

Canon



# PowerShot A40 PowerShot A30

DIGITAL CAMERA

## **Camera User Guide**



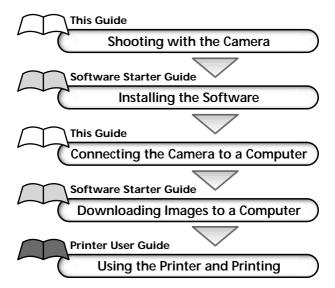


- Please read the "Read this First" section (p. 5).
- Please refer to the Quick Start section for a simple explanation of shooting, replaying and erasing (p. 12).
- Please refer to the Software Starter Guide for information on installing the software and downloading images.
- Please also read the Printer User Guide included with your Canon printer.





## Flowchart and Reference Guides



#### **Precautions**

This digital camera is designed to perform optimally when used with genuine Canon brand digital camera accessories ("Canon Brand Accessories"). You may use non Canon Brand Accessories with this Digital Camera. However, Canon Makes no warranties concerning, and is not responsible for damages resulting from, use of non Canon Brand Accessories.

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

#### 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. 134).

Please read through the "Read This First" section (p. 5) before using your camera.

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## **About this Camera User Guide**

## **Symbols Used**

Icons on the right end of title bars show the operations mode. As in the example below, the mode dial should be set to (100), P, M or  $\Box$ .

## **\$ Using the Flash**





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



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

## Question? Look here first.

■ How do I navigate the menus?

#### Selecting Menus and Settings (p. 41)

What settings are available under each function? and

Will my settings remain in effect even after I've turned the camera off?

# Functions Available in Each Shooting Mode (p. 82)

■ How do I go about printing?

About Printing (p. 100)

■ What functions are available through the menus?

Rec. Menu (p. 130) Replay Menu (p. 135)

The above sections are shaded on the right edges to make them easy to find.

## **About the Thumb Index**

A quick introduction intended for new users who want to shoot first and learn more later. Tells you how to get the camera running and how to begin shooting and playing back images.

**Quick Start** 

Introduces you to all of the camera components, and explains how to load batteries and use the shutter button, among other basic functions.

Preparing the Camera,
Basic Functions

Describes shooting with the camera, from the five different shooting modes to using the camera's various shooting features.

Shooting

Explains how to review recorded images one at a time or in index form, how to protect them or erase them, and more.

Replaying, Erasing

Explains how to print and make print settings, and how to select images for transferring to e-mail.

Printing, Transferring

Explains how to transfer recorded images to a computer. Also explains how you can connect the camera to a TV set for shooting and reviewing images.

Connecting

Shows the Rec. and Replay menus at a glance and error messages. Also explains how to replace the date battery and how to use various separately sold accessories, such as the Battery and Charger Kit and lenses.

**Appendix** 

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: Functions and operations tables. These pages are shaded on the right edges to make them easy to find.

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## Read this First

#### Please Read

#### **Test Shots**

Before you shoot images of subjects of importance to you, we strongly recommend that you shoot several trial images to confirm that you are operating the camera correctly. Please note that Canon, its subsidiaries and affiliates, and distributors of its digital cameras are not liable for any consequential damages arising from any malfunction of the Canon digital camer a or CompactFlash<sup>TM</sup> card (CF card) resulting in the f ailure 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 camer as are intended for personal use and must be used in a manner that respects international and 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 recorded 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.

#### **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, battery, battery charger and optional compact power adapter.

## **⚠ 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 inf ants.
   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 smok e 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 and unplug the power cord from the electrical outlet. Confirm that smoke or fume emissions have ceased.
   Please consult your camera distributor or the closest Canon Customer Support Help Desk.
- Stop operating the equipment if it is dropped or the casing is damaged. Failure to do so may result in fire or electrical shock. Immediately turn the camera's power off, remove the camera batteries and unplug the power cord from the electrical outlet. Please consult your camera distributor or the closest Canon Customer Support Help Desk.
- Do not allow the equipment to come into contact with, or become immersed in, water or other liquids. Do not allow liquids to enter the interior. The camera has not been waterproofed. If the exterior comes into contact with liquids or salt air, wipe it dry with a soft, absorbent cloth. 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 electrical outlet. Continued use of the equipment may result in fire or electrical shock. Please consult your camera distributor or the closest Canon Customer Support Help Desk.
- Do not use substances containing alcohol, benz ene, 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 electrical 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 of power sources not expressly recommended for this equipment may lead to overheating, distortion of the equipment, fire, electrical shock or other hazards. Use only the recommended power accessories.
- Do not place the batteries near a heat source or expose them to direct flame or heat. Neither should you immerse them in water. Such exposure may damage the batteries and lead to the leakage of corrosive liquids, fire, electrical shock, explosion or serious injury.
- Do not attempt to disassemble, alter or apply heat to the batteries. There is serious risk of injury due to an explosion. Immediately flush with water any area of the body, including the eyes and mouth, or clothing, that comes into contact with the inner contents of a battery. If the eyes or mouth contact these substances, immediately flush with water and seek medical assistance.
- Avoid dropping or subjecting the batter ies 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 mater ials in waste containers may lead to fire or explosions. Discard the batteries in specialized waste facilities if available in your area.
- Use of batteries not expressly recommended for this equipment may cause explosions or leaks, resulting in fire, injury and damage to the surroundings. Use only recommended batteries and accessories.
- If using AA-size NiMH batteries, use only Canon AA-size NiMH batteries and 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 the compact power adapter from both the camera and electrical outlet after recharging and when the camera is not in use to avoid fires and other hazards.
- 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 batter ies. There is a risk of fire and other hazards.
- Exercise due caution when screwing on the separately sold wide converter, tele-converter, close-up lens and conversion lens adapter. If they loosen, fall off and shatter, the glass shards may cause an injury. Never aim the lenses at the sun or strong light sources. There is a risk of damage to eyesight.

## **A CAUTIONS**

- Avoid using, placing or storing the equipment in places subject to strong sunlight or high temper atures, such as the dashboard or trunk (boot) of a car. Exposure to intense sunlight and heat may cause the batteries to leak, overheat or explode, resulting in fire, burns or other injuries. High temperatures may also cause deformation of the casing. Ensure that there is good ventilation when using the compact power adapter to charge the batter y pack or power the camera.
- Do not store the equipment in humid or dusty areas. Storage in such areas could lead to fire, electrical shock or other damage.
- Be careful not to bang the camera or subject it to strong impacts or shocks that could lead to injury or damage the equipment when wearing or holding it by the strap.
- Be careful not to cover the flash with your fingers when shooting. In addition, do not touch the surface of the flash after taking several pictures in rapid succession. Either action could result in burns.
- If your camera is used for prolonged periods, the camera body may become warm. Please take care when operating the camera for 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 CF card and battery or power cord (if connected) from the camera and wait until the moisture evaporates completely before resuming use.

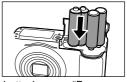
#### **Extended Storage**

When not using the camera for extended periods of time, remove the battery 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.

## **Quick Start**

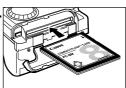
# Install the batteries (p. 18).

Slide the battery cover lock, then open the cover and insert the batteries.



- For important information about batteries, see "Proper Battery Handling" (p. 19).
- 2 Install the CF card (p. 22).

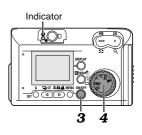
Open the CF card slot cover and insert a CF card.



# **3** Press the ON/OFF button to turn the camera on (p. 30).

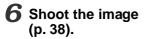
Hold the ON/OFF button down until the indicator next to the viewfinder starts flashing green.

- If the LCD monitor displays the Set Date/Time menu, set the date and time (p. 25).
- For information about how to change the language, see "Setting the Language" (p. 27).
- Turn the mode dial to (Auto) (p. 46).



## **5** Set the focus (p. 38).

Aim the camera at the subject, and lightly press and hold the shutter button halfway down. The camera beeps twice when the focus is set.



Press the shutter button all the way down. The camera beeps once to indicate that it has taken the shot.



## 7 View the recorded image.

The recorded image displays on the LCD monitor for approximately 2 seconds (p. 48).

For information about how to view other images that you

have already taken, see "Replaying" (p. 86).



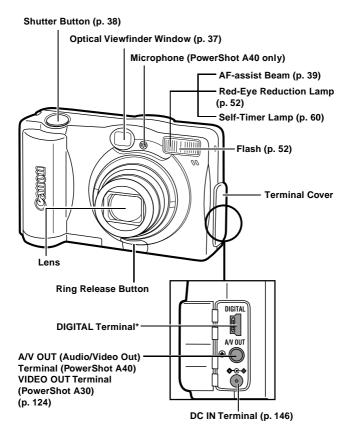


#### To Immediately Erase the Displayed Image

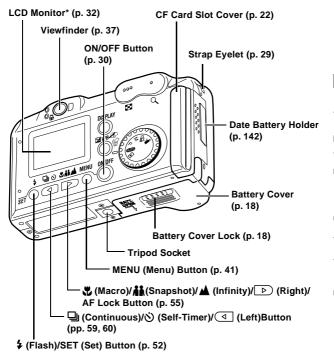
- 2 Confirm that [Erase] is selected and press the SET button.



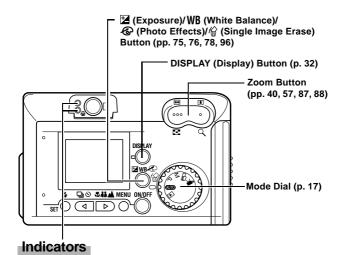
## **Components Guide**



\* If connecting to your computer, use the dedicated USB cable included with the camera (pp. 104, 128). If connecting to a printer, use the direct interface cable DIF-100 included with the printer. (For a list of printers that work with this camera, please refer to the System Map.)



<sup>\*</sup> The LCD monitor is covered with a thin plastic sheet for protection against scratches during shipment. Remove it before using the camera.



The upper indicator comes on when you turn on the power and whenever you press the shutter button.

#### **Upper Indicator**

Green: Ready to shoot, or ready to communicate with your computer.

Flashing Green: Camera is busy processing (starting up; accessing the CF card, or transmitting data to your computer).

Orange: Ready to shoot, using the flash.

Flashing Orange: Ready to shoot, but shutter speed is slow (This warns you that the picture may come out blurred.).

#### Lower Indicator

Yellow: Macro/Snapshot/Infinity modes

Flashing Yellow: Focusing difficulty (Although you can press the shutter button, it is recommended to use the focus lock to shoot (p. 71))

#### **Mode Dial**

You use the mode dial to select the camea's operating mode.



## (Auto)

The camera automatically makes most of the settings for you (p. 46).

## P (Program AE)

You can manually adjust the exposure, white balance, and other settings before shooting (p. 67).

## M (Manual)

You can manually set the shutter speed and aperture to achieve a particular effect (p. 69).

## (Stitch Assist)

Use this mode when taking shots that you want to stitch into a panorama (p. 62).

## ·無 (Movie)

Use this mode to shoot movies (p. 65).

## ▶ (Replay)

- Replay or delete images from the CF card (pp 86, 96).
- Download and display images at your computer (p. 126).
- Print images directly to a connected pinter (p. 104).

## **Preparing the Camera**

## **Installing the Battery Pack**

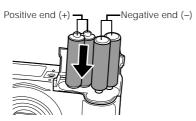
The camera uses four AA-size alkaline batteries supplied with the camera. You may use optional nickel metal hydride (NiMH) batteries.

- 1 Be sure that the camera power is off.
- Slide the battery cover lock, and push the battery cover slightly forward. Then open the cover.





3 Insert the batteries as shown.



4 Close the battery cover.





When the camera's indicator flashes green, do not turn
off the power or open the battery cover. The camera is
writing, reading, erasing or transmitting an image to or
from the CF card.



- We recommend that you use the optional AC Adapter Kit ACK600 to power the camera during long usage sessions (p. 146).
- The optional battery charger kit lets you use rechargeable NiMH batteries to power the camera (p. 144).
- For important information, see "Battery Performance" (p. 164).
- For information about the Battery and Charger Kit and AA-size rechargeable NiMH batteries, see the System Map (separate from this guide).

## **Proper Battery Handling**

- Use AA-size alkaline or Canon AA-size NiMH batteries only.
   For information on handling the AA-size rechargeable NiMH batteries, see "Using the Optional Battery Kits" (p. 144).
- Never use manganese or lithium batteries, as these battery types may overheat in the camera.
- 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 (a fourpiece set).
- While it is possible to use AA-size nickel-cadmium batteries, performance is unreliable and their use is not recommended.

- Never mix unused and partially used batteries. Always load four fresh (or fully recharged) batteries at the same time.
- Never mix batteries of different types or from different manufacturers. All four 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.

### **⚠ WARNING**

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.



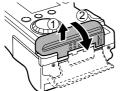
Batteries are beginning to run low. Replace (or recharge) batteries promptly.

Change the batteries

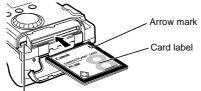
Batteries are fully depleted and the camera can no longer operate. You should replace the batteries immediately.

## **Installing a CF Card**

- Be sure that the camera is turned off.
- Slide the CF card slot cover in the direction of the arrow, and open it.

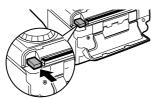


- Insert the CF card into the slot, in the direction shown in the illustration.
  - Insert the CF card all the way into the slot, so that the CF card eject button pops all the way out.



CF card Eject Button

• To remove the CF card, press the CF card eject button.



# 4 Close the CF card slot cover securely.



- When the indicator on the left side of the vie wfinder flashes green, the camera is writing, reading, erasing or transmitting an image to or from the card. Do not perform the following, for image data may be lost or corrupted:
  - Do not shake the camera.
  - Do not turn off the power or open the CF card slot cover.
- Be aware that use of CF cards whose contents have been edited at another camera or with another company's software may cause the camera to operate incorrectly.



 For more information on CF cards, see "CF Cards and Estimated Capacities (Recordable Images)" (p. 165).

#### About CF Cards...

- CF 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 a CF card.
- Moving a CF card rapidly between temperature extremes will cause condensation to form in the card and lead to a malfunction. To avoid condensation, place the CF card in a sealed plastic bag before moving it into a different temperature zone and allow it to adjust slowly to the new temperature. If condensation forms on the CF card, store it at room temperature until the water droplets have evaporated naturally.
- Do not use or store CF cards in the following types of location.
  - Locations subject to dust or sand
  - Locations subject to high humidity and high temper atures

## **Setting the Date/Time**

The Set Date/Time menu will appear when the camera is first turned on or the date battery has run down. Replace the date battery, then reset the date and time starting from step 6 below.

- Press the ON/OFF button to turn on the camera (p. 30).
- 2 Turn the mode dial to @, P, M, 🗗 or 📆
- $oldsymbol{3}$  Press the MENU button.

The [Rec. Menu] will display.



Display on the PowerShot A40

4 Press **③** or **▶** button to select **⑥**, and then press the SET button.



## 

## 6 Set the date and time.

- Press the SET button to set the value and advance to the next field.
- The final item selects the date display type. Use <a>o</a> or
   b button to select, and then press the SET button.



The factory default for the date format in some regions may differ from that shown.

## **7** Press the MENU button.

## **Setting the Language**

Use this feature to select the language for the LCD monitor displays.

- 1 Turn the mode dial to ௵, P, M, □ or '\,.
- $oldsymbol{2}$  Press the MENU button.

The [Rec. Menu] will display.



Display on the PowerShot A40

3 Press or button to select 1, and then press the SET button.



# 4 Press ◀ or ▶ button to select ♠, and press the SET button.



## 5 Select the desired language.

• Use <a> and <a> button to select a language.</a>



The Language menu may appear differently on cameras in some regions.

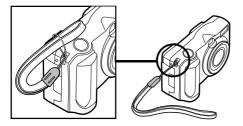
- 6 Press the SET button.
  - If you wish to cancel, press the MENU button instead.
- 7 Press the MENU button.



#### **Hint for Easy Operation**

 The Language menu can also be displayed in replay mode by holding down the SET button and pressing the MENU button.

# **Attaching the Strap**





 Be careful when carrying the camera by the strap. Don't swing the camera on the strap, and keep the strap and camera body clear of obstacles.

## **Basic Functions**

## **Turning the Power On**

1 Press the ON/OFF button until the green indicator begins flashing.

## Amo, P, M, □ and ' Modes

Current shooting settings will appear in the LCD monitor for about 6 seconds.



• If you turn the mode dial to **\( \)**, the lens will retract after approximately 1 minute.

### **▶** mode

The LCD monitor displays an image



#### **Power Save Function**

When the camera's power save function is turned on and it activates, restore power by pressing the ON/OFF button.

#### **Shooting Mode**

The power will automatically shut off approximately 3 minutes after the last function is accessed. Even if the power save function is turned off, the LCD monitor will shut off approximately 3 minutes after the last function is accessed. Press any button other than the ON/OFF button to restore the LCD monitor.

#### **Replay Mode**

The power will automatically shut off approximately 5 minutes after the last function is accessed.

#### While Connected to a Printer

The power will automatically shut off approximately 5 minutes after the last camera function is accessed or printer (sold separately) ceases to print an image.

#### While Connected to a Computer

A warning message will appear on the computer screen approximately 5 minutes after the last function is accessed. The power will automatically shut off approximately 1 minute later if no functions are accessed.

- The power save function will not activate while the camera is in auto play mode (p. 93).
- The camera's settings can be changed to turn off the power save function (p. 133).

## **Using the LCD Monitor**

The LCD monitor can be used to compose images while shooting, adjust settings merus and replay images.



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

#### **QUO. P and M Modes**

 Pressing the DISPLAY button cycles the LCD monitor to the next mode each time the button is pressed.





- 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 Battery Pack" message appears, the LCD monitor may not automatically turn on the next time the camera is started.
- When the LCD monitor is set to Standard or Off, shooting information appears for approximately 6 seconds when you take any of the following actions.
  - The power is turned on.
  - The ¼, 및/⋄, or ♥/♣♣/▲ button is pressed.
  - The camera settings are changed.
  - The Setup menu is closed.
- Setting the mode dial to a or modes turns the LCD monitor on regardless of whether it is set to on or off.



 Set the flash to on or affix the camera to a tripod when the upper indicator flashes orange and the camera shake warning icon (②) appears in the LCD monitor after the metering preparations are complete.

### **▶** Mode

- The LCD monitor always comes on when you turn the mode dial to .
- You can use the DISPLAY button to switch the amount of information shown on the display.

### Single Image Replay



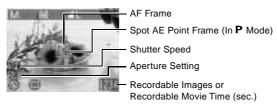
### Index Replay (9 images)

### Information Displayed on the LCD Monitor

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

### **(Ш0**), P, M, □ , **'** , Modes

The following displays in information view.



	Shooting Mode	p. 17
-2 ··· ±0 ··· +2	Exposure Compensation	p. 75
船 ※ 🕰 泰 ※※	White Balance	p. 76
ay an ls as by	Photo Effect	p. 78
8 4 4	Compression	p. 50
LMS 🔯 🜃	Resolution	p. 50
<b>ISO</b> 50 100 200 400	ISO Speed	p. 79
AFL	Focus Lock	p. 71
\$^	Flash	p. 52
ロ 回 回 回 回 回	Shooting Method	pp. 59/60
T ii A	Macro / Snapshot / Infinity	p. 55
● (red)	Movie Recording Mode	p. 65
(PowerShot A40) ×3.8 ×4.7 ×6.0 ×7.5 (PowerShot A30) ×3.8 ×4.8 ×6.0	Digital Zoom Setting*	p. 57
<b>Q</b>	Camera Shake Warning	p. 33
	Low Battery	p. 21

- The icons in the shaded boxes above appear even when the information view is turned off.
- In addition to the above, the AF frame, spot light metering frame (P mode), shutter speed, aperture setting (M mode), recordable images or recordable movie time (sec.) are displayed as in the example to the left.
  - \* Zoom powers reflect the combined optical and digital zoom effects. These figures appear when the digital zoom is activated.

### **▶** Mode

In simple display mode, the following information appears.



File Number

Image Number and Total (Display Image/Total)

Shooting Date / Time

<b>S 1</b>	Compression	p. 50
LMS	Resolution (Still images)	p. 50
	Sound annotation (wav file)	p. 66
AV	Movie	p. 90
О-п	Protection Status	p. 94

In detailed display mode, the following information also appears.

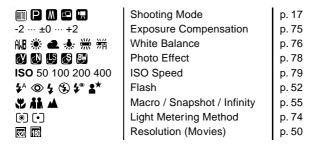


Shutter Speed

Aperture Setting



Recorded Movie Time



 In addition to the above, the shutter speed, aperture setting and recorded movie time are displayed as in the example on the previous page.

The following information may also appear with some image files.



An audio file other than a way file, or a file with an unrecognized format, is attached.



A JPEG file not supported by "Design rule for Camera File system" (DCF) standards.



RAW format file



A file with an unrecognized format.

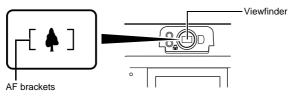


 Please note that image information recorded by this camera may not display correctly on other cameras and image information recorded by other cameras may not display correctly on this camera.

## **Using the Viewfinder to Shoot**

Save power by shooting with the viewfinder.

- 1 Align the square brackets (autofocus metering field) inside the viewfinder on the primary subject to compose the image.
  - The viewfinder has a field of vision of approximately 80% of the actual shooting image.





#### **About the Autofocus Function**

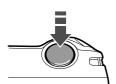
 This camera employs AiAF (artificial intelligence autofocus) technology which uses a broad meter ing field to calculate the focal distance with high precision. It delivers a crisp focus even when the photographic subject is slightly off-center.

### Image Seen in Viewfinder vs. Recorded Image

• Please note that the actual image may differ from the image seen in the optical vie wfinder due to the physical separation between the viewfinder and lens. This is called the parallax phenomenon and is more noticeable the closer the subject is to the lens. 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 to shoot images up close.

## **Pressing the Shutter Button**

The shutter button features a two-stage action.



### **Pressing Halfway**

Pressing halfway automatically sets the exposure, focus and white balance.

The indicators shine or flash as follows.

### **Upper Indicator**

- Green: Metering complete (two beeps sound)
- · Orange: Flash will fire
- Flashing Orange: Camera shake warning / Insufficient exposure

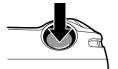
#### Lower Indicator

- Yellow: Macro / Snapshot / Infinity
- Flashing Yellow: Focusing difficulty\* (single beep sounds)
  - \* When the indicator flashes yellow, lock the focus before shooting (p. 71).



The AF frame appears as follows when the LCD monitor is on.

- Green: Metering complete
- Yellow: Focusing difficulty (When AiAF is turned on (p. 73))



### **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 upper indicator flashes green while the image is recording onto the CF card.



### **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. 132).
   If animals are your subject, turn off the beam when shooting in the dark to avoid startling them (this may however, make it more difficult for the camera to focus).

# **Using the Zoom (Focal Length)**

The zoom can be adjusted to any setting in the 35 to 105 mm range in 35 mm film equivalent terms.

### Telephoto/Wide Angle



### **Digital Zoom**

When the LCD monitor is on, you can digitally zoom in on a subject with the zoom button. Images can be zoomed up to 7.5 times (PowerShot A40), or 6 times (PowerShot A30), which combines the effect of the optical zoom (p. 57).



 Note that the image appears grainier, the more the image is digitally zoomed.



Digital zoom is unavailable in some modes (p. 82).

# **Selecting Menus and Settings**

Use the menus as shown below to operate the various shooting and replaying settings.

For information on menu items and settings, see "Menu Settings and Default Settings" (p. 44).

## Press the MENU button.

The menu appears.





(MTO, P, M, □ , and ¬ modes

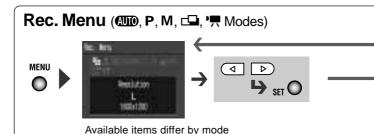
**▶** mode

- 2 Press the ◀ or ▶ button to select a menu item and press the SET button.
  - The remainder of this procedure explains how to use the Rec. menu. The procedure for using the Replay menu differs depending on the item you select. (p. 42, 102)
- 3 Press the ◀ or ▶ button to select a setting and press the SET button.



f 4 Press the MENU button.

### Selecting Menus and Settings, cont'd



# Replay Menu (F mode)



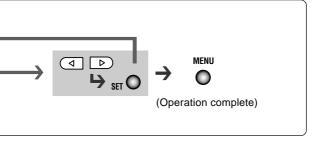
\* For information on (a) (print settings)

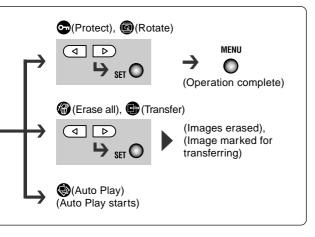
→ "Selecting from the Print Order Menu" (p. 102)

### MENU

: Turns the menu on/off
: Selects items and settings

set O : Sets items and settings





## Menu Settings and Default Settings

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

### Rec.Menu

I/ec-iniciin				
Menu Item		Available Settings	Reference Pages	
Resolution (Still picture)	PowerShot A40 PowerShot A30	L 1600 x 1200* M 1024 x 768 S 640 x 480 L 1280 x 960* M 1024 x 768 S 640 x 480	p. 50	
Resolution	(Movie)	₪320x240* / ₪160x120	p. 50	
<b>⊕</b> Compression		<pre> g(Superfine) /</pre>	p. 50	
©Light Metering		Evaluative Metering* / Spot AE point Metering	p. 74	
		50 / 100 / 200 / 400 / AUTO	p. 79	
<b>M</b> AiAF		On* / Off	p. 73	
Digital Zoor	m	On / Off*	p. 57	
Self Timer		10 sec.* / 2 sec.	p. 60	
Review		Off / 2 sec.* / 10 sec.	p. 49	
⊕AF-assist B	eam	On* / Off	p. 132	
File No. Reset		On / Off*	p. 80	
<b>1</b> Set up	Auto Power Down	On* / Off	p. 133	
	Date / Time	Sets the date and time	p. 25	
	Wideo System	NTSC / PAL	p. 134	
	Beep	On* / Off	p. 132	
	Format	Formats the CF card	p. 98	
	<b>⊜</b> Language	English* / Deutsch / Français / Nederlands / Dansk / Suomi / Italiano / Norsk / Svenska / Español / Japanese or Chinese (depending on the region)	p. 27	

### Play Menu

Menu Item	Available Settings	Reference Pages
Protect	Turns image protection on and off	p. 94
Rotate	Rotates the image in the display	p. 92
Erase all	Erases all images on the CF card	p. 97
Auto Play	Replays selected images in a slide show	p. 93
Print Order	Sets the print settings	p. 102
Transfer Order	Sets the transfer settings	p. 122

- \* Default values. Default languages and video system settings var y between regions.
- · Some menu items are not available in certain shooting modes.
- The ISO default setting depends on the shooting mode.
- The default of all the settings changed by the menu and button operations except for [Date/Time], [Video System] and [Language] can be restored all at once (p. 137).

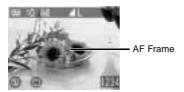
# **Shooting - Letting the Camera Select Settings**

## **AUTO** Auto Mode



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

- 1 Aim the camera at the subject.
- Use the zoom lever to achieve the desired composition (relative subject size in the viewfinder).
- 3 Press the shutter button halfway (p. 38).
  - Two beeps will sound when the camer a has finished metering, and the indicator beside the vie wfinder will shine green or orange. If the LCD monitor is on, the AF frame will appear green.
  - The yellow indicator will flash and the beep will sound one time if the subject is difficult to focus on.



# $4\,$ Press the shutter button all the way (p. 38).

You will hear the sound of the shutter when the shutter activates.

 The picture appears for two seconds on the LCD monitor, if it is on.



- For information on the settings you can change, see "Functions Available in Each Shooting Mode" (p. 82).
- 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. 49).

# Reviewing an Image Right After Shooting P M -

After a photo is taken, the image displays on the LCD monitor for two seconds (To change, see "Changing the Image Display Duration" (p. 49)). There are two ways to display the image for longer.

- Keeping the Shutter Button Pressed
- Press the SET button while the image is displayed in the LCD monitor.
  - Press the shutter button halfway again to stop displaying it.



- You can perform the following while images are displayed.
  - Erasing Images Individually (p. 96)
  - Magnifying Images (p. 87)

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

The length of time images are displayed after a photo has been taken can be changed from 2 seconds to 10 seconds or turned off.

- In the [Rec.] menu, select [Review] and press the SET button.
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).
- 2 Select a Review setting with the <a>/
  </a> buttons and press the SET button.



- With the [Off] option, the image will not automatically display.
- With the [2 sec.] or [10 sec.] options, the image will appear for the time selected.
- 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.
- $\mathfrak{Z}$  Press the Menu button.

# Changing the Resolution and Compression PM - 📆

You can change the resolution and compression (excluding movies) settings to suit the purpose of the image you are about to shoot. The resolution gets higher in the order **S** (Small), **M** (Medium), and **L** (Large). Use a higher resolution if you wish to make a large print. Conversely, use a lower resolution if you wish to print on small objects, such as labels, to send images electronically, or to fit more images on a CF card.

The compression gets higher in the order (Superfine), (Fine) and (Normal). Select (Superfine) for a higher quality image, or (Normal) if you wish to fit more images on a CF card. The (Fine) setting provides adequate quality for standard shots.

### Resolution (excluding )

	PowerShot A40	PowerShot A30		
(Large)	1600 ×1200 pixels	1280 × 960 pixels		
(Medium)	1024 × 768 pixels	1024 × 768 pixels		
(Small)	640 × 480 pixels	640 × 480 pixels		

### Resolution ( )

320	$320 \times 240$ pixels
160	160 × 120 pixels

### Compression (excluding )

<b>S</b>	Superfine		
0	Fine		
0	Normal		

Common to PowerShot A40 and PowerShot A30

- In the [Rec.] menu, select ⊕ (Resolution) or ⊕ (Compression), and press the SET button.
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).
- 2 Press or button as necessary to adjust the setting and press the SET button.

(Resolution)



⊕ (Compression)



Display on the PowerShot A40

3 Press the MENU button.



- For more information, see "Functions Available in Each Shooting Mode" (p. 82).
- For information on necessary space per image (approximate), types of CF cards and the number of images per card see, "Specifications" (p. 165).

# Using the Flash



Auto

The flash fires automatically as required by the light level.

Red-Eye Reduction, Auto

The flash may fire automatically as required by the light level. The red-eye reduction lamp fires with each shot.

On

The flash will fire.

Off

The flash will not fire.

Red-eye reduction, Flash on

The red-eye reduction lamp and the flash always fire.

Slow-Synchro The flash timing is adjusted to slow shutter speeds. This reduces the chance that the background will be dark when shots are taken at night or in rooms with artificial lighting. The red-eye reduction lamp fires with each shot. Use of a tripod is recommended.

# 1 Press the \$ button as necessary to select the desired flash mode.

	<b>AUTO</b>	Р	М		<b>-</b>
<b>3</b>	0	0	_	_	_
<b>∌</b> ⊚	O*	O*	_	_	_
Ø	_	0	0	Δ	_
<b>(3)</b>	0	0	O*	O*	0*
<b>3</b>	_	_	0	_	_
3	_	0	_	Δ	_

- \* · Default
- ∴ Available
- $\Delta$ : Available, but cannot be changed after taking the first shot
- : Not available

# **2** Shoot the image.

 The flash can be fired when the upper indicator glo ws a steady orange.



- When shooting with a high ISO sensitivitiy and using the built-in flash, there is more of a chance of o verexposure the closer you are to the subject.
- Please note that a slow shutter speed will be selected in dark places when the flash is set to off or slo wsynchro. Be careful to avoid camera blur under these conditions.
  - Shooting in (M) Mode
     Be careful to hold the camera still to avoid camera
     Shake.
  - Shooting in P (when ISO Speed is set to AUTO) or
     □ Mode

Fix the camera to a tripod to shoot in the **P** or **D** mode since the shutter speed will be slower than in the **MID** mode. If an image is dark in **MID** mode, reshooting it in **P** mode will make it brighter.



- The flash may take approximately 10 seconds to charge. Recharging time may vary with the state of the battery charge.
- In M mode, the flash fires at full intensity (but less than full intensity when in macro mode). The flash intensity is automatically adjusted except in M mode.
- The flash fires twice. A preparatory pre-flash is followed by the main flash. The exposure readings obtained from the subject with the pre-flash are used to set the optimal flash intensity for the main flash, which is used to shoot the image.

### **Red-Eye Reduction**

- Light reflecting back from eyes can make them appear red when the flash is used in dark areas. Under these conditions, use the red-eye reduction mode\*. 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 shooting with the lens set to the wide-angle position, increasing the lighting in indoor settings or approaching closer to the subject.
  - \* The shutter will not activate for approximately 1 second after the red-eye reduction lamp fires in order to improve the effect. If you wish a more immediate shutter response, set the flash setting to any setting other than the red-eye reduction auto setting.

# 

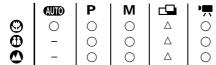
Macro Mode Use this mode to record subjects in the range of 16 to 76 cm (6.3 in. to 2.5 ft.) from the lens tip when at maximum wide angle and in the range of 26 to 76 cm (10.2 in. to 2.5 ft.) when at the maximum telephoto setting.

Snapshot Mode

Use this mode to record subjects in the range of 1.5 to 2.5 m (4.9 to 8.2 ft.).

Use this mode to record landscapes and distant objects. It can also be used for compositions combining both near and distant objects.

Press the **♣/ii/** button as necessary so that **⑤**, **⑥** or **⑥** appears.



- ∴ Available
- : Not available
- $\Delta$ : Available, but cannot be changed after taking the first shot
- 2 Shoot the image.



- Use the LCD monitor to compose close-ups in macro mode since the parallax phenomenon may cause images composed with the optical vie wfinder to be offcenter.
- The exposure may not be optimal when the flash is used in macro mode in the range of 16 to 26 cm (6.3 to 10.2 in.).



 When the lens is zoomed out to the maximum wideangle position, the recordable area is approximately 162 × 120 mm (6.4 in. × 4.7 in.) at the closest focal distance, and at maximum telephoto, it is approximately 92 × 69 mm (3.6 in. × 2.7 in.).

# **Digital Zoom**



When the LCD monitor is on, images can be zoomed with the combined optical and digital zoom functions as follows (figures are approximate).

PowerShot A40: 3.8 times, 4.7 times, 6.0 times, and 7.5 times PowerShot A30: 3.8 times, 4.8 times, and 6.0 times

- In the [Rec.] menu, select (Digital Zoom) and press the SET button.
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).
- 2 Press the or button to select [On] and press the SET button.



- 3 Press the MENU button.
- 4 Press the [ button.
  - The lens will zoom to the maximum optical telephoto setting and stop. Press the button again to further zoom the image digitally.
  - To zoom back out, press the | button.

# 5 Shoot the image.



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



- Digital zoom is unavailable in some modes (p. 82).
- Images become coarser the more they are digitally zoomed.

## **■** Continuous Mode



The camera will shoot continuously at the speed of approx. 2.5 images per second\* (When the LCD monitor is OFF in Large/Fine mode).

- \* The figures reflect standard shooting conditions established by Canon. Actual figures may vary according to the subject and shooting conditions.
- Press the ☑/৩ button as necessary so that the ⓐ appears on the LCD monitor.
- 2 Shoot the image.



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

### 

- 1 Press the □/৩ button as necessary so that the ③ appears on the LCD monitor.
- 2 Shoot the image.
  - The self-timer starts and the self-timer lamp flashes when you press the shutter button down all the way.

### Changing the self-timer countdown time

- In the [Rec.] menu, select (S) [Self-timer] and press the SET button.
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).



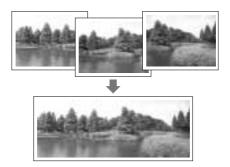
# 2 Select [ (10 sec.)] or [ (2 sec.)] with the / buttons and press the SET button.

- When [ (10 sec.)] is selected, the self-timer sounds and the flashing gets faster 2 seconds before the shutter activates.
- When [ (2 sec.)] is selected, the self-timer sounds at the same time the shutter button is pressed. The shutter activates in 2 seconds
- **3** Press the MENU button.

### **Stitch Assist Mode**



Use this mode when taking shots that you want to combine into a panorama. To create the panorama itself, you must stitch the images together at your computer.





 To create the panorama at your computer, use the PhotoStitch software that came with your camera.

### 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.
- For good results, pan (swivel) the camera to take successive shots.
- To shoot close-ups, slide the camera over the subject, keeping it parallel as you move.

### Shooting

1 Press the or button to select the sequence direction, and then press the SET button.



- (Left to right horizontally.
- (2): Right to left horizontally.
- You can take the first shot immediately by pressing the shutter button instead of the SET button.
- 2 Take the first shot.

# 3 Compose the next shot, taking care to overlap the previous image.

- Minor discrepancies in the overlapping portions can be corrected when the images are stitched together.
- If you are not satisfied with the previous shot, you can use or button to return to that shot and reshoot it.

# 4 Take additional shots for the panorama in the same way.

- You can take as many as 26 images.
- 5 After taking the final image, press the SET button.



- For information on the settings you can change, see "Functions Available in Each Shooting Mode" (p. 82).
- The settings in place for the first image are locked in and cannot be changed for subsequent shots.
- It is not possible to display the images that appear on the LCD monitor on a TV monitor when shooting in Stitch Assist mode.

## **Movie Mode**



The resolution can be set to  $\boxed{m}$  320 x 240 pixels (default setting) or  $\boxed{m}$  160 x 120 pixels in [Resolution] of the Rec. menu (p. 50).

# $oldsymbol{1}$ Press the shutter button all the way.

Shooting starts. With the PowerShot A40, sound recording also starts simultaneously.

 During shooting the recording time (in seconds) and a red circle appears in the LCD monitor.

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

- The maximum length of individual movie clips (approximately 20 frames/second) is about 10 seconds\* at the (320 × 240) setting and about 30 seconds\* at the (160 × 120) setting. The clip will end automatically after this time elapses or when the CF card becomes full.
  - \* The data reflects standard Canon testing conditions. The actual figures will vary according to the shooting objects and conditions



- Be careful not to touch the microphone while shooting (PowerShot A40 only).
- The exposure, focus, white balance and zoom settings are set and locked to the settings of the first frame.
- If the indicator on the left side of the vie wfinder flashes green after a shot, this indicates that the mo vie is being written to the CF card. You cannot shoot again until it stops flashing.
- For information on the settings you can change, see
   "Functions Available in Each Shooting Mode (p. 82).



- Sound is recorded monaurally (PowerShot A40 only).
- There is no shutter sound in movie mode.
- QuickTime 3.0 or higher is required to replay movie files (AVI / Motion JPEG) on a computer. QuickTime 5.0 is included on the Canon Digital Camera Solution Disk.

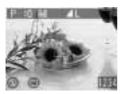
# **Shooting-Selecting Particular Effects**

# **Program AE**



Use the program AE mode to have the camera automatically set the shutter speed and aperture settings to match the brightness of the scene. Some settings such as exposure compensation and white balance can be set manually.

# 1 Shoot the image.





• The nature of CCD image sensors is such that noise in the recorded image increases at slow shutter speeds. This camera, however, applies special processing to images shot at shutter speeds slower than 1.3 seconds to eliminate the noise, thereby producing high-quality images. Nevertheless, a certain amount of processing time may be required before the next image can be shot.



# Differences and Similarities between the ${f P}$ and ${f Q}{f D}$ Modes.

- Both modes automatically select the shutter speed and aperture settings.
- The following settings can be adjusted in **P** mode, but not in **Auto** mode.
  - Exposure Compensation
  - White Balance
  - Flash (Red-Eye Reduction, Flash On, Slow-Synchro)
  - Continuous Mode
  - Snapshot/Infinity
  - Photo Effects
  - ISO Speed
  - Change of Light Metering Method
  - Focus Lock
  - Change of AF frame (Center only)

# Manually Setting the Shutter Speed and Aperture M

You can manually set the shutter speed and aperture to achieve a particular effect. This is convenient for shooting fireworks and other images where it is difficult to set the correct exposure automatically.

### 1 Press the 2/WB button once.

The Exposure menu appears.



- 2 Select the shutter speed with the buttons.
- 3 Select an aperture setting with the DISPLAY button.
- 4 Shoot the image.



• For information about noise reduction, see "Program AE" (p. 67).



### **Shutter Speed Display**

The numbers in the table below indicate the shutter speed in seconds. For slower speeds, quote marks indicate the decimal place, so that 0"3 indicates 0.3 second and 2" indicates 2 seconds.

1/1500 1/1250 1/1000 1/800 1/640 1/500 1/400 1/320 1/250 1/200 1/160 1/125 1/100 1/80 1/60 1/50 1/40 1/30 1/25 1/20 1/15 1/13 1/10 1/8 1/6 1/5 1/4 0"3 0"4 0"5 0"6 0"8 1" 1"3 1"6 2" 2"5 3"2 4" 5" 6" 8" 10" 13" 15"

### **Aperture Setting Display**

- At any given zoom setting, only two aperture settings, from F2.8 to F14, are available.
- Available aperture settings depend on the zoom setting.
   Select from the settings that appear on the LCD monitor.

### **Using the Focus Lock**



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

- Subjects with extremely low contrast to the surroundings
- Subjects with extremely bright objects at the center of the composition
- · Subjects that are moving quickly
- Subjects through glass
   Try to shoot as close to the glass as possible to reduce the chances of light reflecting back off the glass.

### Focus Lock Method 1

- Aim the camera so that a subject at the same focal distance as the main subject is centered in the brackets in the optical viewfinder or LCD monitor.
- Press and hold the shutter button halfway, and wait until the camera beeps twice. Without releasing your finger, re-aim the camera to compose the shot as desired and press the shutter button all the way.

### Focus Lock Method 2

- Press the DISPLAY button to turn on the LCD monitor.
- 2 Aim the camera so that a subject at the same distance as the main subject is centered in the selected AF frame.
- Press and hold the shutter button halfway to lock focus, and wait until the camera beeps twice. Without releasing your finger, press the W/AL/A button.

AFL appears in the LCD monitor.

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

### Cancelling Focus Lock

- To cancel focus lock, press the ♥/iii/A button, the DISPLAY button or the zoom button.
- Focus lock can also be cancelled by changing the position of the mode dial.



 Method 2 is convenient because you can let go of the shutter button to recompose the image. Also, the focus remains locked after shooting, allowing you to shoot again right away with the same focus.

# Switching Between Autofocus Modes P M

You can change the auto focus frame (AF frame) selection method. The AF frame will appear when the LCD monitor is turned on (p. 38).

On (Auto Selection)

On (Auto Selection)

The camera automatically selects the AF frame to focus according to the shooting conditions.

Of three AF frames, the middle one is selected to focus. This is convenient for making sure the focus is exactly where you want it.

indicates the AF frame which appears on the monitor

### 1 In the [Rec.] menu, select @ (AiAF).

 For information on using the menu, see "Selecting Menus and Settings" (p. 41).

# 2 Select [On] or [Off].



### $oldsymbol{\Im}$ Press the MENU button.

 You can immediately shoot the image using the selected AF frame by pressing the shutter button instead of pressing the MENU button.

# Switching Between Light Metering Modes P

You can switch between metering modes to shoot

.ou c	rea can ewiten between metering meace to eneet.					
•	Evaluative Light Metering	Appropriate for standard shooting conditions, including backlit scenes. The camera divides images into several zones for light metering. The camera evaluates the complex lighting conditions, such as the position of the subject, the brightness, the background, the direct light, and the backlighting, and adjusts the settings to the correct exposure for the main subject.				
•	Spot AE Point	Meters the area within the spot AE point frame at the center of the LCD monitor. Use this setting when you want to set the exposure on the subject in the center of the monitor.				

# 1 In the [Rec.] Menu, select (a) (Light Metering).

 For information on using the menu, see "Selecting Menus and Settings" (p. 41).

# $oldsymbol{2}$ Select [Evaluative] or [Spot AE Point].

• If you have selected [Spot AE Point], the spot AE point frame will appear in the center of the LCD monitor.



3 Press the MENU button.

## **∠** Adjusting the Exposure





If you are shooting against a bright background or strong backlight, you may need to correct the exposure so that the subject doesn't come out too dark.

### 1 Press the 🗷/WB button once.



# 2 Adjust the compensation.

- You can set the adjustment from -2 to +2, in 1/3-step increments.
- If the LCD monitor is on, you can check the results of the compensation by viewing the image on the LCD monitor.
- A shot can be taken immediately after by pressing the shutter button. The menu will reappear after the shot, allowing you to adjust the setting.

### 3 Press the SET button.

 If you wish to turn compensation off, repeat this procedure and set the compensation value to [0].

### **WB Setting the White Balance**







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

	Auto	The camera sets the white balance automatically according to shooting conditions.
	Daylight	Use when shooting outdoors in sunlight on a clear day.
0	Cloudy	Use when shooting outdoors and the sunlight is not enough such as under cloudy skies, in shade or at dusk.
	Tungsten	For recording under tungsten and bulb-type 3-wavelength fluorescent lighting.
	Fluorescent	For recording under warm-white, cool-white or warm-white (3-wavelength) fluorescent lighting.
#	Fluorescent H	For recording under daylight fluorescent, or daylight fluorescent-type 3-wavelength fluorescent lighting.

### 1 Press the **½**/WB button one or more times.



### 2 Select the white balance.

- If the LCD monitor is on, you can check the results by viewing the image on the LCD monitor.
- 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 SET button.



The white balance cannot be set when (sepia) or (B/W) photo effect is selected.

# **Switching Between Photo Effect Modes**









Records with no photo effect.

**(4)** Vivid Emphasizes the contrast and color saturation to record in bold color.

**@** Neutral Tones down the contrast and color saturation to record neutral hues.

Iow (B) Sharpening Records subjects with softened outlines.

➌ Sepia

Records in sepia tones.

B/W Records in black and white.

### Press the & button one or more times.



# Select a photo effect.

- If the LCD monitor is on, you can check the results by viewing the image on the LCD monitor.
- A shot can be taken immediately after by pressing the shutter button. The menu will reappear after the shot, allowing you to adjust the setting.

### Press the SET button.

### **Changing the ISO Speed**



Change the ISO speed when shooting in dak places or when you want to shoot with a faster shutter speed.

- $oldsymbol{1}$  In the [Rec.] menu, select  $oldsymbol{\textcircled{1}}$  (ISO Speed).
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).
- 2 Select an ISO speed.



3 Press the MENU button.



• The ISO [AUTO] setting is available only in **P** mode.



- Higher ISO speeds increase the image noise. To take clean images, use as low an ISO speed as possible.
- When ISO [AUTO] is selected, the camera automatically adjusts ISO between 50 and 150.

### **Resetting the File Number**

You can use this feature to select whether the camea resets the file number each time you insert a new CF card.

On

The camera resets the file number to 100-0001 each time you insert a new (unused) CF 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 CF card.

- 1 In the [Rec.] menu, select 🌑 (File No. Reset).
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).
- 2 Select [On] or [Off].



3 Press the MENU button.



 The [Off] setting helps ensure that file numbers remain unique over multiple CF cards. This is useful if you are planning to download images from the cards to your computer, since it helps avoid accidental overwrites that may occur if filenames are duplicated.

### About file numbering...

- Image files are assigned numerical file names over the range 0001 to 9900. The camera stores these files into folders, which are assigned folder numbers from 100 to 998 (except that numbers ending in 99 are not used).

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

The following chart shows the functions and settings available in each shooting mode The camera stores settings separately for each mode, and retains these settings even if you switch to a different mode.

	Function		AUTO Auto	P Program
	Large		O*	O*
	Medium	<b>(</b>	0	0
Resolution	Small	8	0	0
	movie	320	_	_
	movie	160	_	_
	SuperFine	S	0	0
Compression	Fine	0	○*	O*
	Normal	0	0	0
	Auto	<b>3</b>	0	0
	Red-eye reduction, Auto	0	O*	O*
Flash	On	Ø	_	0
	Off	<b>③</b>	0	0
	Red-eye reduction, On	<b>3</b>	_	-
	Slow-Synchro	3	_	0
Macro Mode		0	0	
Snapshot Mode		_	0	
Infinity Mode		_	0	
Focus Lock AFL		-	0	

- \* : Default, ○: Available, △: Available, but cannot be changed after taking the first shot, -: Not available :: Setting is retained even after power off.
- (1) The ISO speed is automatically set between the equivalent of 50 and 150.
- (2) [AUTO] cannot be selected.

M Manual	□ Stitch Assist	• <del>,</del> Movie	Reference page
0*	Δ*	_	
0	Δ	_	
0	Δ	_	p. 50
_	_	○*	
_	_	0	
0	Δ	_	
O*	Δ*	_	p. 50
0	Δ	-	
_	_	_	
_	_	_	
0	Δ	_	p. 52
0*	Δ*	0	, -
0	-	_	
_	Δ	_	
0	Δ	0	
0	Δ	0	p. 55
0	Δ	0	
0	_	_	p. 71

	Function	<b>AUTO</b> Auto	P Program
Ob tim -	Single	O*	O*
Shooting Method	Continuous	_	0
Method	Self-Timer	0	0
Auto Focus Frame		_	0
AF-assist Beam		0	0
Light	Evaluative Metering	0	O*
Metering	Spot Metering	_	0
Digital Zoom		0	0
Exposure Compensation		oosure Compensation –	
White Balance		te Balance –	
Photo Effect		_	0
ISO Speed		_ (1)	0

M Manual	□ Stitch Assist	• <del>∏</del> Movie	Reference page
O*	△*	O*	p. 59
0	-	_	ρ. σσ
0	Δ	0	p. 60
0	-	_	p. 73
0	0	0	p. 132
_	0	0	p. 74
_	_	_	ρ. / τ
0	-	_	p. 57
_	Δ	0	p. 75
0	Δ	0	p. 76
0	Δ	0	p. 78
○ <sup>(2)</sup>	_ (1)	_ (1)	p. 79

# Replaying

### **Displaying Images Individually**



Use this feature to view recorded images one at a time on the LCD monitor (Single Image Replay).

1 Turn the mode dial to lacksquare.

The LCD monitor displays the last recorded image.



- 2 Use and button to display different images.
  - ◆ Hold down ◀ or ▷ button to cycle continuously.

### **Q** Magnifying Images



### 1 Press the $\bigcirc$ button.

The image enlarges gradually by up to approximately 10 times.



 Approximate Location of the Magnified Area

- When you hold down the SET button and press the Q button, the image enlarges in the order: approximately 2.5 times → approximately 5 times → approximately 10 times.
- To slide the magnified image left or right on the monitor, press or button.
   To slide the image up or down, hold down the SET button and press or button.
- To return to normal-size display, press the **b**utton.

# **™** Viewing Images in Sets of Nine (Index View)



View nine images at a time on the LCD monitor (Index View). You can also jump by sets of nine to search for a certain image conveniently.

### 1 Press the button twice.



Nine images appear at a time

# 2 Press or button to change the displayed images.

The previous or next set of nine images appears

- Hold the SET button and press the or b button to jump to the first or last set of nine images.
- 3 When the image you are searching for is displayed among the nine, press the button.



- Selected image

### 

The selected image displays in Single Image Replay.

• Hold the **SET** button and press the <a href="#">d</a> or <a href="#">D</a> button to jump to the first or last image.

### **Viewing Movies**



# Press or ▶ button to display an image shot in ႃ█ (movie) mode.

● A movie displays with the instruction SET ►/ II on it.



### 2 Press the SET button.

The movie starts playing.

 When a movie has finished playing, it will display the last frame. If the SET button is pressed in this state, the movie will start playing from the first frame.

### Pausing and Resuming Play

• Press the **SET** button to pause the movie. Press it again to resume.

### Fast Forwarding / Rewinding

 Press d or b button to stop the movie and display the previous or next image or movie.



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



You can hear the audio when a movie is played on a TV.
 Adjust the volume on the TV set (PowerShot A40 only)
 (p. 124).

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



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







0° (Original)

90°

270°

- 1 In the Replay menu, select @ (Rotate).
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).
- 2 Press or button to select the image you want to rotate 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.



- 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.

### **Auto Play**



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

# 1 In the Replay menu, select 🕲 (Auto Play).

 For information on using the menu, see "Selecting Menus and Settings" (p. 41).

### Auto play starts.

As with the single image display mode, pressing the 
 or D button 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 save function is disabled during Auto Play (p. 30).

### **Protecting Images**



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

- 1 In the Replay menu, select 🚭 (Protect).
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).
- 2 Press or button to select an image you wish to protect, and then press the SET button to protect it.



Protected Icon

- The om icon appears on protected images.
- To remove the protection, press the SET button again (in protection mode).
- You can make the selection of images easier by toggling between single replay and Index replay with the •••
- 3 Press the MENU button.



 Please note that even protected images are erased when a CF card is reformatted (p. 98).

# **Erasing**



- Remember that erased images cannot be recovered.
   Be careful to avoid accidental erasures.
- This function will not erase protected images (p. 94).

### **Erasing Images Individually**



1 Press ◀ or ▶ button to select the image you want to erase and press the ₩ button.



- 2 Press or button to select [Erase] and press the SET button.
  - If you decide you don't want to erase the image, select [Cancel] instead of [Erase].

### **Erasing All Images**



In the Replay menu, select ( (Erase all) and press the SET button.

The LCD monitor asks for confirmation.



- 2 Press or button to select [OK], and then press the SET button.
  - If you decide you don't want to erase all unprotected images, select [Cancel] instead of [OK].

# Formatting a CF Card



You should format new CF cards before using them.



- Formatting a CF card will permanently erase all data already on the card, including all of its protected images. Before formatting a card that has already been used, be sure to check its contents.
- In the [Rec.] menu, select ( (Setup) and press the SET button.
- Press or button to select (Format), and then press the SET button.



# 3 Press ◀ or ▶ button to select [OK], and press the SET button.



 To cancel formatting instead, select [Cancel] instead of [OK].



- If the camera is not operating correctly, the CF card may be corrupted. Formatting the card may solve the problem.
- If you are using a CF card from another man ufacturer and the card is not functioning correctly, you may be able to correct the problem by formatting the card.
- CF cards that were formatted by another camera or by a computer may not operate correctly until you format them in the camera as described above. If formatting in the camera doesn't work properly, turn the camera off and re-insert the CF card. Then turn the camera back on and format again.

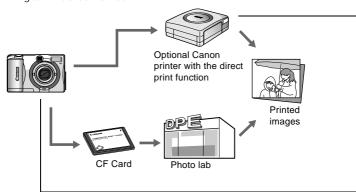
# **Printing**

### **About Printing**

After connecting the camea to an optional Canon printer with the direct print function, you can easily print images just by using the controls on the camea. Or, you can specify the images on your CF card you want to print and how many copies you want (DPOF\* Print Settings), and then take the CF card to a participating photo lab to have them printed out later.

Refer to the System Map included with this camea kit for printer information.

Digital Print Order Format



### **Print Settings for Direct Print Function**

• Select how many copies you want (p.109)



- Select the print style (p.110)
  - Standard / Multiple
  - Bordered / Borderless
  - Date On / Off
- Select the print area (p.112)

### **DPOF Print Settings**

- Select the image you want to print (p. 114)
- Select how many copies you want (p. 114)



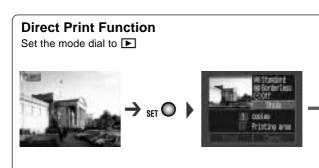
- Select the print style (p. 116)
  - Standard / Index
  - Date On / Off
  - File Numbers On / Off

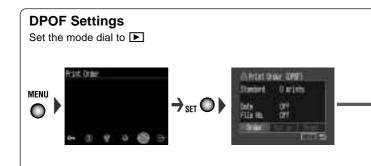
### **Transfer Settings**

- Select the image you want to send through e-mail\* (p. 122)
  - \* The DPOF-compliant software is needed for actually transferring the images.

### **Selecting from the Print Order Menu**

Use the Print Order Menu as shown below to select all print settings.



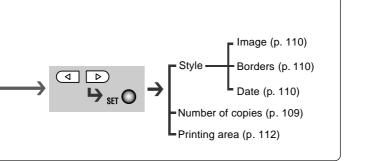


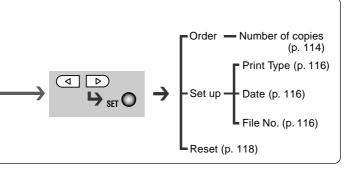
MENU

: Turns the menu on/off

: Selects items and settings

SET : Sets items and settings





### **Connecting the Camera to a Printer**

Two direct interface cables are included with Canon printers having the direct print function. Use DIF-100 cable with the ← mark on the connector when connecting to this camera.



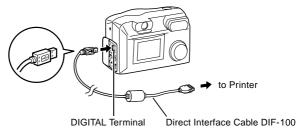
 If you plan to print out many prints in a single session, it is recommended that you power the camera with AC power (p. 146) or else load fully charged NiMH batteries (p. 144) or unused alkaline batteries before you begin.



- Refer to the System Map included with this camer a kit for printer information.
- Please see your printer's user guide for instructions on loading paper and installing ink cartridges.
- 1 Turn off the Camera.
- Attach the power cable to the printer and plug the other end into power supply. Or, install the printer's rechargeable battery.
  - Depending on the type of printer you have, it may or may not use rechargeable batteries. Refer to your printer's user guide.

# 3 Connect the camera and printer using the direct interface cable.

When you insert the cable, make sure the ← mark of the cable faces the rear of the camera (monitor side).



# 4 Turn the mode dial to ▶ and turn the camera on.



If the printer is correctly connected, the ☑ icon will appear on the LCD monitor.



 When disconnecting the cable from the camera's Digital terminal, be sure to hold the connector at its sides and pull it straight out.



- Movies cannot be played when the camera is connected to a printer.
- When the printer is disconnected, the symbol will disappear from the LCD monitor and the camer a will revert to standard replay mode.

## **Printing**

An image can be printed when displayed in single replay or selected in index replay.

- 1 Press or button to select the image you wish to print, and then press the SET button.
- 2 Set the number of prints, the print style and printing area settings as required.
  - Selecting the number of copies (p. 109)
  - Setting the Print Style (p. 110)
  - Selecting the printing area (p. 112)
- 3 Select [Print].

The image will start to print and, when it is completely finished, the display will revert to standard replay mode.







## **Cancel Printing**

- A print in progress cannot be stopped. Wait until the current image is printed and then cancel before the next one starts. The display will revert to standard replay mode.

## **Printing Errors**

- An error message appears if an error occurs for some reason during the printing process (p. 140). Select [Stop] or [Resume] using <a> or <a> b</a> button and press the SET button.
- The [Resume] option may not appear with some error messages. Select the [Stop] option in that case.

## **Print Settings (Direct Print Function)**

You can specify print settings while the camera is connected to the printer.

## **Selecting the Number of Copies**

While displaying the image, press the SET button. Press ◁ or ▷ button to select [copies], and press the SET button.



- 2 Press the <a or b button to specify the desired number of copies.
  - You can specify from 1 to 99 prints.

## **Setting the Print Style**

You can select from among the following print styles.

Image	Standard	Prints one image per page.
	Multiple*	Prints eight copies of the same image on
		one page.
Borders	Borderless	Prints right to the edges of the page.
	Bordered	Prints right to the edges of the page. Prints with a border.
Date		Prints the image's creation date.

<sup>\*</sup> This setting is only available for Card Size paper.

While displaying the image, press the SET button. Press ◁ or ▷ button to select [Style], and press the SET button.



2 Press or button to select [Image], [Borders], or [Date], and press the SET button.



## **⊰** Press **⊲** or **⊳** button to select the desired setting, and press the SET button.









Choose [Borderless] or [Bordered].





Choose [On] or [Off].

## Press the MENU button.

• If [Borderless] or [Multiple] is selected as the print style. the center portion of the recorded image (the image displayed on the LCD monitor) is printed at an enlarged size. As a result, the image's top, bottom and sides may be cropped slightly. The area of the image that will be printed will appear lighter than the rest of the image allowing you to check the portion that will be cropped.



Print Area Frame



- The date and borders settings cannot be selected when the [multiple] option is selected. (The image will be printed with the Date set to [Off] and the Borders set to [Borderless].)
- With the [Bordered] option, the border is printed in practically the same space as the recorded image.

## **Specifying the Printing Area**

Choose from three printing area options.



## Before specifying the printing area

- Please set the Print Style (Image, Borders and Date) first before setting the printing area (p. 110).
- Printing area can only be specified with the border less print style.
- While displaying the image, press the SET button. Press ☐ or D button to select [Printing area], and press the SET button.

The **◄►** marks appear, indicating that you can now set the printing area for that image.



**2** Press **④** or **▶** button to select [1], [2] or [3].







 When printing on L Size paper, or when [Order] is set to [Multiple], the selectable print area may move left or right.



- The printing area setting only applies to one image.
- The printing area setting is cancelled with the following operations.
  - Printing
  - When you set the printing area setting for another image.
  - When you close the Print mode, i.e.
    - · turn the camera off
    - change the camera mode
    - after setting the printing area, you select [Cancel] and don't print
    - · detach the DIF-100 direct interface cable

## **DPOF Print Settings**

On your CF card, select which image or images you want to print and how many copies you want. This is convenient for printing on optional Canon printers with the direct print function or at participating photo labs.

## **Selecting Images for Printing**

- 1 Display the [Print Order] menu.
  - For selecting from the menu, see "Selecting from the Print Order Menu" (p. 102).
- 2 Press or button to select [Order], and then press the SET button.



- Press or button to select an image, and then press the SET button.
  - The selection method will vary according to the print type ((a))(p. 116).
    - (Standard) / (Both)

The ◀► marks appear, indicating that you can now set the number of copies for that image.

Press (a) or (b) button to select the number of copies (up to 99).



## (Index)

A check mark appears at the upper left.

Pressing the **SET** button once selects the image for printing. Pressing the **SET** button again deselects the image, so that the check mark disappears.



## 4 Press the MENU button.



- The A mark appears 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.



- Images are printed in order from oldest to ne west by the shooting date.
- A maximum of 998 images can be marked per CF card.
- Press the zoom button in step 3 to switch between single and 3-image index replay for selecting an image.
- 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 supplied software programs on a computer.

## **Setting the Print Style**

You can set up the print style as follows.

Print Type

Standard
Index

Print one image por once
Print index prints (multiple reduced-size images per page).

Print selected images both in standard and index format.

Include the date on the print.

Include the file number on the

- 1 Display the [Print Order] menu.
  - For selecting from the menu, see "Selecting from the Print Order Menu" (p. 102).
- Select the setting and then press the SET button.



☐ Press ☐ or ☐ button to select the print style (a), or a), and then press the SET button.

# 4 Press or button to make the desired setting, and then press the SET button.



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



(Date) Select [On] or [Off].



(File No.)
Select [On] or [Off].

# 5 Press the MENU button.



- If you have chosen [Index] as the print type, you cannot set [Date] and [File No.] to [On] at the same time.
- If you have chosen [Both] as the print type, you can set both [Date] and [File No.] to [On]. However, only the file numbers will be printed on index prints.



 If you include the date, the date will be printed in the format you selected at the Set Date/Time menu (p. 25).

## **Resetting the Print Settings**

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

- 1 Display the [Print Order] menu.
  - For selecting from the menu, see "Selecting from the Print Order Menu" (p. 102).
- 2 Press or button to select [Reset], and then press the SET button.



- 3 Press ◀ or ▶ button to select [OK], and press the SET button.
  - If you decide you don't want to reset the settings, select [Cancel] instead of [OK].

## **Printing with DPOF Print Settings**

You can use the DPOF print settings to print with an optional printer with the direct print function.

- 1 Display the [Print Order] menu.
  - For selecting from the menu, see "Selecting from the Print Order Menu" (p. 102).
- 2 Press or b button to select [Print], and then press the SET button.



- 3 Set the print style settings as required.
  - See Setting the Print Settings (p. 116).
  - A print style cannot be set if the print type is set to [Index] in the DPOF print setting.

## 

The image will start to print and, when it is completely finished, the display will revert to the standard replay mode.







• To print the date, set the [Date] setting in the print order menu in Step 2 on the previous page to [On]. You cannot set the date to print with the [Style] menu in Step 3 on the previous page (p. 116). If the print type is set to [Index], the date will not print even if the [Date] setting is set to [On] in Step 2.



- When the Print Type is set to [Index], the number of images that will be printed depends on the size of the paper.
  - Card Size: 20 imagesL Size: 42 images
  - Postcard Size: 63 images

### Cancel Printing (p. 108)

### **Restarting Printing**

- In the Print Order menu, select [Resume] using <a>o</a> or
   button and press the SET button. The remaining images can be printed.
- Printing cannot be restarted under the following circumstances.
  - If the print settings have been changed before restarting.
  - If the image for which the print settings were set has been deleted before restarting.
  - If there was very little free space on the CF card when the printing was cancelled.

If these circumstances apply, you can select [OK] in the Print Order menu and reprint starting from the first image. If printing was cancelled because the camera batteries became too low on charge, you are recommended to either power the camera with a household power source or switch to AA size fully charged nickel metal hydride (NiMH) or unused alkaline batteries. If you must use a battery pack, ensure that it is fully charged for printing (p. 144). After replacing the spent battery pack, turn the camera power on again.

#### Printing Errors (p. 108)

# Image Transfer Settings (DPOF Transfer Order)

Using the camera, you can make marks on images you wish to transfer and attach to e-mails (Please use the supplied software for actually transferring images.) These settings are compatible with the Digital Print Order Format (DPOF) standards.



 The A mark will display 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 [Rec.] menu, select @ (Transfer Order).
  - For information on using the menu, see "Selecting Menus and Settings" (p. 41).
- 2 Select [Order] and press the SET button.



 You can remove all the transfer marks at once by selecting [Reset].

# 3 Select images for transferring.

- Select an image using (4) or (b) button, and mark or remove marks from images using the SET button.
- You can use the same procedures to select images in index replay (3 images). Press the button to switch between single replay and index replay.



4 Press the MENU button.

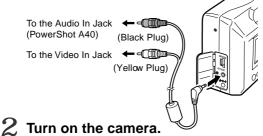


- Images are transferred in order from oldest to newest by the shooting date.
- A maximum of 998 images can be marked per CF card.
- Transfer settings can also be assigned to images with the supplied software programs on a computer.

# Viewing Images on a TV Set

The camera can connect directly to aTV set, allowing you to use the TV screen as your monitor when shooting or replaying images. Make the connection using the supplied AV Cable AVC-DC100 (for PowerShot A40) or the Video Cable VC-100 (for PowerShot A30). Be sure to turn both the TV set and the camera off before connecting or disconnecting the cable.

1 Connect the camera to the TV set using the supplied video cable. Then turn the TV set on, and set it to display video input.



- - The image display that normally appears on the LCD monitor now appears on the TV monitor instead.
  - If the image disappears from the TV screen while the camera is in one of the shooting modes, you can bring the image back by pressing the **DISPLAY** button.



- The LCD monitor does not display images while the TV is connected.
- A TV monitor cannot be used in  $\square$  mode.
- You can plug the AV cable into either the left or right input jack on a stereo TV. Please consult the TV's manual for details.



The video output signal can be switched (NTSC or PAL) to accommodate different regional standards (p. 134).
 The default setting will vary between regions.
 NTSC: Japan, U.S. A., Canada, Taiwan, etc. PAL: Europe, Asia (excluding Taiwan), Oceania, etc.

# Downloading Images to a Computer

Download images taken with the camera to a computer in one of the following ways:

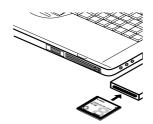
- Directly from the CF card
- Connect the camera to a computer with the USB cable

After installing the supplied software, download images automatically by simply connecting the camera to a computer with the supplied USB cable.

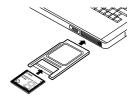
\* For information about system requirements and for more details about how to download images, refer to the Software Starter Guide.

## **Downloading Directly from a CF Card**

1 Eject the CF card from the camera, and insert it into a CF card reader connected to the computer.



 If you are using a PC card reader, first insert the CF card into a PC card adapter (optional), and then insert the PC card adapter into the computer's PC card reader.



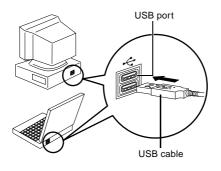
- 2 Double-click the icon of the drive with the CF card.
- 3 Copy images from the card into a folder of your choice on the hard disk.
  - The images are stored in the [xxxCANON] folders located under the [DCIM] folder (where xxx is a threedigit number from 100 to 998).

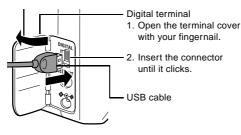


 Some computers or PC card readers require the po wer to be off when the CF card or PC card adapter is inserted. Since this requirement varies between models, please consult the manual for your equipment.

# Connecting the Camera to a Computer Via the USB Cable

- 1 Connect the supplied USB interface cable to the computer's USB port and the camera's Digital terminal.
  - You do not need to turn off the computer or camera when making this connection.
  - Please refer to your computer manual for information regarding the location of the USB por t.

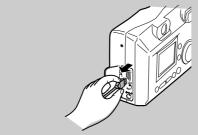




# 2 Turn the camera's mode dial to **.**

The LCD monitor displays in replay mode. When the connection to the computer is complete the LCD monitor tums off and the green indicator comes on.

To disconnect the cable from the camera: Hold the cable connector firmly at both sides and pull it straight out.





- It is recommended to power the camera from a household power outlet with the optional AC Adapter Kit ACK600 when connected to a computer.
- If you disconnect the USB cable while the camera is on, the camera will automatically turn off.
- If you leave the camera unused for approximately 5
  minutes while it is connected the computer, the
  computer screen displays a warning message. If you do
  not take any action within the next minute, the camera
  turns off. You can turn the camera back on by pressing
  the ON/OFF button.
- For information about what to do after making the connection, please refer the Software Starter Guide.

# **List of Menu Options and Messages**

## Rec. Menu

#### Item/ Menu Screen

Resolution (Still images)



#### Resolution (Movies)



#### Compression



#### **Light Metering**



## **Setting Content**

Sets the number of pixels used to record images to CF cards.

- L Large\*
   PowerShot A40 (1600 x1200 pixels)
   PowerShot A30 (1280 x 960 pixels)
- M Medium (1024 x 768 pixels)
   S Small (640 x 480 pixels)
- . . .

Sets the resolution of the frames as they are recorded to the CF card.

- 🔯 (320 x 240 pixels)\*
- (160 x 120 pixels)

Sets the relative compression ratio used to record images to CF cards.

- Superfine
- Fine\*
- Normal

Switches between two metering options.

- Evaluative\*
- Spot

#### Reference Page

p. 50

n E0

~ 7/

**ISO Speed** 



AiAF



Digital Zoom



Self-timer



### **Setting Content**

Sets the sensitivity at which images are recorded. The ISO default setting depends on the shooting mode.

- 50
- · 100
- 200
- 400
- AUTO

Sets the AiAF to on (the camera automatically selects the AF frame when taking a picture) or off (AF frame is set to the middle frame).

- On\*
- Off

Turns the digital zoom on (the digital zoom combines with the optical zoom to zoom images) or off.

- On
- Off\*

Sets the self-timer countdown time.

- 10 sec \*
- 2 sec.



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#### Review



## **Setting Content**

Reference Page

p. 49

Sets the duration images display on the LCD monitor after the shutter button is released.

- Off
- 2 sec \*
- 10 sec.

### p. 39

#### AF-assist Beam



Turns the AF-assist beam on or off

- On\*
- Off

#### File No. Reset



Sets how file numbers are assigned to images when new CF cards are inserted.

- On
- Off\*

p. 80

Sets whether or not the beep sounds

Set up... Beep



when the shutter button is pressed or when a menu operation is performed.

- On\*
- · Off (Still beeps to warn of an error even when set to Off)

Set up... Auto Power Down



Set up... Date/Time



Set up... Format



Set up... Language



## **Setting Content**

Sets whether or not the camera automatically powers down after a specified period of time elapses without something being pressed.

- On\*
- Off

Sets the date, time and date format.

Formats (initializes) a CF card.

Sets the language used in the menus and messages on the LCD monitor. The menu may appear differently in some regions.

- English
  - Deutsch Français
- Nederlands
   Dansk Suomi Italiano Norsk Svenska
- · Japanese or Chinese Español

Reference Page

p. 30

p. 25

p. 98

p. 27

Set up... Video System



\* Default setting

## **Setting Content**

Sets the video output signal standard.
• NTSC

- M12
- PAL

## Reference Page

p. 125

# Replay Menu

Replay Mena				
Item/ Menu Screen Protect	Setting Content Protects images from accidental erasure.	Reference Page p. 94		
Protect  ⊕ on ∀ → △ →				
Rotate	Rotates images 90 or 270 degrees clockwise in the display.	p.92		
Erase all	Erases all images from a CF card (excluding protected images).	p. 97		
Auto Play	Plays images automatically one after the other.	p. 93		

Print Order



#### Transfer Order



### **Setting Content**

Sets which images and how many copies will be printed on a printer with the direct print function or at a photo lab service.

Sets the images that will be transferred p. 122 with your e-mail software.

### Reference Page

p. 114

## **Resetting the Settings to Default**

You can reset all of the meru and button operation settings to default except for [Date/Time], [Language], and [Video System].

- 1 Turn on the camera.
  - The mode dial can be turned to any setting.
- 2 Press the MENU button for longer than 5 seconds.

The message "Reset settings to default?" appears on the LCD monitor.



3 Press ◀ or ▶ button to select [OK], and press the SET button.

The screen below appears while resetting. The normal screen resumes when resetting is complete



• To cancel resetting, select [Cancel] instead of [OK].

## **List of Messages**

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

**Busy...** The camera is writing image data to the CF

card (after taking a shot), or reading an image from the card (when getting ready to display it).

No CF card You attempted to shoot or replay with no CF

card installed.

Cannot record! You attempted to shoot with no CF card

installed.

**CF card error!** There is something wrong with the CF card.

**CF card full** The CF card is too full to store images or

accept new print settings.

Naming error! The camera cannot generate a file name for the

image you have shot because (a) the card already contains a folder having the same name as the file to be created, or (b) the file number has already reached maximum possible value. Display the Rec. menu and set [File Number Reset] to [On]. Save all images you wish to keep into your computer, and reformat the CF card (Please note that formatting will erase all data in the card.).

Change the batteries

The batteries are dead, and the camera can no longer function. Replace with new AA-size alkaline batteries (p.18) or fully recharged batteries (Be sure to replace all batteries at the same time.).

**No image** No images recorded on CF card.

Image too large You attempted to replay an image whose file

size was too large or whose

resolution exceeded 3200  $\times$  2400 pixels.

Incompatible JPEG format

You attempted to replay an incompatible JPEG

file.

Corrupted data You attempted to replay an image with

corrupted data.

**RAW** You attempted to replay an image recorded in

the RAW format.

Unidentified image

You attempted to replay an image file recorded in a unrecognized format (file recorded by a

different camera in a proprietary format, etc.).

Cannot magnify! The image you attempted to magnify was recorded by another camera, or recorded in a

format that cannot be magnified, or edited on a

computer.

Cannot rotate! The image you attempted to rotate was

recorded by another camera, or recorded in a format that cannot be rotated, or edited on a

computer.

Protected! Too many

marks!

You attempted to erase a protected image.

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 malfunction (where xx is the two-digit error code). Try turning the camera off and back on. If this message recurs frequently, note down the error and call a Canon Customer Suppor t Help Desk. If this message appears immediately after you have taken a shot, it is possible that the camera failed to record the image—so you may want to switch into Replay mode to check whether the image was actually recorded.

The following table lists and explains the messages that may be on the LCD monitor when printing to an optional printer with the direct print function (some of these messages may not appear depending on the pinter).

No Paper Paper cassette is empty or is not installed

correctly.

No Ink No ink cassette in the printer, or the ink

cassette is out of ink.

Incompatible You attempted to print with a paper size paper size

incompatible with this camera.

**Incompatible ink size** You attempted to print with an ink cartridge

type incompatible with this camera.

Ink Cassette Error There is a problem with the ink cassette. Paper and ink The paper size and ink type are from

do not match different sets.

Paper Jam Paper jammed during printing.

Paper has been The paper size was changed between the changed

time the Print Style menu was displayed and the time printing started.

Ink has been changed. The ink type was changed between the

time the Print Style menu was displayed

and the time printing started.

Recharge the printer The printer's battery is out of power.

battery

Communication Error A communication error has occurred.

Cannot Print! You attempted to print an image shot by a

different camera, or in an incompatible format, or downloaded to and edited on a

computer.

Could not print You attempted to print xx number of xx images with DPOF settings that were

images with DPOF settings that were shot by a different camera, or in an incompatible format, or downloaded to and edited

on a computer.

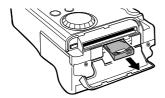
## **Appendices**

## Replacing the Date Battery

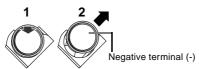
The camera uses a special Date battery to power its internal clock. If the LCD monitor displays the Set Date/ Time menu when you turn on the camera, this means that the Date battery has run down and the clock has stopped running. Please purchase a replacement battery (battery type CR2016) and install 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.)



- 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 CF card slot cover.
- 3 Pull out the date battery holder.



4 Pull the battery out of the holder, as shown.



- 5 Insert the new date battery into the holder, with the negative terminal (–) facing up.
- Replace the date battery holder back into its original position, and close the CF card slot cover.
- When the LCD monitor displays the Set Date/Time menu, proceed to set the current date and time (p. 25).



 The LCD monitor also displays the Set Date/Time menu the very first time you turn on the camera. This is normal, and does not mean that the date batter y is depleted.

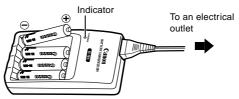
If you should dispose of your camera, first remove the date battery for recycling according to the recycling system of your country.



## **Using the Optional Battery Kits**

# Using Rechargeable Batteries (Battery and Charger Kit CBK100)

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



 The indicator flashes while charging, then comes on solid when charging is finished.



- This charger can be used only to charge Canon AAsize NiMH batteries. Please do not attempt to charge any other type of batteries with this charger.
- Never mix new batteries together with batteries that have been used in other devices.
- When recharging batteries from the camera, always recharge all four of them at the same time.
- All batteries you place in the charger should be at approximately the same charge state, and should have been purchased at the same time. Don't mix batteries with different purchase dates or different charge states.
- Do not attempt to recharge fully charged batter ies, as doing so may reduce or impair battery performance.
- 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.
- 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's AA-size NiMH batteries (four-piece set).
- 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 220 minutes for the charger to fully recharge the batteries (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 104 °F).

 Charging time varies according to ambient temper ature and to the batteries' initial charge state.

# Using the Household Power Source (AC Adapter Kit ACK600)

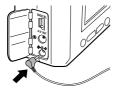
This optional adapter kit allows you to operate the camera continuously without worrying about having to stop and replace the batteries. Use of the kit is recommended when you are planning long sessions with the camera, and whenever you connect the camera to a computer.



- 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 electrical 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 ACK600 with your camera. Use of a different adapter may result in damage to the camera or to the adapter.

## **Using the Optional Lenses and Lens Adapter**

The camera supports use of the optional Wide Converter WC-DC52, Tele-converter TC-DC52 and Close-up Lens 250D (52 mm). In order to attach any of these lenses, you also need to use the optional Conversion Lens Adapter LA-DC52B.



- When attaching the wide converter, tele-converter or close-up lens, be sure to screw it on securely. If the wide converter or close-up lens comes lose it may fall from the camera, posing risk of injury from shattered glass.
- Never look into the sun or into strong light through the wide converter, tele-converter or the close-up lens, as this can result in blindness or impairment of vision.

### Wide Converter WC-DC52

Use this converter for taking wide-angle shots. The wide converter changes the focal length of the camera body's lens by a factor of 0.7 (The thread diameter is 52 mm.).



### Tele-converter TC-DC52

This 52 mm-threaded diameter magnifying conversion lens is for taking telephoto shots. The lens changes the focal length of the camera body's lens by a factor of 2.4x.





- It is not possible to attach a lens hood or filter to the wide converter or tele-converter.
- If you use the flash when shooting with the wide converter, the outer area of the recorded image (and especially the lower right corner) will come out relatively dark.
- The wide converter blocks part of the view through the viewfinder.
- When using the wide converter, please set the camera to maximum wide angle.
- When using the tele-converter, please set the focal length to maximum telephoto. At other zoom settings, the image will appear as if its corners have been cut off

### Close-Up Lens 250D (52 mm)

This lens makes it easy to take macro shots. With the camera set to Macro mode, you can use this option to shoot subjects that are 10 to 25 cm (3.9 to 9.8 in.) at maximum wide angle and 13 to 25 cm (5.1 to 9.8 in.) at maximum telephoto from the lens tip





 Please do not use the flash when shooting with this lens.

### **Shooting Ranges in Macro Mode**

Lens tip and Subject Sh	ooting Range
	48 × 36 mm .9 × 1.4 in.)
telephoto 25 cm	82 × 61 mm
(9.8 in.) (3	$6.2 \times 2.4 \text{ in.}$
	$06 \times 80 \text{ mm}$
	.2 × 3.2 in.)
wide angle 25 cm 25	$30 \times 173 \text{ mm}$
(9.8 in.) (9	$0.1 \times 6.8 \text{ in.}$

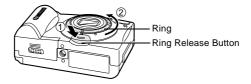
## Conversion Lens Adapter LA-DC52B (52 mm)

This optional adapter is required for attaching the wide converter, tele-converter and close-up lens (all optional).



### **Attaching a Lens**

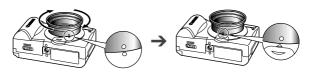
- 1 Be sure that the camera is turned off.
- 2 Press the ring release button and hold it down, and turn the ring in the direction of the arrow.



3 When the ● marks on the ring and the camera are aligned, lift off the ring.



4 Align the ● marks on the Conversion Lens Adapter and the camera, and turn the adapter in the direction of the arrows as far as the ▲ mark on the camera.



5 Set the lens on the adapter, and attach it securely by turning it in the indicated direction.





- Completely remove all dust and dirt from conversion lenses with a lens blower brush before use. The camera may focus on any dirt that remains.
- Exercise due caution when handling the lenses since it is easy to dirty them with finger prints.
- Be careful not to drop the camera or adapter when removing the ring.
- When shooting with these attachments, please use the LCD monitor to compose your shots. The attachments block part of the view through the viewfinder, and the area shown in the viewfinder does not match the area of the shot that is actually recorded.
- You should not shoot images in mode when using these attachments. Although it is possible to select this mode at the camera, the PhotoStitch software will not be able to stitch the images together at the computer.

## **Camera Care and Maintenance**

When the camera becomes dirty, clean it as follows.

Camera Body: Wipe the camera body with a soft cloth or

eyeglass lens wiper.

Lens: Clean the lens with a lens blower brush, then

wipe lightly with a soft cloth.

 Never wipe the camera body or lens with organic solvents or other synthetic cleaning solutions. If you are unable to remove the dirt from the lens, contact

Canon Customer Support Help Desk.

Viewfinder: Clean with a lens blower brush. If necessary,

wipe lightly with a soft cloth or eyeglass lens

wiper.

LCD Monitor: Clean with a lens blower brush. If necessary,

wipe lightly with a soft cloth or eyeglass lens

wiper.

Don't press strongly on the monitor or rub it forcefully.
 Strong pressure or rubbing may cause scratches on

the surface.



 Never use water, paint thinner, benzene, or detergents to clean the camera, as these may cause damage or deformation.

# Troubleshooting

1		1
Problem	Cause	Solution
The camera doesn't function	The camera is turned off.	Press the ON/OFF button for a few moments.
(no power).	The battery cover or CF card slot cover is open.	Be sure these covers are closed securely.
	Batteries are loaded in the wrong direction.	Reload the batteries in the correct direction.
	Batteries are depleted.	Replace with unused alkaline or fully recharged batteries (four AA-size batteries).      Use a household power source.
	Batteries are not the right type.	Use only unused AA- size alkaline batteries or Canon AA-size NiMH batteries. (For the information about alkaline batteries, see "Proper Battery Handling" (p. 19).)
	Batteries are not making good electrical contact with the camera.	Wipe the battery terminals with a clean dry cloth.

Problem	Cause	Solution
The camera doesn't shoot.	The mode dial is set to [▶ (Replay).	Turn the mode dial to (Auto), P (Program), M (Manual), □□ (Stitch Assist), or □□ (Movie).
	The flash is charging.	Wait until the flash charges. You can press the shutter button when the indicator glows a steady orange.
	The CF card is full.	<ul> <li>Insert a new CF card.</li> <li>Download images to your computer, then erase them from the card to free up more space.</li> </ul>
	The CF card is not formatted correctly.	<ul> <li>Format the card (p. 98).</li> <li>The card may be defective (its physical format may be corrupted).</li> <li>Contact Canon Customer Help Desk.</li> </ul>
The power is off but the lens did not retract.	You opened the battery cover or CF card slot cover while the camera was on.	Close the covers, and then use the ON/OFF button to turn the power off correctly.
	You opened the battery cover or CF card slot cover while recording to the CF card (warning beep sounds).	Close the covers, and then use the ON/OFF button to turn the power off correctly.

Problem	Cause	Solution
The batteries are consumed quickly.	Batteries are not the right type.	Use only unused AA- size alkaline batteries or Canon AA-size NiMH batteries. (For the information about alkaline batteries, see "Proper Battery Handling" (p. 19).)
	The batteries are cold.	Battery performance deteriorates at low 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.	Wipe them well with a dry cloth before use.
	The batteries have not been used for over a year.	If batteries are rechargeable: Performance should return to normal after several charging cycles.
	If rechargeable batteries: The batteries have lost their effectiveness.	Discard all 4 batteries and replace with new ones.

Problem	Cause	Solution
If using rechargeable batteries:	Batteries were placed in the charger in the wrong direction.	Put batteries back into the charger in the correct direction.
Batteries do not charge.	Poor electrical contact.	<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 electrical outlet.</li> </ul>
	Battery terminals are dirty.	Wipe them well with a dry cloth before charging.
	Battery life exceeded.	Replace all 4 batteries with new ones.
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 auxiliary light emitter with your finger or other items.
	The AF-assist beam has been set to [Off] through the menu.	Set the AF-assist beam to [On].

Problem	Cause	Solution
Shots are blurry or unfocused.	The subject was outside the range over which the camera can focus.	<ul> <li>Ensure that there is at least 76 cm (2.5 ft.) between the camera lens and subject.</li> <li>Use the macro mode to shoot close-ups between 16 to 76 cm (6.3 in. to 2.5 ft.) from the lens when set to wide angle and between 26 to 76 cm (10.2 in. to 2.5 ft.) when set to telephoto.</li> <li>When shooting distant subjects, set the camera to infinity mode.</li> </ul>
The subject comes out	Insufficient light for shooting.	Set the flash on.
underexposed (too dark).	The subject is darker than the surroundings.	Set exposure compensation to a positive value or use spot AE point light metering.
	The subject is beyond the range of the flash.	When flash is used, the distance between lens and subject should not exceed 4.2 m (13.8 ft.) at maximum wide angle or 2.5 m (8.2 ft.) at maximum telephoto setting.

Problem	Cause	Solution
The subject comes out overexposed (too bright).	The subject is too close to the flash.	When flash is used, the distance between lens and subject should be no less than 26 cm (10.2 in.).
	The subject is brighter than the surroundings.	Set exposure compensation to a negative value.
	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.
The flash doesn't fire.	The flash mode is set to Off.	Set the flash to any other mode except Off.
Image not showing on TV.	Incorrect video system setting.	Set the video system to the appropriate setting, NTSC or PAL, for your TV. Or, use spot AE point light metering.
	The mode dial is turned to □ (stitch assist).	Turn the mode dial to any mode other than □.
Zoom does not operate.	Zoom button was pressed while shooting in movie mode.	Operate the zoom before shooting in movie mode.

# **Specifications**

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

Subject to change without notice			
	PowerShot A40 / PowerShot A30		
Camera effective pixels	A40 : Approx. 2 million A30 : Approx. 1.2 million		
Image	A40: 1/2.7 in. CCD (Total number of pixels: approx. 2.1 million)		
Sensor	A30 : 1/2.7 in. CCD (Total number of pixels: approx. 1.3 million)		
Lens	: 5.4 (W) $-$ 16.2 (T) mm (35 mm film equivalent: 35 $-$ 105 mm), F 2.8 (W) $-$ 4.8 (T)		
Digital Zoom	A40 : Maximum 2.5× (Maximum 7.5× with optical zoom)		
	A30 : Maximum 2.0× (Maximum 6× with optical zoom)		
Optical Viewfin	der : Primary imaging real-image optical zoom viewfinder		
LCD Monitor	: 1.5-inch low-temperature polycrystalline silicon TFT color LCD, approx. 120,000 pixels		
Autofocus	: TTL 3 point AiAF/TTL 1 point center AF Focus lock possible		
Focusing Rang	e: Normal: 76 cm (2.5 ft.) $-\infty$ Macro: 16 - 76 cm (6.3 in 2.5 ft.) (W)/ 26 - 76 cm (10.2 in 2.5 ft.) (T)		
Shutter	: Mechanical + electronic		
Shutter Speed	<ul> <li>: 15 – 1/1500 sec.</li> <li>• 15 – 1.3 sec. in manual mode with the flash off or in slow synchro mode.</li> <li>• Noise reduction processing on speeds slower than 1.3 sec.</li> </ul>		
Light Metering	: Evaluative metering (linked to focusing point) /		

Method

Spot metering

**Exposure Control** : Program AE (Auto and Program modes only)

: ±2 EV (1/3 steps) Exposure Compensation

> (W): wide angle (T): telephoto

Sensitivity : ISO 50/100/200/400 equivalent and Auto

> (In Auto mode, camera automatically adjusts sensitivity in the range of ISO 50 to ISO 150

equivalent)

White Balance : TTL auto/preset (daylight, cloudy, tungsten,

fluorescent, fluorescent H)

Flash : Auto/red-eve reduction auto/on/off/red-eve

reduction on/slow-synchro

: Normal Mode: 76 cm - 4.2 m (2.5 - 13.8 ft.) (W). Flash Range

76 cm - 2.5 m (2.5 - 8.2 ft.) (T) Macro Mode: 26 – 76 cm (10.2 in. – 2.5 ft.) (W/T)

Shooting Modes : Auto/program/manual/stitch assist/movie

Continuous Shooting: Approx. 2.5 images/sec.

(Large/Fine mode, LCD monitor off)

Self-Timer : Shoots after approx. 2 sec. or approx.10 sec.

PC Connected : Available (USB connection only, Exclusive software Shooting

program "RemoteCapture" is included in the camera

kit.)

Recording Media : CompactFlash card (Type I)

File Format : Design rule for Camera File System, DPOF compliant

Still images: JPEG (Exif 2.2)\*1 Image

Recording Movies : AVI (Image data: Motion JPEG. Format

Audio data: WAVE [monaural], A40 only)

Compression : Superfine/fine/normal

Number of Still images: Large: (A40) 1600 × 1200 pixels

Recording (A30) 1280 × 960 pixels Pixels Medium: 1024 × 768 pixels

> Small: 640 × 480 pixels

: 320 × 240 pixels (Approx. 10 sec.)\*2 Movies 160 × 120 pixels (Approx. 30 sec.)\*2

Approx. 20 frames/sec.

\*2 The data in parentheses refer to the maximum

movie length per shooting

: Single image replay/index replay (9 thumbnails)/ Replay Modes

zoomed view (LCD monitor zooms images up to maximum of approx. 10×)/auto play/printing with Card Photo Printer CP-100 or CP-10 (Direct Print

Function)

Display languages : English, Deutsch, Français, Nederlands, Dansk,

Suomi, Italiano, Norsk, Svenska, Español, Chinese

or Japanese (depending on the region)

Interface A40: Universal Serial Bus (USB) (mini-B), Audio/Video

Output (NTSC or PAL selectable, monaural audio)

A30: Universal Serial Bus (USB) (mini-B), Video Output

(NTSC or PAL selectable)

Power Source : Four AA alkaline batteries (included)

Four AA rechargeable NiMH batteries (optional)

Compact Power Adapter CA-PS500 (optional)

Operating :  $0 - 40 \, ^{\circ}\text{C} \, (32 - 104 \, ^{\circ}\text{F})$ 

**Temperatures** 

Operating Humidity: 10 - 90 %

Dimensions :  $110.3 \times 71.0 \times 37.6 \text{ mm} (4.3 \times 2.8 \times 1.5 \text{ in.})$ 

 $(w \times h \times d)$  (excluding protrusions) Weight : Approx. 250 g (8.8 oz.)

(excluding batteries and CF card)

<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.

## Battery Performance

		of Shots	Replay
	LCD Monitor ON	LCD Monitor OFF	Time
AA Alkaline Batteries (included with the camera)	Approx. 200 shots	Approx. 500 shots	Approx. 240 min.
AA NiMH Battery NB-1AH	Approx. 350 shots	Approx. 1000 shots	Approx. 240 min.

#### <Test Conditions>

Shooting: Room temperature (23 °C, 73 °F), alternating between

wide angle and telephoto every 20 seconds, flash used one in four shots, power turned off and on again after

every eighth shot.

Replay: Room temperature (23 °C, 73 °F), continuous replay at 3

seconds per image.

 For information on handling batteries, see "Proper Battery handling" (pp. 19, 144).

# **CF Cards and Estimated Capacities** (Recordable Images)

### PowerShot A40

		FC-8M	FC-16M	FC-32M	FC-64M	FC-128M
	S	7	15	31	64	128
L	4	11	24	49	100	200
'	4	24	48	99	200	401
'	8	16	32	67	135	271
М	4	24	49	102	205	412
'	4	46	92	189	379	760
'	8	35	70	143	288	577
S	4	50	99	206	415	831
	4	87	172	353	707	1417
Movie	320	18	36	75	152	305
(in seconds)	180	48	97	198	399	799

### **PowerShot A30**

		FC-8M	FC-16M	FC-32M	FC-64M	FC-128M
'	8	10	21	43	88	177
L	4	16	32	67	135	271
	4	32	64	131	263	528
	8	16	32	67	135	271
M	4	24	49	102	205	412
'	4	46	92	189	379	760
	8	35	70	143	288	577
S	4	50	99	206	415	831
	4	87	172	353	707	1417
Movie	320	18	36	75	152	305
(in seconds)	160	48	97	198	399	799

- • S (Superfine), (Fine), (Normal) indicate the compression setting.

	PowerShot A40	PowerShot A30
L (Large)	1600 ×1200 pixels	$1280 \times 960$ pixels
M (Medium)	1024 × 768 pixels	1024 × 768 pixels
S (Small)	640 × 480 pixels	640 × 480 pixels
320	$320 \times 240 \text{ pixels}$	$320 \times 240 \text{ pixels}$
160	160 × 120 pixels	160 × 120 pixels

# Approximate File Size for One Image PowerShot A40

	S		4
<b>L</b> (1600 × 1200)	957KB	611KB	302KB
<b>M</b> $(1024 \times 768)$	450KB	294KB	155KB
<b>S</b> ( 640 × 480)	208KB	141KB	79KB

### PowerShot A30

	S	4	4
<b>L</b> (1280 × 960)	693KB	450KB	228KB
<b>M</b> (1024 × 768)	450KB	294KB	155KB
<b>S</b> ( 640 × 480)	208KB	141KB	79KB

### NiMH Battery NB-1AH

Supplied with the optional NiMH Battery NB4-100 set and the Battery/ Charger Kit CBK100.

Type Rechargeable nickel metal hydride battery

Nominal Voltage 1.2 V DC Typical Capacity 1600 mAh

Cycle Life Approx. 300 times Operating  $0-35 \,^{\circ}\text{C} \, (32-95 \,^{\circ}\text{F})$ 

Temperature 10 – 35 °C (32 – 95

Dimensions Diameter: 14.5 mm (0.6 in.) Length: 50 mm (2 in.)

Weight Approx. 27 g (0.95 oz.)

### **Battery Charger CB-3AH**

Supplied with the optional Battery and Charger Kit CBK100.

Rated Input 100 – 240 V AC (50/60 Hz), 8 W

Rated Output 1.6 V DC/2 A

Charging Time Approx. 220 minutes\*
Operating 0 - 35 °C (32 - 95 °F)
Temperature

Dimensions  $113 \times 74 \times 27.5 \text{ mm}$  $(4.4 \times 2.9 \times 1.1 \text{ in.})$ 

Weight (body) Approx. 100 g (3.5 oz.)

### Compact Power Adapter CA-PS500

Supplied with the optional AC Adapter Kit ACK600.

Rated Input 100 – 240 V AC (50/60 Hz), 0.17 A

Rated Output 4.3 V DC/1.5 A

Operating 0 – 40 °C (32 – 104 °F) Temperature

Dimensions  $42.5 \times 104.4 \times 31.4 \text{ mm}$   $(1.7 \times 4.1 \times 1.3 \text{ in.})$ 

Weight (body) Approx. 180 g (6.4 oz.)

<sup>\*</sup> To charge four NB-1AH NiMH Batteries

### CompactFlash™ Card

Card Slot Type | Type I

Dimensions  $36.4 \times 42.8 \times 3.3 \text{ mm}$ 

(1.4  $\times$  1.7  $\times$  0.1 in.)

Weight Approx. 10 g (0.4 oz.)

### Wide Converter WC-DC52 (optional)

Magnification Approx. 0.7× (35 mm film equivalent at maximum wide angle: approx. 24.5 mm)

Focusing Range Approx. 60 mm (2.4 in.) – ∞

(from tip of lens) (when mounted on PowerShot A40 or A30, at

maximum wide angle)

Thread Diameter | 52 mm standard filter thread

(Conversion Lens Adapter LA-DC52 is required for mounting to PowerShot A40 or

A30)

Dimensions Diameter: 58 mm (2.3 in.)

Length: 30.5 mm (1.2 in.)

Weight Approx. 74 g (2.6 oz.)

### Tele-converter TC-DC52 (optional)

Magnification Approx. 2.4× (35 mm film equivalent at

maximum telephoto: approx. 252 mm)

Focusing Range Approx. 200 mm (Approx. 7.9 in.) – ∞

(from tip of lens) (when mounted on PowerShot A40 or A30, at

maximum wide angle)

Thread Diameter 52 mm standard filter thread

(Conversion Lens Adapter LA-DC52 is required for mounting to PowerShot A40 or

A30)

Dimensions Diameter: 67 mm (2.6 in.)

Length: 57 mm (2.2 in.)

Weight Approx. 74 g (2.6 oz.)

### Close-Up Lens 250D 52mm (optional)

Focal Length 250 mm

Focusing Range 100 - 250 mm (3.9 - 9.8 in.) (W)/130 - 250(from tip of lens)

mm (5.1 - 9.8 in.) (T) (when mounted on

PowerShot A40 or A30)

Thread Diameter 52 mm standard filter thread

> (Conversion Lens Adapter LA-DC52 is required for mounting to PowerShot A40 or

A30)

Diameter: 54 mm (2.1 in.) Dimensions

Length: 10.2 mm (0.4 in.)

Weight Approx. 55 g (1.9 oz.)

### Conversion Lens Adapter LA-DC52B (optional)

Thread Diameter 52 mm standard filter thread Dimensions Diameter: 55.7 mm (2.2 in.) Length: 23 mm (0.9 in.) (from tip of lens) Weight (body) Approx. 13 g (0.5 oz.)

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## Canon Customer Support

### Canon Inc.

30-2 Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501, Japan

### NORTH AMERICA

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

Canon Customer Care Center

Phone (US): 1-800-828-4040 (Available Mon. - Fri., 9 AM to 8 PM

Eastern Time)

www.powershot.com

### Canon Canada Inc.

Phone (Canada): 1-800-OK-CANON (1-800-652-2666)

(24 hours/day, 7 days/week)

### **EUROPE**

# Europe, Africa & Middle East Canon Europa N.V.

PO Box 2262, 1180 EG Amstelveen, The Netherlands

### Canon (UK) Ltd.

Helpdesk

Tel.: 08705 143 723 (Calls may be recorded.)

Fax.: 08705 143 340

### Canon Communication & Image France S.A.

Tél: 01.41.99.70.70 Fax: 01.41.99.79.50

### **Canon Deutschland GmbH**

Customer Hotline: (02151) 349-555

### Canon Italia S.p.A.

Pronto: Canon: 02 8249 2000 E-mail: support@canon.it

### Canon Belgium N.V. / S.A.

Helpdesk: 0900-10627 Tel.: (02) 722.04.11 Fax: (02) 721.32.74

### Canon Luxembourg S.A.

Tel.: (352) 48 47 961 Fax: (352) 48 47 96232

### Canon Nederland N.V.

Helpdesk: 023 - 5 681 681 Tel.: 023 - 5 670 123 Fax: 023 - 5 670 124

#### Canon Danmark A/S

Phone: +45 44882400 e-mail: helpdesk@canon.dk

### Canon España S.A.

Help Desk: 906 301 255 Fax: (91) 411 54 48

E-mail: helpdesk1@btlink.net

### Canon Norge as

Tlf. 22 62 93 21 Faks: 22 62 06 15

E-mail: helpdesk@canon.no

# Finland Canon OY

Puhelin: 010 54420 Fax: 010 544 4571 Help Desk: 0600 0 22606 (14,80 mk/min+pvm) Help Desk: 0600 0 22666 (enint. 40mk/puhelu+pvm)

Sähköposti: helpdesk@canon.fi

### Canon (Schweiz) AG

Fax: 01-835-6526 Hotline 0900 57 55 20

Tel. 01-835-6161

### Canon Svenska AB

Helpdesk: 08-7448620

### Austria

### Canon GmbH

Zetschegasse 11, A-1230 Wien Vienna Helpdesk Tel: 01 66 146 412

Fax: 01 66 146 308

### **OCEANIA**

### Canon Australia Pty. Ltd.

Info-Line: (02) 9805 2864 www.canon.com.au

### Canon New Zealand Ltd.

Info-Line: 0900-522666 www.canon.co.nz

### ASIA

### Canon Singapore Pte. Ltd.

79 Anson Road, #09-01 / 06, Singapore 079906 Phone: (65) 532 4400 Fax: (65) 221 7577

### Canon Hongkong Co., Ltd.

9/F, The Hong Kong Club Building, 3A Chater Road, Central, Hong Kong

Phone: 852-2739-0802 Fax: 852-2369-7701

### **Canon Marketing Services**

No.1 Jalan Kilang Timor, #09-00, Pacific Tech Centre, Singapore 159303

Phone: (65) 799 8888 Fax: (65) 273 3317

### Canon Marketing (Malaysia) Sdn. Bhd.

Wisma General Lumber, Block D, Peremba Square, Saujana Resort, Section U2, 40150.

Shah Alam, Selangor Darul Ehsan, Malaysia Phone: (60) 3 744 6000, (60) 3 745 0055

Fax: (60) 3 745 0505

### Canon Marketing (Thailand) Co., Ltd.

10th Floor, Bangkok City Tower, 179/34-45 South Sathorn Road, Bangkok 10120. Thailand

Phone: (662) 344 9999 Fax: (662) 344 9910

## Canon Marketing (Hongkong) Co., Ltd.

10/F, Mirror Tower, 61 Mody Road, Tsimshatsui East , Kowloon

HongKong

Phone: 852-2170-2828 Fax: 852-2723-9684

#### **FCC Notice**

(Digital Camera, Model PC1019 and PC1020)

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 MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE CAUSING EQUIPMENT REGULATIONS.

#### Réglementation canadienne sur les interférences radio

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

# Canon