



Canon

Canon DIGITAL CAMERA PowerShot TX1 Advanced Camera User Guide

# Canon PowerShot TX1 DIGITAL CAMERA



- Before Using the Camera
- Shooting
- Playback/Erasing
- Print/Transfer Settings
- Customizing the Camera
- Troubleshooting
- List of Messages
- Appendix

## Advanced Camera User Guide

This guide explains camera features and procedures in detail.



# Main Features



## Shooting

- 10x optical zoom lens with lens shift type image stabilizer
- Avoid the effects of camera shake or blurry subjects when shooting by using High ISO Auto and Auto ISO Shift
- Face Detect AF ideal when photographing people
- Stereo movie shooting at a 16:9 aspect ratio and recording pixels of 1280 x 720
- Movie shooting in any shooting mode by pressing the Movie button.

## Playback

- Connect to a high-definition TV (D3 compatible)
- Auto plays slideshows
- Organize images by category

## Editing

- Red-eye correction
- Adds effects to still images with the My Colors function
- Edits movies

## Printing

- Makes printing easy with the Print/Share button
- Also supports non-Canon brand *PictBridge* compliant printers

## Uses of Recorded Images

- Effortlessly transfer them to a computer with the Print/Share button
- Freely customize the start-up image or start-up sound using the My Camera settings



# Table of Contents

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

<b>Conventions Used in this Guide</b> . . . . .	<b>1</b>
<b>Handling Precautions</b> . . . . .	<b>5</b>
Please Read . . . . .	5
Safety Precautions . . . . .	6
Preventing Malfunctions . . . . .	11
<b>Before Using the Camera—Basic Operations</b> . . . . .	<b>12</b>
Using the LCD Monitor . . . . .	12
LCD Monitor Brightness . . . . .	14
Information Displayed on the LCD Monitor . . . . .	15
Power Saving Function . . . . .	18
Setting the World Clock . . . . .	19
☆ Menus and Settings . . . . .	21
☆ Menu List . . . . .	23
Resetting Settings to Their Default Values. . . . .	27
Formatting Memory Cards . . . . .	28
<b>Shooting</b> . . . . .	<b>29</b>
Setting the Aspect Ratio (Horizontal to Vertical Ratio). . . . .	29
Changing the Recording Pixels and Compression (Still Images) . . . . .	30
Setting the Image Stabilizer Function. . . . .	31
Using the Digital Zoom/ Digital Tele-Converter . . . . .	32
Magnified Close-Up Shooting (Super Macro). . . . .	34
Red-Eye Reduction Function . . . . .	35
Setting the Slow Synchro Function . . . . .	35
📷 Continuous Shooting . . . . .	36
Setting the Display Overlay . . . . .	37
🎬 Movie Shooting. . . . .	38
Setting the Recording Function . . . . .	43
Shooting Panoramic Images (Stitch Assist). . . . .	44
Switching between Focus Settings. . . . .	45
Switching between Focusing Modes . . . . .	46

Shooting Hard-to-Focus Subjects (Focus Lock, AF Lock) . . .	48
Locking the Exposure Setting (AE Lock) . . . . .	49
Locking the Flash Exposure Setting (FE Lock) . . . . .	50
Switching between Metering Modes . . . . .	51
Adjusting the Exposure Compensation . . . . .	52
Setting Shutter Speed (Long Shutter Mode) . . . . .	53
Adjusting the Tone (White Balance) . . . . .	55
Shooting in a My Colors Mode . . . . .	58
Changing Colors . . . . .	60
ISO Adjusting the ISO Speed . . . . .	65
Changing the ISO Speed with One Touch (Auto ISO Shift) . .	66
Registering Settings to the  Button . . . . .	67
Setting the Auto Rotate Function . . . . .	69
Creating an Image Destination (Folder) . . . . .	70
Resetting the File Number . . . . .	72

## **Playback/Erasing . . . . . 74**

 Magnifying Images . . . . .	74
 Viewing Images in Sets of Nine (Index Playback) . . . . .	75
Organizing Images by Category (My Category) . . . . .	76
 Jumping to Images . . . . .	77
Viewing Movies . . . . .	79
Editing Movies . . . . .	81
Rotating Images in the Display . . . . .	83
Playback with Transition Effects . . . . .	84
Red-Eye Correction Function . . . . .	84
Adding Effects with the My Colors Function . . . . .	87
Attaching Sound Memos to Images . . . . .	89
Sound-Only Recording (Sound Recorder) . . . . .	90
Automated Playback (Slide Shows) . . . . .	92
Protecting Images . . . . .	98
 Registering Settings to the Movie Button . . . . .	100
Viewing Images on a TV set . . . . .	101
Erasing Images . . . . .	104

## **Print Settings/Transfer Settings . . . . . 106**

Setting the DPOF Print Settings . . . . .	106
Setting the DPOF Transfer Settings . . . . .	110

**Customizing the Camera (My Camera Settings) . . . . . 112**

Changing My Camera Settings . . . . .	112
Registering My Camera Settings . . . . .	113

**Troubleshooting . . . . . 115**

Camera . . . . .	115
When the power is turned on . . . . .	115
LCD monitor . . . . .	116
Shooting . . . . .	117
Shooting Movies . . . . .	121
Playback . . . . .	122
Battery/Battery Charger . . . . .	123
TV monitor output . . . . .	123
Printing on Direct Print Compatible Printers . . . . .	124

**List of Messages . . . . . 125****Appendix . . . . . 129**

Battery Handling . . . . .	129
Handling the Memory Card . . . . .	131
Using an AC Adapter Kit (Sold Separately) . . . . .	133
Using an Externally Mounted Flash (Sold Separately) . . . . .	134
Camera Care and Maintenance . . . . .	136
Specifications . . . . .	137

**INDEX . . . . . 147****☆ Functions Available in Each Shooting Mode . . . . . 160**

# Handling Precautions

## Please Read

### Test Shots

Before you try to photograph important subjects, we highly recommend that you shoot several trial images to confirm that the camera is operating and being operated correctly.

Please note that Canon Inc., its subsidiaries and affiliates, and its distributors are not liable for any consequential damages arising from any malfunction of a camera or accessory, including memory cards, that results in the failure of an image to be recorded or to be recorded in a way that is machine readable.

### Warning Against Copyright Infringement

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

### Warranty Limitations

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

**For Canon Customer Support contacts, please see the customer support list supplied with your camera.**

### **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. 101).

### **Language Setting**

Please see the *Basic Guide* (p. 10) to change the language setting.

## **Safety Precautions**

- Before using the camera, please ensure that you read the safety precautions described below and in the "Safety Precautions" section of the *Basic Camera User Guide*. 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. Be sure you fully understand them before reading the rest of the manual.
- Equipment refers to the camera, battery charger or separately sold compact power adapter.
- Battery refers to the battery pack.

## **⚠ Warnings**

### **Equipment**

- **Do not point the camera directly at the sun or bright light sources.**

Doing so could damage the camera's CCD or your eyesight.

- **Store this equipment out of the reach of children and infants.**
  - Wrist strap: Placement of the strap around the child's neck could result in asphyxiation.
  - Memory card: Dangerous if accidentally swallowed. If this occurs, contact a doctor immediately.

- **Do not attempt to disassemble or alter any part of the equipment that is not expressly described in this guide.**
- **To avoid the risk of high-voltage electrical shock, do not touch the flash portion of the camera if it has been damaged.**
- **Stop operating the equipment immediately if it emits smoke or noxious fumes.**
- **Do not allow the equipment to come into contact with, or become immersed in, water or other liquids. If the exterior comes into contact with liquids or salt air, wipe it dry with a soft, absorbent cloth.**

Continued use of the equipment may result in fire or electrical shock. Immediately turn the camera power off and remove the camera battery or unplug the battery charger or compact power adapter from the power outlet. Please consult your camera distributor or the closest Canon Customer Support Help Desk.

- **Do not use substances containing alcohol, benzene, thinners or other flammable substances to clean or maintain the equipment.**
- **Do not cut, damage, alter or place heavy items on the power cord.**
- **Use only recommended power accessories.**
- **Remove the power cord on a regular periodic basis and wipe away the dust and dirt that collects on the plug, the exterior of the power outlet and the surrounding area.**
- **Do not handle the power cord if your hands are wet.**

Continued use of the equipment may result in fire or electrical shock.

## Battery

- Do not place the battery near a heat source or expose it to direct flame or heat.
- The battery should not be immersed in water or sea water.
- Do not attempt to disassemble, alter or apply heat to the battery.
- Avoid dropping or subjecting the battery to severe impacts that could damage the casing.
- Use only recommended battery and accessories.

Use of battery not expressly recommended for this equipment may cause explosions or leaks, resulting in fire, injury and damage to the surroundings. In the event that a battery leaks and the eyes, mouth, skin or clothing contact these substances, immediately flush with water and seek medical assistance.

- Disconnect the battery charger and compact power adapter from both the camera and the power outlet after recharging or when they are not in use to avoid fire and other hazards.
- Do not place anything, such as tablecloths, carpets, bedding or cushions, on top of the battery charger while it is charging.

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

- Use only the specified battery charger to charge the battery.
- The battery charger and compact power adapter are designed for exclusive use with your camera. Do not use it with other products or batteries.

There is a risk of overheating and distortion which could result in fire or electrical shock.

- Before you discard a battery, cover the terminals with tape or other insulators to prevent direct contact with other objects.

Contact with the metallic components of other materials in waste containers may lead to fire or explosions.

## Others

- **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.

- **Keep objects that are sensitive to magnetic fields (such as credit cards) away from the speaker of the camera.**

Such items may lose data or stop working.

## Cautions

### Equipment

- **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.**

- **Do not store the equipment in humid or dusty areas.**
- **Do not allow metal objects (such as pins or keys) or dirt to contact the charger terminals or plug.**

Such conditions could lead to fire, electrical shock or other damage.

- **Avoid using, placing or storing the equipment in places subject to strong sunlight or high temperatures, such as the dashboard or trunk (boot) of a car.**
- **Do not use the equipment in a manner that exceeds the rated capacity of the electrical outlet or wiring accessories. Do not use if the power cord or plug are damaged, or if not fully plugged into the outlet.**
- **Do not use in locations with poor ventilation.**

The above-mentioned can cause leakage, overheating or explosion, resulting in fire, burns or other injuries. High temperatures may also cause deformation of the casing.

- **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.**

The battery can run down.

## Equipment

- **Do not connect compact power adapters or battery chargers to devices such as electrical transformers for foreign travel because it may lead to malfunctions, excessive heat generation, fire, electric shock or injury.**

## Flash

- **Do not operate the flash with dirt, dust or other items stuck to the surface of the flash.**
- **Be careful not to cover the flash with your fingers or clothing when shooting.**

The flash may be damaged and emit smoke or noise. The resulting heat build-up could damage the flash.

- **Do not touch the surface of the flash after taking several pictures in rapid succession.**

Doing so could result in burns.

## 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

- **When moving the equipment rapidly from a cold place to a hot place, you can avoid condensation by placing the equipment in an airtight, resealable plastic bag and letting it adjust to temperature changes slowly before removing it from the bag.**

Moving the equipment rapidly from a cold place to a hot place may cause condensation (water droplets) to form on its external and internal surfaces.

### If Condensation Forms Inside the Camera

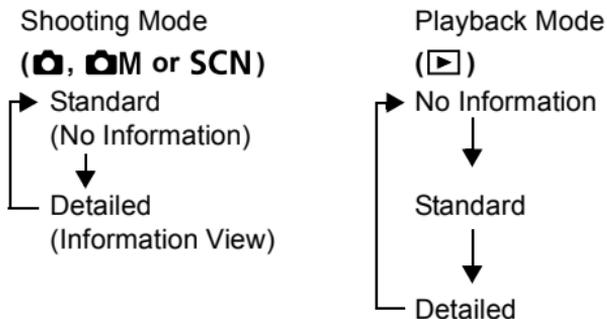
- **Stop using the camera immediately.**

Continued use may damage the equipment. Remove the memory card and battery or compact power adapter from the camera and wait until the moisture evaporates completely before resuming use.

## Using the LCD Monitor

### 1 Press .

- The display mode changes as follows with each press.



- The shooting information displays for approximately 6 sec. when a setting is changed, regardless of the selected display mode.



- The LCD monitor setting is retained even after the camera power is turned off.
- The LCD monitor will not switch to detailed display in magnified display (p. 74), or index playback mode (p. 75).

## Using the Clock

You can display the current date and time for a 5-second\* interval using the following two methods.

\* Default setting



### Method 1

Push in and hold the Multi Controller (**FUNC./SET**) while turning on the power.

### Method 2

In a shooting/playback mode, push in the Multi Controller (**FUNC./SET**) for more than one second.

If you hold the camera vertically, it displays the time. If you hold it horizontally, the time and date display.

- You can change the clock display color by pressing the Multi Controller **←** or **→**.
- The clock display will cease when the display interval is over or when a control is used.
- The clock's display interval can be changed in the **ff** (Set up) menu (p. 26).
- The clock cannot be displayed during magnified display (p. 74) or in index playback (p. 75).

# LCD Monitor Brightness

## LCD Monitor Brightness Settings

The brightness of the LCD monitor can be changed in the following two ways.

- **Changing Settings Using the Set up Menu (p. 25)**
- **Changing Settings Using the DISP. Button (Quick-bright LCD Function)**

You can set the LCD monitor to the brightest setting regardless of the option selected in the Set up menu by pressing the **DISP.** button for more than one second.\*

- To restore the previous brightness setting, press the **DISP.** button for more than one second again.
- The next time you turn on the camera, the LCD monitor will be at the brightness setting selected in the Set up menu.

\* You cannot change the brightness of the LCD monitor with this function if you have already set it to its highest setting in the Set up menu.

## Night Display

When shooting in dark conditions, the camera automatically brightens the LCD monitor to suit the brightness of the subject\*, making it easier to frame the subject.

\* Although noise may appear and the movement of the subject shown on the LCD monitor may appear somewhat jagged, there is no effect on the recorded image. The brightness of the image displayed in the monitor, and the brightness of the actual image recorded will be different.

# Information Displayed on the LCD Monitor

## Shooting Information (Shooting mode)

**Time Zone** (p. 19)

Zoom Magnification (p. 32)

**T** Digital Tele-Converter (p. 32)

[ ] Spot Frame

[ ] AF Frame (p. 46)

ISO AUTO ISO F11 ISO 80 ISO 100 ISO 200 ISO 400 ISO 800 ISO 1600  
 ([ISO 80] · · [ISO 1600])<sup>\*</sup>  
 ISO Speed (p. 65)

Flash (Basic Guide p. 15)

Shooting Method (p. 36, Basic Guide p. 17)

Auto Rotate (p. 69)

Rec. Movie Recording (p. 38)

Low Battery (p. 129)

AE Lock (p. 49)

FE Lock (p. 50)

AF Lock (p. 48)

Wind Filter (p. 43)

Create Folder (p. 70)

Buffer Warning\*\*

Movies: Remaining Time/Elapsed Time  
 Stills: Recordable Shots

IS Mode (p. 31)

\*Shutter Speed\*/  
 Aperture Value\*

3:2 Guide (p. 37)

Grid Lines (p. 37)

Aspect Ratio (p. 29)

Recording Pixels/  
 Frame Rates (Movie) (p. 40)

Compression (Still images) (p. 30)

Recording Pixels (Still images) (p. 30)

(Red)\* Camera Shake Warning (p. 117)

Exposure Shift Bar (Movie) (p. 39)

Shooting Mode (pp. 34, 44, 60, 62, Basic Guide pp. 13 – 13)

Exposure Compensation (p. 52)

Long Shutter Mode (p. 53)

White Balance (p. 55)

My Colors (p. 58)

- \* Displays when pressing the shutter halfway. Since the camera automatically readjusts the ISO speed, shutter speed and aperture value for the optimal settings when using the flash, settings displayed in shooting information may differ from the actual settings.
- \*\* Displays when remaining available internal memory (buffer) is half or less during movie recording. When the buffer warning indicates full, shooting or recording may stop.

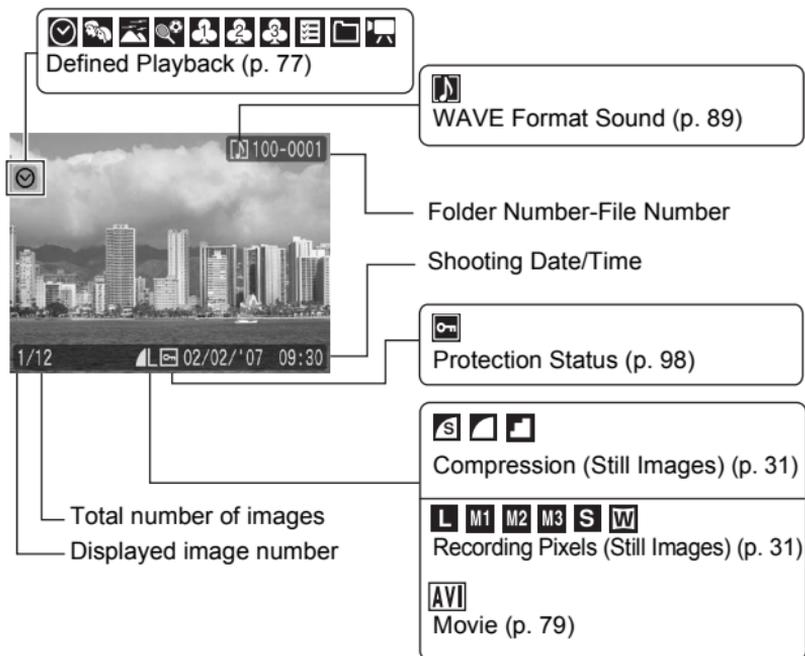


If the camera shake icon () displays, it indicates there is insufficient illumination and a slow shutter speed will be selected. Shoot using the following methods.

- Set IS mode to a setting other than [Off] (p. 31).
- Raise the ISO speed (p. 65).
- Set the Auto ISO Shift to [On] (p. 66).
- Select a setting other than  (flash off) (*Basic Guide* p. 15).
- Attach the camera to a tripod or other device.

## Playback Information (Playback Mode)

### Standard



## Detailed

My Category (p. 76)

Histogram (p. 18)

<p>Shooting Mode (pp. 34, 38, 44, 60, 62, <i>Basic Guide</i> pp. 13 – 13)</p>	<p>Exposure Compensation (p. 52)</p>
<p>Still image shot while shooting a movie (p. 42)</p>	<p>Flash (<i>Basic Guide</i> p. 15)</p>
<p>Metering Mode (p. 51)</p>	<p>Macro/Infinity (<i>Basic Guide</i> p. 16)</p>
<p>ISO Speed (p. 65)</p>	<p>My Colors (Shooting) (p. 58), Color Accent /Color Swap (p. 60)</p>
<p>Recording Pixels/Frame Rates (Movies) (p. 41)</p>	<p>My Colors (Playback) (p. 87)</p>
<p>Shutter Speed</p>	<p>Image with red-eye correction (p. 84)/a My Colors effect (p. 87)</p>
<p>Aperture Value</p>	<p>White Balance (p. 55)</p>
	<p>File Size</p>
	<p>Red-Eye Correction</p>
	<p>Recording Pixels (Still Images) (p. 30) Movie Length (Movies) (p. 38)</p>

The following information may also be displayed with some images.

	A sound file in a format other than the WAVE format is attached or the file format is not recognized.
	JPEG image not conforming to Design rule for Camera File System Standards
	RAW image
	Unrecognized data type



Information for images shot on other cameras may not display correctly.

## Histogram Function

The histogram is a graph that allows you to check the brightness of the image. The greater the bias toward the left in the graph, the darker the image. The greater the bias toward the right, the brighter the image.

If the image is too dark, adjust the exposure compensation to a positive value. Similarly, adjust the exposure compensation to a negative value if the image is too bright (p. 52).

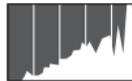
Sample Histograms



Dark Image



Balanced Image



Bright Image

## Power Saving Function

This camera is equipped with a power saving function. The power will shut off in the following circumstances. Press the power button again to restore power.

<b>Shooting Mode</b>	Powers down approximately 3 minutes after the last control is accessed on the camera. The LCD monitor automatically turns off 1 minute* after the last control is accessed even if [Auto Power Down] is set to [Off]. Press any button other than the power button or change the camera orientation to turn the LCD monitor back on.
<b>Playback Mode Connected to a Printer</b>	Powers down approximately 5 minutes after the last control is accessed on the camera.

\* This time can be changed.



- The power saving function will not activate during a slide show or while the camera is connected to a computer.
- The power saving function settings can be changed (p. 25).

# Setting the World Clock

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

## Setting the Home/World Time Zones

### 1 **[i] (Set up) Menu** ► **[Time Zone]** ► **[FUNC. SET]**.

See *Menus and Settings* (p. 22).



### 2 **[Home]** ► **[FUNC. SET]**.



### 3 **Press the Multi Controller** ◀ or ▶ **to select a home time zone** ► **[FUNC. SET]**.

- To set the daylight saving option, press the Multi Controller ▲ or ▼ to display . The time will advance by 1 hour.



### 4 **[World]** ► **[FUNC. SET]**.



## 5 Press the Multi Controller ← or → to select a destination time zone ► .

- As in Step 3, you can set daylight saving time.

Time Difference from the Home Time Zone



## 6 Press the Multi Controller ↑ or ↓ to select [Home/World], and ← or → to select .



# Switching to the Destination Time Zone

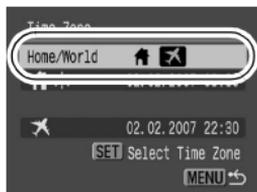
## 1 (Set up) Menu ► [Time Zone] ► .

See Menus and Settings (p. 22).



## 2 Press the Multi Controller ← or → to select ► .

- To change the destination time zone, push in the Multi Controller (FUNC./SET).
- When you switch to the destination time zone,  will display on the monitor.



If you change the date and time when the World option is selected, the Home date and time will also change automatically.

# Menus and Settings

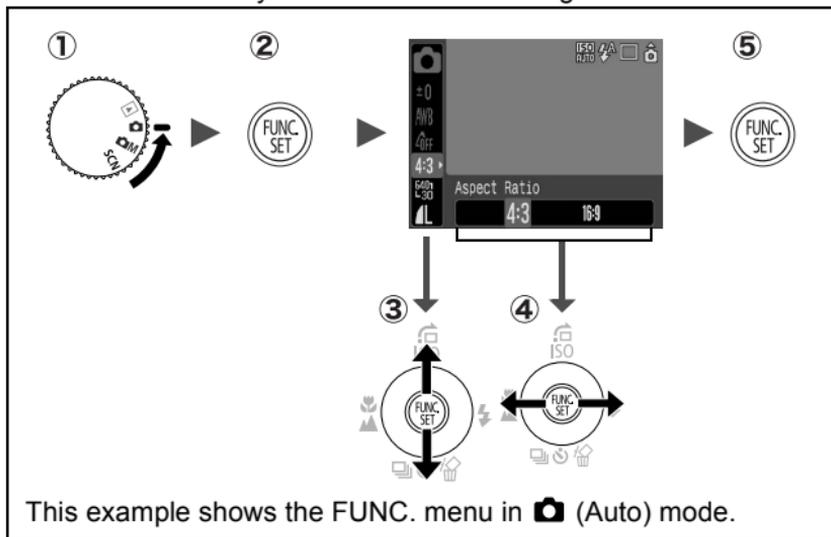
Menus are used to set the shooting, playback and print settings as well as such camera settings as the date/time and electronic beep. The following menus are available.

## ● FUNC. Menu

## ● Rec., Play, Print, Set up and My Camera Menus

### FUNC. Menu

This menu sets many of the common shooting functions.



① Turn the mode dial to **☺**, **☺M** or **SCN**.

② Push in the Multi Controller (FUNC./SET).

③ Press the Multi Controller **↑** or **↓** to select a menu item.  
• Some items may not be selectable in some shooting modes.

④ Press the Multi Controller **←** or **→** to select an option for the menu item.

• You can select further options with the **MENU** button for some options.

• After selecting an option, you can press the shutter button to shoot immediately. After shooting, this menu will appear again, allowing you to adjust the settings easily.

⑤ Push in the Multi Controller (FUNC./SET).

## Rec., Play, Print, Set up and My Camera Menus

Convenient settings for shooting, playback or printing can be set with these menus.

① (Rec.) Menu

② (Set up) Menu

③ (My Camera) Menu

① MENU

② You can switch between menus by pressing the Multi Controller ← or → when this part is selected.

③

④

⑤ MENU

- This example shows the Rec. menu in (Auto) mode.
- In playback mode, the Play, Print, Set up and My Camera menu display.

① Press the **MENU** button.

② Press the **Multi Controller** ← or → to switch between menus.

- You can also use the zoom lever to switch between menus.

③ Press the **Multi Controller** ↑ or ↓ to select menu items.

- Some items may not be selectable in some shooting modes.

④ Press the **Multi Controller** ← or → to select an option.

- Menu items followed by an ellipsis (...) can only be set after pushing in the Multi Controller (**FUNC./SET**) to display the next menu.

Push in the Multi Controller (**FUNC./SET**) again to confirm the setting.

⑤ Press the **MENU** button.

# Menu List

See *Functions Available in Each Shooting Mode* (p. 160).

## FUNC. Menu

The icons shown below are the default settings.

Menu Item	Page	Menu Item	Page
 Manual Mode	<i>Basic</i> p. 12	 White Balance	p. 55
 Special Scene Mode	<i>Basic</i> p. 12	 My Colors	p. 58
 Exposure Compensation	p. 52	 Aspect Ratio	p. 29
 Long Shutter Mode	p. 53	 Recording Pixels/ Frame Rates (Movie)	p. 40
		 Recording Pixels/ Compression (Still Image)	p. 30

## Rec. Menu

\* Default setting

Menu Item	Options	Page/Topic
Face Detect AF	On*/Off	p. 46
Digital Zoom	Standard*/Off/1.5x/1.9x	p. 32
Slow Synchro	On/Off*	p. 35
Red-Eye	On*/Off	p. 35
Self-timer	Delay: 0–10*, 15, 20, 30 sec. Shots: 1–10*1	<i>Basic Guide</i> p. 17
Light Metering		p. 51
Auto ISO Shift	On/Off*	p. 66
AF Mode	Single*/Continuous	p. 45
AF-assist Beam	On*/Off	p. 118
Review	Off/2*–10 seconds/Hold	<i>Basic Guide</i> p. 12
Save Original	On/Off*	p. 64
Reverse Disp.	On*/Off	<i>Basic Guide</i> p. 9
Auto Category	On*/Off	Sets whether or not images are automatically classified into categories during shooting.*2

Disp. Overlay	Off*/Grid Lines/3:2 Guide/ Both	p. 37
IS Mode	Continuous*/Shoot Only/ Panning/Off	p. 31
Set  button	 */  /  WB/  /  /  /  / 	p. 67

\*1Default setting is 3 shots.

\*2They are classified according to the following categories.

 **(People):** , , or images with faces detected if [On] has been selected in [Face Detect AF] mode.

 **(Scenery):** 

 **(Events):** , , , 

## Play Menu

Menu Item	Page	Menu Item	Page
 Slide Show	p. 92	 Sound Memo	p. 89
 My Category	p. 76	 Sound Recorder	p. 90
 Erase	p. 104	 Rotate	p. 83
 Protect	p. 98	 Transfer Order	p. 110
 Red-Eye Correction	p. 84	 Set Movie button	p. 100
 My Colors	p. 87	 Transition	p. 84

## Print Menu

Menu Item	Page	Menu Item	Page
Print	p. 106	Select by Folder	p. 106
Select Images & Qty.		Select All Images	
Select by Date		Clear All Selections	
Select by Category		Print Settings	

Menu Item	Options	Page/Topic
Mute	On/Off*	Set to [On] to silence all sounds except warning sounds. ( <i>Basic</i> p. 11)
Volume	Off/1/2*/3/4/5	Adjusts the volume of the start-up sound, operation sound, self-timer sound, shutter sound and playback sound. The volume cannot be adjusted if [Mute] is set to [On].
Start-up Vol.		Adjusts the volume of the start-up sound when the camera is turned on.
Operation Vol.		Adjusts the volume of the operation sound that plays when any button other than the shutter button is pressed.
Selftimer Vol.		Adjusts the volume of the self-timer sound played 2 sec. before the shutter is released.
Shutter Volume		Adjusts the volume of the sound played when the shutter releases. The shutter sound does not play when a movie is recording.
Playback Vol.		Adjusts the playback volume of movies, sound memos or recorded sounds.
Audio		p. 43
Mic Level	Auto*/Manual	Sets method of adjustment for the sound recording level.
Level	-40 to 0 dB	Sets the sound recording level.
Wind Filter	On/Off*	Reduces wind noise.
LCD Brightness	-7 to 0* to +7	Press the Multi Controller ◀ or ▶ to adjust the brightness. You can check the brightness in the LCD monitor while you are adjusting the setting.
Power Saving		p. 18
Auto Power Down	On*/Off	Sets whether or not the camera automatically powers down after a set period of time elapses without the camera being operated.
Display Off	10 sec./20 sec./30 sec./1 min.*/ 2 min./3min.	Sets the length of time before the LCD monitor turns off when no camera operation is performed.

Time Zone	Home*/World	p. 19
Date/Time		<i>Basic Guide</i> p. 10
Clock Display	0–10* <sup>1</sup> sec./20 sec./30 sec./1 min./2 min./3 min.	p. 13
Format		You can also set it to perform a low level format (p. 28).
File Numbering	Continuous*/Auto Reset	p. 72
Create Folder		p. 70
Create New Folder	Check mark (On)/ No check mark (Off)	Creates a folder for the next shooting session.
Auto Create	Off*/Daily/ Monday–Sunday/ Monthly	You can also set the Auto Create time.
Auto Rotate	On*/Off	p. 69
Distance Units	m/cm*/ ft/in	Sets the units displayed for AF range distance ( <i>Basic Guide</i> p. 15).
Lens Retract	1 min.* <sup>1</sup> /0 sec.	Sets the timing of the lens retraction when you switch from the shooting to the playback mode.
Language		<i>Basic Guide</i> p. 10
Video System	NTSC/PAL	p. 101
Print Method	Auto*/ 	See below. <sup>*2</sup>
Reset All		p. 27

\*1 Default setting is 5 seconds.

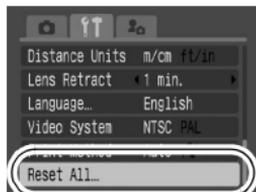
\*2 You can change the printer connection method. There is usually no need to change the settings, but select  when you print an image recorded in the  (Widescreen) mode at the full page setting for wide paper using a Canon SELPHY CP730/CP720/CP710/CP510 Compact Photo Printer. Since this setting is saved even when the power is turned off, ensure that you return the setting to [Auto] to print other image sizes. (However, it cannot be changed while the printer is connected.)

Menu Item	Available Settings	Page
Theme	Selects a common theme for each My Camera settings item.	p. 112
Start-up Image	Sets the image displayed when the camera power is turned on.	
Start-up Sound	Sets the sound played when the camera power is turned on.	
Operation Sound	Sets the sound played when any button other than the shutter button is pressed.	
Selftimer Sound	Sets the sound played 2 seconds before the shutter releases in self-timer mode.	
Shutter Sound	Sets the sound played when the shutter button is pressed. There is no shutter sound for movies.	
My Camera Menu Contents	 (Off) /  * /  / 	

## Resetting Settings to Their Default Values

### 1 (Set up) Menu ► [Reset All].

See *Menus and Settings* (p. 22).



### 2 Select [OK] and press .



- Settings cannot be reset when the camera is connected to a computer or to a printer.
- The following cannot be reset.
  - Shooting mode
  - The [Time Zone], [Date/Time], [Language] and [Video System] options in the  (Set up) menu (p. 26)
  - White balance data recorded with the custom white balance function (p. 56)
  - Colors specified in the [Color Accent] (p. 61) or [Color Swap] (p. 62) modes.
  - Newly added My Camera settings (p. 112)

# Formatting Memory Cards

You should always format a new memory card or one from which you wish to erase all images and other data.



- Please note that formatting (initializing) a memory card erases all data, including protected images and other file types.
- When the  icon is displayed, sound data recorded with the sound recorder exists. Exercise adequate caution before formatting the memory card.

1

## (Set up) Menu ► [Format].

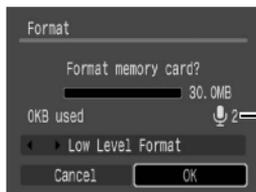
See *Menus and Settings* (p. 22).



2

## Select [OK] and press .

- To perform a low level format, press the Multi Controller  to select [Low Level Format] and  or  to add a check mark.
- You can stop formatting a card when [Low Level Format] is selected by pushing the Multi Controller (**FUNC./SET**). You can still use a card without problem when formatting is halted, but its data will be erased.



Displays when sound data recorded with the sound recorder is present (p. 90).



### ● Low Level Format

We recommend you select [Low Level Format] when you think that the recording/reading speed of a memory card has dropped. A low level format may require 2 to 3 minutes with some memory cards.

- A format cannot be performed in Stitch Assist mode.

## Setting the Aspect Ratio (Horizontal to Vertical Ratio)



Shooting Mode



You can change the horizontal to vertical aspect ratio for shooting. If you shoot at the 16:9 aspect ratio, you can shoot images with a size that is appropriate for playback on a high-definition TV (HDTV), or for printing on wide size paper.

### 1 FUNC. Menu ► **4:3** \* (4:3)/**16:9** (16:9).

See *Menus and Settings* (p. 21).

\* Default setting.

- Press the Multi Controller ◀ or ▶ to select the aspect ratio, and then push in the Multi Controller (**FUNC./SET**).
- When shooting still images:  
Refer to *Changing the Recording Pixels and Compression (Still Images)* (p. 30)
- When shooting movies:  
Refer to *Changing Recording Pixels and Frame Rates (Movies)* (p. 40)



The aspect ratio for  and  is fixed at [4:3].





1

 **(Rec.) Menu ▶ [IS Mode]**  
**▶ [Continuous]\*/[Shoot Only]/[Panning]/[Off].**

See *Menus and Settings* (p. 22).

\* Default setting.



- It may not be possible to completely stabilize images when shooting at low shutter speeds. Use a tripod to shoot under these conditions.
- If camera shake is too strong, it may not be fully corrected.
- Hold the camera vertically while panning (stabilization does not work when the camera is held horizontally).
- If you have selected [Shoot Only] or [Panning] and then shoot a movie, the setting will change to [Continuous].

## Using the Digital Zoom/ Digital Tele-Converter



Shooting Mode



You can shoot zoomed images using the combined digital and optical zooms. The focal lengths (35mm film equivalent) and characteristics are as follows.

Option	Focal Length	Characteristics
<b>Standard</b>	39 – 1560 mm	You can shoot at a maximum zoom factor of approximately 40x using a combination of the optical and digital zoom features.
<b>Off</b>	39 – 390 mm	Shoots without using the digital zoom.
<b>1.5x</b>	58.5 — 585 mm	Digital zoom is fixed at the selected zoom factor, and the focal length shifts to maximum telephoto. This enables a faster shutter speed and less chance of camera shake than a shot taken at the same angle of view with [Standard] or [Off].
<b>1.9x</b>	74.1 — 741 mm	



This function cannot be set when Aspect Ratio is set to [16:9].

1

## (Rec.) Menu ► [Digital Zoom] ► [Standard]\*/[Off]/[1.5x]/[1.9x].

See *Menus and Settings* (p. 22).

\* Default setting.

- When using [Standard]:  
See *Shooting with the Digital Zoom* (p. 33).
- When using [1.5x], [1.9x]:  
See *Shooting with the Digital Tele-Converter* (p. 34)



## Shooting with the Digital Zoom

2

### Press the zoom lever toward and shoot.

- The combined optical and digital zoom factor will appear on the LCD monitor.
- Based on the number of recording pixels set, the Safety Zoom feature calculates the maximum zoom factor beyond which image quality will begin to deteriorate. The digital zoom pauses at this zoom factor for a moment, and  appears on the LCD monitor. If you press the zoom lever toward  again, you can zoom in even closer.



In this case, the zoom factor color has the following meanings:

- White: optical zoom
  - Yellow: digital zoom (non-deteriorative)
  - Blue: digital zoom (deteriorative)
- Pressing the zoom lever toward  reduces the zoom factor.

## Shooting with the Digital Tele-Converter

### 2 Adjust the angle of view with the zoom lever and shoot.

- **T** and the zoom factor appears on the LCD monitor.
- Depending on the number of recording pixels set, image quality may deteriorate (**T** and the zoom factor appear in blue).

Digital Tele-Converter



### About the Digital Tele-Converter

The digital tele-converter feature uses digital zoom to achieve the effects of a tele-converter (a lens used in telephoto shooting).

## Magnified Close-Up Shooting (Super Macro)



Shooting Mode



This mode allows even closer shooting of the subject than standard Macro mode (*Basic Guide* p. 15), magnifying the subject further. You can shoot a subject 0 – 10 cm (0 – 3.9 in.) from the end of the lens at the maximum wide angle setting. At the minimum focusing distance, the image area is 16 x 12 mm (0.63 x 0.47 in.). With the digital zoom, the image area is 4 x 3 mm (0.16 x 0.12 in.) at maximum zoom (approximately 4.0x).

### 1 FUNC. Menu ► **C** \* (Manual) ► **S** (Super Macro).

See *Menus and Settings* (p. 21).

\* Default setting.



## Red-Eye Reduction Function



Shooting Mode



You can set whether or not the red-eye reduction\* lamp automatically fires with the flash.

\* This function reduces the effect of light reflecting back from the eyes and making them appear red.

### 1 (Rec.) Menu ► [Red-Eye] ► [On]\*/[Off].

See *Menus and Settings* (p. 22).

\* Default setting.



## Setting the Slow Synchro Function

Shooting Mode



You can shoot with the flash at slow shutter speeds. This is handy for shooting at night or under artificial lighting indoors.

### 1 (Rec.) Menu ► [Slow Synchro] ► [On]/[Off]\*.

See *Menus and Settings* (p. 22).

\* Default setting.



You are recommended to fix the camera to a tripod to shoot in this mode.





- The interval between shots lengthens when the built-in memory of the camera fills.
- If the flash is used, the interval between shots lengthens because the flash must charge.
- When set to , images will be shot with Face Detect AF set to [Off] (p. 46).

## Setting the Display Overlay



Shooting Mode



You can check a composition's horizontal and vertical alignment as well as a 3:2 aspect ratio print range on the LCD monitor by using a shooting guide while shooting.

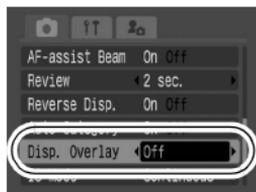
<b>Grid Lines</b>	Displays grid lines dividing the monitor into 9 areas, allowing you to check the subject's horizontal and vertical alignment.
<b>3:2 Guide</b>	You can check what can be printed in a composition using a 3:2 aspect ratio*. The portion that will not print displays in gray. * Images are recorded at the same aspect ratio of 4:3 as shown in the normal viewing mode.
<b>Both</b>	You can display both the grid lines and 3:2 guide at the same time.

1

 **(Rec.) Menu** ► **[Disp. Overlay]** ► **[Off]\* / [Grid Lines]/[3:2 Guide]/[Both].**

See *Menus and Settings* (p. 22).

\* Default setting.



- The grid lines and 3:2 guide do not appear on recorded images.
- When shooting a movie, only [Grid Lines] can be used.

You can shoot movies with just a push of the Movie button (not applicable when in playback mode).

You can select the movie recording pixels and frame rates (p. 40) and shoot with color effects such as Color Accent and Color Swap.

Sound is recorded in stereo.

● Max. Clip Size: 4 GB\*

\* Even if the clip size has not reached 4 GB, recording will stop at the moment the clip length reaches 1 hour. Depending on the storage capacity of the memory card and the speed at which the data is written, recording may stop before reaching 4 GB or 1 hour.

## 1 Turn the mode dial to , or **SCN**.

- Make any necessary settings. Some settings are not available when shooting movies (p. 160).

## 2 Press the Movie button to shoot.

- Shooting starts when the Movie button is pressed.
- Recording will include sound.
- During shooting, the recording time (in seconds) and “● Rec.” appear on the LCD monitor.
- The indicator blinks red during movie recording and turns off when the recording session is over.
- Pressing the Movie button again stops recording. Recording will stop automatically under the following circumstances.
  - When the maximum recording time elapses
  - When the internal memory and the memory card becomes full
- When shooting in the Color Accent mode (p. 61) or the Color Swap mode (p. 62), be sure to specify colors beforehand.





- You are recommended to use a memory card that has been formatted in your camera to shoot movies (p. 28). The card supplied with the camera may be used without further formatting.
- Be careful of the following while recording.
  - Try not to touch the microphones (*Basic Guide* p. 3).
  - If you press a button other than the Movie button, the sound of the button being pressed will also be recorded.
  - The camera will automatically adjust the exposure and white balance to suit the shooting conditions during recording. Please note, however, that the sounds made by the camera automatically adjusting the exposure may also be recorded.



- You can set the AE lock (p. 49) and exposure shift while shooting movies.
  1. Pressing the Multi Controller  while pressing the shutter button halfway will display **AEL**.
  2. Pressing the Multi Controller  again will display the exposure shift bar.
  3. Exposure can be changed by pressing the Multi Controller  or . Pressing the Multi Controller  once more will cancel the setting.
- Use the supplied software program ZoomBrowser EX or ImageBrowser to play back movies shot with this camera. For Windows 2000, however, QuickTime is required to play back movies.

## Changing Recording Pixels and Frame Rates (Movies)

You can change the movie recording pixels and frame rate in any shooting mode. Available recording pixels and frame rates will differ with the aspect ratio setting.

### 1 Set the aspect ratio.

See *Setting the Aspect Ratio (Horizontal to Vertical Ratio)* (p. 29).

### 2 FUNC. Menu \* / \*.

See *Menus and Settings* (p. 21).

\* Default setting.

- Press the Multi Controller  or  to select recording pixels/frame rate settings and push in the Multi Controller (**FUNC./SET**).



## Recording Pixels and Frame Rates

Frame rates indicate the number of frames recorded or played back each second. The higher the frame rate, the smoother the appearance of motion.

### ■ When the Aspect Ratio is [4:3]

If you use a super high-speed memory card (recommended memory card: SDC-512MSH), you can shoot until the memory card is full. You can also use the digital zoom while shooting (p. 32).

 *1	640 x 480 pixels, 30 frames/sec.
 *2	640 x 480 pixels, 30 frames/sec., LP
 *1	320 x 240 pixels, 60 frames/sec.
 *1	320 x 240 pixels, 30 frames/sec.

### ■ When the Aspect Ratio is [16:9]

It is possible to play back images on an HDTV at their original aspect ratio. (It is recommended that you use a super high-speed memory card with a transfer rate of 20 MB/s or more.)

 *1	1280 x 720 pixels, 30 frames/sec.
 *2	1280 x 720 pixels, 30 frames/sec., LP

\*1 Default setting

\*2 If you would like to place a priority on shooting time rather than image quality, select an icon with LP (Long Play) appearing on it. You will be able to approximately double the shooting time with the same file capacity.



- See *Image Data Sizes (Estimated)* (p. 144).
- See *Memory Cards and Estimated Capacities* (p. 142).



# Setting the Recording Function



Shooting Mode



The microphone level (sound recording level) and wind filter setting can be changed.

## 1 [f] (Set up) Menu ▶ [Audio].

See *Menus and Settings* (p. 22).



## 2 [Mic Level] ▶ [Auto]\*/[Manual].

\* Default setting.

- When set to [Manual], press the Multi Controller  $\downarrow$  to select [Recording Level], and then press the Multi Controller  $\leftarrow$  or  $\rightarrow$  to select recording level (recording sound volume).



## 3 [Wind Filter] ▶ [On]/[Off]\*.

\* Default setting.

- It is recommended to set this to [On] when there is a strong wind.
- When set to [On],  displays in the LCD monitor.



- When Mic Level is set to [Auto], the camera will automatically prevent distortion of sound if the recording volume becomes too loud.
- Wind Filter suppresses the noise of strong winds.



### 3 Compose the second image so that it overlaps a portion of the first and shoot.

- You can retake a shot by pressing the Multi Controller  or  and returning to the previously recorded image screen.
- Minor discrepancies in the overlapping portions can be corrected when the images are stitched together.

### 4 Repeat the procedure for additional images.

- A sequence may contain up to 26 images.
- Push in the Multi Controller (**FUNC./SET**) after the last shot.



- You cannot display the images on a TV when shooting in Stitch Assist mode.
- The settings for the first image are applied to the second image onward.



Use PhotoStitch, a supplied software program, to merge the images on a computer.

## Switching between Focus Settings

Shooting Mode

















You can switch between focus settings to shoot.

<b>Single</b>	The camera only focuses when the shutter button is pressed halfway, conserving battery power.
<b>Continuous</b>	The camera is continually focusing on whatever it is aimed at even when the shutter button is not pressed, allowing you to shoot without missing opportunities.

# 1 (Rec.) Menu ► [AF Mode] ► [Single]\* / [Continuous].

See *Menus and Settings* (p. 22).

\* Default setting.



## Switching between Focusing Modes

Shooting Mode



The autofocus frame (AF frame) indicates the area used to set the focus. Select from among the following focusing methods.

### Setting Face Detect AF

	<b>On</b>	You can have the camera automatically detect the position of a face and use this data to set the focus and exposure* while shooting. In addition, the camera will meter the subject so that the face is correctly illuminated when the flash fires. * Only in evaluative metering mode (p. 51).
	<b>Off</b>	The camera focuses using the center AF frame. This is convenient for focusing on a specific part of a subject with greater certainty.

# 1 (Rec.) Menu ► [Face Detect AF] ► [On]\* / [Off].

See *Menus and Settings* (p. 22).

\* Default setting.





- The AF frame appears as follows when the shutter button is pressed halfway.
    - Green: Shooting preparations complete
    - Yellow: Focusing difficulty (Face Detect AF set to [Off])
  - The following occurs when [On] is selected.
    - A maximum of 3 frames will be displayed at the positions of faces the camera detects. At this point, the frame the camera judges to be the main subject appears in white while the others appear in gray. Pressing the shutter button halfway displays up to 9 green AF frames.
    - If no white frame displays and all the frames appear in gray, or if a face is not detected, the focus will change as follows according to the AF Mode setting (p. 45).
      - When [Single] is set: Camera will automatically select the AF frame from the 9 AF frames and focus.
      - When [Continuous] is set: Focus using the AF frame in the center.
    - The camera may mistakenly identify non-human subjects as a face. If this occurs, set Face Detect AF to [Off].
    - In certain cases, faces may not be detected.
- Examples:
- Faces near the screen edges or faces that appear extremely small, large, dark or bright in relation to the overall image.
  - Faces turned to the side or at a diagonal, or faces with a portion hidden.

# Shooting Hard-to-Focus Subjects (Focus Lock, AF Lock)



Shooting Mode               

It may be difficult to focus on the following types of subjects.

- Subjects with extremely low contrast to the surroundings
- Scenes with a mixture of near and far subjects.
- 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.

## Shooting with the Focus Lock

- 1 Press the shutter button halfway to set the focus.**
- 2 Keep the button pressed, re-aim the camera to compose the shot as desired and press the shutter button fully.**

## Shooting with the AF Lock

The AF lock can be used in the  or  mode.

- 1 Press the shutter button halfway and press the Multi Controller .**
  - The  icon will display.
- 2 Re-aim the camera to compose the shot as desired and shoot.**

**To Release the AF Lock**  
Press the Multi Controller .



- The AF lock is convenient because you can let go of the shutter button to compose the image. Moreover, the AF lock is still effective after the picture is taken, allowing you to capture a second image with the same focus.
- When shooting with the focus lock or AF lock, setting [Face Detect AF] to [Off] (p. 46) makes shooting easier since the camera focuses using the center AF frame only.
- AF can also be locked during movie shooting.

## Locking the Exposure Setting (AE Lock)



Shooting Mode



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



You must set the flash to .  
The AE lock cannot be used when the flash is set to fire.

- 1 Focus on the part of the subject on which you wish to lock the exposure setting.**
- 2 Press the shutter button halfway and press the Multi Controller .**
  - The  icon will display.
- 3 Re-aim the camera to compose the shot as desired and press the shutter button fully.**

### To Release the AE Lock

Press the Multi Controller .



You can use the FE lock (p. 50) when using the flash.

# Locking the Flash Exposure Setting (FE Lock)



Shooting Mode



You can lock the flash exposure so that the exposure settings are correctly set regardless of the composition of your subject.

- 1 Press the Multi Controller towards  and then press it  or  to select  (flash on).**
- 2 Focus on the part of the subject on which you wish to lock the flash exposure setting.**
- 3 Press the shutter button halfway and press the Multi Controller .**
  - The flash will pre-fire and  will display.
- 4 Re-aim the camera to compose the shot as desired and press the shutter button fully.**

To Release the FE Lock  
Press the Multi Controller .



# Adjusting the Exposure Compensation



Shooting Mode



Adjust the exposure compensation to a positive value to avoid making the subject too dark when it is backlit or shot against a bright background. Adjust the exposure compensation to a negative value to avoid making the subject too bright in night shots or when shot against a dark background.

## 1 FUNC. Menu ► $\pm 0$ \* (Exposure Compensation).

See *Menus and Settings* (p. 21).

\* Default setting.

- Press the Multi Controller  $\leftarrow$  or  $\rightarrow$  to adjust the exposure compensation and push in the Multi Controller (FUNC./SET).



### To Cancel the Exposure Compensation

Restore the compensation value to [0].





- Use the LCD monitor to confirm that the image was recorded at the desired brightness.
- Please note that camera shake becomes a factor at low shutter speeds. Set IS mode to a setting other than [Off], or shoot with the camera attached to a tripod.
- Use of the flash may result in an over-exposed image. If this occurs, shoot with the flash set to .
- The following are unavailable:
  - Exposure Compensation
  - Metering
  - AE Lock
  - FE Lock
  - ISO speed: Auto, High ISO Auto
  - Auto ISO Shift
  - Flash: Auto
  - Slow Synchro

# Adjusting the Tone (White Balance)

Shooting Mode



Normally, the **AWB** (Auto) white balance setting selects an optimal white balance. When the **AWB** setting cannot produce natural looking colors, change the white balance using a setting appropriate for the light source.

## 1 **FUNC. Menu** **AWB \* (Auto).**

See *Menus and Settings* (p. 21).

\* Default setting.

- Press the Multi Controller  or  to select a white balance setting and push in the Multi Controller (**FUNC./SET**).



## White Balance Settings

	<b>Auto</b>	Settings are automatically set by the camera
	<b>Day Light</b>	For recording outdoors on a bright day
	<b>Cloudy</b>	For recording under overcast, shady or twilight skies
	<b>Tungsten</b>	For recording under tungsten and bulb-type 3-wavelength fluorescent lighting
	<b>Fluorescent</b>	For recording under warm-white, cool-white or warm-white (3-wavelength) fluorescent lighting
	<b>Fluorescent H</b>	For recording under daylight fluorescent, or daylight fluorescent-type 3-wavelength fluorescent lighting
	<b>Custom</b>	For recording with the optimal white balance data retained in the camera from a white-colored object, such as white paper or cloth



This setting cannot be adjusted when the My Colors mode is set to **Se** or **BW**.

## Using the Custom White Balance

You can set a custom white balance to obtain the optimal setting for the shooting conditions by having the camera evaluate an object, such as a piece of white paper or cloth, or a photo-quality gray card that you wish to establish as the standard white color.

In particular, take a custom white balance reading for the following situations that are difficult for the **AWB** (Auto) setting to detect correctly.

- Shooting close-ups
- Shooting subjects of monotone color (such as sky, sea or forest)
- Shooting with a particular source of light (such as a mercury-vapor lamp)

### 1 **FUNC. Menu** ► **AWB** \* (Auto) ► **☑** (Custom).

See *Menus and Settings* (p. 21).

\* Default setting.



### 2 **Aim the camera at a piece of white paper or cloth and press** **☑**.

- Ensure that the center frame is completely filled with the white image. However, the center frame will not appear when using the digital zoom.



- You are recommended to set the shooting mode to  and the exposure compensation setting to  $[\pm 0]$  before setting a custom white balance. The correct white balance may not be obtained when the exposure setting is incorrect (image appears completely black or white).
- Shoot with the same settings as when reading the white balance data. If the settings differ, the optimal white balance may not be set. In particular, the following should not be changed.
  - ISO Speed
  - Flash
    - Setting the flash to on or off is recommended. If the flash fires when reading the white balance data with the flash set to  (Auto), make sure that you also use the flash when you shoot.
- Since the white balance data cannot be read in Stitch Assist mode, preset the white balance in another shooting mode beforehand.

# Shooting in a My Colors Mode



Shooting Mode



You can change the look and feel of the pictures you take.

	<b>My Colors Off</b>	Records normally with this setting.
	<b>Vivid</b>	Emphasizes the contrast and color saturation to record bold colors.
	<b>Neutral</b>	Tones down the contrast and color saturation to record neutral hues.
	<b>Sepia</b>	Records in sepia tones.
	<b>B/W</b>	Records in black and white.
	<b>Positive Film</b>	Use this option to make red, green or blue colors more intense like the Vivid Red, Vivid Green or Vivid Blue effects. It can produce intense natural-appearing colors like those obtained with positive film.
	<b>Lighter Skin Tone*</b>	Use this option to make skin tones lighter.
	<b>Darker Skin Tone*</b>	Use this option to make skin tones darker.
	<b>Vivid Blue</b>	Use this option to emphasize blue tints. It makes blue subjects, such as the sky or ocean, more vivid.
	<b>Vivid Green</b>	Use this option to emphasize green tints. It makes green subjects, such as mountains, new growth, flowers and lawns, more vivid.
	<b>Vivid Red</b>	Use this option to emphasize red tints. It makes red subjects, such as flowers or cars, more vivid.
	<b>Custom Color</b>	Use this option to adjust the contrast, sharpness or saturation settings or the color balance between red, green, blue and skin tones*. It can be used to make subtle adjustments, such as making blue colors more vivid or face colors brighter.

\* If the image contains colors that are the same as human skin, those colors will also be changed. You may not obtain the expected results depending on the skin color.

## 1 FUNC. Menu \* (My Colors Off).

See *Menus and Settings* (p. 21).

\* Default setting.

- Press the Multi Controller  or  to select a My Colors mode.

● In 

See *Setting the Camera to a Custom Color Mode* (p. 59).

● When not in 

Push in the Multi Controller (FUNC./SET) to return to the shooting screen.



## 2 Shoot.

### Setting the Camera to a Custom Color Mode

This mode allows you to adjust the contrast, sharpness and saturation and the color balance for red, green, blue and skin tones.

#### 1 FUNC. Menu \* (My Colors Off) (Custom Color) .

See *Menus and Settings* (p. 21).

\* Default setting.



#### 2 Press the Multi Controller or to select [Contrast], [Sharpness], [Saturation], [Red], [Green], [Blue] or [Skin Tone] and or to adjust the setting.

- The altered color will display.



Select a category

Adjust it

3



- This completes the setting.  
If you press the **MENU** button at this point, you will return to the screen where you can select a My Colors mode.

## Changing Colors



Shooting Mode



You can shoot images with the original colors transformed. This can be performed on movies as well as still images, allowing you to enjoy photographing with image or movie effects.

However, depending on the shooting conditions, the images may appear rough or you may not get the expected color. Before you try to photograph important subjects, we highly recommend that you shoot trial images and check the results.

If you set [Save Original] (p. 64) to [On] when shooting a still image, you can record the original image as well the transformed one.

	<b>Color Accent</b>	Use this option to have only the color specified in the LCD monitor remain and to transform all others to black and white.
	<b>Color Swap</b>	Use this option to transform a color specified in the LCD monitor into another. The specified color can only be swapped into one other color, multiple colors cannot be chosen.



The ISO speed will rise depending on the shooting conditions, which may increase the “noise” in the image.

# Shooting in the Color Accent Mode

## 1 FUNC. Menu ► \*(Manual) ► (Color Accent).

See *Menus and Settings* (p. 21).

\* Default setting.



## 2 .

- The Color Accent mode will take effect.

## 3 .

- The camera will switch to color input mode and the display will alternate between the original image and the color accent image (using the previously set color).



## 4 Aim the camera so that the color you wish to retain appears at the center of the LCD monitor and press the Multi Controller .

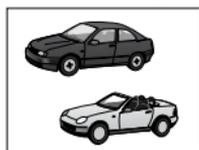
- Only one color can be specified.
- You can press the Multi Controller  or  to specify the range of colors that are retained.
  - -5: Only takes the color that you want to retain
  - +5: Also takes colors close to the one that you want to retain

## 5 Press to complete the setting, then shoot.



- The default color accent is green.
- You may not obtain the expected results if you use the flash.
- The specified color and color input range will be retained even if the camera's power is turned off.

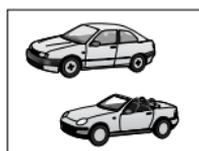
## Shooting in the Color Swap Mode



Original Color  
(Before Swapping)



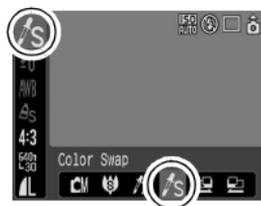
Desired Color  
(After Swapping)



### 1 FUNC. Menu ► \*(Manual) ► (Color Swap).

See *Menus and Settings* (p. 21).

\* Default setting.



### 2 .

- The Color Swap mode will take effect.

### 3 .

- The camera will switch to color input mode and the display will alternate between the original image and the color swap image (using the previously set color).



**4 Aim the camera so that the original color appears at the center of the LCD monitor and press the Multi Controller ← .**

- Only one color can be specified.
- You can press the Multi Controller ↑ or ↓ to specify the range of colors that are swapped.
  - -5: Only takes the color that you want to swap
  - +5: Also takes colors close to the one that you want to swap

**5 Aim the camera so that the desired color appears at the center of the LCD monitor and press the Multi Controller → .**

- Only one color can be specified.

**6 Press  to complete the setting, then shoot.**



- The default setting for color swap mode changes green into white.
- You may not obtain the expected results if you use the flash.
- The specified color and color input range will be retained even if the camera's power is turned off.

## Changing the Save Method for the Original Image

When shooting still images in the Color Accent or Color Swap mode, you can set whether or not to save the original image as well as the transformed one.

### 1 (Rec.) Menu ► [Save Original] ► [On]/[Off]\*.

See *Menus and Settings* (p. 22).

\* Default setting.

- If [On] is selected, the two images will be numbered consecutively with the altered image following the original.



### When [Save Original] is Set to [On]

- Only the transformed image displays in the LCD monitor while shooting in the Color Accent or Color Swap mode.
- The transformed image is reviewed in the LCD monitor after shooting in the Color Accent or Color Swap mode. If you erase the image at this point, the original image is erased along with the transformed image. Exercise adequate caution before deleting a file.
- Since two images are recorded with each shot, the number of shots remaining is approximately half the number displayed when this function is set to [Off].



Raise the ISO speed to use a fast shutter speed when you wish to reduce the effects of camera shake or avoid blurry subjects, or to turn the flash off when shooting in a dark area.

## 1 Press the Multi Controller towards ISO and then press it $\uparrow$ or $\downarrow$ to switch settings.

- You can advance to the next option each time you press the Multi Controller  $\uparrow$  or  $\downarrow$  :  $\text{ISO AUTO} / \text{ISO HI} / \text{ISO 80} / \text{ISO 100} / \text{ISO 200} / \text{ISO 400} / \text{ISO 800} / \text{ISO 1600}$ .
- Selecting  $\text{ISO AUTO}$  (Auto) sets the optimal ISO speed according to the light level when shooting. Since the ISO speed setting will automatically be raised in dark places, the camera will select a faster shutter speed and reduce the chances of camera shake.
- Selecting  $\text{ISO HI}$  (High ISO Auto)\* sets the sensitivity to a higher value than the  $\text{ISO AUTO}$  setting. This sets the shutter speed faster, reducing the potential for camera shake or blurry subjects compared with the  $\text{ISO AUTO}$  setting.
  - \* Noise in the recorded image may be higher than for the  $\text{ISO AUTO}$  setting.
- When in  (Auto) shooting mode, only  $\text{ISO AUTO}$  or  $\text{ISO HI}$  can be selected.
- When in long shutter mode (p. 53),  $\text{ISO AUTO}$  or  $\text{ISO HI}$  cannot be selected.



- The camera automatically applies noise reduction processing when you shoot at a high ISO speed.
- If the camera is set at  $\text{ISO AUTO}$  or  $\text{ISO HI}$ , the ISO speed automatically set by the camera will be displayed when pressing the shutter button halfway or in playback information.

# Changing the ISO Speed with One Touch (Auto ISO Shift)



Shooting Mode



If the camera shake warning icon () displays while shooting, you can raise the ISO speed merely by pressing the  button to record at a shutter speed that avoids the effects of camera shake.

## 1 (Rec.) Menu ► [Auto ISO Shift] ► [On]/[Off]\*.

See *Menus and Settings* (p. 22).

\* Default setting.



## 2 Press the shutter button halfway.

- If  is displayed, the  button will blink blue.



## 3 Press the button while pressing the shutter button halfway. When the button lights, press the shutter button fully.

- When pressing the  button once again while pressing the shutter button halfway, the ISO speed will return to the original setting.
- If you set the AE Lock (p. 49), after raising the ISO speed, the  button will continue to light blue until you release the AE Lock, even if you stop pressing the shutter button halfway.



## 2 Press the Multi Controller ↑, ↓, ← or → to select the function you wish to register and press .

- If  appears on the lower right of the icon, you can still register this function but pressing the  button will not activate the function in the current shooting mode.



### To Cancel the Shortcut Button

Select  in Step 2.

## Using the Button

### 1 Press the button.

- Each press of the  button cycles through setting values of the registered function.
  - A configuration screen will appear for the  and  functions.
  - With the  function registered, the white balance data is captured each time you press the  button. Since a guidance frame does not show in the LCD monitor in this case, please have the white target object or cloth centered in the LCD monitor before pressing the  button.
  - The  function is useful for directing your subject's attention to the camera right before taking a shot because it plays a sound when you press the  button.
- If a function that cannot be used in the currently selected shooting mode is selected, nothing will happen when you press the  button.



# Creating an Image Destination (Folder)



Shooting Mode

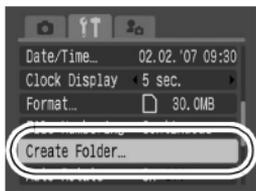


You can create a new folder at any time and the recorded images will be automatically saved to that folder.

<b>Create New Folder</b>	Creates a new folder the next time you shoot images. To create an additional folder, insert another check mark.
<b>Auto Create</b>	You can also specify a date and time if you wish to create a new folder using a shooting time after the specified date and time (p. 26).

## 1 [F] (Set up) Menu ► [Create Folder].

See *Menus and Settings* (p. 22).

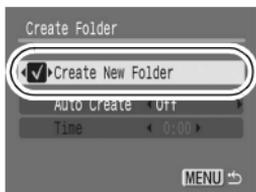


## Creating a Folder the Next Time You Shoot

### 2 Press the Multi Controller ← or → to add a check mark beside [Create New Folder] ►



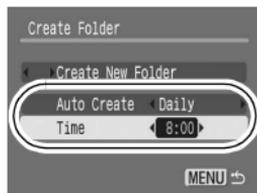
-  displays in the LCD monitor when shooting. The symbol will cease to display after the new folder is created.



## Setting the Day or Time for Automatic Folder Creation

### 2 Select a day for the [Auto Create] option and a time in the [Time] option .

-  displays when the specified time arrives. The symbol will cease to display after the new folder is created.



Up to 2000 images can be saved into one folder. A new folder will automatically be created when you record more than that number even if you are not creating new folders.

# Resetting the File Number



Shooting Mode



The images you shoot are automatically assigned file numbers. You can select how the file number is assigned.

## 1 **[i] (Set up) Menu ▶ [File Numbering] ▶ [Continuous]\*/[Auto Reset].**

See *Menus and Settings* (p. 22).

\* Default setting.

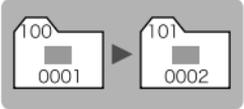
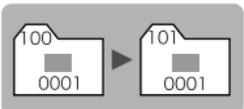


## File Number Reset Function

<b>Continuous</b>	<p>A number one higher than the last one recorded is assigned to the next image. This is convenient for managing all your images together on a computer because you avoid file name duplication when changing folders or memory cards.*</p> <p>* When a blank memory card is used. If a memory card with recorded data is used, the 7-digit number for the last recorded folder and image is compared with the last one on the card, and the larger of the two is utilized as the basis for new images.</p>
<b>Auto reset</b>	<p>The folder and image number are reset to the starting value (100-0001).* This is convenient for managing images on a folder-by-folder basis.</p> <p>* When a blank memory card is used. If a memory card with recorded data is used, the number following the 7-digit number for the last recorded folder and image on the card is utilized as the basis for new images.</p>

## File and Folder Numbers

Recorded images are assigned consecutive file numbers starting with 0001 and ranging up to 9999, while folders are assigned numbers starting with 100 and ranging up to 999. Up to 2,000 images can be saved into a single folder.

	New Folder Created	Memory Card Exchanged for Another
<b>Continuous</b>	Memory Card 1 	Memory Card 1    Memory Card 2 
<b>Auto Reset</b>	Memory Card 1 	Memory Card 1    Memory Card 2 

- Images may be saved to a new folder when there is insufficient free space even if the total number of images in a folder is less than 2,000 because the following types of image are always saved together into the same folder.
  - Images from continuous shooting
  - Self-timer images (custom)
  - Stitch Assist mode images
  - Still images shot in Color Accent/Color Swap mode with the [Save Original] category set to [On]
- Images cannot be played back when the folder numbers are duplicated or image numbers are duplicated within folders.
- Please refer to the *Software Starter Guide* for information regarding folder structures or image types.

# Playback/Erasing

Please also see the *Basic Camera User Guide* (p. 19).

## Q Magnifying Images



### 1 Press the zoom lever toward .

-  will display and a magnified portion of the image will display.
- Images can be magnified up to a factor of approximately 10x.



Approximate Location of the Displayed Area

### 2 Press the Multi Controller , , or to move around the image.

- If you push in the Multi Controller (**FUNC./SET**) while in magnified display, the camera switches to image advance mode and  will display. You can press the Multi Controller  or  to advance to the next or previous image at the same level of magnification. Pushing in the Multi Controller (**FUNC./SET**) again cancels the image advance mode.
- You can change the magnification level with the zoom lever.

### To Cancel the Magnified Display

Press the zoom lever toward . (You can also cancel it immediately by pressing the **MENU** button.)



Movie frames and index playback images cannot be magnified.

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



### 1 Press the zoom lever toward .

- Up to nine images can be viewed at once.
- Press the Multi Controller , ,  or  to change the image selection.

Selected Image



Movie

### Switching between Sets of Nine Images

The jump bar will display if you press the zoom lever toward  while in index playback and you can switch the display between sets of nine images.

- Press the Multi Controller  or  to move to the previous or next set of nine images.
- Push in and hold the Multi Controller (FUNC./SET) and press it  or  to jump to the first or last set.



Jump Bar

### To Return to Single Image Playback

Press the zoom lever toward .

# Organizing Images by Category (My Category)



You can organize images into prepared categories (People, Scenery, Events, Category 1-3, To Do). At the category level, you can perform the following.

- Image searches (p. 77)
- Slide Show (p. 92)
- Protect (p. 98)
- Erase (p. 104)
- Configure print settings (p. 106)

## 1 (Play) Menu .

See *Menus and Settings* (p. 22).

- In playback mode, you can press the button to display the screen in Step 2 directly.



## 2 **Press the Multi Controller or to select an image to classify and or to select a category and press the button.**

- You can put the same image into more than one category.
- Setting can also be done in the index playback mode.
- You can cancel the classification by pressing the Multi Controller button again.



When working with images (for example, compiling a slide show, erasing or printing), it is convenient to categorize images in the [To Do] category.

## Jumping to Images

When you have many images recorded onto a memory card, it is handy to use the six search keys below to jump over images to find the object of your search.

	<b>Shot Date</b>	Jumps to the first image of each shooting date.
	<b>My Category</b>	Jumps to the first image in each category.
	<b>Folder</b>	Jumps to the first image in each folder.
	<b>Movie</b>	Jumps to a movie.
	<b>By 10 images</b>	Jumps over 10 images at a time.
	<b>By 100 images</b>	Jumps over 100 images at a time.

### 1 In single image playback mode, press the Multi Controller towards .

- The camera will switch to jump search mode.

### 2 Press the Multi Controller or to select a search key.

- The screen sample will vary slightly according to the search key.
- You can show/hide image information using the **DISP.** button.

Image Information



### 3 Display the Images.

-  / : press the Multi Controller  or .
- Pressing the **MENU** button will cancel the operation.



- : press the Multi Controller  or  to select date, category, folder or movie for playback and push in the Multi Controller (**FUNC./SET**).

Select the search key



- The camera will change to the defined playback mode and a blue frame will appear. Only the images designated with the search key will be played back.
- Press the Multi Controller towards  to cancel defined playback mode.



The defined playback mode will be canceled under the following circumstances.

- When classifying categories
- When newly saving images that were adjusted with the My Colors function, images upon which red-eye correction has been performed, or edited movies.
- When images are deleted using [Erase] from the  (Play) menu



Movies cannot be played in the index playback mode.

## 1 Display a movie and press .

- Images with a   icon are movies.

## 2 Select (Play) and press .

- The movie will pause if you push in the Multi Controller (**FUNC./SET**) during playback. It will resume when you push in the Multi Controller (**FUNC./SET**) again.
- When playback ends, the movie stops at the last frame displayed. Push in the Multi Controller (**FUNC./SET**) to display the movie control panel.
- You can switch between showing/hiding the playback progress bar with the **DISP.** button while playing a movie.
- If playback was halted partway through in the prior viewing session, playback will resume from the last frame displayed.

Movie Control Panel

Volume Level  
(Adjust with the  or  button)



Playback Progress Bar

Time movie was shot

## Operating the Movie Control Panel

	Ends playback and returns to single image playback
	Print (An icon will display when a printer is connected. See the <i>Direct Print User Guide</i> for details.)
	Play
	Slow Motion Playback (You can press the Multi Controller  to slow down or  to speed up playback.)
	Displays the first frame
	Previous Frame (Rewinds if the Multi Controller ( <b>FUNC./SET</b> ) is held down)
	Next Frame (Fast Forwards if the Multi Controller ( <b>FUNC./SET</b> ) is held down)
	Displays the last frame
	Edit (Switches to movie editing mode) (p. 81)



- Use the television's controls to adjust the volume when playing a movie on a TV set (p. 101).
- The sound cannot be played in slow motion playback.



You can delete portions of recorded movies.



Protected movies and movies 1 second or less in duration cannot be edited.

## 1 Select (Edit) in the movie control panel and press .

- The movie editing panel and the movie editing bar will display.

Movie Editing Panel



Movie Editing Bar

## 2 Press the Multi Controller or to select (Cut Beginning) or (Cut End) and or to specify the cut point ().

- To check a temporarily edited movie, select  (Play) and push in the Multi Controller (FUNC./SET).
- Selecting  (Exit) cancels the edit and restores the movie control panel.

## 3 Select (Save) and press .

## 4 Select [New File] or [Overwrite] and press



- [New File] saves the edited movie under a new file name. The pre-edit data is left unchanged.

Note, if you push in the Multi Controller (**FUNC./SET**) while saving the movie, saving is canceled.

- [Overwrite] saves the edited movie with its original name. The pre-edit data is lost.
- When there is not enough space left on the memory card, only [Overwrite] can be selected.

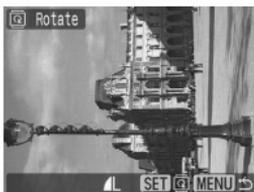


Depending on the movie's file size, it may take some time to save an edited movie. If the battery runs out of charge partway through, edited movie clips cannot be saved. When editing movies, it is recommended to use a fully charged battery or the separately sold AC Adapter Kit ACK-DC10 (p. 133).

# Rotating Images in the Display



Images can be rotated clockwise 90° or 270° in the display.



Original



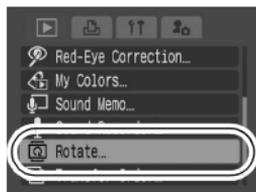
90°



270°

## 1 (Play) Menu .

See *Menus and Settings* (p. 22).



## 2 Press the Multi Controller or to select an image to rotate and press to rotate it.

- Cycle through the 90°/270°/original orientations with each push of the Multi Controller (**FUNC./SET**).
- This also can be set in the index playback mode.



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

## Playback with Transition Effects



You can select the transition effect displayed when switching between images.



No transition effect.



The displayed image darkens and the next image gradually brightens until it is displayed.



Press the Multi Controller **←** to have the previous image display from the left and **→** to have the next image display from the right.

1

**(Play) Menu** \* / .

See *Menus and Settings* (p. 22).

\* Default setting.



## Red-Eye Correction Function



You can correct red eyes in recorded images.

However, red eyes may not be automatically detected in some images or the results may not turn out as you intended.

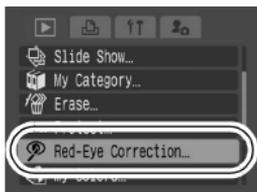
Examples:

- Faces near the screen edges or faces that appear extremely small, large, dark or bright in relation to the overall image.
- Faces turned to the side or at a diagonal, or faces with a portion hidden.

1

**(Play) Menu** .

See *Menus and Settings* (p. 22).



## 2 Press the Multi Controller $\leftarrow$ or $\rightarrow$ to select the image for which you wish to perform red-eye correction and press .

- A frame will be displayed automatically at the position where red-eye is to be corrected.
- If red-eye is not automatically detected, press the Multi Controller  $\leftarrow$  or  $\rightarrow$  to select [Add Frame] and push in the Multi Controller (**FUNC./SET**) (p. 86).



## 3 Select [Start] and press .



## 4 Select [New File] or [Overwrite] and press .

- **[New File]**: saves the image under a new file name. The original file remains as is. The newly saved image file is saved as the last image of the photographed images.
- **[Overwrite]**: saves the new image under the original file name. The original image is overwritten.
- If you selected [New File], proceed to Step 5.



## 5 Press and select [Yes] or [No], then press .

- Selecting [Yes] displays the corrected image, while [No] returns you to the Play menu.





- Red-eye correction cannot be performed on movies.
- Protected images cannot be overwritten.



- When there is not enough space left on the memory card, red-eye correction cannot be performed.
- Although you can apply red eye correction any number of times to an image, the image quality will gradually deteriorate with each application.
- Since the correction frame will not appear automatically on images that have already been corrected once with the red-eye correction function, use the [Add Frame] option to correct them.

## Add Correction Frame

You can add up to a maximum of 35 correction frames.

- 1 Press the Multi Controller  $\leftarrow$  or  $\rightarrow$  to select [Add Frame] and press .**



- 2 Press the Multi Controller  $\uparrow$ ,  $\downarrow$ ,  $\leftarrow$  or  $\rightarrow$  to move the frame and press .**

- You can change the size of the frame with the zoom lever.



# Adding Effects with the My Colors Function



You can add effects to recorded images (stills only) using the My Colors function. The following selection of My Colors effects is available. For details, see p. 58.

	Vivid		Lighter Skin Tone
	Neutral		Darker Skin Tone
	Sepia		Vivid Blue
	B/W		Vivid Green
	Positive Film		Vivid Red

## 1 (Play) Menu

See Menus and Settings (p. 22).



## 2 Press the Multi Controller or to select an image and press .



## 3 Press the Multi Controller or to select the My Colors type and press .

- The displayed image will reflect the My Colors effect.
- You can press the zoom lever toward Q to check the image at a higher magnification. While the image is zoomed, you can push in the Multi Controller (FUNC./SET) to switch between the image transformed with the My Colors effect and the original non-transformed image.



## 4 Select [OK] and press .

- The newly saved image transformed with the My Colors effect will be the last one in the list.
- To continue adding effects to other images, repeat the procedures from Step 2 onward.



## 5 Press and select [Yes] or [No], then press .

- Selecting [Yes] displays the image transformed with the My Colors effect, while [No] returns you to the Play menu.



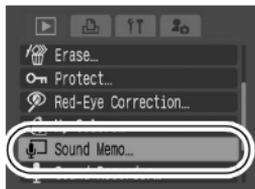
- The My Colors function will not work if there is insufficient space on the memory card.
- Although My Colors effects can be added any number of times to an image, the image quality will gradually deteriorate with each application and the intended colors may not be achieved.
- Color in images taken using My Colors (p. 58) in shooting mode and images edited with the My Colors function in playback mode may differ slightly.

# Attaching Sound Memos to Images

In playback mode (including single image playback and index playback), you can attach sound memos (up to one minute) to an image. The sound data is saved in the WAVE format.

## 1 (Play) Menu .

See *Menus and Settings* (p. 22).



## 2 Press the Multi Controller or to select an image to attach a sound memo to and press .

- The sound memo panel will display.

## 3 Select (Record) and press .

- The elapsed time and the remaining time display.
- Pushing in the Multi Controller (FUNC./SET) pauses the recording. Pushing it in again resumes recording.
- Up to one minute of recordings can be added to any one image.



Sound Memo Panel  
Elapsed Time/  
Remaining Time  
Volume \_\_\_\_\_  
(Press the Multi  
Controller  or  to  
adjust)

## Sound Memo Panel

	Exit
	Record
	Pause
	Play
	Erase
	Select [Erase] in the confirmation screen and push in the Multi Controller ( <b>FUNC./SET</b> ).



- Check that the [Audio] setting (p. 43) is appropriate before recording.
- You cannot attach sound memos to movies.
- Sound memos for protected images cannot be erased.

## Sound-Only Recording (Sound Recorder)



You can record sound only, without images, for up to two hours at one time.

1

 **(Play) Menu**  .

See *Menus and Settings* (p. 22).



## 2 Select (Record) and press .

- Recording time will be displayed.
- Press the Multi Controller  or  to change the sample rate. Sound quality will improve in the order of [11.025kHz], [22.050kHz], [44.100kHz]\*, but the recorded file size will also increase respectively.  
\* Default setting.
- When pushing in the Multi Controller (FUNC./SET), recording will stop. Pushing in the Multi Controller (FUNC./SET) once again will start a new recording.



Available  
Recording Time

Sound Control Panel

## Sound Control Panel

	Exit
	Record
	Pause
	Play
	Rewind Hold the Multi Controller (FUNC./SET) to rewind (no sound plays).
	Fast Forward Push in and hold the Multi Controller (FUNC./SET) to fast forward (no sound plays)
	Erase Select [Erase] or [Erase All] on the screen and push in the Multi Controller (FUNC./SET).
	Protect Set or cancel by pushing in the Multi Controller (FUNC./SET).
	Volume It can be adjusted by pressing the Multi Controller  or  .



Check that the [Audio] setting (p. 43) is appropriate before recording.



- *Estimated Sound Recorder File Sizes and Recording Times* (p. 143)
- When the memory cards fills, recording will automatically stop.

## Automated Playback (Slide Shows)

Automated playback of memory card images.

Image settings for slide shows are based on the Digital Print Order Format (DPOF) standard.

	<b>All Images</b>	Plays all images on a memory card in order.
	<b>Date</b>	Plays images bearing a specified date in order.
	<b>My Category</b>	Plays the images in the selected category in order.
	<b>Folder</b>	Plays images in a specified folder in order.
	<b>Movies</b>	Plays movie files only, in order.
	<b>Stills</b>	Plays still images only, in order.
	<b>Custom 1-3</b>	Plays the images selected for each slide show, Custom 1, Custom 2 or Custom 3, in order (p. 96).

1

 **(Play) Menu** 

See *Menus and Settings* (p. 22).



## 2 Select , , , , , or **or** --.

- , , : select a date, category or folder to be played back (p. 95).
- , , : select the images to be played back (p. 95).
- If you want to add a transition effect to play back images, press the Multi Controller  to select [Effect] and choose the type of effect with pressing the Multi Controller  or  (p. 94).



## 3 Select [Start] and press .

- The following functions are available during slide shows.
  - Pausing/resuming the slide show: push in the Multi Controller (**FUNC./SET**)
  - Fast forwarding/rewinding of the slide show: Press the Multi Controller  or  (continue to press the Multi Controller to switch between images more rapidly).
  - Stopping the slide show: press the **MENU** button.



## Transition Effects

You can select the transition effect used when one image is replaced by another.

	No transition effect.
	The new image gradually brightens as it moves upward from the bottom.
	The new image first appears in a cross shape and gradually expands to display the full image.
	Portions of the new image move horizontally, then the image expands to display the full image.



In single image playback mode, you can start a slide show from the current image displayed by holding the Multi Controller (**FUNC./SET**) while you press the  button. Please note that if you do this while the last image shot is displayed, the slide show will start from the first image using the same date.

## Select a date/category/folder to play back (📅/📁/📂)

1 Select 📅, 📁 or 📂 and press .

2 Press the Multi Controller  or  to select a date/category/folder to play back and press the  button.

- Pushing in the Multi Controller (**FUNC./SET**) again will cancel the selection.
- More than one of the dates, categories and folders can be selected.
- Pressing the Multi Controller  or  will allow you to confirm images in dates, categories and folders.
- Pressing the **MENU** button completes the setting.



## Selecting Images for Playback (\*1-3)

Select only the images that you wish to play back and save them as a slide show (Custom 1, 2 or 3). Up to 998 images can be selected. They will be played back in their order of selection.

### 1 Select \*1, \*2 or \*3 and press .

- Only the \*1 icon will display at first. When you set \*1, the icon will change to \*1✓ and \*2 will display. \*2 and \*3 will change in the same way when they are set.

### 2 Press the Multi Controller ← or → to move between images for playback and press to select or deselect them.

- You can also select images in the index playback mode.
- Pressing the **MENU** button completes the setting.

Check mark  
indicating selection

Number indicating  
the selection order



#### Selecting All Images

- 1 After selecting \*1-3 in step 1, press the Multi Controller **▲** to select [Mark all] and push in the Multi Controller (**FUNC./SET**).
  - 2 Press the Multi Controller **▲** to select [Mark all], push in the Multi Controller (**FUNC./SET**).
  - 3 Press the Multi Controller **▶** to select [OK] and push in the Multi Controller (**FUNC./SET**).
- To deselect all images, select [Reset].

## Adjusting the Play Time and Repeat Settings

### ● Play Time

Sets the duration that each image displays. Choose between 3\*–10 seconds, 15 seconds and 30 seconds. Displaying time can vary slightly depending on the image.

\* Default setting.

### ● Repeat

Sets whether the slide show stops when all the slides have been displayed or continues until stopped.

**1** Select **[Set up]** and press  .

**2** Select **[Play Time]** or **[Repeat]** and then the desired option.

- Pressing the **MENU** button cancels the setting.



# Protecting Images



You can protect important images and movies from accidental erasure.

<b>Select</b>	You can configure the protection settings for each image singly while viewing them.
<b>Select by Date</b>	You can protect the images from a specified date.
<b>Select by Category</b>	You can protect the images in a specified category.
<b>Select by Folder</b>	You can protect the images in a specified folder.
<b>All Images</b>	You can protect all the images on a memory card.

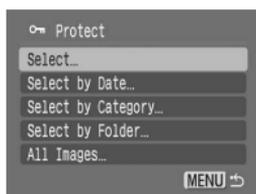
## 1 (Play) Menu .

See *Menus and Settings* (p. 22).



## 2 **Select a menu item and press** .

- Proceed to Step 5 if you select [All Images].



### 3 Select the image, date, category or folder to protect and press .

#### ● [Select]

Press the Multi Controller  or  to select an image and push in the Multi Controller (**FUNC./SET**).

- Pushing the Multi Controller (**FUNC./SET**) again cancels the setting.

- You can also protect images in the index playback mode.

- Press the **MENU** button to complete the setting.



Protection Icon

#### ● [Select by Date] [Select by Category] [Select by Folder]

Press the Multi Controller  or  to select a date, category or folder and push in the Multi Controller (**FUNC./SET**).

- Pushing the Multi Controller (**FUNC./SET**) again cancels the setting.

- You can select multiple dates, categories or folders.

- Press the Multi Controller  or  to confirm each date, category or folder image.



### 4 For the [Select by Date], [Select by Category] and [Select by Folder] options, press .

### 5 Select [Protect] and press .

● Selecting [Unlock] cancels protection of the selected image and returns to Step 2.

● Selecting [Stop] cancels selection of the protected image and returns to Step 2.



## Registering Settings to the Movie Button

In the playback mode, one of the following functions can be registered to the Movie button (*Basic Guide* p. 3).

Menu Item	Page
 Not Assigned*	—
 Sound Recorder	p. 90
 Sound Memo	p. 89

\* Default Setting.

## Registering a Function

### 1 (Play) Menu .

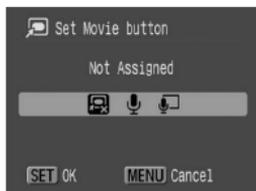
See *Menus and Settings* (p. 22).



### 2 Press the Multi Controller or to select the function you wish to register and press



- If you press the Movie button, the setup screen for the registering function will be displayed. If you continue to press the Movie button, recording will begin.



### To Cancel the Shortcut Button

Select  in Step 2.



If you register the Sound Recorder, recording will be possible even when the LCD monitor is closed. Pressing the Movie button once, the indicator will blink red and the camera will be on standby. If you continue to press the Movie button, the blinking of the indicator will speed up and recording will begin.

## Viewing Images on a TV set



You can use a television as a monitor to play back images when it is connected to the camera with the supplied cable.

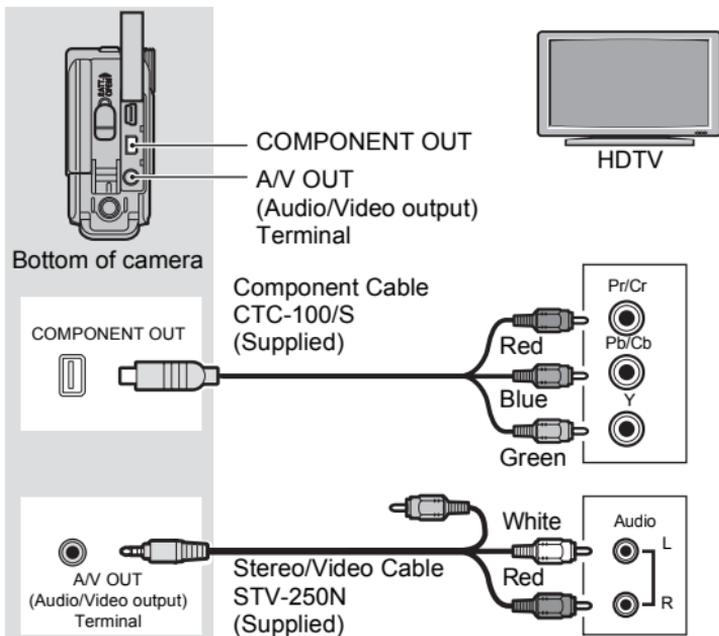


- The video output signal can be switched (NTSC or PAL) to accommodate different regional standards (p. 26). The default setting varies between regions.
  - NTSC: Japan, U.S.A., Canada, Taiwan and others
  - PAL: Europe, Asia (excluding Taiwan), Oceania and others
- You can also use the TV as a display for shooting images. If the component cable is used for connecting the camera to TV, remove the component cable and use only the stereo video cable.
- Please also refer to the instruction manual for the equipment to connect to.

# Connecting to a High-Definition TV (HDTV)

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

**2 Connect the camera and TV.**



**3 Turn on the TV and switch it to external input.**

**4 Turn on the camera.**

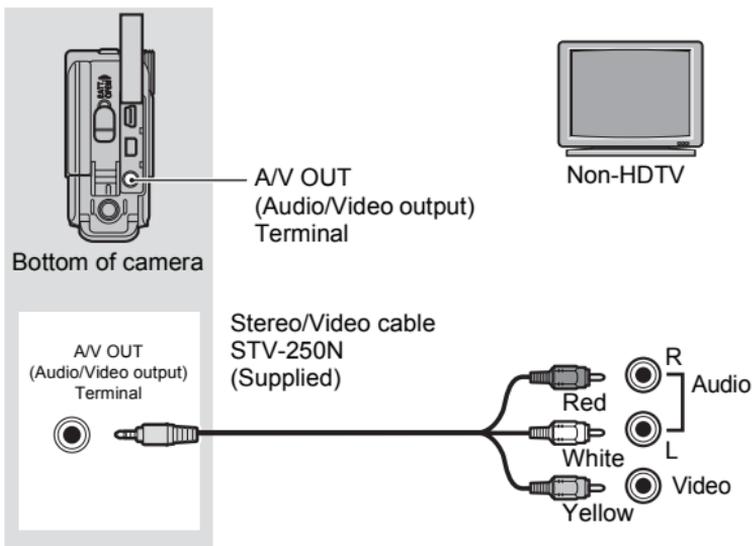


Camera can be connected to any D3/D4/D5 input compliant TV.

## Connecting to a Non-High-Definition TV

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

**2 Connect the camera and TV.**



**3 Turn on the TV and switch it to external input.**

**4 Turn on the camera.**

# Erasing Images



You can erase images from a memory card.

<b>Select</b>	Erase images after selecting them one at a time.
<b>Select by Date</b>	Erases images corresponding to the selected date.
<b>Select by Category</b>	Erases images in the selected category.
<b>Select by Folder</b>	Erases images in the selected folder.
<b>All Images</b>	Erases all images on a memory card.

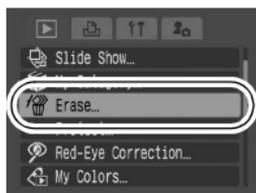


- Note that erased images cannot be recovered. Exercise adequate caution before erasing an image.
- Protected images cannot be erased with this function.

1

**(Play) Menu** .

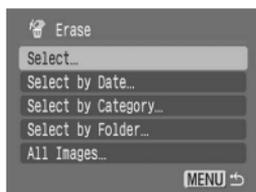
See *Menus and Settings* (p. 22).



2

**Select a menu item and press** .

- Proceed to Step 5 if you select [All Images].



### 3 Select the image, date, category or folder and press .

#### ● [Select]

Press the Multi Controller ◀ or ▶ to select an image and push in the Multi Controller (FUNC./SET).

- Pushing in the Multi Controller (FUNC./SET) again cancels the setting.
- You can also erase images in the index playback mode.

#### ● [Select by Date] [Select by Category] [Select by Folder]

Press the Multi Controller ▲ or ▼ to select a date, category or folder and push in the Multi Controller (FUNC./SET).

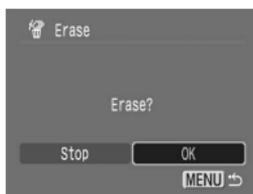
- Pushing in the Multi Controller (FUNC./SET) again cancels the setting.
- You can select multiple dates, categories or folders.
- Press the Multi Controller ◀ or ▶ to confirm each date, category or folder image.



### 4 Press .

### 5 Select [OK] and press .

- Selecting [Stop] or [Cancel] cancels selection of the image you are about to erase and returns to Step 2.
- Pushing in the Multi Controller (FUNC./SET) while erasing is in progress cancels the procedure.



Please format the memory card when you want to erase not only image data but also all the data contained on the card (p. 28).

# Print Settings/Transfer Settings

## Setting the DPOF Print Settings

You can select images on a memory card for printing and specify the number of print copies in advance using the camera. The settings used on the camera comply with the Digital Print Order Format (DPOF) standards. This is extremely convenient for printing on a direct print compatible printer, or for sending the images to a photo developing service that supports DPOF.

**The  icon may display for a memory card with print settings set by a different DPOF-compliant camera. These settings will be overwritten by those set by your camera.**

<b>Select Images &amp; Qty.</b>	Configures print settings for single images as you view them.
<b>Select by Date</b>	Configures print settings for images corresponding to the selected date.
<b>Select by Category</b>	Configures print settings for images in the selected category.
<b>Select by Folder</b>	Configures print settings for images in the selected folder.
<b>Select All Images</b>	Configures print settings for all images.
<b>Clear All Selections</b>	Removes all print settings from images.

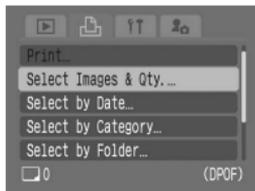


Only one copy will be printed for each selected image. With the [Select Images & Qty.] option, you can only set the number of copies to print when the [Print Type] option is set to [Standard] or [Both] (p. 109).

# 1 Set the mode dial to (Playback) (Print) Menu Select a menu item .

See *Menus and Settings* (p. 22).

- Proceed to Step 4 if you select [Select All Images].



# 2 Select the image, date, category or folder to print and press .

## ● [Select Images & Qty.]

Selection methods differ for the Print Type settings (p. 109).

### (Standard) / (Both)

Press the Multi Controller  or  to select an image, push in the Multi Controller (**FUNC./SET**) and press it  or  to select the number of print copies (up to 99).

Number of Print Copies



### (Index)

Press the Multi Controller  or  to select an image and push in the Multi Controller (**FUNC./SET**) to select or deselect it.

Index Print Selection



- You can also select images in the index playback mode.
- Press the **MENU** button to complete the setting.

● **[Select by Date] [Select by Category] [Select by Folder]**

Press the Multi Controller **▲** or **▼** to select a date, category or folder and push in the Multi Controller (**FUNC./SET**).

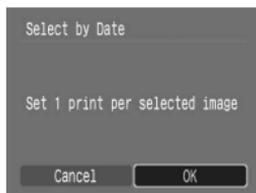


- Pushing in the Multi Controller (**FUNC./SET**) again cancels the setting.
- You can select multiple dates, categories or folders.
- Press the Multi Controller **◀** or **▶** to confirm each date, category or folder image.

**3 For the [Select by Date], [Select by Category] and [Select by Folder] options, press .**

**4 Select [OK] and press .**

- Selecting [Cancel] cancels print settings of the selected image and returns you to Step 1.



- The output of some printers or photo developing services may not reflect the specified print settings.
- Print settings cannot be set for movies.



- Images are printed in order according to the file number.
- A maximum of 998 images can be selected.
- If you are connected to a printer, the  button will light blue while you are selecting images. You can start printing at this point by pressing the  button, confirming that [Print] is selected and pushing in the Multi Controller (**FUNC./SET**).

## Setting the Print Style

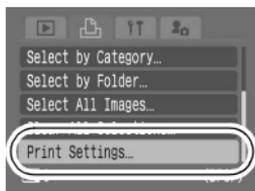
After setting the print style, select the image(s) to print. The following print settings can be selected.

\*Default setting

Print Type	<input checked="" type="checkbox"/> <b>Standard*</b>	Prints one image per page.
	<input type="checkbox"/> <b>Index</b>	Prints the selected images together at a reduced size in an index format.
	<input type="checkbox"/> <input checked="" type="checkbox"/> <b>Both</b>	Prints the images in both the standard and index formats.
<input checked="" type="checkbox"/> <b>Date (On/Off*)</b>	Adds the date to the print.	
<input type="checkbox"/> <b>File No. (On/Off*)</b>	Adds the file number to the print.	
<input type="checkbox"/> <b>Clear DPOF data (On*/Off)</b>	Clears all print settings after the images print.	

### 1 Set the mode dial to (Playback) (Print) Menu [Print Settings].

See *Menus and Settings* (p. 22).



### 2 Select [Print Type], [Date], [File No.] or [Clear DPOF data] and then specify the settings.



- The Date and File No. settings change according to the Print Type as follows.
  - Index  
[Date] and [File No.] cannot be set to [On] at the same time.
  - Standard or Both  
[Date] and [File No.] can be set to [On] at the same time, however, the printable information may vary between printers.
- Dates print in the style specified in the [Date/Time] menu (p. 26).

## Setting the DPOF Transfer Settings

You can use the camera to specify settings for images before downloading to a computer. Refer to the *Software Starter Guide* for instructions on how to transfer images to your computer.

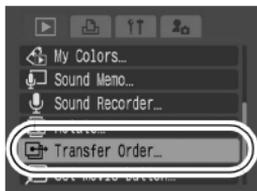
The settings used on the camera comply with the Digital Print Order Format (DPOF) standards.

**The  icon may display for a memory card with transfer settings set by a different DPOF-compliant camera. These settings will be overwritten by those set by your camera.**

### Single Images

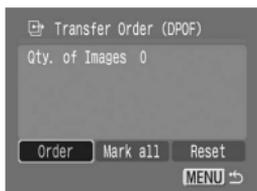
#### 1 (Play) Menu .

See *Menus and Settings* (p. 22).



#### 2 Select [Order] and press .

- Selecting [Reset] cancels all transfer order settings.



#### 3 Press the Multi Controller or to select an image to transfer and press .

- Pushing in the Multi Controller (FUNC./SET) again deselects the setting.
- You can also select images in the index playback mode.

Transfer Selection



# All the Images on a Memory Card

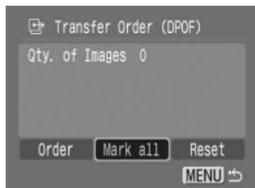
## 1 (Play) Menu .

See *Menus and Settings* (p. 22).



## 2 Select [Mark all] and press .

- Selecting [Reset] cancels all transfer order settings.



## 3 Select [OK] and press .

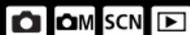


- Images are transferred in order according to the file number.
- A maximum of 998 images can be selected.

# Customizing the Camera (My Camera Settings)

My Camera allows you to customize the start-up image and start-up, operation, self-timer and shutter sounds. You can change and register these settings, enabling you to customize the camera to suit your own tastes.

## Changing My Camera Settings



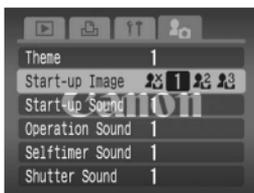
### 1 (My Camera) Menu ► Menu item.

See *Menus and Settings* (p. 22).



### 2 **Select the contents you wish to set.**

- Select [Theme] to set all to the same settings.



# Registering My Camera Settings



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

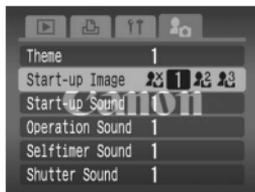


A computer is required to restore the My Camera settings to the defaults. Use the supplied software (ZoomBrowser EX/ImageBrowser) to restore the default settings to the camera.

1

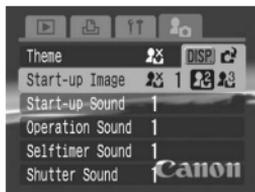
(My Camera) Menu ► Menu item to register.

See *Menus and Settings* (p. 22).



2

Select or and press .



### 3 Select an image or record a sound.

#### ● Start-up Image

Press the Multi Controller ◀ or ▶ to select the image you wish to register and push in the Multi Controller (**FUNC./SET**).



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

Select  (Record) and push in the Multi Controller (**FUNC./SET**). After recording, select  (Register) and push in the Multi Controller (**FUNC./SET**).



- Recording will automatically stop when the recording time elapses.
- To play it, select  (Play).
- To exit instead of registering, press  (Exit).

### 4 Select [OK] and press .

- To cancel registering, select [Cancel].



- The following cannot be registered as My Camera settings.
  - Movies
  - Sounds recorded with the sound memo function (p. 89)
  - Sounds recorded with the sound recorder function (p. 90)
- The prior setting is erased when a new My Camera setting is added.



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

# Troubleshooting

## Camera

### Camera will not operate.

Power is not turned on.	● Press the power button ( <i>Basic Guide</i> p. 11).
Memory card slot cover or battery cover is open.	● Confirm that the memory card slot cover or battery cover is securely closed ( <i>Basic Guide</i> pp. 7, 8).
Battery charge insufficient to operate camera ("Change the battery pack" message displays).	● Insert a fully charged battery into the camera ( <i>Basic Guide</i> p. 7). ● Use the AC Adapter Kit ACK-DC10 (sold separately) (p. 133).
Poor contact between camera and battery terminals.	● Polish the terminals with a soft cotton swab before charging or using the battery (p. 129).

### Sounds come from the camera interior.

The camera's horizontal/vertical orientation was changed.	● The camera's orientation mechanism is operating. There is no malfunction.
---	---

## When the power is turned on

### "Card locked!" message appears.

The SD memory card's and SDHC memory card's write protect tab is set to "Write protect".	● When recording to, erasing from or formatting the memory card, slide the write protect tab upward (p. 131).
--	---

### The Date/Time menu appears.

The built-in rechargeable lithium battery charge is low.	● Recharge the built-in battery immediately ( <i>Basic Guide</i> p. 10).
--	--

## Camera screen is black at start-up

Incompatible image has been selected as the start-up image in the My Camera settings.

- Change the start-up image in the My Camera settings (p. 112) or use the supplied software program ZoomBrowser EX or ImageBrowser to restore the default settings. See *ZoomBrowser EX/ ImageBrowser Software User Guide* (PDF).

## The display darkens.

The image in the LCD monitor will darken in strong sunlight or bright light.

- This is a normal occurrence in devices containing CCDs and does not constitute a malfunction. (This image will not be recorded when shooting still images, but it will be recorded when shooting movies.)

## Display flickers.

Display flickers when shot under fluorescent lighting.

- This is not a camera malfunction (flickering recorded in movies, but not in still images).

## A bar of light (red, purple) appears on the LCD

This may occur when shooting a bright subject, such as the sun or a light.

- This is a normal occurrence in devices containing CCDs and does not constitute a malfunction. This bar of light will not be recorded when shooting still images, but it will be recorded when shooting movies.

### appears.

A slow shutter speed has likely been selected because of insufficient lighting.

- Set IS mode to a setting other than [Off] (p. 31).
- Raise the ISO speed (p. 65)
- Set the Auto ISO Shift to [On] (p. 66).
- Set the flash to any setting other than  (flash off) (*Basic Guide* p. 15)
- Set the self-timer and attach the camera to a tripod or other device (*Basic Guide* p. 17).

### appears.

This displays when using a memory card that has print settings, transfer settings or slide show image selections set by other DPOF-compliant cameras.

- Take note that these settings will be overwritten by those set by your camera (pp. 92, 106).

### **Noise displays./Subject's movements are irregular.**

Camera automatically lightened the image displayed on the LCD monitor to make it easier to see when shooting in a dark area (p. 14).

- There is no effect on the recorded image.

## Shooting

### **Camera will not record.**

Mode dial is set to  (playback).

- Set the mode dial to ,  or **SCN** (*Basic Guide* p. 12).

LCD monitor is closed.

- Open the LCD monitor.

Memory card is full.	<ul style="list-style-type: none"> <li>● Insert a new memory card (<i>Basic Guide</i> p. 7).</li> <li>● If required, download the images to a computer and erase them from the memory card to make space.</li> </ul>
Memory card is not formatted correctly.	<ul style="list-style-type: none"> <li>● Format the memory card (p. 28).</li> <li>● If reformatting does not work, the memory card logic circuits may be damaged. Consult the nearest Canon Customer Support Help Desk.</li> </ul>
SD memory card or SDHC memory card is write protected.	<ul style="list-style-type: none"> <li>● Slide the write protect tab of the memory card upward (p. 131).</li> </ul>

### **Image is blurred or out of focus.**

The camera moved when the shutter button was pressed.	<ul style="list-style-type: none"> <li>● Refer to “ appears” (p. 117) to confirm the camera movement.</li> </ul>
AF-assist Beam is set to [Off].	<ul style="list-style-type: none"> <li>● In dark places where it is difficult for the camera to focus, the AF-assist Beam will emit to assist focusing. As the AF-assist Beam will not function when turned off, set it [On] to activate it (p. 23). Take care not to obstruct the AF-assist Beam with your hand when used.</li> </ul>
Subject is out of focal range.	<ul style="list-style-type: none"> <li>● Shoot with the subject at the correct focusing distance (p. 137).</li> </ul>
The subject is hard to focus on.	<ul style="list-style-type: none"> <li>● Use the focus lock or AF lock to shoot (p. 48).</li> </ul>

### **Subject in recorded image is too dark.**

Insufficient light for shooting.	<ul style="list-style-type: none"> <li>● Set the flash to  (flash on) (<i>Basic Guide</i> p. 15).</li> </ul>
The subject is underexposed because the surroundings are too bright.	<ul style="list-style-type: none"> <li>● Set the exposure compensation to a positive (+) setting (p. 52).</li> <li>● Use AE lock or use the spot metering function (pp. 49, 51).</li> </ul>

Subject is too far away for flash to reach.

- Shoot within correct flash range of the subject when using the built-in flash (p. 138).
- Raise the ISO speed and then shoot (p. 65).

### Subject in recorded image is too bright, or image flashes white.

Subject is too close, making the flash too strong.

- Shoot within correct flash range of the subject when using the built-in flash (p. 138).

The subject is overexposed because the surroundings are too dark.

- Set the exposure compensation to a negative (-) setting (p. 52).
- Use AE lock or use the spot metering function (pp. 49, 51).

Too much light is shining directly into the camera, or is being reflected off the subject.

- Change the shooting angle.

Flash is set to on.

- Set the flash to  (flash off) (*Basic Guide* p. 15).

### Image contains noise.

ISO speed is too high.

- Higher ISO speeds and the  (High ISO Auto) setting may increase image noise. For higher image quality, select as low an ISO speed as possible (p. 65).
- In , , ,  and  modes, the ISO speed increases and noise can appear.

### White dots appear on the image.

Light from the flash has reflected off dust particles or insects in the air. This is particularly noticeable when shooting using the wide angle.

- This is a phenomenon that occurs with digital cameras and does not constitute a malfunction.

## Eyes appear red.

Light is reflected back from the eyes when the flash is used in dark areas.

- Set the [Red-Eye] function to [On] and shoot (p. 35). For this mode to be effective, the subject must be looking right at the red-eye reduction lamp. Try asking them to look directly at the lamp.  
Even better results can be obtained by increasing the lighting in indoor settings or 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.
- Images with eyes that appear red can be corrected using the red-eye correction function (p. 84).

## Continuous shooting slows down.

The memory card's performance has dropped.

- To enhance the continuous shooting performance, you are recommended to format (Low Level Format) the memory card in the camera after you save all its images to your computer (p. 28).

## Recording images to memory card takes a long time.

Memory card was formatted in another device.

- Use a memory card formatted in your camera (p. 28).

## Lens will not retract.

Memory card slot cover or battery cover was opened with power on.

- First close the memory card slot cover or battery cover and then turn the power on and then off again. (*Basic Guide* p. 7).

## Shooting Movies

### **The recording time may not display properly or shooting may stop unexpectedly.**

The following types of memory cards are used.

- Slow recording cards.
- Cards formatted on a different camera or a computer.
- Cards which have had images recorded and erased repeatedly.

- Although the recording time may not display properly during shooting, the movie will be recorded correctly on the memory card. Recording time will display properly if you format the memory card in this camera (excluding slow recording memory cards) (p. 28).

### **[Buffer Warning] (p. 15) often displayed on the LCD monitor**

The buffer warning indicates full when the internal memory of the camera is full. Shooting will stop automatically.

- Try the following procedures.
  - Format the card with a low level format before shooting (p. 28).
  - Lower the recording pixels (p. 40).
  - Use a high-speed memory card (SDC-512MSH, etc.).

# Playback

## Cannot play back.

You attempted to play back images shot with another camera or images edited with a computer.

- Computer images that cannot be played back will play back if they are added to the camera using the supplied software program ZoomBrowser EX or ImageBrowser. See *ZoomBrowser EX/ImageBrowser Software User Guide* (PDF).

File name was changed with a computer or file location was changed.

- Set the file name or location on the file format/structure of the camera. (Refer to the *Software Starter Guide* for details).

## Movies cannot be edited.

Some movies shot with another camera cannot be edited.

## Movies do not play back correctly.

Movies recorded with high recording pixels and frame rates may momentarily stop playing if played on slow reading memory cards.

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

Movies recorded at  and with the video signal set to the PAL format, may play back with a frame rate lower than the recorded one when output to a TV or video. You can play every frame by using the slow motion playback.

- To check the images at the original frame rate, you are recommended to play the movie back on the camera's LCD monitor or on a computer.

## Reading images from memory card is slow.

Memory card was formatted in another device.

- Use a memory card formatted in your camera (p. 28).

## Battery/Battery Charger

### Battery consumed quickly.

Battery is not performing to its fullest.

- Refer to “Battery Handling Precautions” (p. 129) for instructions on handling batteries.

Battery life exceeded if battery loses its charge quickly at normal temperature (23 °C/73 °F).

- Replace the battery with a new one (*Basic Guide* p. 6).

### Battery will not charge.

Battery life exceeded.

- Replace the battery with a new one (*Basic Guide* p. 6).

## TV monitor output

### Image is distorted or not showing on TV monitor.

Incorrect video system setting.

- Set the video system to the appropriate setting, NTSC or PAL, for your TV (p. 26).

Shooting in Stitch Assist mode.

- The output will not appear on a TV in Stitch Assist mode. Cancel the Stitch Assist mode (*Basic Guide* p. 13).

The component cable is used to connect during shooting mode.

- If the component cable is used to connect to a TV during shooting mode, images cannot be output to the TV screen. Remove the component cable and connect the stereo video cable only.

## Printing on Direct Print Compatible Printers

### Cannot print.

Camera and printer not properly connected.	● Attach the camera to the printer securely with the supplied cable.
Printer power is off.	● Turn on the printer.
Incorrect print connection.	● In the <b>f1</b> (Set up) menu, select [Print Method] and select [Auto] (p. 26).

# List of Messages

The following messages may appear on the LCD monitor during shooting or playback. Please refer to the *Direct Print User Guide* for the messages that display during a printer connection.

## Busy...

- Image is being recorded to, or read from, memory card. The playback mode is starting up.

## No memory card

- You turned on the camera without a memory card installed, or with a memory card installed in the wrong orientation (*Basic Guide* p. 7).

## Card locked!

- The SD memory card or SDHC memory card is write-protected.

## Cannot record

- You attempted to shoot an image without a memory card installed in the camera or with a memory card incorrectly installed in the wrong orientation, or you attempted to attach a sound memo to a movie.

## Memory card error

- The memory card may be malfunctioning. Some malfunctioning memory cards may be fixed by formatting them in this camera. However, if this error message appears even when using the supplied memory card, contact your Canon Customer Support Help Desk as there may be a problem with the camera.

## Memory card full

- Memory card is full of images and no more can be recorded or saved, or no more image settings, sound recorder files or sound memos can be recorded.

### **Naming error!**

- The file name could not be created because there is a file with the same name as the folder that the camera is attempting to create, or the highest possible file number has already been reached. In the Set up menu, set the File Numbering option to [Auto Reset]; alternatively, save all the images you wish to retain onto a computer, then reformat the memory card. Please note that formatting will erase all the existing images and other data.

### **Change the battery pack.**

- Battery charge is insufficient to operate the camera. Replace it at once with a charged one or recharge the battery. Also refer to *Battery Handling Precautions* (p. 129).

### **No image.**

- No images recorded on memory card.

### **Image too large.**

- You attempted to play back an image larger than 4992 x 3328 pixels or with a large data size.

### **Incompatible JPEG**

- You attempted to play back an incompatible JPEG image (such as those edited on computers).

### **RAW**

- You attempted to play back a RAW image.

### **Unidentified Image**

- You attempted to play back a corrupted image, an incompatible image (proprietary format used by another manufacturer's camera, etc.), an image edited on a computer or a movie clip recorded by another camera.

### **Cannot magnify!**

- You attempted to magnify an image recorded in a different camera or data type, an image edited with a computer, or a movie.

### **Cannot rotate**

- You attempted to rotate an image recorded in a different camera or data type, or an image edited with a computer.

### **Incompatible WAVE**

- A sound memo cannot be added to this image since the data type of the existing sound memo is incorrect. Sound cannot be played back.

### **Cannot register this image!**

- You attempted to register an image recorded in a different camera or a movie as a start-up image.

### **Cannot modify image**

- You attempted to apply a My Colors effect to a movie or an image recorded in a different camera.

### **Cannot assign to category**

- You attempted to categorize or adjust red-eye of an image recorded in a different camera.

### **Cannot Modify**

- Cannot apply red-eye correction as no red-eye is detected.

### **Cannot transfer!**

- When transferring images to your computer using the Direct Transfer menu, you attempted to select an image with corrupted data or an image taken with a different camera or data type. You may have also attempted to select a movie when [Wallpaper] was selected in the Direct Transfer menu.

### **Protected!**

- You attempted to erase or edit a protected image, movie or sound memo.

### **Too many marks.**

- Too many images have been marked with print settings, transfer settings or slide show settings. Cannot process any more.

### **Cannot complete!**

- Could not save a part of the print, transfer or slide show settings.

### **Unselectable image.**

- You attempted to set the print settings for a non-JPEG image.

### **Communication error**

- The computer was unable to download the image due to the large amount of images (approx. 1000) stored on the memory card.

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

- Camera detected an error while moving the lens and cut the power automatically. This error message may appear if you press on the lens while it is moving or turn on the camera in a dusty or sandy environment. Turn on the camera again and shoot or playback images. Take the camera to a service center if this message appears frequently because there may be a problem with the lens.

### **Exx**

- (xx: number) Camera detected an error. Turn the power off and then back on, then shoot or play back. A problem exists if the error code reappears. Note the number and contact your Canon Customer Support Help Desk. If an error code displays directly after taking a picture, the shot may not have been recorded. Check image in playback mode.
-

## Battery Handling

### Battery Charge

The following icon and message will display.



Battery charge is low.  
Recharge it as soon as possible it will be used for an extended period.

Change the battery pack

Battery charge is insufficient to operate the camera. Replace the battery immediately.

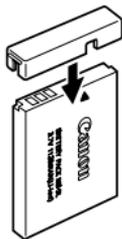
### Battery Handling Precautions

- **Keep the battery terminals clean at all times.**  
Dirty terminals may cause poor contact between the battery and camera. Polish the terminals with a soft cotton swab before charging or using the battery.
- **At low temperatures, battery performance may be reduced and the low battery icon (  ) may appear earlier than usual.**  
Under these conditions, revive the battery by warming it in a pocket immediately before use.
- **However, ensure that there are no metallic items in the pocket that could cause a short circuit, such as a key ring, etc.**  
The battery may be short circuiting.
- **Do not allow any metal objects such as key rings to touch the (⊕) and (⊖) terminals (Fig. A). To carry the battery or store it during periods of disuse, always replace the terminal cover (Fig. B).**  
These conditions can damage the battery.

Fig. A



Fig. B



You may be able to check the charge state depending upon how the terminal cover is attached (Fig. C, D).

Fig. C



Charged Battery  
Attach it so the ▲  
is visible

Fig. D



Spent Battery  
Attach it the  
opposite way to  
Fig. C.

- You are recommended to use it in the camera until it is completely discharged and to store it in an indoor location with low relative humidity and between the temperatures of 0 – 30 °C (32 – 86 °F).

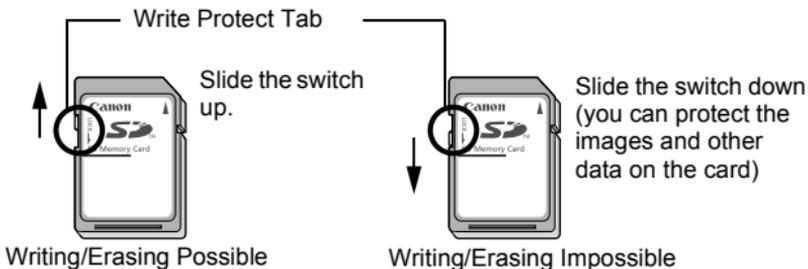
Storing a fully charged battery for long periods of time (about one year) may shorten its life cycle or affect its performance. If you do not use the battery for long periods of time, charge it fully and discharge it fully in the camera about once a year before returning it to storage.

### Charging the Battery

- Since this is a lithium-ion battery, you need not completely discharge it before recharging.
- It takes approximately 1 hours 30 minutes to fully charge the battery from a depleted state (based on Canon's testing standards).
  - Charging it within a temperature range of 5 – 40 °C (41 – 104 °F) is recommended.
  - Charge times may vary according to the ambient temperature and the battery's charge state.
- You are advised to charge the battery on the day of use, or one day before, to ensure a full charge.  
Even charged batteries continue to discharge naturally.
- If the performance of the battery diminishes substantially even when it is fully charged, its life has been exceeded and it should be replaced.

# Handling the Memory Card

## SD Memory Card and SDHC Memory Card Write Protect Tab



## Cautions When Handling

- Memory cards are high-precision electronic devices. Do not bend them, apply force to them, or subject them to shocks or vibration.
- Do not attempt to disassemble or alter the memory card.
- Do not allow dirt, water or foreign objects to contact the terminals on the back of the card. Do not touch the terminals with your hands or metal objects.
- Do not peel away the original label on the memory card or cover it with another label or sticker.
- When writing on the memory card, do not use a pencil or ball-point pen. Only use a soft point pen (e.g. felt-tip pen).
- Do not use or store memory cards in the following locations.
  - Locations subject to dust or sand
  - Locations subject to high humidity and high temperatures
- Since some or all of the data recorded on the memory card may be corrupted or erased by electrical noise, static electricity, or camera or card malfunction, making a backup copy of important data is recommended.

## Formatting

- **Please note that formatting (initializing) an memory card erases all data, including protected images.**
- **You are recommended to use memory cards that have been formatted in your camera.**
  - The card supplied with the camera may be used without further formatting.
  - When the camera is malfunctioning, a corrupted memory card might be the cause. Reformatting the memory card may solve the problem.
  - When a non-Canon brand memory card is malfunctioning, reformatting it may solve the problem.
  - Memory cards formatted in other cameras, computers, or peripheral devices may not operate correctly in this camera. When that happens, reformat the memory card with this camera.
- **If formatting in the camera does not work properly, turn the camera off and re-insert the memory card. Then turn the camera back on and format again.**
- **Data on a card is not completely erased even when the card is formatted or images are erased because these processes merely change the file management data. Please note this fact when transferring ownership or disposing of cards. Take care to destroy the card when disposing of it to prevent the leakage of personal data.**

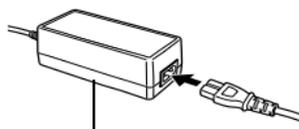
## Using an AC Adapter Kit (Sold Separately)

It is best to power the camera with AC Adapter Kit ACK-DC10 (sold separately) when you are using it for long periods of time or connecting it to a computer.



Turn the camera power off before connecting or disconnecting the AC adapter.

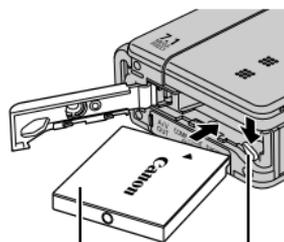
- 1 Connect the power cord to the compact power adapter first and then plug the other end into the power outlet.**



Compact Power Adapter  
CA-DC10

- 2 Open the battery cover, push the battery lock in the direction of the arrow and insert the DC coupler until it locks.**

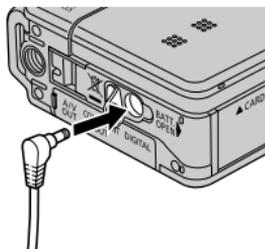
- Slide the battery cover closed.



DC Coupler DR-10

Battery Lock

- 3 Open the DC coupler terminal cover and attach the cord to the DC terminal.**

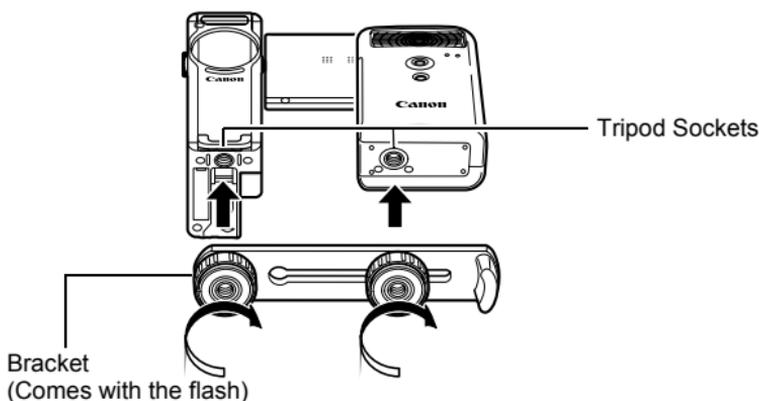


## Using an Externally Mounted Flash (Sold Separately)

### High-Power Flash HF-DC1

This flash is used to supplement the camera's built-in flash when the subject is too far away for proper illumination. First open the LCD monitor of the camera, and firmly fix the camera and the high power flash with the supporting bracket as shown in the diagram below, and then shoot.

Please read the instructions accompanying the flash along with this explanation.



- The flash charge time will lengthen as the battery charge gets weaker. Always set the power/mode switch to [OFF] when you finish using the flash.
- Be careful not to touch the flash window or sensor windows with your fingers while the flash is in use.
- The flash may fire if another flash is being used in close proximity.
- The High-Power Flash may not fire outdoors in daylight or when there are no reflective items.
- For continuous shooting, although the flash fires for the first shot, it does not fire for subsequent shots.
- Fasten the attachment screws securely so that they do not loosen. Failure to do so may lead to the dropping of the camera and flash resulting in damage to both.



- Before attaching the bracket to the flash, check that the lithium battery (CR123A or DL123) is installed.
- To illuminate the subjects properly, install the flash so that it is up against the side of the camera and parallel with the camera's front panel.
- A tripod can be used even when the flash is attached.

## Batteries

- **Charge becomes Severely Limited**

If the battery usage time has considerably diminished, wipe the battery terminals well with a dry cloth. The terminals may be dirty from fingerprints.

- **Usage in Cold Temperatures**

Get a spare generic lithium battery (CR123A or DL123). You are recommended to place the spare battery in your pocket to warm it up before switching it for the battery in the flash.

- **Non-Use over Extended Periods**

Leaving batteries in the High-Power Flash could allow the battery fluid to leak, damaging the product. Remove the batteries from the High-Power Flash and store them in a cool, dry place.

## Camera Care and Maintenance

**Never use thinners, benzine, detergents or water to clean the camera. These substances may distort or damage the equipment.**

### Camera Body

Gently wipe dirt off the camera body with a soft cloth or eyeglass lens wiper.

### Lens

First use a lens blower brush to remove dust and dirt, then remove any remaining dirt by wiping the lens lightly with a soft cloth.



Never use organic solvents on the camera body or lens. If dirt remains, contact the closest Canon Customer Support Help Desk as listed on the customer support list supplied with your camera.

### LCD Monitor

Use a lens blower brush to remove dust and dirt. If necessary, gently wipe with a soft cloth or an eyeglass lens wiper to remove stubborn dirt.



Never rub or press strongly on the LCD monitor. These actions may damage it or lead to other problems.

# Specifications

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

## PowerShot TX1

(W): Max. wide angle (T): Max. telephoto

Camera Effective Pixels	Approx. 7.1 million
Image Sensor	1/2.5-inch type CCD (Total number of pixels: Approx. 7.4 million)
Lens	6.5 (W) – 65.0 (T) mm (35mm film equivalent: 39 (W) – 390 (T) mm) f/3.5 (W) – f/5.6 (T)
Digital Zoom	Approx. 4.0x (Up to approx. 40x in combination with the optical zoom)
LCD Monitor	1.8-inch type, low-temperature polycrystalline silicon TFT color LCD, approx. 115,000 pixels (Picture coverage 100%)
AF System	TTL autofocus Face Detect AF: On (Face Detect*1) / Off (1-point*2) *1 When the face cannot be detected, the following is used as the AF frame according to the selected mode. Single AF mode: 9-point Continuous AF mode: 1-point (fixed to center) *2 Fixed to center
AF Mode	Single/Continuous
Focusing Range (From the front of the lens)	Normal: 50 cm (1.6 ft.) – infinity Macro: 10 – 50 cm (W) (3.9 in. – 1.6 ft. (W)) Infinity: 3 m (9.8 ft.) – infinity Super Macro: 0 – 10 cm (W) (0 - 3.9 in. (W))
Shutter	Mechanical shutter and electronic shutter
Shutter Speeds	15 – 1/2500 sec. The shutter speed varies according to the shooting mode. Slow shutter speeds of 1.3 sec. or slower operate with noise reduction.
Image Stabilization	Lens shift type Continuous/Shoot Only*/Panning*/Off * Still images only

Metering System	Evaluative* <sup>1</sup> , Center-weighted average or Spot* <sup>2</sup> * <sup>1</sup> When Face Detect is set to [On], the brightness of the face is also evaluated * <sup>2</sup> Fixed to center
Exposure Compensation	± 2 stops in 1/3-stop increments
ISO Speed* <sup>1</sup>	Auto* <sup>2</sup> , High ISO Auto* <sup>3</sup> , ISO 80/100/200/400/800/1600 * <sup>1</sup> Standard Output Sensitivity, Recommended Exposure Index. * <sup>2</sup> Camera automatically sets the optimal speed. * <sup>3</sup> Camera automatically sets the optimal speed according to subject brightness. However, the ISO speed is set relatively higher than Auto (maximum ISO speed is ISO 800).
White Balance	Auto, Day Light, Cloudy, Tungsten, Fluorescent, Fluorescent H or Custom
Built-in Flash	Auto*, On*, Off * Red-eye reduction, FE Lock and slow synchro available
Flash Range	Normal: 50 cm – 2.0 m (1.6 – 6.6 ft.) (W), 1.0 m – 1.2 m (3.3 – 3.9 ft.) (T) Macro: 35 cm – 50 cm (1.1 – 1.6 ft.) (W), (When ISO speed is set to AUTO.)
Shooting Modes	Auto, Manual*, Super Macro**, Color Accent**, Color Swap**, Stitch Assist**, Special Scene***, Movie * Long shutter mode available ** Selectable in Manual mode. ***Portrait, Night Snapshot, Indoor, Foliage, Snow, Beach, Aquarium
Continuous Shooting	Approx. 2.2 shots/sec. (Large/Fine mode) Approx. 1.1 shots/sec. (Continuous Shooting AF, Large/Fine mode)
Self-timer	Activates shutter after an approx. 10-sec./approx. 2-sec. delay, Custom Timer
Recording Media	SD memory card/SDHC memory card/ MultiMediaCard/MMC <i>plus</i> card
File Format	Design rule for camera file system and DPOF compliant

Data Type	Still images: Exif 2.2 (JPEG)* Sound memos, Sound Recorder: WAVE (Stereo) Movies: AVI (Image data: Motion JPEG; Audio data: WAVE (Stereo)) * 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.
Compression	Superfine, Fine, Normal
Number of Recording Pixels (Still Images)	Large: 3072 x 2304 pixels Medium 1: 2592 x 1944 pixels Medium 2: 2048 x 1536 pixels Medium 3: 1600 x 1200 pixels Small: 640 x 480 pixels Widescreen: 3072 x 1728 pixels
Number of Recording Pixels (Movies)	: 1280 X 720 pixels, 30 frames/sec. : 1280 X 720 pixels, 30 frames/sec., LP : 640 x 480 pixels, 30 frames/sec. : 640 x 480 pixels, 30 frames/sec., LP : 320 x 240 pixels, 60 frames/sec. : 320 x 240 pixels, 30 frames/sec. Recording can continue until the memory card is full* (can record up to a maximum of 4 GB** at one time). * Using super high-speed memory cards (SDC-512MSH recommended). **Even if the clip size has not reached 4 GB, recording will stop at the moment the clip length reaches 1 hour. Depending on memory card capacity and data write speed, recording may stop before the file size reaches 4 GB or the recording time reaches one hour.

Playback Modes	Single (histogram displayable), Index (9 thumbnail images), Magnified (approx. 10x (max.) in LCD monitor, advance or reverse through magnified images possible), Red-Eye Correction, My Category, Jump (Shot Date, My Category, Folder, Movie, By 10 images, By 100 images. In index playback mode, it displays 9 images at once.), Slide show, My Colors, Sound memos (up to 1 min.), Movie (edit/slow motion play back possible) or Sound recorder (up to 2 hours).
Direct Print	<i>PictBridge</i> compliant, and <i>Canon Direct Print</i> and <i>Bubble Jet Direct</i> compatible
My Camera Settings	Start-up image, start-up sound, operation sound, self-timer sound, and shutter sound.
Interface	USB 2.0 Hi-Speed (mini-B) Video output (NTSC or PAL selectable)/ Audio output (stereo audio) Special connector: Component out
Communication Settings	MTP, PTP
Power Source	Battery Pack NB-4L (Rechargeable lithium-ion battery) AC Adapter Kit ACK-DC10
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Operating Humidity	10 – 90%
Dimensions (Excluding protrusions)	88.8 x 59.9 x 29.0 mm (3.50 x 2.36 x 1.14 in.)
Weight (camera body only)	Approx. 220 g (7.76 oz.)

## Battery Capacity (Battery Pack NB-4L (Fully charged))

Number of Images Shot (Based on the CIPA standard)	Playback Time
Approx. 160 images	Approx. 4 hours

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

### Test Conditions

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

- A Canon-brand memory card is used.

\* Until the battery returns to normal temperature

Playback: Normal temperature ( $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}/73\text{ }^{\circ}\text{F} \pm 3.6\text{ }^{\circ}\text{F}$ ), normal relative humidity ( $50\% \pm 20\%$ ), continuous playback at 3 seconds per image.



See *Battery Handling Precautions* (p. 129).

## Memory Cards and Estimated Capacities

: Card included with the camera

Recording Pixels	Compression	32MB	SDC-128M	SDC-512MSH
<b>L</b> (Large) 3072 x 2304 pixels		9	40	156
		15	64	251
		33	134	520
<b>M1</b> (Medium 1) 2592 x 1944 pixels		11	49	190
		21	87	339
		42	173	671
<b>M2</b> (Medium 2) 2048 x 1536 pixels		18	76	295
		33	136	529
		66	269	1041
<b>M3</b> (Medium 3) 1600 x 1200 pixels		30	121	471
		53	217	839
		102	411	1590
<b>S</b> (Small) 640 x 480 pixels		114	460	1777
		177	711	2747
		278	1118	4317
<b>W</b> (Widescreen) 3072 x 1728 pixels		12	53	207
		21	86	335
		43	177	686

\*  Capable of smooth continuous shooting (p. 36) when card has been formatted with a low level format.

\* This reflects standard shooting criteria established by Canon. Actual results may vary according to the subject and shooting conditions.

## Movie

: Card included with the camera

	32MB	SDC-128M	SDC-512MSH
 1280 x 720 pixels 30 frames/sec.	6 sec.	26 sec.	1 min. 42 sec.
 1280 x 720 pixels 30 frames/sec., LP	12 sec.	50 sec.	3 min. 17 sec.
 640 x 480 pixels 30 frames/sec.	14 sec.	58 sec.	3 min. 48 sec.
 640 x 480 pixels 30 frames/sec., LP	26 sec.	1 min. 48 sec.	6 min. 59 sec.
 320 x 240 pixels 60 frames/sec.	20 sec.	1 min. 21 sec.	5 min. 17 sec.
 320 x 240 pixels 30 frames/sec.	35 sec.	2 min. 24 sec.	9 min. 19 sec.

## Estimated Sound Recorder File Sizes and Recording Times

: Card included with the camera

	Sound Size	32MB	SDC-128M	SDC-512M
<b>11.025 kHz</b>	44 KB/sec.	12 min. 6 sec.	48 min. 30 sec.	3 hrs. 7 min. 8 sec.
<b>22.050 kHz</b>	88 KB/sec.	6 min. 3 sec.	24 min. 15 sec.	1 hrs. 33 min. 34 sec.
<b>44.100 kHz</b>	176 KB/sec.	3 min. 2 sec.	12 min. 7 sec.	46 min. 47 sec.

## Image Data Sizes (Estimated)

Recording Pixels	Compression		
			
<b>L</b> (3072 x 2304 pixels)	3045 KB	1897 KB	902 KB
<b>M1</b> (2592 x 1944 pixels)	2503 KB	1395 KB	695 KB
<b>M2</b> (2048 x 1536 pixels)	1602 KB	893 KB	445 KB
<b>M3</b> (1600 x 1200 pixels)	1002 KB	558 KB	278 KB
<b>S</b> (640 x 480 pixels)	249 KB	150 KB	84 KB
<b>W</b> (3072 x 1728 pixels)	2304 KB	1420 KB	678 KB

	File size
 1280 x 720 pixels 30 frames/sec.	4480 KB/sec.
 1280 x 720 pixels 30 frames/sec., LP	2280 KB/sec.
 640 x 480 pixels 30 frames/sec.	1960 KB/sec.
 640 x 480 pixels 30 frames/sec., LP	1020 KB/sec.
 320 x 240 pixels 60 frames/sec.	1370 KB/sec.
 320 x 240 pixels 30 frames/sec.	746 KB/sec.

## SD Memory Card

Interface	Compatible with SD memory card standards
Dimensions	32.0 x 24.0 x 2.1 mm (1.26 x 0.94 x 0.08 in.)
Weight	Approx. 2 g (0.07 oz.)

## MultiMediaCard

Interface	Compatible with MultiMediaCard standards
Dimensions	32.0 x 24.0 x 1.4 mm (1.26 x 0.94 x 0.06 in.)
Weight	Approx. 1.5 g (0.05 oz.)

## Battery Pack NB-4L

Type	Rechargeable lithium-ion battery
Nominal Voltage	3.7 V DC
Typical Capacity	760 mAh
Cycle Life	Approx. 300 times
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Dimensions	35.4 x 40.3 x 5.9 mm (1.40 x 1.59 x 0.23 in.)
Weight	Approx. 17 g (0.60 oz.)

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

Rated Input	100 – 240 V AC (50/60 Hz) 10 VA (100 V) – 14 VA (240 V) (CB-2LV) 0.1 A (100 V) – 0.06 A (240 V) (CB-2LVE)
Rated Output	4.2 V DC, 0.65 A
Charging Time	Approx. 90 minutes
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Dimensions	53.0 x 86.0 x 19.5 mm (2.1 x 3.4 x 0.77 in.)
Weight	Approx. 60 g (2.1 oz.) (CB-2LV) Approx. 55 g (1.9 oz.) (CB-2LVE) (excluding power cord)

## Compact Power Adapter CA-DC10

(Included with the separately sold AC Adapter Kit ACK-DC10)

Rated Input	100 – 240 V AC (50/ 60 Hz)
Rated Output	4.3 V DC, 1.5 A
Operating Temperatures	0 – 40 °C (32 – 104 °F)
Dimensions	42.6 x 104.4 x 31.4 mm (1.68 x 4.11 x 1.24 in.)
Weight (excluding power cord)	Approx. 180 g (6.35 oz.)



### **U.S.A. and Canada only:**

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

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

# INDEX

## Numerics

3:2 Guide .....37

## A

AC Adapter Kit ACK-DC10 ... 133  
AE Lock .....49  
AF Frame ..... 15, 46  
AF Lock .....48  
AF-assist Beam .....23, 118  
AiAF .....46  
Aspect Ratio .....29  
Auto ISO Shift .....66  
Auto Play (Slide Show) .....92  
Auto Rotate Function .....69

## B

Battery  
    Battery Capacity .....141  
    Charging ..... 130, *Basic 6*  
    Handling .....129  
    Installing ..... *Basic 7*

## C

Category .....76  
    Auto Category (Recording)  
        .....23  
    My Category (Playback) .....76  
Clock Display .....13  
Compression .....30  
Continuous Shooting .....36  
Correction Frame .....86  
Create Folder .....70  
Custom White Balance .....56

## D

Date/Time  
    Setting .....*Basic 10*

    Using the Clock ..... 13  
    World Clock ..... 19  
Digital Tele-Converter ..... 32  
DIGITAL Terminal .... *Basic 2*, 28  
Digital Zoom ..... 32  
Direct Transfer ..... *Basic 31*  
Downloading Images to a  
    Computer ..... *Basic 25*  
DPOF Print Order  
    Print Style ..... 109  
    Selecting Images ..... 106  
DPOF Transfer Order ..... 110

## E

Erasing  
    All Images ..... 104  
    Single Images ..... *Basic 20*  
Exposure ..... 52

## F

FE Lock ..... 50  
File Number ..... 72  
Flash ..... *Basic 4*, 15  
Focus ..... 46  
Focus Lock ..... 48  
FUNC. Menu ..... 21  
FUNC./SET ..... 21, *Basic 4*

## G

Grid Lines ..... 37

## H

HF-DC1 ..... 134  
Histogram ..... 18

## I

Image Data Sizes (Estimated)	144
Image Stabilizer	31
Index Playback	75
Infinity	<i>Basic</i> 16
Interface Cable	<i>Basic</i> 23, 28
IS Mode	31
ISO Speed	65

## J

JUMP (Image Search)	77
---------------------	----

## L

Language	<i>Basic</i> 10
LCD Monitor	
Night Display	14
Opening the LCD Monitor	<i>Basic</i> 8
Playback Information	16
Quick-bright LCD	14
Shooting Information	15
Using the LCD Monitor	12

## M

Macro	<i>Basic</i> 16
Magnifying	74
Memory Card	
Estimated Capacities	142
Formatting	28, 132
Handling	131
Inserting	<i>Basic</i> 7
Menu	
FUNC. Menu	21, 23
Menu List	23
Menus and Settings	21
My Camera Menu	27
Play Menu	22, 24
Print Menu	22, 24
Rec. Menu	22, 23

Set up Menu	22, 25
MENU button	22, <i>Basic</i> 3
Messages	125
Metering Modes	51
Mode Dial	<i>Basic</i> 3, 11, 12
Movie	
Editing	81
Playback	79
Shooting	38
Multi Controller	<i>Basic</i> 3, 4
Mute	25, <i>Basic</i> 11
My Camera Menu	27
My Camera Settings	112
My Category	76
My Colors (Playback)	87
My Colors (Shooting)	58

## P

Playback	<i>Basic</i> 19
Power Button	<i>Basic</i> 3, 11
Power Saving	18, 25
Print/Share Button	<i>Basic</i> 3, 23, 31
Printing	106, <i>Basic</i> 23
Protect	98

## R

Recording Pixels	30, 31
Red-Eye	35, <i>Basic</i> 1
Red-Eye Correction	84
Reset All	27
Review	23, <i>Basic</i> 12
Rotate	83

## S

Self-Timer	<i>Basic</i> 17
Set up Menu	25
Shooting Mode	
Auto	<i>Basic</i> 13

Manual .....	<i>Basic</i> 13
Color Accent ...61,	<i>Basic</i> 13
Color Swap ...62,	<i>Basic</i> 13
Stitch Assist .....	<i>Basic</i> 13
Super Macro .....	<i>Basic</i> 13
Movie .....	38, <i>Basic</i> 14
Selecting .....	<i>Basic</i> 12
Special Scene .....	<i>Basic</i> 14
Aquarium .....	<i>Basic</i> 14
Beach .....	<i>Basic</i> 14
Foliage .....	<i>Basic</i> 14
Indoor .....	<i>Basic</i> 14
Night Snapshot ....	<i>Basic</i> 14
Portrait .....	<i>Basic</i> 14
Snow .....	<i>Basic</i> 14
Stitch Assist .....	44
Super Macro .....	34
Shutter Button .....	<i>Basic</i> 3
Fully .....	<i>Basic</i> 12
Halfway .....	<i>Basic</i> 11
Shutter Speed .....	53
Slide Show .....	92
Repeat Settings .....	97
Selecting .....	96
Transition Effects .....	94
Slow Synchro .....	35
Smooth Continuous Shooting	
.....	36
Sound Memo .....	89
Sound Recorder .....	90
Spot AE Point Frame .....	51
Spot Frame .....	15
System Requirements ..	<i>Basic</i> 26

## T

Telephoto .....	<i>Basic</i> 15
Time Zone .....	15, 19, 26
Transition Effects	
Playback .....	84
Slide Show .....	94

## V

Video System .....	101
--------------------	-----

## W

White Balance .....	55
Wide Angle .....	<i>Basic</i> 15
Wrist Strap .....	<i>Basic</i> 1

## Z

Zoom .....	32, <i>Basic</i> 15
------------	---------------------

# MEMO

# MEMO

# MEMO



# MEMO

# MEMO

# MEMO

### **FCC Notice**

(Digital Camera, Model PC1211 systems)

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

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

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

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

Canon U.S.A., Inc.

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

Tel No. (516) 328-5600

### **Canadian Radio Interference Regulations**

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

### **Règlementation canadienne sur les interférences radio**

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

## **Battery Charger CB-2LV**

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

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

### **IMPORTANT SAFETY INSTRUCTIONS-SAVE THESE INSTRUCTIONS.**

**DANGER-TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.**

For connection to a supply not in the U.S.A., use an attachment plug adapter of the proper configuration for the power outlet.

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

### **For CA, USA only**

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

See [www.dtsc.ca.gov/hazardouswaste/perchlorate/](http://www.dtsc.ca.gov/hazardouswaste/perchlorate/) for details.

## **Disclaimer**

- While every effort has been made to ensure that the information contained in this guide is accurate and complete, no liability can be accepted for any errors or omissions.
- Canon reserves the right to change the specifications of the hardware and software described herein at anytime without prior notice.
- No part of this guide may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form, by any means, without the prior written permission of Canon.
- Canon makes no warranties for damages resulting from corrupted or lost data due to a mistaken operation or malfunction of the camera, the software, SD memory cards (SD cards), personal computers, peripheral devices, or use of non-Canon SD cards.

## **Trademark Acknowledgments**

- Windows, Windows Vista and Windows Vista logo are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Macintosh, Mac logo, Mac OS, QuickTime and QuickTime logo are trademarks of Apple Computer Inc., registered in the United States and/or other countries.
- The SDHC logo is a trademark.

# Functions Available in Each Shooting Mode

The chart below is a reference for the settings available for various shooting conditions.

Shooting Mode										Movie	Page
Function											
Aspect Ratio		○	○	○	○	—	○	○	○		p. 29
Recording Pixels (Still)	4:3		●	●	●	●	▲	●	—		p. 30
			○	○	○	○	△	○	—		
			○	○	○	○	△	○	—		
			○	○	○	○	△	○	—		
		○	○	○	○	△	○	—			
	16:9		○	○	○	○	—	○	—		
Compression (Still)	Super Fine		○	○	○	○	△	○	—		p. 31
	Fine		●	●	●	●	▲	●	—		
	Normal		○	○	○	○	△	○	—		
Recording Pixels/Frame Rates (Movie)		—	—	—	—	—	—	—	○ <sup>1)</sup>		p. 40
Flash	Auto		●	○ <sup>2)</sup>	—	○	—	○ <sup>3), 4)</sup>	—		Basic p. 15
	On		—	○	—	○	△	○	—		
	Off		○	●	●	●	▲	○ <sup>5)</sup>	—		
Slow Synchro		—	○	—	—	△	—	—	—		p. 35
Red-Eye Reduction		○	○	—	○	△	○ <sup>3)</sup>	—	—		p. 35
Macro Mode			○	○	—	○	△	○	○		Basic
Infinity Mode			—	○	—	○	△	○	○		p. 16
AF Lock			—	○	○	—	—	—	○		p. 48
AE Lock			—	○	○	—	—	—	○		p. 49
FE Lock			—	○	—	—	—	—	—		p. 50
Shooting Method	Single Shot		●	●	●	●	●	●	●		—
	Continuous		—	○	○	—	—	○	—		p. 36
	AF Continuous		—	○	○	—	—	○	—		p. 36
	10 sec. Self-Timer		○	○	○	○	○	○	○		Basic p. 17
	2 sec. Self-Timer		○	○	○	○	○	○	○		
	Custom Timer		○	○	○	—	—	○	— <sup>5)</sup>		
Face Detect AF		○	○	○	○	—	○	—	—		p. 46
AF Mode	Single	●	●	●	●	▲	●	●			p. 45
	Continuous	○	○	○	○	△	○	○			
AF-assist Beam		○	○	○	○	△	○ <sup>3)</sup>	○			p. 23

Shooting Mode		CAM					SCN			Movie	Page
Function											
Digital Zoom <sup>6)</sup>		○	○	○	—	—	○	○	○	○	p. 32
Digital Tele-Converter <sup>6)</sup>		○	○	○	—	—	○	○	○	○	p. 32
Metering Method	Evaluative	○	● <sup>2)</sup>	●	○	○	○	○	○	○	p. 51
	Center Weighted Avg.	—	○ <sup>2)</sup>	○	—	—	—	—	—	—	
	Spot	—	○ <sup>2)</sup>	○	—	—	—	—	—	—	
Exposure Compensation		—	○	○	—	△	○	○	○	○	p. 52
Exposure Shift		—	—	—	—	—	—	—	—	○	p. 39
Long Shutter		—	○	—	—	—	—	—	—	—	p. 53
White Balance		— <sup>7)</sup>	○	○	— <sup>7)</sup>	△	— <sup>7)</sup>	— <sup>7)</sup>	— <sup>7)</sup>	○	p. 55
My Colors		—	○	○	—	△	—	—	—	○	p. 58
ISO Speed		○ <sup>8)</sup>	○ <sup>9)</sup>	○	— <sup>7)</sup>	—	p. 65				
Auto ISO Shift <sup>10)</sup>		○	○ <sup>2)</sup>	○	—	—	—	—	—	—	p. 66
Reverse Disp.		○	○	○	○	—	○	○	○	○	p. 23
Auto Rotate		○	○	○	○	△	○	○	○	○	p. 69
Auto Category		○	○	○	○	—	○	○	○	○	p. 23
Disp. Overlay		○	○	○	○	—	○	○	○	○	p. 37
IS Mode		○	○	○	○	△	○	○	○ <sup>11)</sup>	○	p. 31
Set  Button		○	○	○	○	△	○	○	○	○	p. 67

○ Setting available (● Default setting)

△ Setting can only be selected for the first image. (▲ Default setting)

■ (Shaded Area): Setting is retained even when the camera power is shut off.

(1) The recording pixels and frame rates for the (Movie) mode (p. 41).

(2) Cannot be set in long shutter mode.

(3) Default flash settings are as follows.

- : Auto
- : Flash Off

(4) Cannot be set in the mode.

(5) Only the delay before shooting starts can be set.

(6) Cannot be set when [Aspect Ratio] is set to [16:9].

(7) Automatically set by the camera.

(8) or can be selected.

(9) or cannot be set in long shutter mode.

(10) Cannot be used in , or .

(11) [Shoot Only] or [Panning] settings will change to [Continuous] in mode.