



• Please also see the Software Starter Guide and the Direct Print User Guide.

Canon

# PowerShot A400

DIGITAL CAMERA

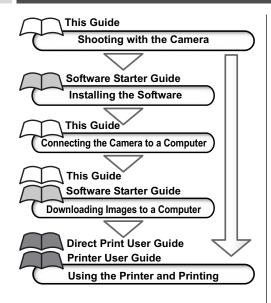
**Camera User Guide** 

DiG!C



Canon

# Flowchart and Reference Guides



Use of genuine Canon accessories is recommended.

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

#### **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.

#### About the LCD Monitor

The LCD monitor is produced with extremely highprecision 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.

#### **Video Format**

Please set the camera's video signal format to the one used in your region before using it with a TV monitor (p. 104).

#### **Language Setting**

Please see page 22 to change the language setting.

#### Disclaimer

- While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions. Canon reserves the right to change the specifications of the hardware and software described herein at any time without prior notice.
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# Symbols Used

Icons under title bars show the operations mode. As in the example below, the shooting mode should be set to . The control of the control of

**Adjusting the Tone (White Balance)** 

Shooting Mode M 🖳 🖳



This mark denotes issues that may affect the camera's operation.



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

In this guide SD memory card (Secure Digital, a copyright protection system) is referred to as SD card

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Items marked with ☆ are lists or charts that summarize camera functions or procedures.

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## **Read This First**

#### Please Read

#### **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, its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including SD cards, that results in the failure of an image to be recorded or to be recorded in a format that is machine readable.

#### **Warning Against Copyright Infringement**

Please note that Canon digital cameras are intended for personal use and should never be used in a manner that infringes upon or contravenes international or domestic copyright laws and regulations. Please be advised that in certain cases the copying of images from performances, exhibitions, or commercial properties by means of a camera or other device may contravene copyright or other legal rights even if the image was shot for personal use.

#### **Warranty Limitations**

This camera's warranty is only effective in the country of sale. If 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.

For Canon Customer Support contacts, please see the Canon Limited Warranty supplied with your camera.

# **Safety Precautions**

- Before using the camera, please ensure that you have read and understood 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, batteries, and separately sold battery and charger kit and compact power adapter.

#### **Storing SD cards**



Store the SD memory card out of the reach of children and infants.

It may be swallowed accidentally. If this occurs, consult a doctor immediately.

# **↑** WARNINGS

- Do not aim the camera directly into the sun or at other intense light sources which could damage 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 damage eyesight. In particular, remain at least one meter (39 inches) away
  from infants when using the flash.

- Store this equipment out of the reach of children and infants. Accidental damage to the camera or batteries by a child could result in serious injury. In addition, placement of the strap around a child's neck could result in asphyxiation.
- Be particularly careful to keep the date battery used in the camera away from 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 a 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 a 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 batteries or
  unplug the power cord from the power 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 batteries or
  unplug the power cord from the power 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. In the event that water or other foreign substances enter the interior, immediately turn the camera's power off and remove the camera batteries or unplug the power cord from the power 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.
- Remove the power cord on a regular periodic basis and wipe away the dust and dirt that collects on the plug, the exterior of the power outlet and the surrounding area. In dusty, humid or greasy environments, the dust that collects around the plug over long periods of time may become saturated with humidity and short-circuit, leading 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.
- 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 only the recommended power accessories. Use of power sources not expressly recommended for this equipment may lead to overheating, distortion of the equipment, fire, electrical shock or other hazards.
- 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, skin,
  or clothing that comes into contact with the inner contents of a battery.
- 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.
- 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 only recommended batteries and accessories. Use of batteries not expressly recommended for this equipment may cause explosions or leaks, resulting in fire, injury and damage to the surroundings.
- If using AA-size NiMH batteries, use only Canon AA-size NiMH batteries and the charger recommended for use with these batteries. Use of another charger may cause batteries to overheat or deform, posing risk of fire or electric shock.
- Disconnect the battery charger or compact power adapter from both the camera and power outlet
  after recharging and when the camera is not in use to avoid fires and other hazards. Continuous
  use over a long period may cause a unit to overheat and distort, resulting in fire.
- The camera terminal of the battery charger cord and the 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.

#### Caution about magnetic fields

Keep objects that are sensitive to magnetic fields (such as credit cards) away from the speaker of the camera (p. 12). Such items may lose data or stop working.

# **⚠** 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 battery charger to charge the batteries 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 or clothing when shooting. The flash may be
  damaged and emit smoke or noise. In addition, do not touch the surface of the flash after taking several
  pictures in rapid succession. Either action could result in burns.
- Do not operate the flash with dirt, dust or other items stuck to its lens. The resulting heat build-up could damage the flash.
- Ensure that the battery charger is plugged into a power outlet of the specified rating, not over the specified rating. The plug of the battery charger varies according to region.
- Do not use the battery charger or compact power adapter if the cable or plug is damaged, or if the plug is not fully inserted into the power outlet.
- Do not allow metal objects (such as pins or keys) or dirt to contact the charger terminals or plug.
- If your camera is used for prolonged periods, the camera body may become warm. Please take
  care when operating the camera for an extended period 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

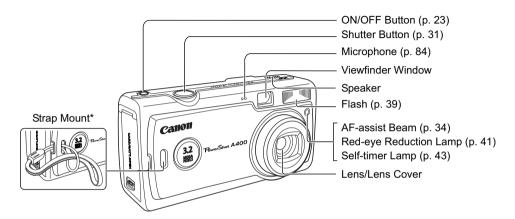
Stop using the camera immediately if you detect condensation.

Continued use may damage the equipment. Remove the SD card and battery or power cord (if connected) from the camera and wait until the moisture evaporates completely before resuming use.

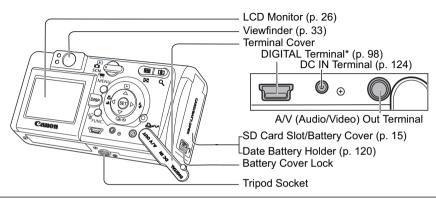
# **Extended Storage**

When not using the camera for extended periods of time, remove the batteries from the camera or battery charger and store the equipment in a safe place. Storing the camera for extended periods with batteries installed will run down the battery and may damage the camera.

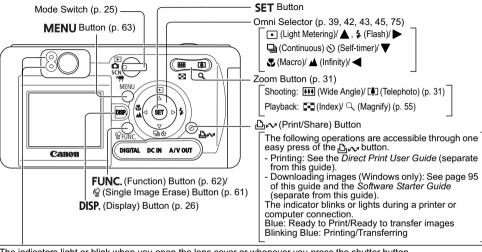
# **Components Guide**



<sup>\*</sup> Be careful not to wave the camera about or catch it on other items when dangling it from the wrist strap.



- \* To connect the camera to a computer or printer, use one of the following cables.
- Computer: Interface Cable IFC-400PCU (supplied with the camera)
- Direct Print Compatible Printers (Sold Separately)
- CP Printers: Interface Cable IFC-400PCU (supplied with the camera) or the Direct Interface Cable DIF-100 (supplied with the CP-100/CP-10)
- Bubble Jet Printers:
- Bubble Jet Direct Compatible Printers: Please refer to your Bubble Jet printer user guide.
- PictBridge Compliant Printers: Interface Cable IFC-400PCU (supplied with the camera)
- PictBridge Compliant Non-Canon Printers: Interface Cable IFC-400PCU (supplied with the camera) Please refer to the System Map or the Direct Print User Guide supplied with the camera for direct print compatible printer information.



The indicators light or blink when you open the lens cover or whenever you press the shutter button.

**Upper Indicator** 

Green: Ready to shoot or ready to communicate with

your computer.

Blinking Green: Starting-up, recording to the SD card, reading the SD card, erasing data on the SD card, or transmitting data to your computer.

Orange: Ready to shoot (using the flash).

Blinking Orange: Ready to shoot (camera shake warning) or charging the flash (with LCD monitor On).

Lower Indicator

Yellow: Macro mode or Infinity mode

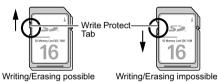
**Blinking Yellow:** Focusing difficulty (although you can press the shutter button, try using focus lock (p. 73))

# **Preparing the Camera**

# **Installing the Battery and SD Card**

#### **Write Protect Tab**

The SD card has a write protect tab. Sliding the tab downward prevents recording of data and protects existing data (e.g. images). When recording to, erasing from or formatting the SD card, slide the tab upward.



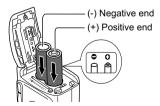
Insert two (2) AA-size alkaline batteries (included with the camera) or two (2) AA-size NiMH batteries (sold separately) and insert the SD card.

- **1** Check that the camera power is off.
- **2** Press the battery cover lock towards the arrow to open the cover.



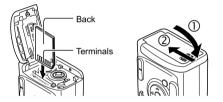


3 Insert the batteries as shown.

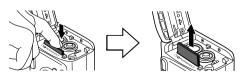


# 4 Insert the SD card as shown and close the SD card slot/battery cover.

- Insert the SD card as shown on the inside of the battery cover until you hear it click into place.
- Do not touch or allow metal objects to contact the terminals on the back of the SD card.



# **To remove the SD card**Push in the SD card until you hear it click, then release it.





- Since the camera is writing, reading, erasing or transmitting data to or from the SD card when the indicator blinks green, never perform the following actions during this time. It could corrupt the image data.
  - Subject the camera body to vibration or shocks.
  - Turn the camera's power off or open the SD card slot/battery cover.
- Please note that SD cards formatted with other manufacturers' cameras or a computer, or formatted or edited with application programs, may slow down writing to the SD card or may not operate correctly in the camera.
- You are recommended to use SD cards that have been formatted in your camera (p. 19). The card supplied with the camera may be used without further formatting.



- We recommend that you use the separately sold AC Adapter Kit ACK800 to power the camera during long usage sessions (p. 124).
- The separately sold battery charger kit lets you use rechargeable NiMH batteries to power the camera (p. 121).

- See Battery Performance (p. 129).
- For information about the Battery and Charger Kit and AA-size rechargeable NiMH batteries, see the System Map (separate from this guide).
- See SD Cards and Estimated Capacities (Recordable Images) (p. 129).

### **Proper Battery Handling**

- Use AA-size alkaline or Canon AA-size NiMH batteries (sold separately) only. For information on handling the AA-size rechargeable NiMH batteries, see *Using the Power Kits (Sold Separately)* (p. 121).
- Since the performance of alkaline batteries may differ according to brand, the operating time of the batteries you purchase may not be as long as the batteries that came with the camera.
- Camera operating time may shorten at low temperatures when alkaline batteries are used.
   Also due to their specifications, alkaline batteries may expire faster than NiMH batteries. If you are using the camera in cold areas or for a long time, we recommend using Canon AA-size NiMH Battery Kit NB4-200 (a four-battery Kit).

- While it is possible to use AA-size nickelcadmium batteries, performance is unreliable and their use is not recommended.
- Never mix unused and partially used batteries. Always load two fresh (or fully recharged) batteries at the same time. The partially used batteries may leak.
- Be careful to load the batteries with their positive
   (+) and negative (-) ends in the right direction.
- Never mix batteries of different types or from different manufacturers. Both batteries should be identical.
- Before inserting the batteries, wipe the battery terminals well with a dry cloth. Oil from one's skin or other dirt may cause a considerable reduction in the number of recordable images or reduced usage time.
- Battery performance deteriorates at low temperatures (especially with alkaline batteries). If you are using the camera in cold areas and batteries are running down faster than they should, you may be able to restore performance by placing batteries in an inner pocket to warm them up prior to use. But be careful that you don't put the batteries into a pocket together with a metal key chain or other metallic objects, as these objects may cause batteries to short-circuit.

 If you do not plan to use the camera for a long. time, remove the batteries from the camera and store them in a safe place. Batteries may leak and damage the camera if left installed during prolonged periods of non-use.



#### ∕!\ WARNINGS

Never use damaged batteries or batteries whose outer seal is completely or partially missing or peeled off, as there is risk that such batteries may leak, overheat, or burst. Always check the seals on store-bought batteries before loading them, as some batteries may come with defective seals. Do not use batteries with defective seals

#### Never use batteries that look like this.



Batteries with all or part of the seal (electrical insulation sheath) peeled off.



The positive electrode (plus terminal) is flat.



The negative terminal is correctly formed (protruding from the metal base), but the seal does not extend up over the edge of the metal base.

### **Battery Status Indications**

The LCD monitor displays an icon or message to let you know when batteries are low or depleted.



Batteries are beginning to run low. Replace (or recharge) batteries promptly. If the LCD monitor is off, this icon will appear when you press any of the following buttons: the omni selector, DISP. button and FUNC button

#### Change the batteries

Batteries are fully depleted and the camera can no longer operate. Replace the batteries immediately.

# Formatting an SD Card

You should always format an SD card when you wish to use a new one, or when you wish to delete not only the images in the SD card but also other data.



Formatting an SD card will permanently erase all data already on it, including all of its protected images. Check the contents before formatting cards that were previously used.

- 1 Turn the power on (p. 23).
- Press the MENU button and select [[] (Set up)] using





3 Select 
 (Format) using 
 or ▼ and press the SET button.





- To cancel formatting instead, select [Cancel] and press the SET button.
- The capacity of the SD card displayed after formatting will be less than the rated capacity of the SD card. This is not a malfunction of the SD card or camera.
- **5** Press the MENU button.



- If the camera is not operating correctly, the SD card may be corrupted. Formatting the card may solve the problem.
- If you are using an SD card from another manufacturer and the card is not functioning correctly, you may be able to correct the problem by formatting the card.
- SD cards formatted with another camera, a computer or peripheral device may not operate correctly. Format these cards with this camera. If formatting in the camera doesn't work properly, turn the camera off and re-insert the SD card. Then turn the camera back on and format again.

# **Handling Precautions for SD Cards**

- SD cards are high-precision electronic devices. Do not bend them, apply force to them, or subject them to shocks or vibration.
- Do not attempt to disassemble or alter the SD card.
- Do not allow dirt, water or foreign objects to contact the terminals on the back of the card. Do not touch the terminals with your hands or metal objects.
- Do not peel away the original label on the SD card or cover it with another label or sticker.

- When writing on the SD card, use a soft point pen (e.g. felt-tip pen). Using a sharp point pen (e.g. ball-point pen) or pencil may damage the SD card or corrupt the recorded data.
- Since some or all of the data recorded on the SD card may be corrupted or erased by electrical noise, static electricity or card malfunction, making a backup copy of important data is recommended.
- Moving an SD card rapidly between temperature extremes will cause condensation to form in the card and lead to a malfunction. To avoid condensation, place the SD 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 SD card, store it at room temperature until the water droplets have evaporated naturally.
- Do not use or store SD cards in the following locations.
  - · Locations subject to dust or sand
  - Locations subject to high humidity and high temperatures

#### **Precaution for Multi Media Cards**

This camera is designed to perform optimally when used with genuine Canon-brand SD cards. You may use multi media cards (MMC) with this camera. However, Canon makes no warranties concerning the use of multi media cards (MMC).

# **Setting the Date/Time**

The Date/Time menu will be displayed when camera power is turned on for the first time or with low date battery power. Perform operations from Step 4 (Replace the date battery when power from the current one is exhausted (p. 120)).

- 1 Turn the power on (p. 23).
- 2 Press the MENU button and select the [i (Set up)] menu using ▶.



3 Select ᠍ (Date/ Time) using ▲ or ▼ and then press the SET button.



# 4 Set the date and time.

 Use ◀ or ▶ to change the value of the highlighted field.



- Press ▲ or ▼ to set the date and time.
- The date can be set up to the year 2030.
- The factory default for the date format may differ from that shown here in some regions.
- **5** Press the SET button.
- **6** Press the MENU button.



- For embedding the date on the image data, refer to page 52.
- Setting the date and time settings does not cause the date/time stamp to appear on images. For printing images with the date on them, refer to page 92, the Direct Print User Guide or Software Starter Guide.
- For important information, see Replacing the Date Battery (p. 120).

# **Setting the Language**

Sets the display language for LCD monitor menus and messages.

- 1 Turn on the camera (p. 23).
- 2 Press the MENU button and select the [ᠬ (Set up)] menu using ▶.





3 Select (Language) using ▲ or ▼ and press the SET button.



- 4 Select a language using ▲, ▼, ◀ or ▶ and press the SET button.
- English Norsk
  Deutsch Svenska
  Français Essañol
  Nederlands 汉语
  Dansk
  Jyzonii Portuguës
  Italiano 日本語
- The setting menu will reappear without changing the language setting if you press the MENU button instead of the SET button.
- **5** Press the MENU button.



#### **Shortcut Operation**

The Language menu can also be displayed in Playback mode by holding down the **SET** button and pressing the **MENU** button. (This function cannot be used while a movie clip is played back, or when a separately sold printer is connected to the camera.)

### **Basic Functions**

# **Turning the Power On/Off**

#### **Turning the Power On**

1 Press the ON/OFF button until the upper indicator next to the viewfinder lights green.

#### **Shooting Mode**

 Current shooting settings will appear in the LCD monitor.



- Current shooting settings will disappear in about 6 seconds when the LCD monitor is set to Standard (No information) or No Display(p. 26).
- If you turn the mode switch to , the lens will retract after approximately 1 minute.

#### **Playback Mode**

The LCD monitor displays an image.

#### **Turning the Power Off**

 Press the ON/OFF button again to turn the power off.



- If the "Card locked!" message appears right after the power is turned on, the SD card cannot record (p. 15).
- You will hear a start-up sound and see the start-up image when the power comes on. (To change the start-up sound and image, see below and p. 71 and 106.)
- The start-up image does not appear when the LCD monitor is off in Shooting mode or the A/V OUT terminal is connected to a TV.

# Turning on the camera without the start-up sound and image

Press and hold the **SET** button, then turn on the power.

### **Power Saving Function**

This camera is equipped with a power saving function. Depending on the power saving setting (p. 69), the camera may power down or the LCD monitor may go off automatically.

#### ●Auto Power Down

#### [On]

#### Shooting mode:

Powers down approximately 3 minutes after the last time a camera control is accessed.

#### Playback mode:

Powers down approximately 5 minutes after the last time a control is accessed on the camera.

#### **Printer Connection mode:**

Powers down approximately 5 minutes after the last time a control is accessed on the camera or something is printed on the printer.

# When the Auto Power Down Function Activates Press the ON/OFF button again.

#### [Off]

The power saving function does not activate.

#### Display Off

The LCD monitor automatically shuts off approximately 1 minute\* after the last time a camera control is accessed.

\* This time can be changed (p. 69).

#### When the Display Off Function Activates

The LCD monitor display turns back on if any button other than the ON/OFF button is pressed.



The power saving function is disabled during Auto Play or during a computer connection (p. 85, 95).

#### Mode Switch

Use the mode switch to select the camera's operating mode.



## **Shooting Mode**

### (Still Image)

Shoots still images. Shooting mode is selectable from Auto (p. 31). Manual. or Stitch Assist (p. 46).

#### SCN (Special Scene Mode)

Shoots the image with the most appropriate settings for the scene.

#### · (Movie)

Shoots movie clips (p. 53).

#### **Replay Mode**

#### Replay Mode

- Replay or delete images from the SD card (p. 55, 61).
- Download and display images on a connected computer (p. 95).
- Print images directly to a connected printer (p. 88).



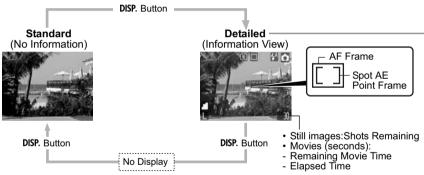
When a printer (sold separately) is properly connected, , , or appears on the I CD monitor

# **Using the LCD Monitor**

Use the LCD monitor to shoot and review images, for menu operations and playing back images.

Pressing the **DISP**. button cycles the LCD monitor to the next mode.

# **Shooting Mode**



The AF frame changes according to its On/Off setting. (LCD monitor On)

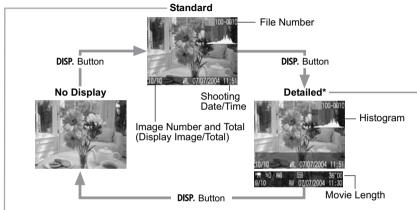
AiAF set to [On] (p. 74)	AiAF set to [Off] (p. 74)
Green: Focusing complete (focused AF frame)	Green: Focusing complete
Does not appear: Focusing difficulty	Yellow: Focusing difficulty

O CI 🖳 🖭 🔊 🗷 🔀	Shooting Mode	p. 35, 48
-2 · · · +2	Exposure Compensation	p. 76
※ 🕰 🔆 💥 🛂	White Balance	p. 77
	Drive Mode	p. 43, 45
	ISO Speed	p. 79
	Photo Effect	p. 80
<b>6</b>	Light Metering Mode	p. 75
<b>6 1 1</b>	Compression	p. 37
640 520 160 L M1 M2 S 🖎 (57)	Resolution Postcard Print	p. 37 p. 51
<b>₹</b> ^ <b>₹ ⑤</b>	Flash	p. 39
<b>©</b>	Red-eye Reduction	p. 39, 41
	Macro/Infinity Mode	p. 42
:0	Quick Shots	p. 38
âôô	Auto Rotate Function	p. 83
• (Red)	Movie Recording Mode	p. 53
2.8x 3.5x 4.4x 5.4x 7.0x	Digital Zoom Setting*1	p. 44
9	Camera Shake Warning	p. 27
	Low Battery	p. 18

<sup>\*1:</sup> Zoom powers reflect the combined optical and digital zoom effects. These figures appear when the digital zoom is activated.

- •When a Shooting mode setting is changed, the settings appear on the LCD monitor for about 6 seconds even if the LCD monitor is set to No information or off. (The Shooting mode settings may not appear depending on the camera setting.) You can set the flash, red-eye reduction, macro/infinity mode, self-timer, continuos shooting, and the light metering mode settings while this information appears on the LCD monitor.
- '\( \tau \) and the icons in \( \tau \) (the shaded area of the chart) appear even when the information view is turned off.
- In addition to the above, the AF frame, spot metering frame, recordable images or recordable movie time are displayed as in the example to the left.
- Setting to the , so or modes turns the LCD monitor on regardless of whether it is set to on or off.
- ●A slow shutter speed has likely been selected because of insufficient lighting if the upper indicator beside the viewfinder blinks orange after the metering preparations are complete and the camera shake icon (❷) displays in the LCD monitor. Set the flash to ❷ or ❷, or affix the camera to a tripod to shoot.
- •After you take a photo by fully pressing the shutter button, the image displays on the LCD monitor for approximately three seconds (or the review duration you set from 3 to 10 seconds). If you press the SET button while the image is displayed, it will continue to display (p. 34).

## **Playback Mode**



	Compression	p. 37
L M1 M2 S 💽	Resolution (Still image)	p. 37
<b>N</b>	Sound memo (WAVE file)	p. 84
AVI	Movie	p. 53
о-п	Protection status	p. 86

\* Detailed Display is not available in index playback (9 images).

	Shooting Mode	p. 35, 48
-2 · · · <u>+0</u> · · · +2	Exposure Compensation	p. 76
## 🔅 🕰 🝌 💥 💥 🗻	White Balance	p. 77
50 50 50 50 50 100 200 400	ISO Speed	p. 79
	Photo Effect	p. 80
640 320 160	Resolution (Movie)	p. 37
4	Flash	p. 39
<b>3</b> • •	Light Metering Mode	p. 75
₩ 🖊	Macro/Infinity	p. 42

In addition to the above, the histogram and recorded movie time are displayed.

The following information may be displayed, depending on the image.

<b>)</b> ?	An audio file other than a wave file, or a file with unrecognized format is attached.
A	A JPEG file not supported by "Design Rule for Camera File System" standards.
RAW	RAW file format
[?]	Unrecognizable file formats



The image in the LCD monitor may darken when the monitor is used under sunlight or other strong lighting. This is not a defect.



- The on/off setting of the LCD monitor display mode 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 "Change the batteries" message appears, the LCD monitor may not automatically turn on the next time the camera is started
- While a recorded image is displayed on the LCD monitor, you can check the exposure with the graph (See About the Histogram). It shows the distribution of the brightness data. If the exposure requires adjustment, set the exposure compensation and re-shoot (Press the DISP, button if the histogram and other information is not shown.).
- Please note that image information recorded by this camera may not display correctly on other cameras and image information recorded by other cameras may not display correctly on this camera.

#### About the Histogram

The histogram is a graph that allows you to judge the brightness of the shot image. The greater the bias toward the left in the graph, the darker the image. The greater the bias toward to the right, the brighter the image. If the image is too dark, adjust the exposure compensation to a positive value. Similarly, adjust the exposure compensation to a negative value if the image is too bright (p. 76).

#### Sample Histograms







Dark image

Balanced image

Bright image

# **Shooting – The Basics**

See Functions Available in Each Shooting Mode (p. 138) at the end of this manual to find out which settings can be changed in which shooting modes.

# Auto Mode

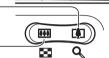
#### Shooting Mode

In this mode, all you have to do is press the shutter button and let the camera do everything else.

- 1 Set the mode switch to
- 2 Select from FUNC.menu.
  - See Selecting Menus and Settings (p. 62).
  - \* The current setting is displayed.
- **3** Aim the camera at the subject you wish to shoot.

# 4 Use the zoom button to achieve the desired composition (relative subject size in the viewfinder).

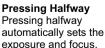
Magnifies the size of subject (Telephoto)

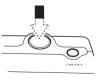


- : Decreases the size of the subject (Wide angle)
- The angle of view can be adjusted within the 45 to 100 mm range, in 35mm film equivalent.
- When the LCD monitor is on, the combined use of the digital zoom and optical zoom enables magnified shooting up to approx. 7x (See Digital Zoom, p. 44).

# **5** Press the shutter button halfway.

 The shutter button has a two-stage action.





- Two beeps will sound when the camera has finished metering, and the indicator will light green or orange. If the LCD monitor is on, the AF frame will appear green.
- The indicator will blink yellow and the beep will sound one time if the subject is difficult to focus.

# **6** Press the shutter button all the way.

Pressing Fully
Pressing fully releases
the shutter.



- You will hear the shutter sound when the shot is complete. Do not move the camera until you hear this sound.
- The indicator next to the viewfinder blinks green while data is recorded onto the SD card.
- The picture appears for three seconds on the LCD monitor, if it is on.

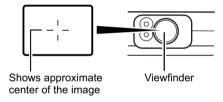


- Functions Available in Each Shooting Mode (p. 138).
- With the Review function, you can change the length of time images show on the LCD monitor after shooting, or set it so they do not show at all (p. 35).
- If the orange or yellow indicator blinks while you press halfway, you can still press fully to take the shot.
- Images are first saved into the camera's internal memory before being recorded onto the SD 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. 67).
- Even when the shutter sound is set to
  [ ■1, [2], [M(On)] (p. 71), no sound will
  be heard if [Mute] is set to [On].
- There is no shutter sound in movie mode.
- Shots cannot be taken while the flash is charging.

#### **Shooting with Viewfinder**

You can save power by turning the LCD monitor off and using the viewfinder to shoot.

1 Compose the image so that the subject appears in the center of the viewfinder.





#### About the AF Function

This camera employs AiAF (artificial intelligence autofocus) technology, which uses a broad metering field to calculate the focal distance with high precision. It delivers a crisp focus even when the photographic subject is slightly off-center.

The camera can also automatically focus on the center when AiAF is set to [Off].

# Image Seen in Viewfinder vs. Recorded Image

When shooting an image, a larger range than the one visible in the viewfinder usually gets recorded. You can confirm the actual range that will be recorded in the LCD monitor. In addition, due to the viewfinder's specification, the range visible in the viewfinder may actually differ from the actual recorded image. The closer the subject is to the lens, the more noticeable the difference will be. In some cases, portions of images shot up close that appear in the viewfinder will not appear in the recorded image. You are recommended to use the LCD monitor during macro photography (p. 42).

#### **AF-assist Beam**

- The AF-assist beam will sometimes emit when the shutter button is pressed halfway to assist focusing in certain conditions, i.e. dark conditions.
- The AF-assist beam can be turned off (p. 65).
  - If animals are your subject, turn off the beam when shooting in the dark to avoid startling them. However, please keep in mind the following facts.
  - If the AF-assist beam is turned off, it may become more difficult for the camera to focus in dark conditions.
  - The red-eye reduction lamp may emit when you press the shutter button halfway even if the AF-assist beam is turned off.

In order to prevent any lamp from emitting before the flash fires, set both the red-eye reduction function and the AF-assist beam to [Off] in the Shooting menu

# Reviewing an Image Right After Shooting

## 

After a photo is taken, the image displays on the LCD monitor for 3 seconds. In addition, the image will keep on displaying regardless of the review duration setting if one of the following operations is performed.

- Keeping the shutter button fully pressed
- Pressing the SET button while the image is displayed\*

Press the shutter button halfway again to stop displaying it.



You can perform the following while images are displayed.\*

- Erasing Images Individually (p. 61)
- Display the setting details of the image (p. 26).
- Magnifying Images (p. 55)
- \* This cannot be performed in Stitch Assist mode.

### **Changing the Image Display Duration**

The length of time images are displayed after a photo has been taken can be changed from between 3 seconds to 10 seconds or turned off.

- **1** Press the MENU button.
- The [ (Rec.)] menu appears.
- 2 Select (Review) using ▲ or ▼.
- 3 Select a Review setting using ◀ or ▶ and press the MENU button.



- With the [Off] option, the image will not display.
- With the [3 sec.] to [10 sec.] options, the image will appear for the time selected even if you release the shutter button.
- You can continue to display the image as long as the shutter button is fully held pressed regardless of the Review setting.
- Another picture can be taken even while the last is displayed.

### **Selecting a Shooting Mode**

The following modes are available with this camera.

•	Auto	The camera automatically makes most of the settings for you.		
CM	Manual	You can manually adjust the exposure, white balance, and other settings before shooting.		
旦旦	Stitch Assist	For shooting panorama composition images		
SCN	Special Scene	Select from 8 scene modes to shoot with the most appropriate settings for the scene.  Portrait  Beach  Night Scene Fireworks Foliage Snow Indoor		
	Movie	For shooting movies		

The settings selected for each mode are kept even if the shooting mode is changed. When the power is turned off, the settings are also retained for certain shooting modes, but not for others (p. 138).

### Selecting 💽, 🖪, 🖺 or 🖼

- 1 Set the mode switch to and press the FUNC, button.
- 2 Select the shooting mode using ◀ or ▶, and press the FUNC. button.



### **Selecting SCN**

- 1 Set the mode switch to SCN and press the FUNC. button.
- 2 Select the shooting mode using ◀ or ▶, and press the FUNC. button.



### Selecting 🗔

- 1 Set the mode switch to ...
  - This will switch to movie mode.

# Changing the Resolution and Compression

### 

The Postcard Print mode is not available in 🖭 , 🖭 and 🖳 .

You can change the resolution and compression (excluding movie) depending on the purpose.

Resolution			Purpose
L (Large)	2048 x 1536 pixels	Large	<ul> <li>Print up to A4 size* 210 x 297 mm (8.3 x 11.7 in.) prints</li> <li>Print up to Letter size* 216 x 279 mm (8.5 x 11 in.) prints</li> </ul>
M1 (Medium1)	1600 x 1200 pixels		Print postcard size     148 x 100 mm (6 x 4     in.) prints     Print L-size 119 x 89     mm (4.7 x 3.5 in.)     prints
M2 (Medium2)	1024 x 768 pixels		Print card size 86 x 54 mm (3.4 x 2.1 in.) prints
S (Small)	640 x 480 pixels	<b>♦</b> Small	Send images as e- mail attachments     Shoot more images

<sup>\*</sup> Paper sizes vary according to region.



- The resolution is set to M1 (1600 x 1200) and the compression is set to (Fine).
- See page 51 for Postcard Print mode information

Compression		on	Purpose
ß	Superfine	High Quality	Shoot higher quality images
	Fine	1	Shoot normal quality images
	Normal	▼ Normal	Shoot more images

## Movies can be shot with the following resolutions.

Resolution		
640	640 x 480 pixels	
320	320 x 240 pixels	
160	160 x 120 pixels	

### 1 Press the FUNC. button.

- - \* The current setting is displayed.



Example (excluding ): Compression

3 Select the compression or resolution you wish to set using



**⋖** or **▶**.

Number of shots remaining\* (Only – displayed when the resolution or compression is selected.)

\*In the case of a movie clip, the remaining shooting time (in seconds) appears.

### 4 Press the FUNC, button.



- Image File Sizes (Estimated) (p. 130)
- Types of SD cards and resolution (p. 129)

### **Quick Shots**

Shooting Mode

You can reduce shutter lag time to capture those fleeting "photo opportunities".



- You cannot select the quick shot method for use with the viewfinder (LCD monitor must be on).
  - The LCD monitor display freezes while the camera is autofocusing.
- 1 Press the DISP. button to turn the LCD monitor on.
- 2 In the (Rec.) menu, select .
- See Selecting Menus and Settings (p. 62).



### 3 Use ◀ or ▶ to select [On] and press the MENU button.

- The display will return to the Shooting screen.
- The icon will display on the LCD monitor (detailed display on) when the "Quick Shot" option is set to On.



### Using the Flash

Shooting Mode

The shooting Mode

Use the flash according to the guidelines below.

Auto with red-eye reduction	The flash fires automatically as required by the lighting level, and the red-eye reduction lamp fires each time the main flash fires.	
Auto	The flash fires automatically as required by the lighting level.	
Flash on with red-eye reduction	The red-eye reduction lamp and the flash always fire.	
Flash on	The flash always fires.	
Flash off	The flash does not fire.	
	red-eye reduction Auto Flash on with red-eye reduction Flash on	

# 1 Press the 4 button to switch between flash modes.

 The selected flash mode appears on the LCD monitor.



 You can switch between settings by pressing the 4 button.

When the red-eye reduction function is on



When the red-eye reduction function is off



 This operation may not work in certain Shooting modes (p. 138).

### **2** Shoot the image.

- The flash will fire if the indicator beside the viewfinder lights orange when the shutter button is pressed halfway. (Does not fire in (A).)
- Shooting procedures are the same as for the
   Auto Mode (p. 31).



 If the flash is used in macro mode, the light may not be controlled correctly. In this case, set a higher ISO sensitivity or use other light sources instead of using the flash.

- When shooting with a high ISO sensitivity and using the flash, there is more of a chance of overexposure the closer you are to the subject.
- Please note that a slow shutter speed will be selected in dark places or when the flash is set to off. Be careful to avoid camera shake under these conditions.

### Shooting in Mode

Be careful to hold the camera still to avoid camera shake.

Shooting in [4], [2], [3] or [5] Mode
Fix the camera to a tripod since the
shutter speed will be slower than in the
10 mode. If an image is dark in 10
mode, reshooting in 11 mode will
make it brighter.



• The flash may take approximately 10 seconds to charge. The LCD monitor, if it is on, will go off after the indicator blinks orange while recharging. The LCD monitor will come back on after the indicator lights a steady orange when recharging is completed. Recharging time may vary according to shooting conditions and battery charge levels.

 The flash fires twice. A pre-flash will fire 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.

# Setting the Red-eye Reduction Function

The red-eye reduction lamp fires when the flash is used in dark areas. This reduces light reflecting back from the eyes and making them appear red.

1 In the [ (Rec.)] menu, set (Redeye) to [On].



- See Selecting Menus and Settings (p. 62).
- appears on the LCD monitor.



 The red-eye reduction function cannot be set when the Special Scene mode (p. 48) is set to (Fireworks).

### Red-eye Reduction

 For this mode to be effective, the subject must be looking right at the red-eye reduction lamp. Try asking them to look directly at the lamp.

Even better results can be obtained by increasing the lighting in indoor settings or coming closer to the subject.

### **™**Macro/ **▲** Infinity Modes

# Macro | Macro | Use this mode when the distance from the lens tip to the subject is in the range of 5 to 47 cm (2.0 in. to 1.5 ft.) at wide angle end and 30 to 47 cm (1.0 to 1.5 ft.) at telephoto end. | Use this mode to shoot landscapes. Also use this mode for compositions combining both near and distant objects.

- 1 Press ♥/ ▲ (◀ on the omni selector) to display ☑ or ☑.
- Pressing ♥/▲ (◄ on the omni selector) cancels the macro mode.
- 2 Shoot the image.
  - Shooting procedures are the same as for the
     Auto Mode (p. 31).
  - The indicator beside the viewfinder will light yellow when the shutter button is pressed halfway.



If the flash is used in macro mode, the light may not be controlled correctly. In this case, set a higher ISO sensitivity or use other lightings instead of using the flash.



- Always use the LCD monitor to compose images in macro mode. Shooting with the viewfinder is possible, however, part of the image may not appear in the final shot (p. 33).
- When the lens is zoomed out to the wide angle end, the recordable area is approx. 47 × 35 mm (1.9 × 1.4 in.)\*1, and at telephoto end, it is 115 × 87 mm (4.5 × 3.4 in.).\*2
  - When the zoom position is located between the telephoto end and the wide angle end, the distance between the front of the lens and the subject will be the same as the telephoto end.
- The exposure may not be optimal when the flash is used in macro mode.

<sup>\*1</sup> Closest focal distance.

<sup>\*2</sup> Maximum optical telephoto setting.

### ⊗ Self-timer

### Shooting Mode CM 🖳 🗠 🔊 🗷 🎏 🐼 👑 🖟 🎉 📜

With this function, images are shot 10 or 2 seconds after the shutter button is pressed. This is useful when you want to take a memorable photo with everyone including yourself in the picture. The self-timer can be used in any shooting mode.

- 1 Press □/᠔ (▼ on the omni selector) as necessary so that ☑ or ☑ appears on the LCD monitor.
- When is selected and the shutter button is pressed fully, the self-timer lamp starts blinking and the self-timer begins to beep.
   The blinking gets faster 2 seconds before the shutter releases.
- When is selected and the shutter button is pressed fully, the self-timer lamp blinks fast from the beginning. The shutter releases in 2 seconds.

### 2 Shoot the image.

Shooting procedures are the same as for the
 Auto Mode (p. 31).

### To Cancel the Self-timer

Press the 🖳/🕉 button to display 🔳.

# Changing the Self-timer Countdown Time

- 1 In the [ (Rec.)] menu, select (Self-timer).
- See Selecting Menus and Settings (p. 62).
- 2 Use ◀ or ▶ to select ☒ or ☒ and press the MENU button.
  - The display will return to the Shooting screen.



You can change the self-timer sound by changing the setting in [Selftimer Sound] in the [ (My Camera)] menu (p. 71).

### **Digital Zoom**

### Shooting Mode 🚺 🕻 🕽 🔀 🎆 🛝 🎉

Images can be zoomed with the combined optical and digital zoom functions as follows.

- 2.8x, 3.5x, 4.4x, 5.4x, and 7.0x
- 1 Press the DISP. button to turn the LCD monitor on.
- 2 In the [o (Rec.)] menu, select ⊠ (Digital Zoom).
  - See Selecting Menus and Settings (p. 62).



3 Select [On] using ◀ or ▶ and press the MENU button.

### 4 Press the zoom button's .

- The lens will zoom to the maximum optical telephoto setting and stop. Press again to further zoom the image digitally.
- Press the zoom button's to zoom back out.



The combined magnifications of the optical zoom and digital zoom are displayed.

### **5** Shoot the image.

- Shooting procedures are the same as for the
   Auto Mode (p. 31).
- 0

The digital zoom cannot be used when the LCD monitor is off



- Images become coarser the more they are digitally zoomed.
- Since camera shake may become a factor when using the digital zoom, the use of a tripod is recommended.

### ☐ Continuous Shooting

### 

Use this mode to shoot successive frames while the shutter button is pressed.

- 1 Press □/᠔ (▼ on the omni selector) as necessary so that □ appears on the LCD monitor.
- 2 Press the shutter button halfway to lock the focus.
- 3 Press the shutter button all the way to shoot.
  - Shooting will stop when the shutter button is released
  - The shooting speed is approximately 1.3 frames per second (Large/Fine, LCD monitor off).
  - \* These figures reflect Canon's testing standard. The actual figures will vary according to the shooting conditions and settings.



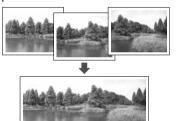
- If internal memory becomes full, intervals between shots may lengthen slightly.
- If you are using the flash, shots are taken more slowly to allow time for the flash to recharge.

### **Shooting Panoramic Images** (Stitch Āssist)

Shooting Mode 🖳 🖳



Stitch Assist can be used to shoot overlapping images that can later be merged (stitched) to create one panoramic image on a computer.



There are two stitch assist modes based on the shooting direction as shown in the following.

	Left → Right	Shoots horizontally from left to right.
<b>3</b>	Right → Left	Shoots horizontally from right to left.



To merge the images on a computer, use PhotoStitch, one of the supplied programs.

### Framing a Subject

The PhotoStitch program detects the overlapping portions of adjoining images and merges them. When shooting, try to include a distinctive item (landmark) 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.

- Make the brightness in each image consistent. The final image will appear unnatural if the difference in brightness is too great.
- Pan (swivel) the camera to take successive shots.
- To shoot close-ups, slide the camera over the subject, keeping it parallel to the subject as you move.

### Shooting

- 1 Set the mode switch to 
  .
- 2 Select or from the FUNC. menu.
  - See Selecting a Shooting Mode (p. 35).
- **3** Shoot the first image.
  - The exposure and white balance settings are set and locked with the first image.

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



 Minor discrepancies in the overlap can be corrected with the software

L Sequence

- An image can be retaken. Press ◀ or ▶ to return to that frame.
- 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.



- A custom white balance setting (p. 78) cannot be set in mode. To use a custom white balance setting, first set it in another shooting mode.
- The settings in place for the first image are locked in and cannot be changed for subsequent shots.
- A TV cannot be used as the monitor for shooting in this mode.



See page 138 for settings that can be changed in this mode.

### **SCN Special Scene Mode**

Shooting Mode SCN

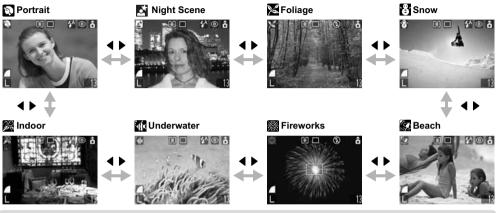
By simply selecting one of the following 8 modes, you can shoot the image with the most appropriate settings for the scene.

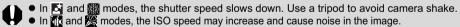
n Portrait	Use this mode when you want the subject to appear sharp and the background to blur.
☑ Night Scene	Use this mode to capture human subjects against the backdrop of an evening sky or night scene. Not only the subject, but also the backdrop can be captured with accurate exposure.
<b>⊠</b> Foliage	Appropriate for shooting images with flowers, leaves or trees to enhance color.
<b>S</b> Snow	Appropriate for shooting the subject against the backdrop of snowy mountains while preventing dark subjects and bluish backgrounds.
Beach	Appropriate for shooting scenes by the sea or on sunlit sandy beaches while preventing dark subjects.

Fireworks	Appropriate for shooting fireworks clearly with the optimal exposure.
<b>11.</b> Underwater	Appropriate for shooting images with the All Weather Case AW-DC20 (sold separately). This mode yields image data in the optimal white balance to record images in natural hue by reducing the bluish tone.
<b>&amp;</b> Indoor	Prevents camera shake and maintains the subject's true color when shooting under fluorescent or tungsten lighting. The exposure is regulated so as to avoid the use of flash as much as possible.

- 1 Set the mode switch to SCN (Special Scene mode).
- 2 Select 

  \* from the FUNC. button.
  - \* The current Scene mode screen is displayed.
- 3 Select the scene you wish to shoot using ◀ or ▶.
  - You can shoot the image right after selecting settings by pressing the shutter button. The menu displays again after the shot, allowing you to change the settings easily.
  - Shooting procedures are the same as for the
     Auto Mode (p. 31) excluding
  - For the shooting procedures of M, see the All Weather Case User Guide included with the All Weather Case AW-DC20 (sold separately).
- 4 Press the FUNC. button.
- **5** Shoot the image.







- See page 138 for settings that can be changed in this mode.
- Results may vary depending on the subject.
- When shooting images underwater, always turn the power off before inserting the camera into the All Weather Case AW-DC20 (sold separately).
- Using the All Weather Case AW-DC20 (sold separately) is recommended in <a>[8]</a>
   and <a>[8]</a>
   modes.

### ™Postcard Print Mode

### 

You can shoot images with settings appropriate for postcard size printing.

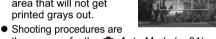
- When printing standard image data to postcard size, sometimes the top, bottom and sides may not get printed.
- By shooting images in the Postcard Print mode, you can check the printing area (vertical/horizontal ratio of 3:2) beforehand. In addition, the resolution locks to M1 (1600 x 1200) and the compression locks to the (Fine) setting, rendering smaller file sizes.
- 1 Press the FUNC, button.
- **2** Select L\* using ▲ or ▼.
  - \* The current setting is displayed.



**3** Select **№** (Postcard) using **◀** or ▶.



- You can shoot the image right after selecting settings by pressing the shutter button. The menu displays again after the shot, allowing you to change the settings easily.
- 4 Press the FUNC. button.
- **5** Shoot the image.
  - When you press the shutter button halfway, the area that will not get printed grays out.



the same as for the Auto Mode (p. 31).



Selecting Selecting cancels the [On] setting of the digital zoom.



- Some settings are not available with certain Shooting modes. Please refer to Functions Available in Each Shooting Mode (p. 138).
- When [Date Stamp] (p. 52) is set to [Date] or [Date & Time], appears on images in step 2 and 3.
- For printing instructions, refer to the Direct Print User Guide

# Embedding the Date in the Image Data

You can embed the date on image data when is selected. The date will be printed on your images even if it has not been set at the computer or printer.

- Ensure that the camera's date/time is set beforehand (p. 21).
- You cannot embed the date on image data when s is not selected.
- 2 Select 

  (Date Stamp) in the [
  (Rec.)] menu.
  - See Selecting Menus and Settings (p. 62).



- 3 Select [Off], [Date] or [Date & Time] using ◀ or ▶.
  - See Setting the Date/ Time (p. 21).



- 4 Press the MENU button.
- **5** Shoot the image.
- Shooting procedures are the same as for the
   Auto Mode (p. 31).



- The Date Stamp cannot be deleted from the image data once it has been set.
- When using a CP printer, part of the date may not get printed if the credit card size print (54 mm x 86 mm) is selected.

### ' ™ Movie Mode

### Shooting Mode

Use this mode to shoot movies. The resolution can be set to [m] (640 x 480)], [m] (320 x 240)], or [m] (160 x 120)] (p. 37).

### 1 Set the mode switch to ...

 The LCD monitor turns on and displays the maximum recording time (in seconds).

### **2** Press the shutter button all the way.

- Shooting and sound recording starts simultaneously.
- During the shooting a red circle appears in the upper right of the LCD monitor.

# 3 Press the shutter button all the way to stop recording the movie.

\* Recording time vary by the SD card. See SD Cards and Estimated Capacities (p. 129). The maximum length of individual movie may vary with the subject and shooting conditions. Recording will automatically stop when the maximum is reached or when the SD card runs out of free capacity.



- You are recommended to use an SD card that has been formatted in your camera to shoot movies (p. 19). The card supplied with the camera may be used without further formatting.
- The recording time may not display properly during shooting or filming may stop unexpectedly with the following types of SD cards.
  - Slow recording cards
  - Cards formatted on a different camera or a computer
  - Cards which have had images recorded and erased repeatedly Although recording time may not display properly during shooting, the movie will

be recorded correctly on the SD card. Recording time will display properly if you format the SD card in this camera (excluding slow recording SD cards).

- Be careful not to touch the microphone while shooting.
- The AE, AF, white balance and zoom settings are set and locked to the settings of the first frame.
- The upper indicator blinks green after a shot. You cannot shoot again until it stops blinking.



- See page 138 for settings that can be changed in this mode.
- Sound is recorded monaurally.
- There is no shutter sound in movie mode.
- QuickTime 3.0 or higher is required to playback movie files (AVI/Motion JPEG) on a computer. (QuickTime (for Windows) is bundled on the supplied Digital Camera Solution Disk. On the Macintosh platform, QuickTime 3.0 or later is generally bundled with the Mac OS 8.5 or later operating system.)

### Playback – The Basics

# Displaying Images Individually (Single Image Playback)

You can view the recorded images on the LCD monitor.

# **1** Set the mode switch to **▶**.

 The last image shot is displayed (Single Image Playback).



# 2 Press ◀ or ▶ to switch the displayed image.

Use ◀ to move to the previous image and ►
to move to the next. Holding ◀ or ► moves
more rapidly between images, but the images
will not appear as clearly.



You may not be able to play back images that have been shot with another camera or edited on a computer with other software applications.



- Press the DISP. button to show the data for the displayed image (p. 28).

### ${}^{ extsf{Q}}$ Magnifying Images

Images can be magnified up to approximately 10 times during single image playback.

### 1 Set the mode switch to ▶.

# **2** Press the **Q** button.

 Pressing the Q button while holding the SET button magnifies the image approx. 2.5 times, approx. 5 times and 10 times in order.



Approximate — position

- Press ▲, ▼, ◀ or ▶ to change the display position vertically and horizontally.
- To return to normal-size display, press the button several times.



Movie frames and index playback images cannot be magnified.

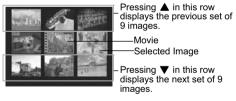


You can magnify an image while it is displayed on the LCD monitor in Shooting mode immediately after the image is shot (p. 34).

# ■ Viewing Images in Sets of Nine (Index Playback)

Up to 9 images can be viewed at once in index playback.

- **1** Set the mode switch to **▶**.
- **2** Press the **button**.
  - 9 images appear at a time (Index Playback).
- 3 Press ▲, ▼, ◀ or ▶ to select the image.



### **4** Press the $\bigcirc$ button.

 Index playback cancels and the display reverts to single image playback.



Press the **DISP**. button to show the data for the displayed image (p. 28).

### **Jumping between Images**

The display can be advanced or set back 9 images when in index playback.

### 1 Press the **button** in index playback.

• The jump bar appears.

### **2** Change the image selection using ◀ or ▶.

- The previous or next 9 images are displayed.
- Hold the SET button and press ◀ or ▶ to jump to the first or last 9 images.



Jump Bar

### **3** Press the **Q** button.

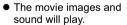
- The jump bar disappears and the camera returns to index playback.
- If you press the Q button once more, the camera returns to single image playback.

### **Viewing/Editing Movies**

### Viewing Movies

You can play back the images shot in 🦷 mode

- Set the mode switch to .
- Movies cannot be viewed in index playback mode
- 2 Press ◀ or ▶ to select a movie and press the SET button.
- A movie displays with the (SET) \( \overline{\pi} \) icon on it.
- The movie playback panel appears.
- **3** Select **□** (Play) using **◄** or ▶ and press the SET button.



 You can adjust the volume using  $\blacktriangle$  or  $\blacktriangledown$ .



Movie Playback Panel Volume

 When a movie has finished playing, it will display the last frame. If the SET button is pressed in this state, the camera will revert to the movie playback panel. If the SET button is pressed again, 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

Select one of the following operations using
 ✓ or ▶ and press the SET button.

(Exit): Return to single image

playback

(First Frame): Display the first frame

(Previous Frame): Return to the previous

frame (Rewinds if the **SET** button is held down)

Proceed to the next frame

(Fast forwards if the **SET** 

button is held down)

(Last Frame): Display the last frame



You may experience frame dropping and audio breakup when playing back a movie on a computer with insufficient system resources.



- The volume at which movies play back can also be adjusted in the Set up menu (p. 68).
- If [Mute] (p. 67) is set to [On] in the Set up menu, the volume setting returns to 0 but it can be adjusted using ▲ or ▼.
- Please adjust the audio sound level on the TV when viewing movie files on a TV.

### **Editing Movies**

You can delete unwanted portions from the first or second half of the movie clip.

- 1 Select the movie you wish to edit, and press the SET button.
- See Viewing Movies (p. 57).

(Next Frame):

# 2 Select (Edit) using or ▶ and press the SET button.

- The movie editing panel and the movie editing bar will appear.
- 3 Select the editing method using ▲ or ▼.



Movie Editing Panel

Movie Editing Bar

- (Cut beginning):Deletes frames in the first half of the movie
- Deletes frames in the second half of the movie
- (Exit): Reverts to the movie playback panel

4 Select the deleting position using ◀ or ▶.



- 5 Select (Play) using ▲ or ▼ and press the SET button.
- The temporarily edited movie will start playing.
- The movie will stop if you press the SET button while it is playing.
- 6 Select ⚠ (Save) using ▲ or ▼ , and press the SET button.



 When is selected, the edited movie is not saved and the camera reverts to the movie playback panel.

# 7 Select [Overwrite] or [New File] using ◀ or ▶ and press the SET button.



- [Overwrite]: Saves the edited movie under the same file name as the original movie. The original data is deleted.
- [New File]: Saves the edited movie under a new file name. The original data is not deleted.
- When there is not enough space left on the SD card, only the overwrite function is available. If this happens, ▲ appears on the counter of the movie editing bar.



- Protected movies cannot be edited.
- It may take approx. 3 minutes to save an edited movie. In case the battery runs out during that period, the saving process may not be able to be completed. To prevent this, it is recommended to use new AA size alkaline batteries or fully charged AAsize NiMH batteries (sold separately), or the AC Adapter Kit ACK 800 (sold separately) (p. 124).



Movies with an original length of 1 second or more can be edited in 1-frame units.

### **Erasing**



Please note that erased images cannot be recovered. Exercise caution before erasing a file.

### 

- 1 Set the mode switch to ▶.
- 2 Press ◀ or ▶ to select the image you want to erase and press the ∜ button.



- A confirmation screen appears.
- 3 Press ◀ or ▶ to select [Erase] and press the SET button.
  - To cancel instead of erasing, select [Cancel] and press the SET button.



Protected images cannot be erased with the erase function (p. 86).

### **Erasing All Images**

1 In the [☐ (Play)]
Menu, select (Erase all) and
press the SET
button.



- A confirmation screen appears.
- 2 Press ◀ or ▶ to select [OK] and press the SET button.
  - To cancel instead of erasing, select [Cancel] and press the SET button.

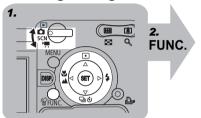


- All the images recorded in the SD card will be erased if you select [Erase all].
- Protected images cannot be erased with the erase function (p. 86).
- To erase the images and all other data recorded in the SD card, see Formatting an SD Card (p. 19).

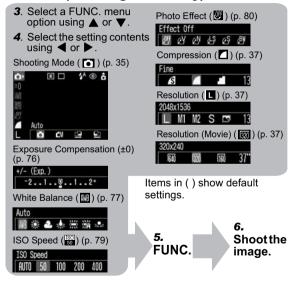
### **Shooting – Advanced Functions**

### **Selecting Menus and Settings**

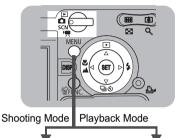
### Selecting Settings with the FUNC. Button (Shooting Mode Only)



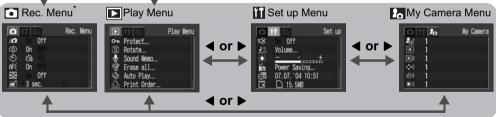
- 1 Set to shooting mode (p. 35).
- **2** Press the FUNC. button.
- 3 Select a FUNC. menu option using ▲ or ▼.
- 4 Select the setting contents using ◀ or ▶.
- **5** Press the FUNC. button.
- **6** Shoot the image.



### **Selecting Settings with the MENU Button**



- 1 Press the MENU button.
- 2 Use ◀ or ▶ to switch between menus.
- You can also switch between menus using the zoom button.
- **3** Use **▲** or **▼** to select a menu item.
- 4 Use ✓ or ► to select the settings you wish to set.
- **5** Press the MENU button.
- **6** Shoot the image if in Shooting mode.



- For items with [...] next to them, push the SET button and carry out the settings from the next displayed menu. Once the settings are complete, press the SET button again and confirm these settings.
- In Shooting mode, you can also close the menu by pressing the shutter button halfway.
- \* The menu will appear slightly different when in SCN and '\(\pi\) mode.



- Some menu items may not be available for selection according to the shooting mode (p. 138).
- You can apply a desired image and sound to A and M in the My Camera menu. For details, see the Registering My Camera Settings (p. 108) or the Software Starter Guide.
- The default of all the settings changed by the menu and button operations except for Shooting mode, [Date/Time], [Language] and [Video System] can be restored all at once (p. 72).

### **Menu Settings and Default Settings**

### Rec. Menu

\*Default Setting

Menu Items	Setting Content	Reference Page
Quick Shot	Sets the Quick Shot option to on or off.  • On / Off*	38
AIAF AIAF	Sets the AiAF to on (the camera automatically selects the AF frame when taking a picture) or off (AF frame is set to the center frame).  • On* / Off	74
Red-eye	Sets whether or not the red-eye reduction lamp fires.  • On* / Off	41
Self-timer	Sets the duration before the self-timer releases the shutter once the shutter button is pressed.  (10 seconds)* (2 seconds)	43
AF-assist Beam	Sets the output of the AF-assist beam according to shooting conditions when using the autofocus.  • On* / Off	34
Digital Zoom	Sets whether or not the digital zoom combines with the optical zoom to zoom images.  • On / Off*	44

<b>≅</b> Review	Sets the duration images display on the LCD monitor after the shutter button is released.  • Off / 3* – 10 sec.	34
	Sets the date format to be embedded in image data when selected.  • Off* / Date / Date & Time	52

### **Play Menu**

Menu Items	Setting Content	Reference Page
<b>o</b> ■ Protect	Protects images from accidental erasure.	86
Rotate	Rotates images 90 or 270 degrees clockwise in the display.	83
	Attaches a sound memo to images.	84
Erase all	Erases all images from an SD card (excluding protected images).	61
Auto Play	Plays images automatically one after the other.	85
Print Order	Sets which images and how many copies will be printed on a printer with the direct print function or at a photo lab service.	90
Transfer Order	Sets the images that will be downloaded to a computer.	94

### Set up Menu

\*Default Setting

Menu Items	Setting Content	Reference Page
<b>▼</b> Mute	Set [On] to mute the start-up sound, operation sound, self-timer sound and shutter sound all at once. For details, see <i>How the Mute setting in the</i> [  (Set up)] menu and each sound setting in the [  (My Camera)] menu are related (p. 71).  • On / Off *  Note that the warning signal beeps even when the Mute setting is [On].	-

<b>₩</b> Volume	Adjusts the volume of the start-up sound, operation sound, self-timer sound, shutter sound, or playback sound. The volume cannot be adjusted if [Mute] is set to [On].  • (Off) / (1) / (2)* / (3) / (4) / (5)	-
	Start-up Vol. Adjusts the Start-up Sound volume when the camera powers up.	23
	Operation Vol.  Adjusts the Operation Sound volume when any button except the shutter button is operated.	-
	Self-timer Vol.  Adjusts the volume of the Self-timer Sound heard from 2 seconds prior to the shot until the actual shot.	43
	Shutter Volume Adjusts the Shutter Sound volume when the shutter button is pressed all the way. There is no shutter sound in Movie mode.	31
	Playback Vol. Adjusts the sound volume when a sound memo or movie is played.	57, 84
☑ LCD Brightness	Adjusts the LCD brightness of the LCD monitor.  • -7 to 0* to +7 Use ◀ or ▶ to adjust the brightness. If you press ▲ or ▼, the display returns to the Set up menu. You can check the brightness in the LCD monitor while you are adjusting the setting.	-

Power Saving	The Auto Power Down and Display Off settings can be set by pressing the <b>SET</b> button.	-
	Auto Power Down Sets whether or not the camera automatically powers down after a specified period of time elapses without camera operation.  • On* / Off	24
	Display Off Specifies a period of time before the LCD monitor turns off when no camera operation is performed.  10 sec. 1 min.* 20 sec. 2 min. 30 sec. 3 min.	24
	Sets the date, time and date format.	21
Format	Formats (initializes) a SD card.	19
File No. Reset	Sets how file numbers are assigned to images.  • On / Off*	105
் Auto Rotate	Sets whether or not images shot with the camera held vertically are automatically rotated in the display.  • On* / Off	83

■ Language	Sets the language used in the menus and messages on the LCD monitor.  • English*(English) • Norsk (Norwegian) • Deutsch(German) • Svenska (Swedish) • Français (French) • Español (Spanish) • Nederlands (Dutch)• 汉语(Chinese) • Dansk (Danish) • Русский (Russian) • Suomi (Finnish) • Português (Portuguese) • Italiano (Italian) • 日本語(Japanese)	22
	You can change the language during image playback by holding the <b>SET</b> button and pressing the <b>MENU</b> button.	
₩ Video System	Sets the video output signal standard.  • NTSC  • PAL	103

<sup>\*</sup> Default setting

#### **Customizing the Camera (My Camera Settings)**

You can select the theme, start-up image and sound, operation sound, self-timer sound and shutter sound used on this camera. These are called My Camera settings. You can also customize the 🖸 and 🖪 options for each item with images from the SD card and newly recorded sounds or by using the supplied software. See the *Software Starter Guide* for details.

Item/Menu Screen	Setting Content	
Theme	Selects a common theme for the start-up image, start-up sound, operation sound, self-timer sound, and shutter sound.*2	106
Start-up Image	Sets the start-up image when you turn on the camera.	106
Start-up Sound	Sets the start-up sound when you turn on the camera.*2	106
Operation Sound	Sets the sound when any button other than the shutter button is operated.*2	106
Selftimer Sound	Sets the sound informing you that the photo will be taken in 2 seconds.*2	106
Shutter Sound	Sets the shutter sound when you depress the shutter button. There is no shutter sound in Movie mode.*2	106
My camera menu settings content	<b>PS</b> (Off) / <b>1</b> *1 / <b>P3</b> / <b>P3</b>	106

<sup>\*1</sup> Default Setting.

How the [Mute] setting in the [ (Set up)] menu and each sound setting in the [ (My Camera)] menu are related To turn off the start-up sound, the shutter sound, operation sound, and self-timer sound all at once, set [Mute] in the [ (Set up)] menu to [On]. This setting overrides each setting for those sounds. Note that the error warning signal beeps even when the [Mute] setting is [On].

## **Resetting the Settings to Default**

You can reset all of the menu and button operation settings to default.

### 1 Turn on the camera.

- Can be performed from Shooting or Playback mode.
- 2 Press the MENU button for longer than 5 seconds.
  - The message "Reset settings to default?" appears on the LCD monitor.
- 3 Press ◀ or ▶ to select [OK], and press the SET button.



- The screen on the right appears while resetting. The normal screen resumes when resetting is complete.
- To cancel resetting, select [Cancel] instead of [OK].



- The following settings do not reset to default.
  - Shooting mode, Date/Time, Language and Video System in the [ (Set up)] menu (p. 25, 67)
  - The custom white balance (p. 78)
  - Newly registered My Camera settings (p. 106)
- When the camera is connected to a computer or a printer, this operation does not work

## Shooting Problem Subjects for the Autofocus

#### 

The following types of subjects may not be suited to autofocus photography. Use the focus lock in these situations.

- 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
- When shooting through glass, get as close as possible to avoid reflection off the glass.
- Subjects with horizontal stripes
- 1 Aim the camera so that a subject at the same focal distance as the main subject is centered in the viewfinder or in the AF frame displayed on the LCD monitor.

- 2 Press and hold the shutter button halfway, and wait until the camera beeps twice.
- 3 Re-aim the camera direction to compose the shot as desired and press the shutter button all the way.



## **Switching between Focus Settings**

## Shooting Mode 🚺 🕽 🗷 👸 🐼 🎉 🎉

You can change the autofocus frame (AF frame) selection method. The AF frame will appear when the LCD monitor is turned on (p. 26).

- The camera automatically selects between 9 AF On frames to focus on (Auto Selection) according to the shooting conditions The focus is selected using the middle AF Off frame. This is convenient (Center for making sure the focus Selection) is exactly where you want it.
- indicates the AF frame which appears on the monitor.

- 1 In the [ (Rec.)] menu, select (AiAF).
- See Selecting Menus and Settings (p. 62).
- 2 Press ◀ or ▶ to select [On] or [Off].



- **3** Press the MENU button.
  - Press the shutter button instead of the MENU button to shoot an image with the set AF frame.



The center AF frame mode is used when the digital zoom is activated.

## Switching between Light Metering Modes

Shooting Mode

Evaluative metering is the default light metering mode. This can be switched to another metering mode.

<b>©</b>	Evaluative Metering	Appropriate for standard shooting conditions, including backlit scenes. The camera divides images into several zones for light metering. It evaluates the complex lighting conditions, such as the position of the subject, the brightness, the direct light, and the backlighting, and adjusts the settings to the correct exposure for the main subject.
	Center- Weighted Averaging	Averages the light metered from the entire frame, but gives greater weight to the subject matter at the center.

Spot AE
Point

Meters the area within the spot AE point at the center of the LCD monitor. Use this mode when the subject is backlit or surrounded by strong light.

1 Press • (▲ on the omni selector) as necessary to display either ᠍,
■ or ☑ , and shoot image.

## **Adjusting the Exposure**

## Shooting Mode CI 🖳 🖳 🖎 🛣 🎉 🎘 🐺 拱

Adjust the exposure compensation setting to avoid making the subject too dark when it is backlit or shot against a bright background.

- 1 Select 

  \* from the FUNC. menu.
  - See Selecting Menus and Settings (p. 62).
  - \* The current setting is displayed.
- 2 Press ◀ or ▶ to adjust the compensation.
  - The settings can be adjusted in 1/3 stops in the range of -2EV to +2EV.





- You can check the results of the compensation by viewing the image on the LCD monitor when it is on.
- You can shoot the image right after selecting settings by pressing the shutter button. The menu displays again after the shot, allowing you to change the settings easily.
- **3** Press the FUNC. button.
  - To cancel the exposure compensation, return the setting to 0 using ◀ or ►.

## **Adjusting the Tone (White Balance)**

Shooting Mode M 🖳 🖳 🖳

When the white balance is set to match the light source, the camera can reproduce colors more accurately.

Combinations of setting contents and light source are as follows.

AWB	Auto	Settings are automatically set by the camera
*	Day Light	For recording outdoors on a bright day
2	Cloudy	For recording under overcast, shady or twilight skies
<b>ķ</b>	Tungsten	For recording under tungsten and bulb-type 3-wavelength fluorescent
***	Fluorescent	For recording under warm-white, color-white or warm-white (3-wavelength) fluorescent lighting
¥	Fluorescent H	For recording under daylight fluorescent, or daylight fluorescent-type 3-wavelength fluorescent lighting
•	Custom	For setting a custom value with a white sheet of paper, etc., to obtain the optimal white balance for the conditions

## 1 Select (Auto) from the FUNC. menu.

- See Selecting Menus and Settings (p. 62).
- \* The current setting is displayed.
- 2 Press ◀ or ▶ to select white balance.



- See page 78 regarding the custom setting.
- When the LCD monitor is on, you can check the setting on the display.
- A shot can be taken immediately by pressing the shutter button. The menu will reappear after the shot, allowing you to adjust the setting.
- **3** Press the FUNC. button.



The white balance cannot be adjusted when the photo effect is set to (sepia) or (B/W) (p. 80).

#### **Setting a Custom White Balance**

In the following cases, the white balance may not be correctly adjusted. Use (Custom) to adjust the white balance.

- Shooting at close distances (macro)
- Shooting monotone subjects (such as the sky, sea, forest, and so on)
- Shooting under special light sources (such as mercury lamps)
- 1 Select m\* (Auto) from the FUNC. menu.
- See Selecting Menus and Settings (p. 62).
- \* The current setting is displayed.
- 2 Select (Custom) using ◀ or ▶.



## 3 Aim the camera at a piece of white paper or cloth, or gray card and press the SET button.

- Aim the camera so that the white paper or cloth completely fills the frame at the center of the LCD monitor or the entire optical viewfinder before pressing the SET button.
   The camera reads the white balance data when you press the SET button.
- You can shoot right after setting the white balance. The menu displays again after the shot, allowing you to change the settings easily.

#### 4 Press the FUNC, button.



- You are recommended to set the white balance when shooting in the following conditions.
  - The shooting mode is set to and the exposure compensation is set to ±0.

The correct white balance may not be obtained when the exposure is incorrect (image is completely black or white).

- The zoom is positioned to the telephoto end setting.
   Set the digital zoom to [Off].
- A mode other than █, █ is selected.
  - In **!** mode, white balance data cannot be read.
- The flash is set to [3] (Flash On) or (§) (Flash Off).

Use the same flash setting as the one that will be used for shooting when you set the white balance. If the white balance setting conditions and shooting conditions are not the same, the correct white balance may not be obtained. When the flash is set to (Auto), the flash may fire while the white balance data is recorded to the custom white balance. If this happens, make sure the flash also fires when you shoot the image.

- The ISO speed is set to the same setting to shoot the image.
- The custom white balance setting is not canceled even if settings are reset to default settings (p. 72).

### **Changing the ISO Speed**

Shooting Mode

Raise the ISO speed when you wish to reduce camera shake, when turning the flash off for use in dark conditions, or when a fast shutter speed is required.

- 1 Select St(ISO Speed) from the FUNC. menu.
  - See Selecting Menus and Settings (p. 62).
- \* The current setting is displayed.
- 2 Press ◀ or ▶ to select the ISO speed.
  - A shot can be taken immediately by pressing the shutter button. The menu will reappear after the shot, allowing you to adjust the setting.



3 Press the FUNC, button.



- Higher ISO speeds increase the image noise. To take clean images, use as low an ISO speed as possible.
- The AUTO setting selects the optimal speed. It will automatically raise the speed when the light from the flash is insufficient to illuminate the subject matter



You can easily shoot images in dark places such as indoor settings by using the (Indoor (p. 48)) option of the SCN mode.

## **Changing the Photo Effect**

Shooting Mode M 🖳 🖳 🔭

You can shoot with different saturation and contrast color effects.

OFF	Effect Off	Records normally with this setting.
œ	Vivid	Emphasizes the contrast and color saturation to record in bold color.
Ø	Neutral	Tones down the contrast and color saturation to record neutral hues.
ĻŞ	Low Sharpening	Records subjects with softened outlines.
ى چ	Sepia	Records in sepia tones.
₿₩	B/W	Records in black and white.

## 1 Select \* (Effect OFF) from the FUNC. menu.

- See Selecting Menus and Settings (p. 62).
- \* The current setting is displayed.

# 2 Select the photo effect using ◀ or

- If the LCD monitor is on, you can check the photo effect by viewing the image on the LCD monitor.
- cN 图□ ③◎6 :0 骤 函 Septa L *图 出 出 出 题 型*
- A shot can be taken immediately by pressing the shutter button. The menu will reappear after the shot, allowing you to adjust the setting.
- 3 Press the FUNC. button.

## **Setting the Auto Rotate Function**

## Shooting Mode O C P P P Z Z B P W K

This camera is equipped with an Intelligent Orientation sensor that detects the orientation of an image shot with the camera held vertically and automatically rotates it to the correct viewing orientation in the display. You can set this function on/off.

1 In the [iii (Set up)] menu, select iii (Auto Rotate).
■ See Selecting Menus

and Settings (p. 62).

- ## Auto Rotate
  ### O7.07.104 14:40
  ### Off
  ### Off
  ### English...
- 2 Select [On] and press the MENU button.

 When this function is on, an icon showing the orientation of the camera appears at the upper right corner of the LCD monitor (when information display is on).

â	Normal
Ĝ	Right end down
â	Left end down



- This function may not operate correctly when the camera is pointed straight up or down. Check that the arrow is pointing in the right direction and if it is not, then set the Auto Rotate function to [Off].
- Even if the Auto Rotate function is set to [On], the orientation of images downloaded to a computer will depend upon the software used to download the images.



- When the camera is held vertically to shoot, the Intelligent Orientation sensor judges the upper end to be "up" and the lower end to be "down". It then regulates the optimal white balance and exposure for vertical photography. This function operates regardless of the on/off status of the Auto Rotate function.
- When changing the camera's orientation between the horizontal and vertical positions, you may hear noise coming from the orientation detection mechanism. This is not a malfunction.

## Playback - Advanced Functions

#### **Rotating Images in the Display**

You can rotate an image by 90° or 270° clockwise in the LCD monitor.







Original

90°

270°

- 1 In the [ □ (Play)] Menu, select ☐ (Rotate).
- See Selecting Menus and Settings (p. 62).
- 2 Press ◀ or ▶ to select the image to be rotated and press the SET button.
  - Press the SET button to rotate the image 90°, 270° and back to original orientation.
- 3 Press the MENU button.
- The Play menu appears again. Press the MENU button again to close the menu.



Movie images cannot be rotated.
 If an image has been rotated in the camera before being loaded onto a computer, the particular software in use will determine whether or not the rotation settings are retained.



- Rotated images can be magnified (p. 55).
- Images taken vertically with the auto rotate function (p. 81) set to [On] will automatically be rotated to the vertical position when viewed on the LCD monitor.

### **Attaching Sound Memos to Images**

In Playback mode (including single image playback, index playback, and magnified playback), you can attach sound memos (up to 60 seconds) to an image. The sound data are saved in WAVE format.

- Select 

  (Sound Memo) from the 

  (□ (Play)] menu.
- See Selecting Menus and Settings (p. 62).
- 🛚 appears.
- 2 Select the image to which you wish to attach the sound memo using ◀ or ▶, and press the SET button.



Sound Memo Panel

The Sound Memo panel appears.

## 3 Select ● using ◀ or ▶ and press the SET button.

- The recording starts and the elapsed time is displayed. Speak towards the microphone of the camera.
- To stop recording, press the SET button. To restart recording press the SET button again.
- You can add as many sound memos as you like until their total reaches 60 seconds.

#### **Playing the Sound Memos**

- Select ▶ in step 3. The ▶ icon is displayed on images with sound memos.
- To stop playback, press the SET button. To resume playback, press the SET button again. You can adjust the volume using ▲ or

#### **Erasing the Sound Memos**

• Select 4 in step 3.

#### **Exiting the Sound Memos Settings**

Press the MENU button.



- You cannot attach sound memos to movies.
- The "Memory card full" message will display when the SD card is full and you will be unable to record sound memos to that card.
- You cannot record or play back sound memos for images that already have an incompatible sound file attached. If you attempt to record or play such images the "Incompatible WAVE format" message will display. Incompatible sound files can be deleted with this camera.
- Sound memos for protected images cannot be erased (p. 86).



- You can also adjust the volume of the sound memo in the Set up menu (p. 68).
- If you set [Mute] to [On] in the Set up menu (p. 67), no sound is reproduced. However, you can resume the sound and adjust the volume during movie playback using ▲ or ▼.

#### **Auto Play**

Use this feature to automatically play back all of the images in the SD card (Auto Play). The LCD monitor displays each image for approximately 3 seconds.

## 1 In the [□ (Play)] menu, select (Auto Play).

- See Selecting Menus and Settings (p. 62).
- Once you have selected it, Auto Play starts.
- As with the single image playback mode, using ◀ or ▶ during auto play will advance through the images more rapidly.

#### **Pausing and Resuming Auto Play**

 You can pause Auto Play at any time by pressing the SET button. You can then restart it by pressing the SET button again.

#### **Stopping Auto Play**

To stop Auto Play, press the MENU button.



- The display interval may vary for some images.
- Movie images play for the length of time that they were recorded.
- The power saving function (p. 24) is disabled during Auto Play.

## **Protecting Images**

Use the protect feature to protect important images from accidental erasure.

- 1 In the [ (Play)] menu, select (Protect).
  - See Selecting Menus and Settings (p. 62).
- 2 Select an image you want to protect using ◀ or ▶ and press the SET button.



- The on icon appears on protected images.
- Protected Icon
- To release the protection, press the SET button again.
- Image can be selected in both single image playback and index playback modes (p. 55, 56).

#### 3 Press the MENU button.

The camera returns to the menu screen.
 Press the MENU button again to exit the menu screen.



Please note that formatting (initializing) an SD card erases all data, including protected images (p. 19) and other file types. Please check the contents of the SD card before formatting it.

#### **Various Functions**

### **About Printing**

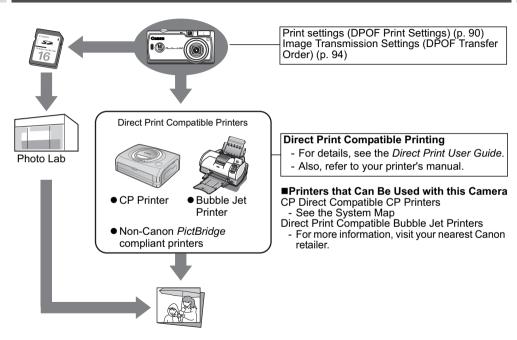
There are two ways of printing images shot with this camera.

- You can easily print images stored in the SD card by connecting the camera to a direct print compatible printer <sup>\*1</sup> with a cable and operating the camera's ∆ button.
- You can specify the images on your SD card you want to print and how many copies you want (DPOF \*2
   Print Settings), and then take the SD card to a participating photo lab that supports DPOF to have them
   printed out later.

\*1 This camera complies with the industry standard PictBridge, therefore, you can connect the camera to non-Canon PictBridge compliant printers and print images.

\*2 Digital Print Order Format

This manual explains the DPOF print settings. For information on how to print images, refer to the Direct Print User Guide supplied with the camera. Also, refer to your printer's manual.



### **DPOF Print Settings**

You can select images on an SD card for printing and specify the number of print copies in advance using the camera. This is extremely convenient for sending the images to a photo developing service that supports DPOF or for printing on a direct print function compatible printer.

Refer to the *Direct Print User Guide* for instructions on how to select print settings from the printer.



- The A mark may appear on images that have had print marks set by another DPOF compliant camera. These settings will be overwritten by any print marks set by your camera.
- The output of some digital printers or photo lab services may not reflect the specified print settings.
- Movies cannot be printed.

#### **Selecting Images for Printing**

- 1 In the [ (Play)] menu, select (Print Order) and press the SET button.
- See Selecting Menus and Settings (p. 62).
- 2 Select [Order]
  using ◀ or ▶ and
  press the SET
  button.



3 Select images for printing.

#### Single Images

When the print type

 (p. 92) is set to
 [Standard] or [Both],
 select an image using or ▶. You can set the number of copies (up to 99) to be printed using



 $\blacktriangle$  or  $\blacktriangledown$ .

 When the print type (p. 92) is set to [Index]. select an image using or and mark or remove marks from images using ▲ or ▼. A check mark appears on the marked image.



• Press to switch to index playback. You can use the same procedures to select images in index playback (3 images).

#### All the Images on a SD Card

• Press = to switch to index playback (3 images).



- You can set one copy of each image to print by pressing the SET button, then selecting [Mark all] using ▲ or ▼, 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 on changing settings, please reread Step 3 from the beginning.
- You can cancel all the settings by selecting [Clear all].

#### Press the MENU button.

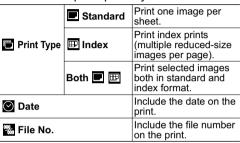
 The setting will be complete and the Print Order menu will reappear.



- Images are printed in order from oldest to newest by the shooting date.
- A maximum of 998 images can be set.
  - When [Print Type] is set to [Both], the number of copies can be set. When it is set to [Index], the number of copies cannot be set (only one copy will be printed).
- Print settings can also be assigned to images with the bundled software programs (ZoomBrowser EX or ImageBrowser) on a computer. However. do not set the date in the DPOF print settings when printing images that have had the date embedded with the [Date Stampl function. This may cause the date to be printed twice.

#### **Setting the Print Style**

You can set up the print style as follows.



- In the [ (Play)] menu, select (Print Order) and press the SET button.
- See Selecting Menus and Settings (p. 62).
- 2 Select [Set up] using ◀ or ▶ and press the SET button.



- 3 Select (Print Type), (Date) or (File No.) using ▲ or ▼.
- **4** Select a setting using **◄** or **▶**.



Print Type
Select [Standard],[Index]
or [Both].





**File No.**Select [On] or [Off].

### **5** Press the MENU button.

 The set up menu will close and the Print Order menu will reappear.



- If you have chosen [Index] as the print type, you cannot set [Date] and [File No.] to [On] at the same time.
- When connected to a CP printer, both [Date] and [File No.] can be set to [On], if [Print Type] is set to [Both] or [Standard], however, only the date is printed for the standard print and only the file number is printed for the index print.



The date prints as the date and time in the format specified in the Set Date/Time menu (p. 21).

#### **Resetting the Print Settings**

The Reset feature clears all print selections, and resets Print Type to [Standard], Date to [On], and File No. to [Off].

- 1 In the [☐ (Play)] menu, select ☐ (Print Order) and press the SET button.
- See Selecting Menus and Settings (p. 62).
- 2 Press ◀ or ▶ to select [Reset] and press the SET button.



- 3 Press ◀ or ▶ to select [OK] and press the SET button.
  - Select [Cancel] and press the SET button to cancel the reset.

## Image Transmission Settings (DPOF Transfer Order)

You can use the camera to specify settings for images before downloading to a computer. Refer to the *Software Starter Guide* for instructions on how to transfer images to your computer. You cannot use this function to transfer several images at once to a Mac OS X computers. The settings used on the camera comply with the Digital Print Order Format (DPOF) standards.



The A mark may appear on images that have had transfer marks set by another DPOF compliant camera. These settings will be overwritten by any marks set by your camera.

#### **Selecting Images for Transferring**

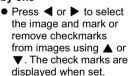
- 1 In the [ Play] menu, select (Transfer Order) and press the SET button.
- See Selecting Menus and Settings (p. 62).

- 2 Press ◀ or ▶ to select [Order] and press the SET button.
- You can remove all the transfer marks at once by selecting [Reset].



## 3 Select images for transferring.

For setting images one by one





 The above method can be used even if you press to switch to index playback (3images display).

## For setting all images on the SD card

 Switch to index playback (a set of 3 images) by pressing



#### 4 Press the MENU button.

 The selection mode will turn off and the Transfer Order menu will reappear.



- Images are transferred in order from oldest to newest by the shooting date.
- A maximum of 998 images can be marked.

## **Downloading Images to a Computer**

The following methods can be used to download images recorded by the camera to a computer. Some methods are not applicable to all operating systems.

#### Downloading via a Camera to Computer Connection

Windows	Windows	Windows	Mac	Mac
Me	2000	XP	OS 9	OS X

- With this method, you download images using computer commands after you have installed the appropriate software.
  - See Connecting the Camera to a Computer (p. 96) and the separate Software Starter Guide.

Windows Windows Wi	indows Windows
THIIIUUNUU THIIIUUNUU T	IIIuono 🛮 miliuono
00 Mo 1 4	2000 XP
JO IVIE A	2000 AF

- With this method, you download images using camera button operations after you have installed the appropriate software (the computer settings only need to be adjusted for the first download).
  - See Connecting the Camera to a Computer (p. 96) and Downloading Images by Direct Transfer (p. 100).



#### Mac OS X

- With this method, you download images using computer commands without installing any software.
  - See Connecting the Camera to a Computer (below) ("Software Installation Not Required"), and Connecting the Camera to the Computer to Download Images without Installing Software (p. 102).

### Downloading Directly from an SD Card

With this method, you download images using a card adapter or card reader.

See Downloading Directly from an SD Card (p. 103).

#### **Connecting the Camera to a Computer**

#### **Computer System Requirements**

#### Windows

	Windows 98 (Including Second Edition)
	Windows Me
os	Windows 2000
	Windows XP (Home Edition,
	Professional)

Computer Model	The above OS should be pre-installed on computers with built-in USB ports.	
CPU	Windows 98/Windows Me/Windows 2000: Pentium 150 MHz or higher processor Windows XP: Pentium 300 MHz or higher processor For all of the above OS: Pentium 500 MHz or higher processor is recommended (for editing movies)	
RAM	Windows 98/Windows Me/Windows 2000: 64 MB or more Windows XP: 128 MB or more For all of the above OS: 128 MB or more is recommended (for editing movies)	
Interface	USB	
Free Hard Disk Space	●Canon Utilities - ZoomBrowser EX: 200 MB or more (Including the PhotoRecord printing program) - PhotoStitch: 40 MB or more ●Canon Camera TWAIN Driver: 25 MB or more ●Canon Camera WIA Driver: 25 MB or more	

Display	800 x 600 pixels/High Color (16bit) or better is required 1,024 x 768 pixels or better is recommended
---------	--

#### Macintosh

OS	Mac OS 9.0 - 9.2, Mac OS X (v10.1/v10.2/v10.3)	
Computer Model	The above OS should be pre- installed on computers with built-in USB ports.	
CPU	PowerPC	
RAM	Mac OS 9.0 - 9.2: 64MB or more of application memory Mac OS X (v10.1/v10.2/v10.3): 128MB or more	
Interface	USB	
Free Hard Disk Space	Canon Utilities     ImageBrowser: 120MB or more     PhotoStitch: 30MB or more	
Display	800 x 600 pixels/ 32,000 colors or better is required 1,024 x 768 pixels or better is recommended	

#### **IMPORTANT**

You must install the software and driver bundled on the supplied Canon Digital Camera Solution Disk onto your computer before connecting the camera to a computer.

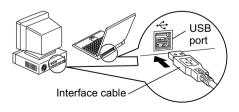


The camera will not operate correctly if you connect it to your computer before installing the driver and software. If this happens, please refer to the *Troubleshooting* section of the *Software Starter Guide*.



- You do not need to turn off the camera or computer power when making a USB connection.
- Please refer to your computer's manual for information regarding the location of the USB port.
- You are recommended to use new AA size batteries, fully charged AA size NiMH batteries or AC Adapter Kit ACK800 (sold separately) to power the camera when connecting to a computer (p. 121, 124).

- All procedures performed with a connection to a USB 2.0 compliant board are not guaranteed.
- Install the driver and the software applications bundled on the Canon Digital Camera Solution Disk (first time only).
- Please see the Software Starter Guide for the installation procedures.
- 2 Use the supplied interface cable to connect the computer's USB port to the camera's DIGITAL terminal.





**DIGITAL**Terminal

- Open the terminal cover with your finger nail.
- 2. Insert the connector with ♣ facing up.



Always grasp the connector's sides to remove the interface cable from the camera's **DIGITAL** terminal.

- **3** Set the camera's mode switch to **▶**.
- 4 Press the ON/OFF button until the upper indicator lights green.
  - Windows → Proceed to steps 4 and 5 below.
  - Macintosh → Refer to the Software Starter Guide and download images.

5 Select [Canon CameraWindow] in the events dialog that appears on the computer and click [OK] (first time only).



If the events dialog fails to appear, click the [Start] menu, followed by [Programs] or [All Programs], [Canon Utilities], [CameraWindows], and [CameraWindow - Set Auto-Launch].

6 Click [Set] in the [CameraWindow - Set Auto-Launch] window (first time only).



The Download Image window will display.



- Using the software and computer to download images:
- → See the Software Starter Guide.
- Using the Camera to Download Images (Direct Transfer Function):
- → See Downloading Images by Direct Transfer (below).

## **Downloading Images by Direct Transfer**

Use this method to download images using camera operations.

Install the supplied software and adjust the computer settings before using this method for the first time (p. 98).

	All Images	Transfers and saves all images to the computer.
	New Images	Transfers and saves to the computer only the images that have not been previously transferred.
<b>√</b> [•	DPOF Trans. Images	Transfers and saves to the computer only the images with DPOF Transfer Order settings (p. 94).
-	Select & Transfer	Transfers and saves single images to the computer as you view and select them.



#### Wallpaper

Transfers and saves single images to the computer as you view and select them. The transferred images display on the computer desktop.

1 Confirm that the Direct Transfer menu is displayed on the camera's LCD monitor.



● The ☐ w button will light Direct Transfer Menu blue

 Press the MENU button if the Direct Transfer menu fails to appear.

## All Images/New Images/DPOF Trans. Images

2 Use ▲ or ▼ to select ♠, ∰ or ☐ and press the ♠ button.



- To cancel the transfer, press the **SET** button.
- The images will download and the Direct Transfer menu will reappear.

#### Select & Transfer/Wallpaper

- 2 Use ▲ or ▼ to select 
   or 
   and press the 
   or button (or SET button).
- 3 Use ◀ or ▶ to select images to download and press the △ ∽ button (or SET button).
- The images will download. The △ → button will blink blue while downloading is in progress.
- 4 Press the MENU button.
  - The Direct Transfer menu will reappear.



Only JPEG format images can be downloaded as wallpaper for the computer.



The option selected with the \( \frac{\D}{\top} \) button is retained even when the camera's power is turned off. The previous setting will be in effect the next time the Direct Transfer menu is displayed. The image selection screen will appear directly when the [Select & Transfer] or the [Wallpaper] option was last selected.

#### Connecting the Camera to the Computer to Download Images without Installing Software

If you are using Windows XP or Mac OS X (v10.1/v10.2/v10.3), you can use the software distributed with these operating systems to download images without installing the software bundled on the Canon Digital Camera Solution Disk. This is useful for downloading images to a computer in which the software is not installed.

However, please note that there are certain limitations to downloading images with this method. For more details, please refer to the For Windows® XP and Mac OS X Users leaflet.

- 1 Use the supplied interface cable to connect the computer's USB port to the camera's DIGITAL terminal.
  - See steps 2 and 3 of p. 98.
- 2 Follow the onscreen instructions to proceed with downloading.

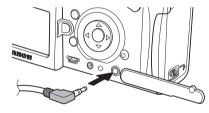
#### **Downloading Directly from a SD card**

- 1 Eject the SD card from the camera and insert it into a SD card reader connected to the computer.
- Refer to your PC card adapter's or PC card reader's manual for information regarding the connection between the computer and card adapter or card reader.
- 2 Double-click the icon of the drive with the SD card.
- Depending on the operating system, a window opens automatically.
- 3 Copy images from the card into a folder of your choice on the hard disk.
- The images are stored in the [xxxCANON] folders located in the [DCIM] folder (where xxx is a three-digit number from 100 to 998 (p. 105)).

## **Viewing Images on a TV Set**

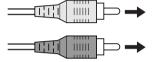
AV cable AVC-DC300 can be used to view images as you shoot or play them back.

- 1 Turn off the camera (p. 23).
- Turn off the television also.
- 2 Attach the AV Cable to the terminal on the camera.



3 Plug the other ends of the AV cable to the video in and audio in jacks on the TV.

Yellow Plug to the Video In Jack



Black Plug to the Audio In Jack

- 4 Turn on the TV and switch it to Video mode.
- 5 Set the mode switch to Shooting mode or Playback mode.
- **6** Turn on the camera (p. 23).
  - The image will appear on the TV. Shoot or playback images as usual.
  - If the images are not appearing on the TV when shooting, press the DISP. button.



- No image will appear on the LCD monitor when the camera is connected to a TV monitor.
- If the TV is a stereo model, you can plug the audio plug into either the left or right Audio In jack. Please refer to the TV's manual for details.
- The video output signal can be switched (NTSC or PAL) to accommodate different regional standards (p. 70). The default setting varies between regions.
  - NTSC:Japan, U.S.A., Canada, Taiwan, etc.
  - PAL: Europe, Asia (excluding Taiwan), Oceania, etc.

If the video system is set incorrectly, the camera output may not display properly.

### **Resetting the File Number**

You can select the way file numbers are assigned.

On

The camera resets the file number to 100-0001 each time you insert a new (unused) SD card. If you insert a card that already contains some images, numbering resumes from the next available number

Off

The camera remembers the last file number, and starts numbering from the next number when you insert a new SD card

In the [ (Set up)] menu, select 🌄 (File No. Reset).

• See Selectina Menus

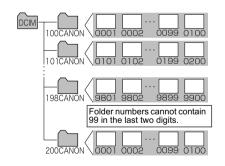
- File No. Reset Fnalish
- and Settings (p. 62). 2 Press ◀ or ▶ to select [On] or
- [Off].
- 3 Press the MENU button.



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

#### About File and Folder Numbers

Images are assigned file numbers from 0001 to 9900, and folders are assigned folder numbers from 100 to 998 (Folder numbers cannot contain 99 in the last two diaits).



#### **Folder File Capacity**

Each folder usually contains up to 100 images.

However, since images shot in Continuous Shooting or Stitch Assist mode are always saved into the same folder, a folder may contain more than 100 images. The number of images may also exceed 100 if a folder contains images copied from a computer or images shot with other cameras. Please note, however, that the images in folders containing 2001 or more images cannot be played back in this camera.

## Customizing the Camera (My Camera Settings)

My Camera allows you to customize the start-up image and start-up, shutter, operation and self-timer sounds. Each menu item has three choices.

#### Ex: Start-up image







As default settings, My Camera setting A has a science fiction theme and My Camera setting A has an animal theme.

### **Changing My Camera Settings**

- 1 Press the MENU button.
- The [ (Rec.)] or [ (Play)] menu appears.
- 2 Select [ ♣ (My Camera)] using ▶ and select a menu item using ▲ or ▼.





3 Select the contents you wish to set using ◀ or ▶.



### 4 Press the MENU button.

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



- If you select [Theme] in Step 2, you can select a consistent theme for each of the My Camera settings.
- If [Mute] in the [M] (Set up)] menu is set to [On], no sound is reproduced except for the error warning signal regardless of the selected My Camera settings. The Start-up image displays (p. 67).

# **Registering My Camera Settings**

Images recorded onto the SD card and newly recorded sounds can be added as My Camera settings to the A and A menu items. You can also use the supplied software to upload your computer's images and sounds to the camera.

The following menu items can be saved to the camera.

- Start-up Image
- Start-up Sound
- Operation Sound
- Self-timer Sound
- Shutter Sound



To revert My Camera settings to default, register the default setting contents with the supplied software programs (ZoomBrowser EX/ImageBrowser) on a computer.

# Registering the SD Card Images and Sounds

- **1** Set the mode switch to **▶**.
- The camera powers into Playback mode. 108

- **2** Press the MENU button.
  - The [ (Play)] menu appears.



3 Select [ ♣ (My Camera)] using ▶ and select the menu item you wish to register using ▲ or ▼.



- 4 Select to or the using ◀ or ▶.
- DISP appears.



# **5** Press the DISP. button.

An image appears.



Start-up Image: Go to step **6a**, **7a**Start-up Sound, Shutter Sound, Operation Sound, and Self-timer Sound: Go to step **6b**, **7b** 

6a Select the image you wish to register using ◀ or ▶.

7a Press the SET button.



6b Select (Record) using or▶ and press the SET button.



- · Recording starts.
- Recording stops when the time is exceeded.

Start-up Sound: 1 second
Operation Sound: 0.3 seconds
Self-timer Sound: 2 seconds
Shutter Sound: 0.3 seconds

- **7b** Select **№** (Register) using **◄** or **▶**.
- 8 Select OK using ◀ or ▶ and press the SET button.





- Sounds recorded using the Sound Memo function (p. 84) and movies (p. 53) cannot be registered as My Camera settings.
- When you register new My Camera settings, the previously registered settings are erased.

### **File Format of My Camera Settings**

My Camera settings should conform to the below file formats. However, SD card images shot with this camera can be registered as My Camera settings regardless of the below formats (excluding movies and sound memos (p. 84)).

#### Start-up Image

Recording Format JPEG (baseline JPEG)

Sampling Rate 4:2:0 or 4:2:2
 Image Size 320 x 240 pixels

File Capacity 20 KB or less

#### Start-up, Operation, Self-timer and Shutter Sounds

• Recording Format WAVE (monaural)

• Quantization Bits 8 bit

• Sampling Frequency 11.025 kHz or 8.000 kHz

#### · Recording Time

	11.025 kHz	8.000 kHz
∰)Start-up Sound	1.0 sec. or less	1.3 sec. or less
Operation Sound	0.3 sec. or less	0.4 sec. or less
Self-timer Sound	2.0 sec. or less	2.0 sec. or less
(Shutter Sound	0.3 sec. or less	0.4 sec. or less

Any file formats other than those described above cannot be used with this camera.

As example of this function is to record "Say Cheese", the self-timer sound so the camera will play back this sound 2 seconds before the photo is taken. You could also record cheerful music to bring out the natural smiles of your subjects, or so

they can strike a pose fitting the music. In these ways you can customize your camera by creating and adding new My Camera settings.

See the supplied *Software Starter Guide* for more information on creating and adding to the My Camera Settings files.

# **List of Messages**

The following table explains each of the messages that may appear on the LCD monitor.

• For messages which may appear when a printer is connected, refer to the *Direct Print User Guide*.

Incompatible JPEG format	You attempted to play back an incompatible JPEG file.	
Image too large	You attempted to play back an image larger than 4064×3048 pixels or with a large file size.	
No image	No images recorded on SD card.	
Change the batteries	Battery charge is insufficient to operate the camera. Replace both batteries at the same time with new AA-size alkaline batteries (p. 17) or fully recharged Canon NiMH batteries.	
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 Set up Menu, set the File Reset option to [On]. Save all the images you wish to retain onto a computer, then reformat the SD card. Please note that formatting will erase all the existing images and other data.	
Memory card full	SD card is too full to accommodate more images or print settings.	
Memory card error!	There is something wrong with the SD card.	
Cannot record!	You attempted to shoot with no SD card installed.	
Card locked!	The SD card is write-protected.	
No memory card	You attempted to shoot or play back with no SD card installed.	
Busy	The camera is recording image data to the SD card. The playback mode is running.	

Corrupted data	You attempted to play back an image with corrupted data.	
RAW	You attempted to play back an image recorded in the RAW format.	
Unidentified Image	You attempted to play back an image that was recorded in a special format (proprietary format used by the camera of another manufacturer) or a movie that was taken with another camera.	
Cannot magnify!	You attempted to magnify an image which was photographed with another camera, recorded in a different format, or edited on a computer or a movie clip.	
Cannot rotate!	You attempted to rotate an image which was photographed with another camera, recorded in a different format, or edited on a computer or a movie clip.	
Incompatible WAVE format	A sound memo cannot be added to this image since the format of the existing sound memo is incorrect.	
Cannot register this image!	You attempted to register an image recorded with another camera or a movie clip as a start-up image.	
Protected!	You attempted to erase protected image or movie clip.	
Too many marks!	Too many images have been marked for printing or transferring. Cannot process any more.	
Cannot mark image	You attempted to set the print settings for a non-JPEG file.	
Exx	Camera malfunctioned. Turn off the power and turn on again, then re-shoot or play back. If the same message recurs frequently, the camera may be damaged. Note down the error number [xx] and take the camera to a Customer Support Help Desk. If this message appears immediately after you have taken a shot, the camera may not have shot the image. Switch to the Playback mode and check whether the image was actually recorded.	

# Troubleshooting

Problem	Cause	Solution
The camera will not operate.	The camera is turned off.	● Turn the power on. (See <i>Turning the Power ON/OFF</i> (p. 23))
	The SD card slot/battery cover is open.	Be sure the cover is closed securely.
	Batteries are loaded in the wrong direction.	Reload the batteries in the correct direction.
	Batteries are depleted.	<ul> <li>Replace with unused alkaline (two AA-size batteries) or fully recharged Canon AA-size NiMH batteries.</li> <li>Use a household power source.</li> </ul>
	Batteries are not the right type.	Use only new AA-size alkaline batteries or Canon AA-size NiMH batteries. (For the information about alkaline batteries, see Proper Battery Handling (p. 17))
	Batteries are not making good electrical contact with the camera.	Wipe the battery terminals with a clean dry cloth.     Reload the batteries several times.
The camera will not	Camera is in Playback mode.	Change to a Shooting mode.
shoot.	The flash is charging.	Wait until the flash charges. You can press the shutter button when the upper indicator lights orange steadily.

Problem	Cause	Solution
The camera will not shoot.	The SD card is full.	<ul> <li>Insert a new SD card.</li> <li>Download images to your computer, then erase them from the card to free up more space.</li> </ul>
	The SD card is not formatted correctly.	<ul> <li>Format the SD card. (p. 19).</li> <li>The card may be defective (its logical may be corrupted). Contact Canon Customer Help Desk.</li> </ul>
	The SD card is write-protected.	<ul> <li>Slide the write protect tab of the SD card upward (p. 15).</li> </ul>
Cannot play back	You attempted to play back images shot with another camera or images edited with a computer.	<ul> <li>Computer images that cannot be played back will playback if they are added to the camera using the bundled software program ZoomBrowser EX or ImageBrowser. See the ZoomBrowser EX/ImageBrowser User Guide (PDF).</li> </ul>
	File name was changed with a computer or file location was changed.	Set the file name or location to the file format/ structure of the camera (See About File and Folder Numbers (p. 105)).
Lens will not retract	SD card slot/battery cover was opened with power on.	• First close the SD card slot/battery cover and then turn the power off.
	SD card slot/battery cover was opened while recording to the SD card (warning signal sounds).	• First close the SD card slot/battery cover and then turn the power off.

Problem	Cause	Solution
The batteries are consumed quickly.	Batteries are not the right type.	Use only new AA-size alkaline batteries or Canon AA-size NiMH batteries. (For the information about alkaline batteries, see <i>Proper Battery Handling</i> (p. 17))
	Battery capacity drops due to low ambient temperatures.	If shooting in a cold area, keep the batteries warm (by placing them in an inner pocket, etc.) until ready to use them.
	Battery terminals are dirty.	<ul><li>Wipe them well with a dry cloth before use.</li><li>Reload the batteries several times.</li></ul>
	The batteries have not been used for over a year.	Performance should return to normal after several charging cycles.
	The batteries have lost their effectiveness.	Replace both batteries with new ones.
Batteries do not charge with a	Batteries were placed in the charger in the wrong direction.	Put batteries back into the charger in the correct direction.
separately sold battery charger.	Poor electrical contact, between batteries and the charger.	<ul> <li>Be sure to set batteries firmly into the charger.</li> <li>Be sure that the power cable is firmly connected to the charger, and is firmly plugged in to the power outlet.</li> </ul>
	Battery terminals are dirty.	• Wipe them well with a dry cloth before charging.
	The batteries have lost their effectiveness.	Replace both batteries with new ones.

Problem	Cause	Solution
Shots are blurry or unfocused.	The camera was moving when you took the shot.	Hold the camera steady when shooting.
	Autofocus function hampered by obstruction to AF-assist beam.	Be careful not to block the AF-assist beam flash part with a finger or other object.
	The AF-assist beam is set to [Off].	● Turn the [AF-assist beam] setting [On] (p. 65).
	The subject was outside the range over which the camera can focus.	<ul> <li>Ensure that there is at least 47 cm (1.5 ft.) between the camera lens and subject.</li> <li>When shooting subjects within the 5 to 47 cm (2.0 in 1.5 ft.) wide angle range or the 30 to 47 cm (1.0 - 1.5 ft.) telephoto range, use Macro mode.</li> <li>When shooting distant subjects, set the camera to infinity mode.</li> </ul>
	The subject is difficult to focus on.	• Use the Focus Lock when shooting (See <i>Using the Focus Lock</i> (p. 73)).
The subject comes	Insufficient light for shooting.	● Set the flash on.
out underexposed (too dark).	The subject is darker than the surroundings.	• Set exposure compensation to a positive value or use the spot metering function.
	The subject is beyond the range of the flash.	<ul> <li>When flash is used, the distance between lens and subject should not exceed 2.0 m (6.6 ft.) (W/T).</li> <li>Raise the ISO speed (See Changing the ISO Speed (p. 79)).</li> </ul>

Problem	Cause	Solution
The subject comes out overexposed	The subject is too close to the flash.	● When flash is used, the distance between lens and subject should be no less than 30 cm (1.0 ft.).
(too bright).	The subject is brighter than the surroundings.	Set exposure compensation to a negative value or use the spot metering function.
	Light is shining or reflecting into the camera.	Adjust the camera angle.
	The flash mode is set so that the flash always fires.	• Set the flash to any other mode except on.
A vertical bar of light (red, purple) appears on the LCD monitor.	The subject is too bright.	This is normal occurrence in devices containing CCDs and does not constitute a malfunction. (This red bar of light will not be recorded when shooting still photos, but it will be recorded when shooting movies.)
White dots or white asterisks appear on the image.	Light from the flash has reflected off dust particles or insects in the air. This occurs more frequently in the following condition:  - When shooting at the wide angle end.	This is a phenomenon that occurs with digital cameras and does not constitute a malfunction.
The flash doesn't fire.	The flash mode is set to off.	Set the flash mode to On.

Problem	Cause	Solution
Image not showing on TV	Incorrect video system setting.	• Set the video system to the appropriate setting, NTSC or PAL, for your TV (p. 70).
	Shooting mode set to ■, ■ (Stitch Assist).	<ul> <li>The output will not appear on a TV monitor in</li> <li>■, ■ (Stitch Assist) mode. Shoot in a different mode.</li> </ul>
Zoom does not operate.	Zoom button was moved while shooting in movie mode.	Operate the zoom before shooting in movie mode.
Reading images from SD card is slow.	SD card was formatted in another device.	Use a SD card formatted in your camera.     (See Formatting a SD Card (p. 19))
Recording images to SD card takes a long time.		

# **Appendix**

# **Replacing the Date Battery**

If the LCD monitor displays the Date/Time menu when you turn on the camera, this means that the date battery has run down and the clock has stopped running. Please purchase a replacement battery (battery type CR1220) and install it as follows.

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

 $\triangle$ 

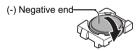
Be particularly careful to keep the date batteries out of the reach of children. Seek medical assistance immediately if a child swallows a battery since corrosive battery fluids could damage the stomach or intestinal wall

1 Be sure that the camera is turned off.

2 Open the SD card slot/battery cover (p. 13, 15) and remove the battery holder.



**3** Pull out the battery in the direction as shown with arrow.



Insert the new date battery into the holder with the negative end (-) facing up.

- 5 Replace the date battery holder back into its original position.
- 6 Set the date and time when the Date/Time menu is displayed on the LCD monitor (p. 21).



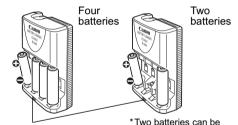
The LCD monitor also displays the Date/ Time menu the very first time you turn on the camera. This is normal, and you don't need to replace the date battery.

# Using the Power Kits (Sold Separately)

# Using Rechargeable Batteries

### (Battery and Charger Kit CBK4-200)

Included are the battery charger and four rechargeable AA-size NiMH (nickel metal hydride) batteries. Charge the batteries as shown below.



**Charge Indicator** 

charged instead of four.

The indicator blinks while charging, then remains lit when charging is finished.



Four batteries are supplied with the Battery and Charger Kit CBK4-200, however, only two batteries are used for this camera.



- This charger can be used only to charge Canon AA-size NiMH batteries NB-2AH.
   Please do not attempt to charge NB-2AH batteries in any other type of charger.
- Never mix new batteries together with batteries that have been used in other devices.
- When recharging batteries from the camera, always recharge both of them at the same time.
- Do not mix batteries with different purchase dates or different charge states.
- Do not attempt to recharge fully charged batteries, as doing so may reduce or impair battery performance. Also, do not charge batteries for more than 24 consecutive hours.
- Do not recharge batteries in enclosed areas that tend to retain heat.
- Repeatedly recharging batteries before they become fully depleted may cause batteries to lose capacity. Do not recharge the batteries until the LCD monitor displays the "Change the batteries" message.

- Wipe the battery terminals well with a dry cloth in the following situations, as the terminals may be soiled with oil from one's skin or other dirt:
  - -If the battery usage time has considerably diminished.
  - -If the number of recordable images has considerably diminished.
  - -When charging the batteries (insert and remove the batteries two or three times before charging)
  - -When charging completes in a matter of a few minutes (the battery charger indicator remains lit)
- You may not be able to fully charge the batteries due to their specifications right after purchase or after long periods of non-use. If this happens, use the batteries until their charge is depleted before charging them again. After doing this several times, battery performance will be restored.

- Since storing a fully charged battery for long periods of time (about one year) can shorten its lifecycle or affect performance, you are recommended to use the battery in the camera until it is completely discharged and to store it at normal temperature (23 °C/73 °F or less). If you do not use the battery for long periods of time, charge it fully and discharge it fully in the camera at least once a year before returning it to storage.
- If battery usage time is considerably low despite their terminals' being wiped and the battery charger's indicator remaining lit, it is possible that the batteries have reached the end of their lifespan. Switch to different, unused batteries. If you are purchasing new batteries, look for Canon AA-size NiMH batteries.
- Leaving batteries in the camera or charger may damage it causing battery leakage. Remove batteries from the camera or charger and store in a dry cool location when not in use.



- It takes approximately 110 minutes when two batteries are loaded one at each end of the charger and 250 minutes with four for the charger to fully recharge them (as determined by testing at Canon facilities). Please do not charge batteries in areas where the temperature is outside the range of 0 to 35 °C (32 to 95 °F).
- Charging time varies according to ambient temperature and to the batteries' initial charge state.
- The battery charger may emit noise while charging. This is not a malfunction.
- You can also use Battery/Charger Kit CBK100. For Battery/Charger Kit CBK100, use Canon AA-size NiMH batteries NB-1AH.

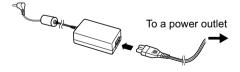
### **Using the AC Adapter Kit ACK800**

Use of the separately sold AC Adapter Kit ACK800 is recommended when using the camera continuously for prolonged periods of time and when connecting to a computer.



Be sure that the camera is turned off before connecting or disconnecting the compact power adapter.

1 Connect the power cord to the compact power adapter, and then plug the other end into the power outlet.



2 Open the terminal cover, and connect the adapter's DC plug into the camera's DC IN terminal.



 Please unplug the adapter from the power outlet when you have finished using the camera.



Please do not attempt to use any AC adapter other than AC Adapter Kit ACK800 with your camera. Use of a different adapter may result in damage to the camera or to the adapter kit.

## **Camera Care and Maintenance**

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

Camera
Body

Wipe the camera body 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 wiping the lens lightly with a soft cloth.

 Never use synthetic cleaners on the camera body or lens. If dirt remains, contact the closest Canon Customer Support Help Desk as listed on the separate Canon Customer Support leaflet.

#### LCD Monitor, Viewfinder

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 water, paint thinner, benzene, or detergents to clean the camera, as these may cause damage or deformation.

# **Specifications**

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

Camera Effective Pixels	Approx. 3.2 million	
Image Sensor	1/3.2-inch CCD (Total number of pixels: Approx. 3.3 million)	
Lens	5.9 (W) - 13.2 (T) mm (35 mm film equivalent: 45 (W) - 100 (T) mm), f 3.8	
Digital Zoom	Up to approx. 3.2x (Up to approx. 7x in combination with the optical zoom)	
Optical Viewfinder	Real-image zoom viewfinder	
LCD Monitor	1.5-inch. low-temperature polycrystalline silicon TFT color LCD, approx. 115,000 pixels	
AF System	TTL autofocus Focus lock available Focusing frame: 9-point AiAF/1-point AF (center)	
Shooting Distance (from the front of the lens)	Normal: 47 cm (1.5 ft.) - infinity (W / T) Macro: 5 - 47 cm (2.0 in 1.5 ft.) (W) / 30 - 47 cm (1.0 - 1.5 ft.) (T)	
Shutter	Mechanical shutter + electronic shutter	
Shutter Speeds	<ul> <li>1 − 1/1500 sec.</li> <li>1 − 1/8 sec. shutter speeds are available in manual or stitch assist mode if the flash is off.</li> <li>Slow shutter speeds of 1/6 sec. or slower operate with noise reduction.</li> </ul>	
Light Metering System	Evaluative, Center-weighted average or Spot (center)	
Exposure Control System	Program AE	
Exposure Compensation	± 2 stops in 1/3-stop increments	
Sensitivity	Auto, ISO 50/100/200/400 equivalent	
	(140) 14(1) 1 (7) 7 1 1 1	

(W): Wide angle (T): Telephoto

White Balance		TTL auto, pre-set (available settings: Daylight, Cloudy, Tungsten, Fluorescent, Fluorescent H) or Custom	
Flash		Auto*, on*, off * Red-eye reduction available	
Flash Range		Normal: 47 cm - 2.0 m (1.5 - 6.0 Macro: 30 - 47 cm (1.0 - 1.5 ft.)	
Shooting Modes		Auto/Manual/Stitch assist/Special Scene (Portrait, Night Scene, Foliage, Snow, Beach, Fireworks, Underwater, Indoor)/Movie	
Continuous Shooting		Approx. 1.3 shots/sec. (Large/F	ine mode, LCD monitor off)
Self-timer		Activates shutter after an appro	x. 10-sec./approx. 2-sec. delay
PC-controlled Shooting		Available (USB connection only. Exclusive software program is included in the camera kit.)	
Recording Media		SD memory card	
File Format		Design rule for camera file system and DPOF compliant	
Image Recording Forma	at	Still images: JPEG (Exif 2.2)*1, Movies: AVI (Image data: Motion JPEG; Audio data: WAVE (monaural))	
Compression		Superfine, Fine, Normal	
Number of Recording Pixels	Still Images	Large: 2048 x 1536 pixels Medium 2: 1024 x 768 pixels	Medium 1: 1600 x 1200 pixels Small : 640 x 480 pixels
	Movies	640 x 480 pixels (30 sec.)* <sup>2</sup> 160 x 120 pixels (3 min.)* <sup>2</sup> 161 to frames/sec.,  162 frames/sec.  163 frames/sec.	320 x 240 pixels (3 min.)* <sup>2</sup> frames/sec. to the maximum movie length per shooting.

Playback Modes	Single (histogram displayable), Index (9 thumbnail images), Magnified (approx. 10x (max.) in LCD monitor), Auto play or Sound memos (up to 60 sec.).
Direct Print	Canon Direct Print / Bubble Jet Direct / PictBridge compatible
Display Languages	14 languages available for menus and messages (English, German, French, Dutch, Danish, Finnish, Italian, Norwegian, Swedish, Spanish, Chinese, Russian, Portugese and Japanese)
My Camera Settings	The start-up image, start-up sound, shutter sound, operation sound and self-timer sound can be customized using the following methods:  1. Using the images and sounds recorded on a camera.  2. Using downloaded data from your computer using the supplied software.
Interface	USB (mini-B, PTP [Picture Transfer Protocol]) Audio/Video output (NTSC or PAL selectable, monaural audio)
Power Source	Two AA-size alkaline batteries (included in the camera kit)     Two AA-size rechargeable NiMH batteries NB-2AH (sold separately)     AC Adapter Kit ACK800 (sold separately)
Operating Temperatures	0 – 40°C (32 – 104°F)
Operating Humidity	10 – 90%
Dimensions	107.0 x 53.4 x 36.8 mm (4.2 x 2.1 x 1.4 in.) (excluding protrusions)
Weight	Approx. 165 g (5.8 oz.) (camera body only)

<sup>\*1</sup> This digital camera supports Exif 2.2 (also called "Exif Print"). Exif Print is a standard for enhancing the communication between digital cameras and printers. By connecting to an Exif Print-compliant printer, the camera's image data at the time of shooting is used and optimized, yielding extremely high quality prints.

time of shooting is used and optimized, yielding extremely high quality prints.

\*2 Maximum recording time per movie clip when using the separately sold SDC-128M SD card (not sold in some regions).

## **Battery Performance**

	Numbe		
	Based on the CIPA standard	LCD Monitor Off	Playback Time
AA Alkaline Batteries (included with the camera)	Approx.	Approx.	Approx.
	100 shots	400 shots	180 min.
AA NiMH Battery	Approx.	Approx.	Approx.
(NB-2AH(fully charged))	300 shots	750 shots	270 min.

The actual figures will vary according to the shooting conditions and settings.

#### <Test Conditions>

Shooting:

Normal temperature (23 °C  $\pm$  2 °C/73 °F  $\pm$  3.6 °F), normal relative humidity (50%  $\pm$  20%), alternating wide angle end and telephoto end shots at 30 second intervals with the flash fired once every two shots and the camera power turned off after every tenth shot. Power is left off for a sufficient amount of time\*, then the power is turned back on and the testing procedure is repeated.

- · The included memory card is used.
- The LCD moniter is turned on for the CIPA standard.
- \* Until the battery returns to normal temperature.

#### Playback:

Normal temperature (23 °C  $\pm$  2 °C/73 °F  $\pm$  3.6 °F), nomal relative humidity (50%  $\pm$  20%), continuous playback at 3 seconds per image.

 For information on handling batteries, see Proper Battery Handling (p. 17).

# SD Cards and Estimated Capacities (Recordable Images)

☐ SD card included with the camera

			SDC-16M	SDC-128M
	(2048 x 1536 pixels)		8	76
L (2			15	136
			30	269
		ß	13	121
M1 (1	600 x 1200 pixels)		24	216
			46	411
	M2 (1024 x 768 pixels)		23	211
M2 (1			41	372
			73	651
	⑤ (640 x 480 pixels)		51	460
<b>S</b> (6			80	711
			126	1117
	(640 x 480 pixels)		20 sec.	181 sec.
Movie	rie (320 x 240 pixels)		40 sec.	355 sec.
	(160 x 120 pixels)		98 sec.	869 sec.

- The maximum movie clip length is 30 sec. (
   ☐)\* or 3 min. (
   ☐, 
   ☐)\*. The times shown are the maximum continuous recording times.
  - \* When using the separately sold SDC-128M SD card (not sold in some regions).
- ▲ (Superfine), ▲ (Fine) and ▲ (Normal) indicate the compression setting.
- L (Large), M1 (Medium 1), M2 (Medium 2), S (Small), M, M and M show resolution rates.
- Some SD cards are not sold in some regions.

L (Large)	2048 x 1536 pixels
L (Large)	2046 X 1330 PIXEIS
M1 (Medium 1)	1600 x 1200 pixels
M2 (Medium 2)	1024 x 768 pixels
S (Small)	640 x 480 pixels
640	640 x 480 pixels
320	320 x 240 pixels
160	160 x 120 pixels

### Image File Size (Estimated)

		S		4
(2048	L x 1536 pixels)	1602 KB	893 KB	455 KB
M1 (1600 x 1200 pixels)		1002 KB	558 KB	278 KB
M2 (1024 x 768 pixels)		570 KB	320 KB	170 KB
(640	S x 480 pixels)	249 KB 150 KB 84 KE		84 KB
	(640 x 480 pixels)	660 KB/sec.		
Movie	(320 x 240 pixels)	330 KB/sec.		
	(160 x 120 pixels)	120 KB/sec.		

#### **NiMH Battery NB-2AH**

Supplied with the separately sold NiMH Battery NB4-200 set and the Battery/Charger Kit CBK4-200.

Туре	Rechargeable nickel metal hydride battery	
Nominal Voltage	1.2 V DC	
Typical Capacity	2300 mAh (min.: 2150 mAh)	
Cycle Life	Approx. 300 times	
Operating Temperatures	0 – 35 °C (32 – 95 °F)	
Dimensions	Diameter: 14.5 mm (0.6 in.) Length: 50 mm (2 in.)	
Weight	Approx. 29 g (1.0 oz.)	

#### **Battery Charger CB-4AH/CB-4AHE**

Supplied with the optional Battery and Charger Kit CBK4-200.

Rated Input	100 – 240 V AC (50/60 Hz) /10W	
Rated Output	565 mA* <sup>1</sup> , 1275 mA* <sup>2</sup>	
Charging Time	Approx. 250 minutes*1 Approx. 110 minutes*2	
Operating Temperatures	0 – 35 °C (32 – 95 °F)	

Dimensions	65.0 × 105.0 × 27.5 mm (2.6 × 4.1 × 1.1 in.)
Weight	CB-4AH: Approx. 95 g (3.4 oz.) CB-4AHE: Approx. 97 g (3.4 oz.)

#### **Compact Power Adapter CA-PS800**

Supplied with the separately sold AC Adapter Kit ACK800

Rated Input	100 – 240 V AC (50/60 Hz), 16 VA (100 V) – 26 VA (240 V)
Rated Output	3.15 V DC/2 A
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Dimensions	42.5 × 104 × 31.4 mm (1.7 × 4.1 × 1.3 in.)
Weight (body)	Approx. 180 g (6.4 oz.)

#### **SD Memory Card**

_	
Interface	Compatible with SD memory card standard
Dimensions	32.0 × 24.0 × 2.1 mm (1.3 × 0.9 × 0.1 in.)
Weight	Approx. 2 g (0.1 oz.)

<sup>\*1</sup> To charge four NB-2AH NiMH Batteries
\*2 To charge two NB-2AH NiMH Batteries loaded one at each end of the battery charger

# **Photo Tips and Information**

This section offers photography tips.

## Tip for Using the Self-timer (p. 43)

Normally, the camera shakes a little when you press the shutter button.

Setting the self-timer to delays the shutter release for two seconds and allows the camera to stop shaking, thus preventing a blurred image. Even better results can be obtained by placing the camera on a stable surface or by using a tripod to shoot

### How to Adjust the Exposure (p. 76)

This camera automatically adjusts the exposure to shoot images with the optimal brightness. However, recorded images may sometimes be brighter or darker than the actual image depending on the shooting conditions. If this happens, adjust the exposure compensation manually.

#### Underexposure

The whole recorded image is dark, which makes white elements of the image appear gray. Shooting bright subjects or in backlit conditions may cause the image to be underexposed. Adjust the exposure compensation towards the + end.



#### **Optimal Exposure**



#### Overexposure

The whole recorded image is bright, which makes black elements of the image appear gray. Shooting dark subjects or in dark places may cause the image to be overexposed. Adjust the exposure compensation towards the - end.



### ISO Speed (p. 79)

The ISO speed is the numeric representation of the camera's sensitivity to light. The higher the ISO speed, the higher the sensitivity. A high ISO speed allows you to shoot images in dark indoor or outdoor conditions without a flash and also helps prevent blurred images due to camera shake. This is convenient when shooting images in places where flash photography is prohibited. The ISO speed setting makes full use of the available light, resulting in images that convey the feel of the place they were shot.



ISO 50 equivalent



ISO 400 equivalent

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W														
White Balance														
Z														
Zoom Button														

#### **FCC Notice**

(Digital Camera, Model PC1080)

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.

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

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

#### Canon U.S.A. Inc.

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

Tel No. (516) 328-5600

#### Canadian Radio Interference Regulations

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

#### Réglementation canadienne sur les interférences radio

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

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

The following chart shows the functions and settings available in each shooting mode.

	Function							<b>,</b>	Reference						
,	FullCuon					Ą	ž	×	8	S		<b>€</b>	NG.	<del></del>	Pages
	Large	Г	0*	0*	△*	0*	0*	0*	0*	0*	0*	0*	0*	_	
	Medium 1	M1	0	0	Δ	0	0	0	0	0	0	0	0	_	27
	Medium 2	M2	0	0	Δ	0	0	0	0	0	0	0	0	_	37
<b>5</b> :	Small	S	0	0	Δ	0	0	0	0	0	0	0	0	_	
Resolution	Postcard Print	2	0	0	_	0	0	0	0	0	0	0	0	_	51
	Movie	640	-	_	_	-	_	1	_	_	_	_	_	0	
	Movie	320	-	_	_	-	_	-	_	_	_	_	_	0*	
	Movie	160	-	_	_	-	_	-	_	_	_	_	_	0	
	Superfine	S	0	0	Δ	0	0	0	0	0	0	0	0	_	
Compression	Fine		0*	0*	△*	0*	0*	0*	0*	0*	0*	0*	0*	_	37
	Normal		0	0	Δ	0	0	0	0	0	0	0	0	_	
Flash	Auto	<b>≱</b> <sup>A</sup>	0*	0	-	0*	0*	0	0*	0*	_	0*	0*	-	
	On	4	_	0	Δ	0	0	0	0	0	-	0	0	-	39
	Off	3	0	0*	Δ*	0	0	0*	0	0	0	0	0	-	

<sup>\*:</sup> Default settings  $\bigcirc$ : Available  $\triangle$ : Available only for the first image -: Not available  $\triangle$ : Setting remains in effect even when the camera is turned off.

	Function			Ô					SC	:N				<b>&gt;=</b>	Reference Pages
	runction		•	Œ۷	旦 旦	Ð	<u>*</u>	×	8	Š	28 EX	<b>(</b> [x		777	
Red-eye Reduction		0	0	Δ	0	0	0	0	0	_	0	0	_	39	
Quick Sho	ot	۵	0	0	_	_	_	-	_	_	_	_	_	_	38
AF-assist	Beam	AF÷	0	0	Δ	0	0	0	0	0	_	0	0	0	34
	Single Shot		0*	0*	Δ*	0*	0*	0*	0*	0*	0*	0*	0*	0*	_
Shooting	Continuous Mode 🖳		_	0	-	0	0	0	0	0	0	0	0	-	45
Method	Self-timer (10 sec	.) લંઠે	0	0	Δ	0	0	0	0	0	0	0	0	0	43
	Self-timer (2 sec.)	<b>©</b>	0	0	Δ	0	0	0	0	0	0	0	0	0	
AF System	AF System Selection AAF		_	0	_	0	0	0	0	0	_	0	0	_	74
Macro Mo	de	*	0	0	Δ	0	0	0	0	0	_	0	0	0	42
Infinity M	ode	4	_	0	Δ	0	0	0	0	0	_	0	0	0	42
Digital Zo	om 📮	On	0	0	_	0	0	0	0	0	0	0	0	_	31
Digital 20		Off	0*	0*	_	0*	0*	0*	0*	0*	0*	0*	0*	_	31
Exposure C	Compensation	Z	_	0	Δ	0	0	0	0	0	0	0	0	0	76
Light Metering System	Evaluative Metering	8	0	0*	0	0	0	0	0	0	0	0	0	0	
	Center-Weighted Averaging		-	0	-	-	_	ı	-	-	-	_	-	-	_ 75
	Spot Metering	<b>O</b>	_	0	-	_	_	_	_	_	_	_	_	_	1

Function			۵			SCN									Reference
			•	Ø	旦旦	2	Š	×	8		<b>388</b>	<b>(</b> )×		[ <sup>*</sup> 77	Pages
White Balance <sup>(1)</sup>	WB		_(2)	0	Δ	_	_	-	_	_	_	_	_	0	77
Photo Effect	@		_	0	Δ	_	_	_	_	_	_	_	_	0	80
ISO Speed	ISO		_(3)	0	_(3)	_(3)	_(3)	_(3)	_(3)	_(3)	_(3)	_(3)	_(3)	-	79
Auto Rotate	-	On	0*	0*	Δ	0*	0*	0*	0*	0*	0*	0*	0*	-	- 81
Auto Rotate	4	Off	0	0	Δ	0	0	0	0	0	0	0	0	_	01

The default for the settings changed by the menu and button operations can be restored all at once except for Shooting mode, [Date/Time] and [Language] (p. 72).

- (1) Cannot be adjusted when the photo effect is set to [Sepia] or [B/W].
- (2)The white balance is set to [AUTO].
- (3)The camera will automatically select the setting.