

FCC STATEMENT

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

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

Note:

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

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

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

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

Notice:

If static electricity or electromagnetism causes data transfer to discontinue midway (fail), restart the application or disconnect and connect the communication cable (USB, etc.) again.

TRADEMARK INFORMATION

- Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.
- Pentium® is a registered trademark of Intel Corporation.
- Macintosh® is a trademark of Apple Computer, Inc.
- SD™ is a trademark.
- Other names and products may be trademarks or registered trademarks of their respective owners.

READ THIS FIRST

Notice:

- Product design and specifications are subject to change without notice. This includes primary product specifications, software, software drivers, and user's manual. This User Manual is a general reference guide for the product.
- The product and accessories that come with your camera may be different from those described in this manual. This is due to the fact that different retailers often specify slightly different product inclusions and accessories to suit their market requirements, customer demographics, and geographical preferences. Products very often vary between retailers especially with accessories such as batteries, chargers, AC adapters, memory cards, cables, pouches, and language support. Occasionally a retailer will specify a unique product color, appearance, and internal memory capacity. Contact your dealer for precise product definition and included accessories.
- The illustrations in this manual are for the purpose of explanation and may differ from the actual design of your camera.
- The manufacturer assumes no liability for any errors or discrepancies in this user manual.

Safety Instructions

Read and understand all **Warnings** and **Cautions** before using this product.

WARNING

If foreign objects or water have entered the camera, turn the power OFF and remove the battery and the AC power adapter.

Continued use in this state might cause fire or electric shock. Consult the store of purchase.



If the camera has fallen or its case has been damaged, turn the power OFF and remove the battery and the AC power adapter.

Continued use in this state might cause fire or electric shock. Consult the store of purchase.



Do not disassemble, change or repair the camera.

This might cause fire or electric shock. For repair or internal inspection, ask the store of purchase.



Use the specified AC power adapter only with the indicated power supply voltage.

Use with any other power supply voltage might cause fire or electric shock.



Do not use the camera in areas near water.

This might cause fire or electric shock. Take special care during rain, snow, on the beach, or near the shore.



Do not place the camera on inclined or unstable surfaces.

This might cause the camera to fall or tilt over, causing injury.



Keep the battery out of the reach of children.

Swallowing battery might cause poisoning. If the battery is accidentally swallowed, immediately consult a physician.



Do not use the camera while you are walking, driving or riding a vehicle.

This might cause you to fall over or result in traffic accident.



CAUTION

Insert the battery paying careful attention to the polarity (+ or -) of the terminals.

Inserting the battery with its polarities inverted might cause fire and injury, or damage to the surrounding areas due to the battery rupturing or leaking.



Do not fire the flash close to anyone's eyes.

This might cause damage to the person's eyesight.



Do not subject the LCD monitor to impact.

This might damage the glass on the screen or cause the internal fluid to leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, rinse with fresh water. If the internal fluid has entered your eyes, consult a physician to receive treatment.



A camera is a precision instrument. Do not drop it, strike it or use excessive force when handling the camera.

This might cause damage to the camera.



Do not use the camera in humid, steamy, smoky, or dusty places.

This might cause fire or electric shock.



Do not remove the battery immediately after long period of continuous use.

The battery becomes hot during use. Touching a hot battery might cause burns.



Do not wrap the camera or place it in cloth or blankets.

This might cause heat to build up and deform the case, resulting in fire. Use the camera in a well-ventilated place.



Do not leave the camera in places where the temperature may rise significantly, such as inside a car.

This might adversely affect the case or the parts inside, resulting in fire.



Before you move the camera, disconnect cords and cables.

Failure to do this might damage cords and cables, resulting in fire and electric shock.



Warning:

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

FOR AMERICAN USERS

The following advisory is included in accordance with the laws of the State of California (USA):

WARNING:

This product contains chemicals, including lead, known to the States of California to cause cancer, birth defects or other reproductive harm. ***Wash hands after handling.***

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designated 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 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.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR CANADIAN USERS

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

FOR EU USERS



Note:

- This symbol mark and recycle system apply to EU countries and do not apply to countries in other areas of the world.

Your SANYO product is designed and manufactured with high quality materials and components which can be recycled and reused.

This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.

Please dispose of the equipment at your local community waste collection/recycling centre.

In the European Union there are separate collection systems for used electrical and electronic products.

Please help up to conserve the environment we live in!

Symbols used in this manual



Points giving some extended instructions or special points to pay attention to.

NOTE

You may find the answers to questions or problems concerning camera operation in the sections "Troubleshooting".

FCC information



Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

Declaration of Conformity

Model number: VPC-T700

Trade Name: SANYO

Responsible party: SANYO FISHER COMPANY

Address: 21605 Plummer Street
Chatsworth, California 91311

Telephone No.: (818) 998-7322

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

Canadian ICES-003 information

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

Notes on Battery Usage

When you use the battery, carefully read and strictly observe the **Safety Instructions** and the notes described below:

- Use only the specified battery (3.7V).
- Avoid using the battery in extremely cold environments as low temperatures can shorten the battery life and reduce camera performance.
- When you are using the new rechargeable battery or rechargeable battery that has not been used for an extended period of time (the battery that passed the expiry date is an exception) might affect the number of images that can be captured. Therefore, to maximize its performance and lifetime, we recommend that you fully charge the battery and discharge it for at least one complete cycle before use.
- The battery may feel warm after long period of continuous use of the camera or the flash. This is normal and not a malfunction.
- The camera may feel warm after long period of continuous use. This is normal and not a malfunction.
- If the battery is not to be used for a long period of time, remove it from the camera to prevent leakage or corrosion.
- If the battery is not to be used for a long period of time, store it after no battery power left. If the battery is stored for a long time in a fully charged state, its performance may be impaired.
- Always keep the battery terminals in a clean state.
- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the recycle instructions.
- We recommend the battery should be charged 8 hours as first time use.

CAUTION

- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type.

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CAMERA SPECIFICATIONS

TROUBLESHOOTING

INTRODUCTION

Overview

Congratulations on your purchase of the new digital camera.

Capturing high-quality digital images is fast and easy with this state-of-the-art smart camera. Equipped with a 7.0 megapixel CCD, this camera is capable of capturing images with a resolution of up to 3072 x 2304 pixels.

Other features provided by the camera include the following:

- LCD monitor -** 2.5" full color LTPS-TFT LCD (230K pixels) monitor makes it easy to frame your subject when capturing images. It also displays the images you have captured.
- Recording media -** 32 MB internal memory (approx. 27 MB for image storage). External memory supports SD/SDHC memory card.
- Optical zoom -** 3x optical lens allows you to capture telephoto and wide-angle images.
- Digital zoom -** 4x digital zoom and 3x optical zoom permit zoom photography of up to 12 times; 4x playback captured images to enlarge a selected portion of an image.
- Voice memo -** A voice memo can be recorded once for 30 seconds at photography mode immediately following a still image captured or at playback mode while viewing the images.
- Thumbnail display -** Display in sets of nine images on the LCD monitor for easier and quicker selection of images.
- Scene mode -** Simply select the scene mode that suits specific shooting conditions and subjects. This lets you shoot for the results you desire without complicated settings.

Package Contents

Carefully unpack your camera and ensure that you have the following items.

Common Product Components:

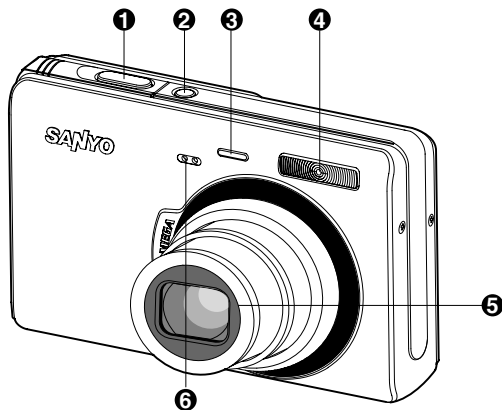
- Digital camera
- User's manual
- Software CD-ROM
- USB cable
- AV cable
- Camera strap
- Camera pouch
- AC power adapter
- Adapter converter (for "DC Jack to mini USB cable")
- Rechargeable lithium-ion battery

Common (Optional) Accessories:

- SD/SDHC memory card

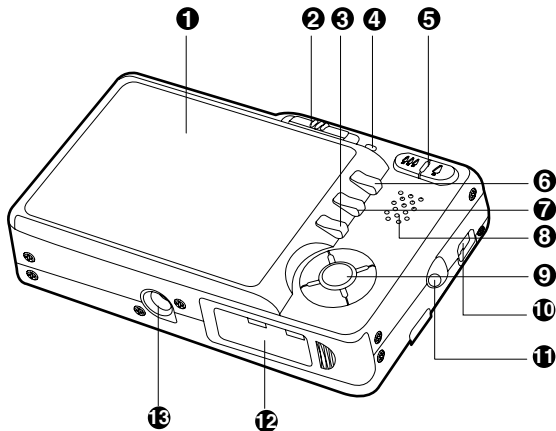
GETTING TO KNOW THE CAMERA

Front View



1. Shutter button
2. **ON/OFF** button
3. Self-timer LED
4. Flash
5. Lens
6. Microphone

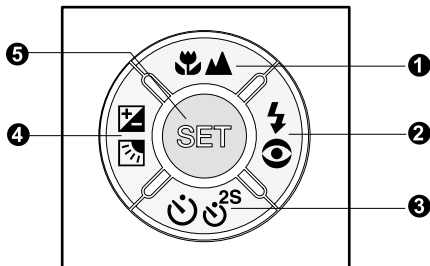
Rear View



1. LCD monitor
2. Mode switch
 - 📷 Capture mode
 - 📹 Video mode
 - ▶ Playback mode
3. **DISPLAY** button
4. Status LED
5. 🔍 Zoom in button
- ⏏ Zoom out button
6. **MENU** button

7. 🗑 Erase button
8. Speaker
9. **SET** /Direction button
10. PC/AV terminal
11. Strap holder
12. Battery/SD/SDHC memory card cover
13. Tripod socket

SET /Direction button



1. ▲ button
🌸▲ Focus button

2. ▶ button
⚡ Flash button















3. ▼ button
🕒^{2S} Self-timer button















4. ◀ button
☒ Exposure/ Backlight correction button

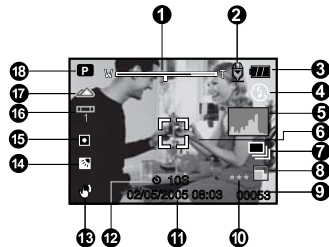
5. **SET** button

LCD Monitor Icons




















Capture mode []

1. Zoom status
2. Voice memo
3. Remaining battery status
 [] Full battery power
 [] Medium battery power
 [] Low battery power
 [] No battery power
 * [] AC adapter icon (if used)
4. Flash mode
 [Blank] Auto Flash
 [] Red-eye Reduction
 [] Forced Flash
 [] Flash Off
5. [] Histogram
6. Focus area (When the shutter button is pressed halfway)
7. Capture mode
 [Blank] Single
 [] Continuous
 [**AEB**] AEB
8. Image size
 [] 3072 x 2304
 [] 2560 x 1920
 [] 1600 x 1200
 [] 640 x 480
9. Possible number of shots
10. Quality
 [*******] Fine
 [******] Standard
 [*****] Economy

11. Date and time
12. Self-timer icon
 [] 10 sec.
 [] 2 sec.
 [] 10+2 sec.
13. Unsteady hold warning icon
14. [] Exposure compensation
 [] Backlight correction
15. Metering
 [Blank] Average
 [] Spot
16. White balance
 [Blank] Auto
 [] Incandescent
 [] Fluorescent 1
 [] Fluorescent 2
 [] Day Light
 [] Cloudy
 [] Manual
17. Focus mode
 [Blank] Auto focus
 [] Macro
 [] Infinity



18. Scene mode


- [**P**] Program AE
- [] Panorama
- [] Portrait Man
- [] Portrait Lady
- [] Landscape
- [] Sport
- [] Night Portrait
- [] Night Scene
- [] Candlelight
- [] Firework
- [**TEXT**] Text
- [] Sunset
- [] Sunrise
- [] Splash Water
- [] Flow Water
- [] Sepia
- [] Monochrome
- [] Snow
- [] Beach
- [] Pets
- [] User Setting

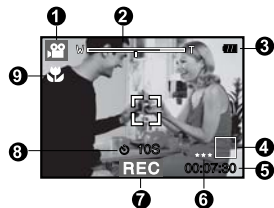


NOTE

- Each press of the **DISPLAY** button switches one step in the sequence of OSD full display, OSD full with Histogram, OSD display off.

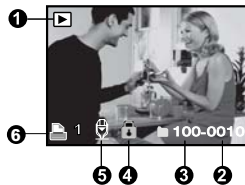
Video mode []

1. [] Video mode
2. Zoom status
3. Remaining battery status
4. Image size
5. Possible recording time / elapsed time
6. Quality
7. Recording indicator
8. Self-timer icon
9. Focus icon




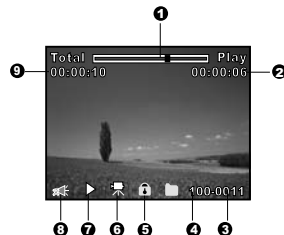
Playback mode [] -Still image playback

1. Playback mode
2. File number
3. Folder number
4. Protect icon
5. Voice memo
6. DPOF icon



Playback mode [] -Video playback

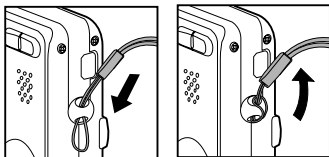
1. Video status bar
2. Elapsed time
3. File number
4. Folder number
5. Protect icon
6. Video mode
7. Playback mode
8. Sound off icon (When the  button is pressed during video playback.)
9. Total recorded time



GETTING STARTED

Attaching the Camera Strap

Attach the camera strap as shown in the illustration.



Inserting and Removing the Battery

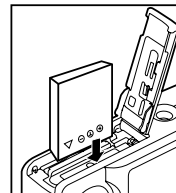
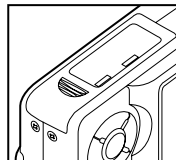
We highly recommend using specified rechargeable lithium-ion battery (3.7V) to fully demonstrate this camera's function. Charge the battery before using the camera. Make sure that the power of the camera is off before inserting or removing the battery.

Inserting the Battery

1. Open the battery/SD/SDHC memory card cover.
2. Insert the battery in the correct orientation shown.
 - Tilt the battery lock lever in the direction of the arrow and orient the battery so that its label is facing to the rear side of the camera, and then insert the battery.
3. Close the battery/SD/SDHC memory card cover.

Removing the Battery

Open the battery/SD/SDHC memory card cover and then release the battery lock lever. When the battery has come out a little, slowly pull it out the rest of the way.



Charging the Battery

The AC power adapter may charge the battery or operate the camera as power supply. Make sure that the power of the camera is off and then insert the battery before starting.

1. Connect one end of the adapter converter to the end of the AC power adapter.

- The camera need to be power off when charging the battery.

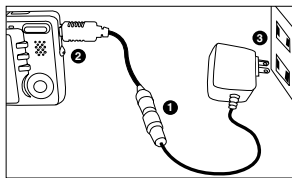
2. Insert the other end of the adapter converter to the PC/AV terminal on the camera.

3. Insert the other end of the AC power adapter into a wall outlet.

- The status LED lights green when charging is started and lights off when charging is completed. The LED lights red when a charging error has occurred or no battery is inserted inside the camera.

- It is recommended to fully discharge the battery before recharging.

- Charging time varies according to the ambient temperature and the status of battery.



NOTE

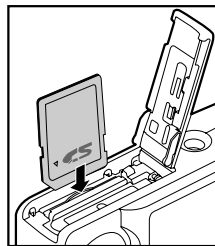
- This camera must be used with specified AC power adapter. Damage caused by the use of an incorrect adapter is not covered under the warranty.
- Always make sure that the camera is off before removing the battery.
- The battery may feel warm after it has been charged or immediately after being used. This is normal and not a malfunction.
- When using the camera in cold conditions, keep the camera and battery warm by storing it in a warm place such as an interior pocket between shots.
- If you open the battery cover without removing the battery, the battery power will not be disconnected.
- If you remove the battery, you have to insert the battery within 2 hours in order to make sure that the date and time will not be reset.
- When charging the battery, do not place the camera at the high temperature condition, such as inside the quilt, under sunshine...etc.

Inserting and Removing the SD/SDHC Memory Card (Optional Accessory)

The digital camera comes with 32 MB of internal memory (approx. 27 MB for image storage), allowing you to store captured still images or video clips in the digital camera. However, you can also expand the memory capacity by using an SD/SDHC memory card so that you can store more files.

Inserting the SD/SDHC memory card

1. Open the battery/SD/SDHC memory card cover.
2. Insert the SD/SDHC memory card in the correct orientation shown.
 - Hold the SD/SDHC memory card with its front side of the SD/SDHC memory card (printed arrow) facing the rear side of the camera, and then insert the card as far as it can go.
3. Close the battery/SD/SDHC memory card cover.



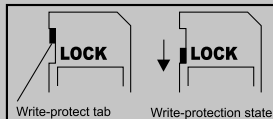
Removing the SD/SDHC memory card

Open the battery/SD/SDHC memory card cover, press lightly on the edge of the SD/SDHC memory card and it will eject.



NOTE

- To prevent valuable data from being accidentally erased from an SD/SDHC memory card you can slide the write-protected tab (on the side of the SD/SDHC memory card) to "LOCK".
- To save, edit or erase data on an SD/SDHC memory card, you must unlock the card.
- Be sure to format an SD/SDHC memory card with this digital camera before using it.





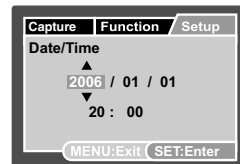
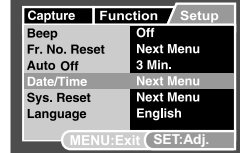
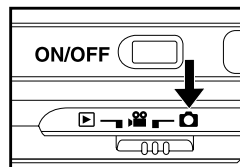
Setting the Date and Time

The date/time needs to be set if/when:

- Camera is turned on for the first time.
- Camera is turned on after leaving the camera without the battery for an extended period of time.







When the date and time information is not displayed on the LCD monitor, follow these steps to set the correct date and time.

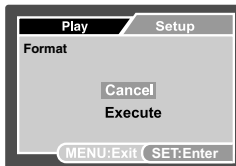
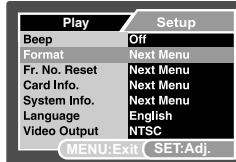
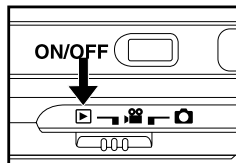
1. Slide the mode switch to [] or [].
2. Press the **MENU** button and select [Setup] menu with the **▶** button.
3. Select [Date/Time] with the **▲** / **▼** buttons and press the **SET** button.
 - The Date/Time setting screen will be displayed.
4. Select the item's field with the **◀** / **▶** buttons and adjust the value for the date and time with the **▲** / **▼** buttons.
 - The date and time is set in the order year-month-day-hour-minute.
 - The time is displayed in 24-hours format.
5. After confirming all settings are correct, press the **SET** button.



Formatting the SD/SDHC Memory Card or Internal Memory

This utility formats the internal memory (or memory card) and erases all stored images and data.

1. Slide the mode switch to [].
2. Press the **MENU** button and select [Setup] menu with  button.
3. Select [Format] with the  /  buttons, then press the **SET** button.
4. Select [Execute] with the  /  buttons, and press the **SET** button.
 - To cancel formatting, select [Cancel] and press the **SET** button.



- To format the internal memory, do not insert an SD/SDHC memory card into the camera. Otherwise, you will format the SD/SDHC memory card.
- Formatting the SD/SDHC memory card also erases the protected images. All data other than images are also erased. Before formatting the card, make sure that all the images are unnecessary.
- Formatting is an irreversible action and data cannot be recovered at a later time.
- An SD/SDHC memory card having any problem cannot be properly formatted.



Setting Image Resolution and Quality

Resolution and quality settings determine the pixel size (dimension), image file size, and compression ratio for your images. These settings affect the number of images that can be stored. As you get to know the camera, it is recommended that you try each quality and resolution setting to get an appreciation for the effects that these settings will have on your images.

Higher resolution and higher quality images offer the best photographic results but produce large file sizes. Therefore, few images will take up a lot of memory space.

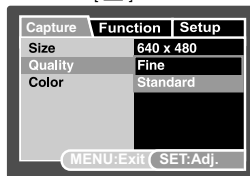
High resolution and quality settings are recommended for printed output and situations requiring the finest detail. Lower resolution/quality images take up less memory space and may be quite suitable for sharing images via e-mail, in a report, or on a web page.

To change image resolution or image quality, perform these steps below:

1. Slide the mode switch to [] or [].
2. Press the **MENU** button.
 - [Capture] menu is displayed.
3. Select [Size] with the **▲** / **▼** buttons, and press the **SET** button.
4. Select the desired setting with the **▲** / **▼** buttons, and press the **SET** button.
5. Select [Quality] with the **▲** / **▼** buttons, and press the **SET** button.
6. Select the desired setting with the **▲** / **▼** buttons, and press the **SET** button.
7. To exit from the menu, press the **MENU** button.







[] Mode





[] Mode

Possible number of shots (still image)

The table shows the approximate shots that you can capture at each setting based on the capacity of the internal memory and the SD/SDHC memory card.

Size	Quality	Internal Memory	SD/SDHC memory card capacity						
			64MB	128MB	256MB	512MB	1GB	2GB	4GB SDHC
 3072 x 2304	*** Fine	6	13	27	54	108	218	436	873
	** Standard	10	22	45	90	181	363	727	1456
	* Economy	14	31	63	126	254	509	1019	2039
 2560 x 1920	*** Fine	8	18	37	76	152	305	611	1223
	** Standard	13	29	59	119	239	480	960	1922
	* Economy	18	40	81	163	326	654	1310	2622
 1600 x 1200	*** Fine	15	34	70	141	283	567	1135	2271
	** Standard	24	54	110	221	443	887	1776	3556
	* Economy	34	75	151	304	610	1222	2447	4898
 640 x 480	*** Fine	61	135	272	547	1098	2199	4402	8809
	** Standard	86	188	381	766	1536	3067	6157	12322
	* Economy	111	242	489	984	1973	3951	7909	15829

Possible recording time / sec (video clip)








Size	Quality	Internal Memory	SD/SDHC memory card capacity						
			64MB	128MB	256MB	512MB	1GB	2GB	4GB SDHC
 640 x 480	*** Fine	00:00:12	00:00:29	00:00:59	00:02:01	00:04:04	00:08:10	00:16:23	00:32:49
	** Standard	00:00:14	00:00:32	00:01:06	00:02:14	00:04:31	00:09:05	00:18:11	00:36:26
 320 x 240	*** Fine	00:00:41	00:01:31	00:03:05	00:06:13	00:12:30	00:25:04	00:50:12	01:40:30
	** Standard	00:00:46	00:01:44	00:03:31	00:07:05	00:14:15	00:28:34	00:57:11	01:54:29

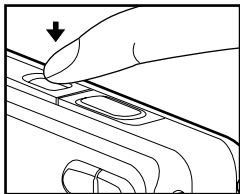
* If your memory card is not high speed write (over 2MB/Sec for random write), it will cause video clip auto stop or unexpected results. Your camera has to set to QVGA size and normal quality to prevent this problem if you want to use slow speed memory card.

PHOTOGRAPHY MODE

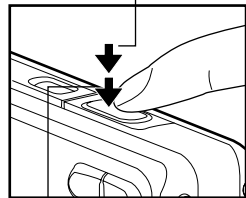
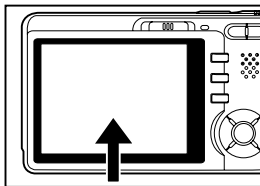
[] Capture Mode

Your camera is equipped with a 2.5" full color LTPS-TFT LCD monitor to help you compose images, playback recorded images/video clips or adjust menu settings.

1. Press the **ON/OFF** button to turn the power on.
 - The status LED lights green and the camera is initiated.
 - When the power is turned on, the camera will start in the mode that was set.
 - If the power is turned on at [] or [] mode, the lens will extend forward and it is ready for shooting. At both modes, if the mode switch is set to [], the lens barrel will retract into the camera body after 30 seconds.
 - If the power is turned on at [] mode, the lens will remain closed.
2. Slide the mode switch to [].
3. Compose your image in the LCD monitor.
 - Pressing the  button zooms in on the subject, and enlarges the subject on the LCD monitor.
 - Pressing the  button provides a wider angle image.
4. Press the shutter button.
 - Pressing the shutter button down halfway automatically focuses and adjusts the exposure, and pressing the shutter button down fully captures the images.
 - The focus area frame turns blue when the camera is in focus and the exposure is calculated.
 - When the focus or exposure is not suitable, the frame of the focus area turns yellow.
 - If the photographic preview is set to "On", the captured image will be displayed while the image is being recorded onto the SD/SDHC memory card.











Ⓐ Press down halfway

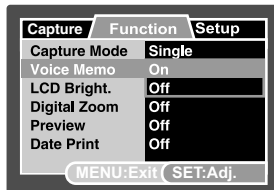


Ⓑ Press down fully

Recording Voice Memos

A voice memo can be recorded once for 30 seconds at still image mode immediately following a still image captured.

1. Slide the mode switch to [].
2. Press the **MENU** button, and select the [Function] menu with the  button.
 - [Function] menu is displayed.
3. Select [Voice Memo] with the  /  buttons, and press the **SET** button.
4. Select [On] with the  /  buttons, and press the **SET** button.
5. Press the **MENU** button to exit from the menu.
 - [] icon is displayed on the screen.
6. Compose the image, press the shutter button down halfway, then press it down fully.
 - [VOICE RECORDING] is displayed on the screen immediately, and the voice memo recording starts.
7. Press the shutter button one more time during recording, or wait for 30 seconds.
 - [VOICE RECORD END] will be displayed and the recording will end.
 - An [] icon is displayed with images that have been recorded with a voice memo.





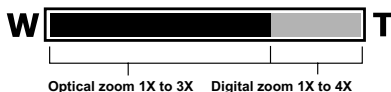
NOTE

- Voice memo is only available in [Single] capture mode.
- Voice memo is automatically fixed at [Off] in [Continuous] or [AEB] capture mode.

Using the Digital Zoom

Using a combination of 3 times optical zoom and 4 times digital zoom permits zoom photography of up to 12 times to suit the subject and the distance. The digital zoom is a compelling feature, the more an image is enlarged (zoomed), the more pixelated (grainier) the image will appear.

1. Slide the mode switch to [] or [].
2. To enable the digital zoom:
 - a. Press the **MENU** button.
 - b. Select [Function] with the ◀ / ▶ buttons.
 - c. Select [Digital Zoom] with the ▲ / ▼ buttons, and press the **SET** button.
 - d. Select [On] with the ▲ / ▼ buttons again, and press the **SET** button.
 - e. Press the **MENU** button to exit from the menu screen.
 - f. To activate the digital zoom, press and hold the ⬆ button completely until the image on the LCD monitor expands.



3. Press the shutter button to capture a “zoomed” image.





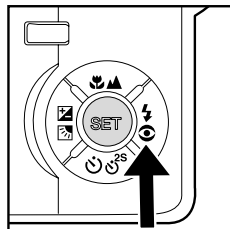
NOTE

- The zoom setting is automatically cancelled by either turning the camera off or the activation of the Auto Off function.





Setting the Flash

Set the flash for capturing images. The flash firing mode can be set to suit for the photographic conditions.



1. Slide the mode switch to [].
2. Toggle the  button to select the desired flash mode.







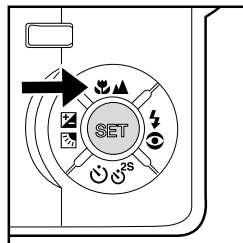
The available flash settings in different photography modes:

Flash mode	Description
[] Auto Flash	The flash fires automatically to suit the photographic conditions.
[] Red-eye Reduction	Use this mode to reduce the red-eye phenomenon when you want to capture natural-looking images of people and animals in low-light conditions. When capturing images, the red-eye phenomenon can be reduced by asking the subject (person) to look at the camera or get as close to the camera as possible.
[] Forced Flash	In this mode, the flash always fires. Use this mode for photographing under artificial light such as backlighting.
[] Flash Off	Use this mode when capturing images using indoor lighting, for stages and indoor competitions, and when the subject is too far away for the flash to be effective.




Setting the Focus

Images can be captured with the distance to the subject set by auto focus, [] macro or [] infinity.

1. Slide the mode switch to [] or [].
2. Toggle the   button to select the desired focus mode.



The table below will help you choose the appropriate focus mode:

Focus mode	Description
[] Auto Focus	Selects this when you want to leave the settings up to the camera so that you can capture images without paying attention to settings. Approximately 50cm/19.7inches to infinity (both Wide and Tele).
[] Macro	Selects this when you want to capture a close up image. Wide (zoom off) : Approximately 6cm/2.4inches to infinity. Tele (at optical zoom 3x) : Approximately 35cm/13.8inches to infinity.
[] Infinity	Selects this when you want to capture images of subjects at a distance of infinity.



Setting the Self-timer


This setting allows images to be captured with the self-timer.

1. Slide the mode switch to [] or [].



2. Toggle the  button to select the setting.

- For the [] mode.

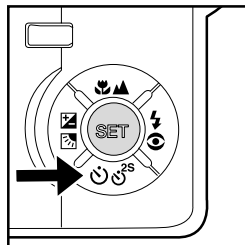
OFF → [ 10s] 10 sec. → [ 2s] 2 sec.

↑ [ 10+2s] 10+2 sec. ↓

- For the [] mode.

OFF → [ 10s] 10 sec. → [ 2s] 2 sec.




↑ [ 10+2s] 10+2 sec. ↓



3. Compose the image, press the shutter button down halfway, then press it down fully.














- The self-timer LED flashes and the image is captured after the preset time has elapsed.
- The countdown is displayed on the LCD monitor.
- To cancel the self-timer during operation, press the shutter button halfway.

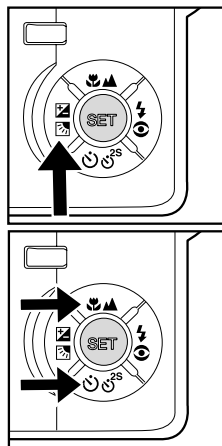
The table below will help you choose the appropriate self-timer mode:

Self-timer mode	Description
[ 10s] 10 sec.	The image is captured about 10 seconds after the shutter button is pressed.
[ 2s] 2 sec.	The image is captured about 2 seconds after the shutter button is pressed.
[ 10+2s] 10+2 sec.	One image is captured about 10 seconds after the shutter button is pressed, and the other image is captured again after 2 seconds. This is convenient when capturing group images in succession.

Exposure Compensation/Backlight Correction

Images can be captured with the overall screen intentionally made brighter or darker. These settings are used when a suitable brightness (exposure) cannot otherwise be obtained in circumstance where the difference in brightness between the subject and the background (the contrast) is large, or when the subject that you want to photograph is very small within the screen. Exposure can be set in 0.3 EV units.

- Slide the mode switch to [] and press the   button.
 - Each press of the   button displays the setting in the order of [Blank], [] Backlight Correction, and [] Exposure Compensation.
 - The exposure compensation value adjustment can only be made when the blue text appears.
- Set the exposure value with the  /  buttons.
 - Press the  button to increase the value.
 - Press the  button to decrease the value.
 - The setting range of the exposure compensation is as follows.
-2.0, -1.7, -1.3, -1.0, -0.7, -0.3, 0, +0.3, +0.7, +1.0, +1.3, +1.7, +2.0
 - Press the   button to confirm the setting.
 - The larger the value, the brighter the image. The smaller the value, the darker the image. The set value is displayed on the screen.




Effective Subjects and Set Values











- + (positive) compensation
 - * Printed matter comprising black text on whitish paper
 - * Backlighting
 - * Bright scenes or strong reflected light such as ski slopes
 - * When the sky accounts for a large area on the screen
- (negative) compensation
 - * People illuminated by a spotlight, in particular, against dark background
 - * Printed matter comprising white text on blackish paper
 - * Weak reflecting bodies such as evergreen trees or darkish leaves
- Backlight correction (+1.3, fixed)
 - * When the background is bright and the subject is dark.
 - * When subjects (people) have a light source such as the sun to their backs.












Setting the Scene Mode

By simply selecting one of the following 21 modes, you can capture the image with most appropriate settings.

- Slide the mode switch to [].
 - Press the **MENU** button.
 - Select [Scene Mode] with the **▲/▼** buttons, and press the **SET** button.
 - Select the desired scene mode with the **▲/▼** buttons, and press the **SET** button.
- Compose the image, press the shutter button down halfway, and then press it down fully.


The table below will help you choose the appropriate scene mode:

Scene mode	Description
[] Program AE	Select this mode to capture images without having to set special functions or manual adjustments. However, this useful mode also allows you to make changes on camera settings to suit the photographic condition.
[] Panorama	Select this mode to take a series of shots then stitch them together with software to make a single image.
[] Portrait Man	Select this mode when you want to capture an image that makes a man stand out against a defocused (blurred) background.
[] Portrait Lady	Select this mode when you want to capture an image that makes a lady stand out against a defocused (blurred) background.
[] Landscape	Select this mode when you want to capture landscape images with bright color.
[] Sport	Select this mode when you want to capture fast-moving subjects.
[] Night Portrait	Select this mode when you want to capture people with an evening or night scene background.
[] Night Scene	Select this mode when you want to capture dark scenes such as night views.
[] Candlelight	Select this mode when you want to capture images of candlelit scene, without spoiling the atmosphere.
[] Firework	Select this mode when you want to capture fireworks clearly with optimal exposure. The shutter speed becomes slower, so using a tripod is recommended.

Scene mode	Description
[] Text	Select this mode when you want to capture an image that contains black and white subjects like printed documents.
[] Sunset	Select this mode when you want to capture images of a beautiful sunset shot that vividly captures beautiful red colors.
[] Sunrise	Select this mode when you want to capture images of sunrise scene. This mode helps keep the deep hues in the scene.
[] Splash Water	Select this mode when you want to capture images of splashing water.
[] Flow Water	Select this mode when you want to capture the soft flowing water. Shutter speed is automatically slowed down while maintaining proper exposure, which produces an image with the water blurred into smooth flowing lines along with a sharply focused background.
[] Sepia	Select this mode when you want to capture a sepia image.
[] Monochrome	Select this mode when you want to capture a black & white image.
[] Snow	Select this mode when you want to capture clear snow scenes without darkened subjects and bluish tint.
[] Beach	Select this mode when you want to capture bright beach scenes and sunlit water surfaces.
[] Pets	Select this mode when you want to capture your pets. Shoot from the eye level of your pets.
[] User Setting	This mode allows you manually set the setting parameters and all these settings will be memorized.


Setting the Panorama Mode

This mode is designed to make it easier to take a series of shots then stitch them together with software to make a single image. You can capture a photographic subject that won't fit into a single frame, such as a landscape, and stitch it together later with a program such as Cool 360 or Photoshop application.

1. Slide the mode switch to [].
2. Press the **MENU** button.
3. Select [Scene Mode] with the **▲** / **▼** buttons, and press the **SET** button.
4. Select [Panorama] with the **▲** / **▼** buttons, and press the **SET** button.
5. Press the **MENU** button.
6. Select the photographic direction with the **◀** / **▶** buttons.
7. Shoot the first image.
 - The next image appears beside the previous image.
8. Orient the camera so that the second frame overlaps a small portion of the photographic subject of the first image and press the shutter button to capture the next image.
9. Follow the same steps to capture subsequent images in the sequence.
10. Finish the sequence by pressing the **MENU** button or switch to another mode after the last image has been recorded.


[] Video Mode

This mode allows you to record video clips at a resolution of 320 x 240 / 640 x 480 pixels. You can select audio to be recorded or not.

1. Slide the mode switch to [].
2. Compose the image.
3. Press the shutter button.
 - The recording of the video clip will start.
 - Pressing the shutter button one more time will end the recording of the video clip.
 - The recording time depends on the storage size and the subject of the image to be recorded.
 - Zoom function cannot be used during video recording.

















NOTE

- When recording a video clip, the flash cannot be used.
- If the access speed of your SD/SDHC memory card is not enough for recording video clips in the currently selected quality, a warning icon [] will appear, and then the video recording will stop. In this case, select a video quality lower than the current one.

[] PLAYBACK MODE

Playing Back Still Images

You can play back the still images on an LCD monitor.

- Slide the mode switch to [].
 - The last image appears on the screen.
- The images can be fed in reverse or fed forward with the  /  buttons.
 - To view the previous image, press the  button.
 - To view the next image, press the  button.
 - Pressing the  /  buttons during image playback will result in a 90 degree rotated display.
 - The  button rotates the image counterclockwise and displays it, whereas the  button rotates the image clockwise and displays it. A press of the button opposite to the direction in which the image was rotated will return the image to the normal display.
 - Press the  button to view the images in the thumbnail display. Images that have been selected with the  /  /  /  buttons will be indicated by a yellow frame. Press the **SET** button to display the selected image is displayed at its regular size.

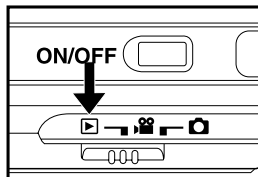
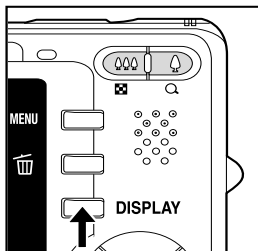




Image Display Information


You can switch the state of the information display by pressing the **DISPLAY** button when playing back images. Each press of the **DISPLAY** button switches the information display state in the following order:



- [] icon is displayed with the video data. Video clips cannot be rotated.
- A [] icon is displayed with images which have an audio memo recorded.
- Press the **SET** button to playback the voice memo data.

Playing Back Video Clips

You can play back video clips recorded on the LCD monitor. You can also play back sound if you recording with the audio.

1. Slide the mode switch to [].
 - The last image appears on the screen.
2. Select the desired video clip with the ◀ / ▶ buttons.
3. Press the **SET** button.
 - A press of the ▶ / ◀ buttons during playback allows fast forward play / fast reverse play.
 - To stop video playback, press the ▼ button.
This stops playback and returns to the start of the video clip.
 - To pause video playback, press the **SET** button.
This pauses video playback.
To cancel pause, press the **SET** button again.




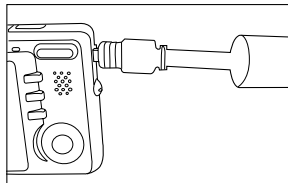
NOTE

- Video clips cannot be displayed rotated or enlarged.

Playing Back Still Images/Video Clips on a TV



You can also play back your images on a TV screen. Before connecting to any video devices, make sure to select NTSC/PAL to match the broadcast standard of the video equipment you are going to connect to the camera.

1. Slide the mode switch to [].
2. Connect one end of the AV cable to the PC/AV terminal of the camera.
3. Connect the other end to the AV input socket of the TV set.
4. Turn the TV and camera on.
5. Play back the still images/video clips.
 - The method of operation is the same as playing back still images and video clips on the camera.



Attaching Voice Memos

A maximum of 30 seconds of audio can be recorded like a memo for captured still images. The voice memo can be recorded only once.

- Slide the mode switch to [].
 - The last image appears on the screen.
- Select the image that you want to attach the voice memo with the ◀ / ▶ buttons.
- Press the shutter button.
 - [VOICE RECORDING] is displayed on the screen and recording starts.
- To stop recording voice memo during recording, press the shutter button again.
 - [VOICE RECORD END] will be displayed and the recording will end. A [] icon is displayed with images that have been recorded with a voice memo.

Playing back voice memo

A press of the **SET** button displays [VOICE PLAYBACK] and plays back the voice memo.




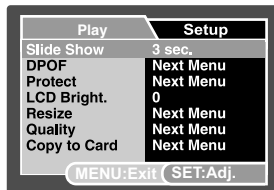
NOTE

- Voice memo is only available for still images.

Slideshow Display

The slideshow function enables you to playback your still images automatically in order one image at a time.

- Slide the mode switch to [].
- Press the **MENU** button.
 - The playback menu is displayed.
- Select [Slide Show] with the ▲ / ▼ buttons, and press the **SET** button.
 - The slideshow starts.
- To stop the slide show during playback, press the **SET** button.
 - The image is displayed on screen when you press the **SET** button.















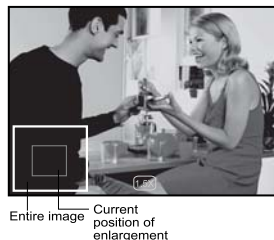
NOTE

- The Auto Off function does not operate during slide show.
- All still images in the folder are automatically played back.

Zoom Playback

This mode also allows you to enlarge your image on the selected portion of the image to check for small details.

1. Slide the mode switch to [].
2. Press the  /  buttons to select the image you want to enlarge.
 - You can also select the image you want to enlarge from the thumbnail display.
3. Adjust the zoom ratio with the  /  buttons.
 - Pressing the  button enlarges the image.
 - To return to normal magnification, press the  button.
 - The magnification factor is displayed on the LCD monitor.
 - The image is displayed enlarged, and a blue frame and yellow frame are displayed on the LCD monitor.
 - The blue frame indicates the entire image, while the yellow frame shows the location of the currently enlarged area.
4. Press the  /  /  /  buttons to select the area to enlarge.
5. To return to regular display, toggle the  button until the regular display appears on the screen.






NOTE

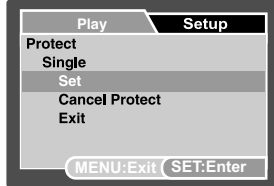
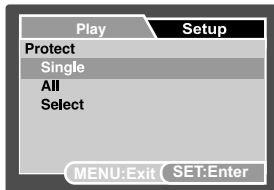
- The range of magnification factor is from 1x to 4x in 0.5x increments.

Protecting Images

Set the data to read-only to prevent images from being erased by mistake.

Protecting Images

1. Slide the mode switch to [].
2. Select the image that you want to protect with the ◀ / ▶ buttons.
3. Press the **MENU** button.
 - The playback menu is displayed.
4. Select [Protect] with the ▲ / ▼ buttons, and press the **SET** button.
5. Select [Single] or [All] with the ▲ / ▼ buttons, and press the **SET** button.
6. Select [Set] with the ▲ / ▼ buttons, and press the **SET** button.
 - Protection is applied to the image and the camera returns to the playback mode.
 - The protect icon [] is displayed with protected images. When [All] has been selected, [] is displayed with all the images.




Canceling the Protection

To cancel protection for only one image, display the image that you want to remove the image protection.

1. Select [Protect] with the ▲ / ▼ buttons from the playback menu, and press the **SET** button.
2. Select [Single] or [All] with the ▲ / ▼ buttons, and press the **SET** button.
3. Select [Cancel Protect] with the ▲ / ▼ buttons, and press the **SET** button.
 - The removal of image protection is executed and the camera returns to the playback mode.

Protecting multiple images simultaneously

1. Select [Protect] with the ▲ / ▼ buttons from the playback menu, and press the **SET** button.
2. Select [Select] with the ▲ / ▼ buttons, and press the **SET** button.
 - The images are displayed in the thumbnail display.
3. Select the image you want to protect with the ▲ / ▼ / ◀ / ▶ buttons, and press the **DISPLAY** button.
 - The protect icon [] is displayed with protected images. Selecting a protected image and pressing the **DISPLAY** button again will cancel the protection. This procedure is repeated to select multiple images.
4. Press the **SET** button.
 - Protection and cancellation the protection are executed and the camera returns to playback mode.




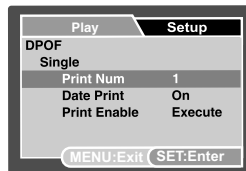
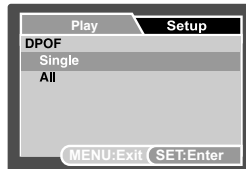
NOTE


- Formatting an SD/SDHC memory card overrides protection, and erases all images regardless of their protected status.

DPOF Settings

DPOF is the abbreviation for Digital Print Order Format, which allows you to embed printing information on your memory card. You can select the images to be printed and how many prints to make with the DPOF menu in the camera and insert the memory card to the card compatible printer. When the printer starts printing, it will read the embedded information on the memory card and print the specified images.

- Slide the mode switch to [].
- Select the image that you want to set DPOF with the ◀ / ▶ buttons.
- Press the **MENU** button.
 - The playback menu is displayed.
- Select [DPOF] with the ▲ / ▼ buttons, and press the **SET** button.
 - The DPOF setting screen is displayed.
- Select [Single] or [All] with the ▲ / ▼ buttons, and press the **SET** button.
 - [Single]: Sets DPOF for each individual image.
 - [All]: Sets DPOF for all images at once.
- Select [Print Num] with the ▲ / ▼ buttons, and press the **SET** button.
 - This displays the number of prints setting screen.
- Set the number of prints with the ▲ / ▼ buttons, and press the **SET** button.
 - You can set up to 9 prints for each image.
- Select [Date Print] with the ▲ / ▼ buttons, and press the **SET** button.
 - The date setting screen appears.
- Select date to [On] or [Off] with the ▲ / ▼ buttons, and press the **SET** button.
 - [On]: The date of the image will also be printed.
 - [Off]: The date of the image will not be printed.
- Select [Print Enable] with the ▲ / ▼ buttons, and press the **SET** button.
- Select [Execute] with the ▲ / ▼ buttons, and press the **SET** button.



- This creates a file containing the DPOF information, and when the operation is finished, the screen returns to the playback mode.
- The DPOF icon [] is displayed on each image that has set up DPOF settings.



NOTE

- The date that is printed on the image is the date set on the camera. To print the correct date on the image, set the date on the camera before you capture the image. Refer to section in this manual titled “Setting the Date and Time” for further details.

Resizing an Image

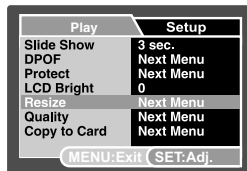
Resizes a previously saved image.

Resizing replaces the original image with the changed image. Only resizing to the smaller size is available.

The following images cannot be resized:

- Image size (640 x 480)
- Image captured with other camera
- Protected images
- Video clips
- Images cannot be resized when the SD/SDHC memory card is write protected

1. Select the image that you want to resize.
2. Press the **MENU** button.
3. Select [Resize] with the **▲** / **▼** buttons, and press the **SET** button.
4. Select the image size that you want to change with the **▲** / **▼** buttons, and press the **SET** button.
 - To quit resizing, press the **MENU** button.
 - When resizing ends, the screen returns to playback mode.








NOTE

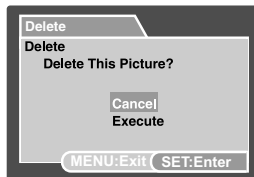
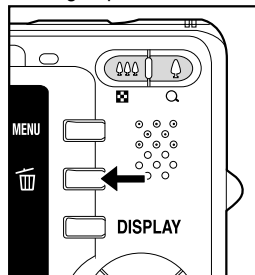
- It is possible to reduce the size of an image. It is not possible to increase the size of an image, or to restore size after it has been decreased.

Erasing Images

Erasing at Photography Mode (Quick Delete Function)







The quick delete function enables you to delete the last-captured image during capture.

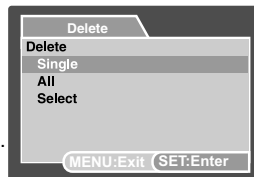
1. Slide the mode switch to [] or [].
2. Press the  button.
 - The last image and quick delete menu appear on the screen.
3. Select [Execute] with the  /  buttons.
4. Press the **SET** button to confirm the deletion.
 - To not delete, select [Cancel], and press the **SET** button.



Erasing at Playback Mode

Erasing single image / Erasing all images

1. Slide the mode switch to [].
 - The last image will be displayed on the screen.
2. Select the image you want to erase with the  /  buttons.
3. Press the  button.
 - The deletion menu will be displayed.
4. Select [Single] or [All] with the  /  buttons, and press the **SET** button.
 - [Single]: Erases the selected image or the last image.
 - [All]: Erases all of the images except for the protected images.
 - [Select]: Erases a number of selected images.



5. Select [Execute] with the ▲ / ▼ buttons, and press the **SET** button.
 - To not erase, select [Cancel], and press the **SET** button.



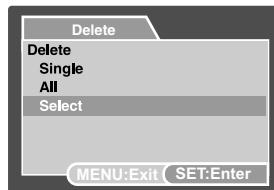
NOTE

- Deleting an image will not affect sequential image numbering. For example, if you delete image number 240, the next captured image will be numbered 241 even though 240 no longer exists. In other words, an image-number is retired when an image is deleted and will not be reused or reassigned to another subsequently captured image.

Erasing selected images

This erases a number of selected images.


1. Slide the mode switch to [].
2. Press the button.
 - The deletion menu will be displayed.
3. Select [Select] with the ▲ / ▼ buttons, and press the **SET** button.
 - The images are displayed in the thumbnail display.
4. Select the image you want to erase with the ▲ / ▼ / ◀ / ▶ buttons, and press the button.
 - The [] icon will be displayed. One more press of the erase button will cancel the operation. Repeat this procedure and select all the images that you want to erase.
5. Press the **SET** button.



MENU OPTIONS

Capture Menu (Capture)

This menu is for the basic settings to be used when capturing still images.

1. Slide the mode switch to [].
2. Press the **MENU** button.
 - [Capture] menu is displayed.
3. Select the desired [Capture] option item with the **▲** / **▼** buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the **▲** / **▼** buttons, and press the **SET** button.
5. To exit from the menu, press the **MENU** button.

Scene Mode

Refer to section in this manual titled “Setting the Scene Mode” for further details.




Size

This sets the size of the image that will be captured.

- * [] 3072 x 2304
- * [] 2560 x 1920
- * [] 1600 x 1200
- * [] 640 x 480

Quality

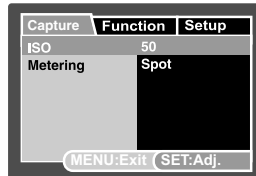
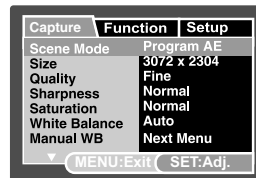
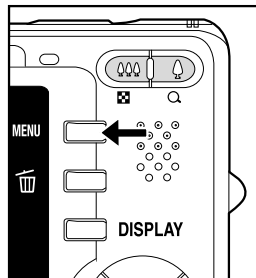
This sets the quality (compression rate) at which the image is captured.

- * [] Fine
- * [] Standard
- * [] Economy

Sharpness

This sets the sharpness of the image that will be captured.

- * Hard / Normal / Soft









Saturation

This sets the saturation of the image that will be captured.

- * High / Normal / Low

White Balance

This sets the white balance capturing under a variety of lighting conditions and permits images to be captured that approach the conditions that are seen by the human eye.

- * [**Blank**] Auto
- * [] Incandescent
- * [] Fluorescent 1
- * [] Fluorescent 2
- * [] Day Light
- * [] Cloudy
- * [] Manual

Manual WB

This manually sets the white balance and stores it. Use of this is convenient when the white balance does not offer a good match.

Before select [Execute] determine the subject (such as a white paper) that will be used to set the white balance.

- * Cancel / Execute


ISO

This sets the sensitivity for capturing images. When the sensitivity is raised (and the ISO figure is increased), photography will become possible even in dark locations, but the more pixelated (grainier) the image will appear.


- * 50 / 100 / 200 / 400 / Auto

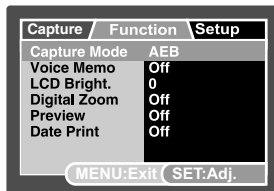
Metering

This sets the metering method for calculating the exposure.

- * [**Blank**] Average: Averages the light metered from the entire frame, but gives greater weight to the subject matter at the center.
- * [] Spot: A very small portion of the center of the screen is measured, and the exposure is calculated.


Capture Menu (Function)

1. Slide the mode switch to [].
2. Press the **MENU** button, and select the [Function] menu with the **▶** button.
 - [Function] menu is displayed.
3. Select the desired [Function] option item with the **▲** / **▼** buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the **▲** / **▼** buttons, and press the **SET** button.
5. To exit from the menu, press the **MENU** button.



Capture Mode

This sets the recording method at the time of capturing images.

- * **[Blank]** Single: Captures an image at a time.
- * [] Continuous: Permits continuous photography of 3 images max.
- * **[AEB]** AEB: Permits 3 consecutive images in the order of standard exposure, underexposure and overexposure compensation.



- In [Continuous] and [AEB] capture mode, the voice memo is automatically fixed at [Off].

Voice Memo

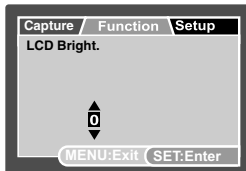
Refer to section in this manual titled "Recording Voice Memos" for further details.

- * On / Off

LCD Bright.

Select a brightness level for the LCD monitor.

The LCD becomes brighter with the ▲ button and darker with the ▼ button. The adjustment range is from -5 to +5.



Digital Zoom

This sets whether or not to use digital zoom at the time of photography.

* On / Off



- When [Voice Memo] is set to [On], the preview setting is also fixed at [On].

Preview

This sets whether or not to display the captured image on the screen immediately after the image is captured.

* On / Off



- When [Preview] is set to [Off], [Voice Memo] setting is also fixed at [Off].

Date Print

The date of recording can be printed directly on the still images.

This function must be activated before the image is captured.


* On / Off

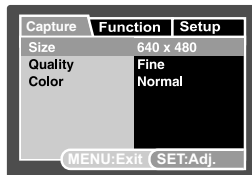


Date imprinted here

Video Menu (Capture)



This menu is for the basic settings to be used when recording video clips.

1. Slide the mode switch to [].
2. Press the **MENU** button.
 - [Capture] menu is displayed.
3. Select the desired [Capture] option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the ▲ / ▼ buttons, and press the **SET** button.
5. To exit from the menu, press the **MENU** button.



Size

This sets the size of the video clip that will be captured.

- * [] 640 x 480
- * [] 320 x 240

Quality

This sets the quality (compression rate) at which the video clip is captured.


- * [] Fine
- * [] Standard

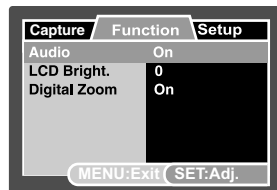
Color

This sets the color of the video clip that will be captured.

- * Normal / Vivid / Sepia / Monochrome

Video Menu (Function)

1. Slide the mode switch to [].
2. Press the **MENU** button, and select the [Function] menu with the **▶** button.
 - [Function] menu is displayed.
3. Select the desired [Function] option item with the **▲** / **▼** buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the **▲** / **▼** buttons, and press the **SET** button.
5. To exit from the menu, press the **MENU** button.



Audio

This sets whether or not to record audio at the time of video recording.

* On / Off

LCD Bright.


Refer to section in this manual titled “LCD Bright.” in Capture Menu (Function) for further details.

Digital Zoom

Refer to section in this manual titled “Digital Zoom” in Capture Menu (Function) for further details.

Playback Menu

In the [] mode, set which settings are to be used for playback.

1. Slide the mode switch to [].
2. Press the **MENU** button.
 - The playback menu is displayed.
3. Select the desired option item with the **▲** / **▼** buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the **▲** / **▼** buttons, and press the **SET** button.
5. To exit from the menu, press the **MENU** button.



Slide Show

Refer to section in this manual titled “Slideshow Display” for further details.

DPOF

Refer to section in this manual titled “DPOF Settings” for further details.

Protect

Refer to section in this manual titled “Protecting Images” for further details.

LCD Bright.

Refer to section in this manual titled “LCD Bright.” in Capture Menu (Function) for further details.

Resize

Refer to section in this manual titled “Resizing an Image” for further details.

Quality

Changes the quality (compression rate) of a recorded image. Compresses images down to half of their size or more, overwrites an old size images with a newly compressed image. Only quality changing to the lower quality level is available.



Copy to Card

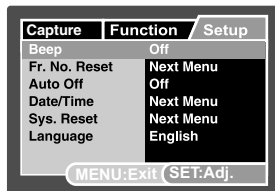
Allows you to copy your files from the digital still camera’s internal memory to an SD/SDHC memory card. Of course, you can only do this if you have an SD/SDHC memory card installed and some files in internal memory.

* Cancel / Execute

Setup Menu (In Photography Mode)

Set your camera's operating environment.

1. Slide the mode switch to [] or [].
2. Press the **MENU** button, and select the [Setup] menu with the **▶** button.
■ [Setup] menu is displayed.
3. Select the desired [Setup] option item with the **▲ / ▼** buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the **▲ / ▼** buttons, and press the **SET** button.
5. To exit from the menu, press the **MENU** button.



Beep

This sets whether or not to mute the camera sound each time you press the camera button.

* On / Off

Fr. No. Reset

This creates a new folder. The captured images are recorded to the newly created folder from number 0001.

* Cancel / Execute

Auto Off

If no operation is performed for a specific period of time, the power to the camera is automatically turned off. This feature is useful to reduce battery wear.

* 1 Min. / 2 Min. / 3 Min. / Off

Date/Time

Refer to section in this manual titled "Setting the Date and Time" for further details.

Sys. Reset







This returns all basic settings to the camera's default settings. The time setting will not be reset.

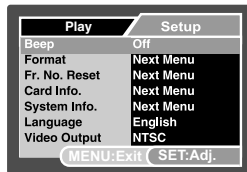
* Cancel / Execute

Language

Specify in which language menus and messages are to be displayed on the LCD monitor.

Setup Menu (In Playback Mode)

1. Slide the mode switch to [].
2. Press the **MENU** button, and select the [Setup] menu with the  button.
 - [Setup] menu is displayed.
3. Select the desired [Setup] option item with the  /  buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the  /  buttons, and press the **SET** button.
5. To exit from the menu, press the **MENU** button.



Beep

Refer to section in this manual titled “Beep” in Setup Menu (In Photography Mode) for further details.

Format

Refer to section in this manual titled “Formatting the SD/SDHC Memory Card or Internal Memory” for further details.

Fr. No. Reset

Refer to section in this manual titled “Fr. No. Reset” in Setup Menu (In Photography Mode) for further details.

Card Info.

This displays the free capacity of the SD/SDHC memory card.

System Info.

This displays the firmware version of the camera.

Language

Refer to section in this manual titled “Language” in Setup Menu (In Photography Mode) for further details.

Video Output

This sets video output system of the video equipment that you are going to connect to the camera.

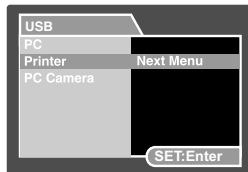
* NTSC / PAL

CONNECTING TO A PICTBRIDGE COMPLIANT PRINTER

If a printer that supports PictBridge is available, images can be printed by connecting the digital still camera directly to the PictBridge-compatible printer without using a computer.

Connecting the camera to the printer

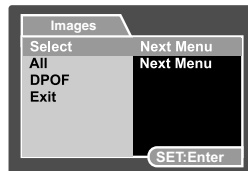
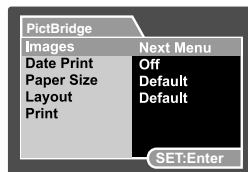
1. Connect one end of the USB cable to the PC/AV terminal of the camera.
2. Connect the other end of the USB cable to the USB port on the printer.
3. Turn on your camera.
 - The [USB] screen appears.
4. Select [Printer] with the ▲ / ▼ buttons, and press the **SET** button.



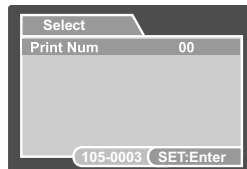
Printing images

When the camera is properly connected to a PictBridge compliant printer, the PictBridge menu is displayed on the monitor.

1. Select the item you want to configure with the ▲ / ▼ buttons, and press the **SET** button.
 - [Images]: Select whether you want to print specific image or all images. You may also select printing number for specific image.
 - [Date Print]: According to the printer type, select whether you want to print the image with date imprint or not.
 - [Paper Size]: Select the desired paper size according to the printer type.
 - [Layout]: Select the desired printing layout according to the printer type.
 - [Print]: After all settings are configured, select this item to start printing.
2. If you select [Images] in the previous step, the figure shown on the right hand side will appear. Select [Select], [All] or [DPOF] with the ▲ / ▼ buttons, and press the **SET** button.
 - [Select]: Select to print one specific image.
 - [All]: Select to print all images.
 - [DPOF]: Select to print images with DPOF settings.
 - [Exit]: Exit from Images option.



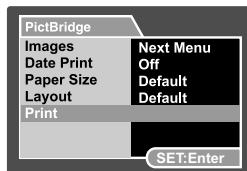
3. If you select [Select] in the previous step, the figure shown on the right hand side will appear.
- Select the image that you want to print with the ◀ / ▶ buttons.
 - Select the [Print Num] (up to 99) with the ▲ / ▼ buttons.
 - After selecting the desired image and printing number, press the **SET** button to confirm.



4. Select [Exit] with the ▲ / ▼ buttons, and press the **SET** button.



5. Select [Print] with the ▲ / ▼ buttons, and press the **SET** button to start printing.



6. The printing starts and the figure shown on the right hand side appears.
- The [COMPLETE] will be displayed temporarily, reminding you that the printing procedure is finished.
 - If a print error is detected, the [PRINT ERROR] will be displayed.



TRANSFERRING RECORDED IMAGES AND VIDEOS TO YOUR COMPUTER

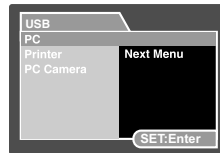
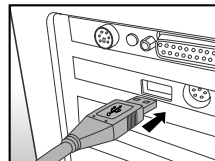
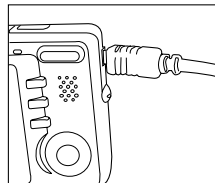
System Requirements

Windows	Macintosh
<ul style="list-style-type: none">■ Pentium III 600 MHz or higher■ Windows 2000/XP/Vista■ 64MB RAM■ 128MB hard disk space■ CD-ROM drive■ Available USB port	<ul style="list-style-type: none">■ PowerPC G3/G4■ OS 9.0 or later■ 64MB RAM■ 128MB hard disk space■ CD-ROM drive■ Available USB port

Connecting the Camera to Your Computer

1. Connect one end of the USB cable to the PC/AV terminal of the camera.
2. Connect the other end of the USB cable to an available USB port on your computer.
3. Turn on your camera.
 - The [USB] screen appears.
4. Select [PC] with the ▲ / ▼ buttons, and press the **SET** button.
5. From the Windows desktop, double click on “My Computer”.
6. Look for a new “Removable disk” icon. This “Removable disk” is actually the memory card in your camera. Typically, the camera will be assigned drive letter “e” or higher.
7. Double click on the removable disk and locate the DCIM folder.
8. Double click on the DCIM folder to open it to find more folders.
 - Your recorded images and video clips will be inside these folders.
 - Copy & Paste or Drag-N-Drop image and video files to a folder on your computer.

Mac users: Double-click the “untitled” or “unlabeled” disk drive icon on our desktop. iPhoto may automatically launch.



Downloading Images and Video Files

When the camera is turned on and connected to your computer, it is considered to be a disk drive, just like a floppy disk or CD. You can download (transfer) images by copying them from the “Removable disk” (“untitled” or “unlabeled” disk on a Macintosh) to your computer hard drive.

Windows

Open the “removable disk” and subsequent folders by double clicking on them. Your images are inside these folder(s). Select the images that you want, and then choose “Copy” from the “Edit” menu. Open the destination location (folder) and choose “Paste” from the “Edit” menu. You may also drag and drop image files from the camera to a desired location.

Macintosh

Open the “untitled” disk icon, and the destination location on your hard disk. Drag and drop from the camera to the desired destination.



NOTE

- Memory card users may prefer to use a memory card reader (highly recommended).
- Video playback application is not included with the package. Make sure that video playback application has been installed in your computer.

USING THE CAMERA AS A PC CAMERA

Your camera can act as a PC camera, which allows you to videoconference with business associates, or have a real-time conversation with friends or family.



NOTE

- Video conferencing (or video editing) software is not included with the camera.
- This mode is not supported for Mac.

General system requirements for videoconference

To use the camera for videoconference, your computer system must include:

- Microphone
- Sound card
- Speakers or headphones
- Network or Internet connection

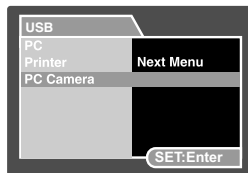
Install the PC Camera Driver

The PC-camera driver included on the CD-ROM is exclusively for Windows. The PC camera function is not supported for Mac platforms.

1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "**Install PC-Cam driver**". Follow the on-screen instructions to complete the installation. After the driver installation is completed, restart your computer.

Connect the Camera to Your Computer

1. Connect one end of the USB cable to the PC/AV terminal on the camera.
2. Connect the other end of the USB cable to an available USB port on your computer.
3. Turn on your camera.
 - The [USB] screen appears.
4. Select [PC Camera] with the ▲ / ▼ buttons, and press the **SET** button.
5. Position the camera steadily on top of your computer monitor or use a tripod.



Run Your Application Software (i.e. Windows NetMeeting)

To use Windows NetMeeting for videoconference:

1. Go to **Start => Programs => Accessories => Communications => NetMeeting** to launch the NetMeeting program.
2. Click the Start Video button to view live video.
3. Click the Place Call button.
4. Type the e-mail address or the network address of the computer that you are calling.
5. Click Call. The person that you are calling must also have Windows NetMeeting running and be willing to accept your call to start the videoconference.



NOTE

- The video resolution for videoconferencing applications is generally 320 x 240.
- For more information about the operation of videoconference application software, refer to its respective help documentation.

EDITING SOFTWARE INSTALLATION

Installing Photo Explorer

Ulead® Photo Explorer provides a simple and efficient way to transfer, browse, modify and distribute digital media. Acquire photos, video or sound clips from various digital device types and easily browse or add personal descriptions; make timely modifications; or distribute the media through the medium of your choice: E-mail, Print, Slideshow Presentations. It is an indispensable all-in-one tool for owners of digital cameras, WebCams, DV camcorders, scanners, or anyone who strives to effectively organize a large collection of digital media.

To install Photo Explorer:

1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click **"INSTALL PHOTO EXPLORER 8.0"**. Follow the on-screen instructions to complete the installation.

Installing Photo Express

Ulead® Photo Express is complete photo project software for digital images. The step-by-step workflow, visual program interface, and in-program help assist users in creating exciting photo projects. Acquire digital photos effortlessly from digital cameras or scanners. Organize them conveniently with the Visual Browse mode. Use hundreds of ready-to-use templates such as albums, cards, posters, slideshows, and more. Edit and enhance images with photo editing tools, photographic filters, and special effects. Embellish projects by adding creative design elements such as frames, callouts, and stamp objects. Share results with family and friends via e-mail and multiple print options.

To install Photo Express:

1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click **"INSTALL PHOTO EXPRESS 5.0"**. Follow the on-screen instructions to complete the installation.

Installing Cool 360

Ulead® COOL 360™ quickly and easily allows photo editing consumers to transform a series of photos into 360° or wide-angle panoramic scenes for an immersive viewing experience. COOL 360's intuitive interface and easy-to-use wizard deliver great-looking panoramas fast while advanced warping, blending and alignment tools ensure excellent results. Share finished panoramas via email, create Web pages or insert them into documents and presentations.

To install Cool 360:

1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "**INSTALL Cool 360 SE**". Follow the on-screen instructions to complete the installation.



NOTE

- For more information about the operation of the application software, refer to its respective help documentation.
- For Windows 2000/XP users, please make sure to install and use the application software in "Administrator" mode.
- The application software are not supported on the Mac.
- The application software are not supported on the Windows Vista.

CAMERA SPECIFICATIONS

Item	Description
Image sensor	1/2.5" CCD sensor (7.0 megapixels)
Image resolution	<Still image> 3072 x 2304, 2560 x 1920, 1600 x 1200, 640 x 480 <Video clip> 640 x 480 (30 fps), 320 x 240 (30 fps)
LCD monitor	2.5" full color LTPS-TFT LCD (230K pixels)
Recording media	32 MB internal memory (approx. 27 MB for image storage) Supports SD/SDHC memory card (up to 4 GB) (optional)
Compression format	JPEG
File format	DCF, EXIF 2.2, DPOF, AVI
Lens	3x optical zoom lens Aperture range: 2.8(W) – 4.8(T) Focal length: 5.8mm – 17.4mm (equivalent to 35mm – 105mm on a 35mm camera)
Focus range	Standard: Approx. 50cm/19.7inches to infinity Macro: Approx. 6cm/2.4inches to infinity (Wide) Approx. 35cm/13.8inches to infinity (Tele)
Shutter speed	1/2 – 1/2000 sec.
Digital zoom	4x (Capture mode) 4x (Playback mode)
Flash effective range	0.6m – 3.0m (Wide) 0.6m – 2.1m (Tele)
Terminal	USB/AV/DC-IN (3 in 1 terminal)
Power supply	Rechargeable Lithium-ion battery (3.7V) AC power adapter
Dimensions	Approx. 88.5 x 55 x 19.1mm (without protruding parts)
Weight	Approx. 110g (without battery and SD/SDHC memory card)

*Design and specifications are subject to change without notice.

TROUBLESHOOTING

Refer to the symptoms and solutions listed below before sending the camera for repairs. If the problem persists, contact your local reseller or service center.

Power Supply

Symptom	Cause	Solution
The power does not come on.	The battery is not inserted.	Insert the battery correctly.
	The battery is exhausted.	Recharge the battery.
The power cuts out during use.	The camera was left unattended and unused, so the auto power off cuts it off.	Turn the power back on.
The battery runs out quickly.	It is being used in extreme low temperature.	
	Many shots are being captured in dark places inside, requiring flash.	
	The battery is not fully charged.	Fully charge the battery and
	The battery is not used for an extended period of time after charged.	discharge it for at least one complete cycle before use to maximize its performance and lifetime.
The battery or camera feels warm.	Long period of continuous use of the camera or the flash.	

Shooting

Symptom	Cause	Solution
Even if I press the shutter button, the camera does not shoot.	The battery is running low.	Recharge the battery.
	The power is not on.	Turn the power on.
	The camera is not in shooting mode.	Slide the mode switch to shooting mode.
	The shutter button is not pressed all the way down.	Press the shutter button all the way down.
	The memory card does not have any free capacity.	Insert a new memory card, or delete unwanted files.
	End of memory card life.	Insert a new memory card.
	The flash is charging.	Wait until the status LED off.
	The memory card is unrecognized by the camera.	Format the memory card in this camera before its first use or when it was used other than this camera.
	The auto power off function is activated.	Turn the power on again.
Images do not appear on the LCD monitor.	The memory card is write-protected.	Remove the write-protection.
	The power is not on.	Turn the power on.
Although it is set to auto focus, it does not focus.	LCD monitor is dark.	Adjust the brightness of the LCD monitor in the menu.
	The lens is dirty.	Wipe clean with a soft, dry cloth or lens paper.
The flash does not fire. The flash cannot recharge. Even though the flash fired, the image is dark.	The distance to the subject is smaller than the effective range.	Get your subject within the effective focus range.
	The flash is set to flash off.	Set the flash to something other than flash off mode.
The image is dark.	The distance to the subject is greater than flash effective range.	Get closer to your subject and shoot.
	The image is captured in a dark place while set to flash off.	Set the flash to something other than flash off mode.
The image is too bright.	It is under-exposed.	Set the exposure compensation to a larger value.
	It is over-exposed.	Set the exposure compensation to a smaller value.
The image lacks natural color.	The image was captured in conditions that are hard for auto white balance to adjust to.	Add a white object to the composition.

Playback

Symptom	Cause	Solution
Cannot playback.	It is not set to playback mode.	Slide the mode switch to playback mode.
The contents of memory card cannot be played back.	You played back a memory card that was not formatted by this device.	Insert a memory card that was formatted and stored on by this device.
Files cannot be deleted.	The file is protected.	Cancel protection.
	You played back a memory card that was not formatted by this device.	Insert a memory card that was formatted and stored on by this device.
	The memory card is write-protected.	Remove the write-protection.
Cannot format a memory card.	The memory card is write-protected.	Remove the write-protection.
	End of memory card life.	Insert a new memory card.
The playback image is dark though I used the flash.	The LCD monitor is too dark.	Adjust the brightness of LCD monitor.

Other Problems

Symptom	Cause	Solution
Even when the camera's buttons are pressed, it does not operate.	The battery is running low.	Recharge the battery.
The date and time is wrong.	The correct date and time is not set.	Set the correct date and time.
The date set has disappeared.	The battery is removed with the power still on.	Set the date and time again.

About connecting to your computer/software

Symptom	Cause	Solution
Cannot download images.	The free space on the hard disk in your computer may be insufficient.	Check whether the hard disk has a space for running Windows, and if the drive for loading image files has a capacity at least that of the memory card inserted in the camera.
	No power supply.	Recharge the battery.
		Use an AC power adapter.
		Turn the power on.