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.

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.
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READ THIS FIRST

Notice:
1. 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.
2. 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.
3. The illustrations in this manual are for the purpose of explanation and may differ from the actual design of your camera.
4. 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.

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, 750mAh-820mAh).
■ 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 instructions.
■ We recommend the battery should be charged 8 hours as first time use.

CONTENTS

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 6.0 Mega pixel CCD, this camera is capable of capturing images with a resolution of up to 2816 x 2112 pixels.

Other cool 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 -	External memory supports SD memory card up to 1 GB.
Optical zoom -	3x optical lens allows you to capture telephoto and wide-angle images.
Digital zoom -	4.4x digital zoom and 3x optical zoom permit zoom photography of up to 13.2 times; 8x playback captured images to enlarge a selected portion of an image.
Flexible flash settings -	Change the flash setting according to your lighting environment and photography mode setting.
Focus mode -	Images can be captured with the distance to the subject set by auto focus, macro or infinity.
Self-timer mode -	Time selectable between 10 seconds, 2 seconds and 10+2 seconds.
Capture mode -	Capture different still images including single, a series of 3 images with different exposures, and 5 images continuously.

Video mode -	Record video clips with voice.
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.
Docking station -	Allows you to playback images or video clips on the LCD monitor, charge the battery, and connect to a USB cable.
Scene mode -	You may select a previously set recording mode for the following situations: Auto, Portrait, Night Portrait, Night, Candlelight, Fireworks, Landscape, Natural Green, Sunrise, Sunset, Sport, Text, Black & White, Sepia, Splash Water, Flowing Water, Pets and User Setting.
DPOF settings -	Allow you to embed printing information on your SD memory card and to print your images on a DPOF compatible printer by simply inserting it.

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
- Docking station
- USB cable
- Camera strap
- Camera pouch

Common (Optional) Accessories:
- SD memory card
- AC power adapter
- Rechargeable lithium-ion battery

GETTING TO KNOW THE CAMERA

Front View
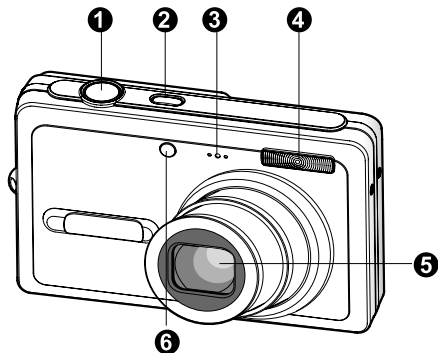
#	Name	Description
1.	Shutter button	Focuses and locks the exposure of the camera when pressed halfway down, and capture the image when pressed all the way down.
2.	**POWER** button	Turns the camera power on and off.
3.	Microphone	Records audio clips.
4.	Flash	Provides flash illumination.
5.	Lens	3x optical zoom lens allows you to capture telephoto and wide-angle images.
6.	Self-timer LED (AF auxiliary LED)	Blinks during Self-timer mode until image is captured. Lights for auto focusing when capture in dark place.

Rear View
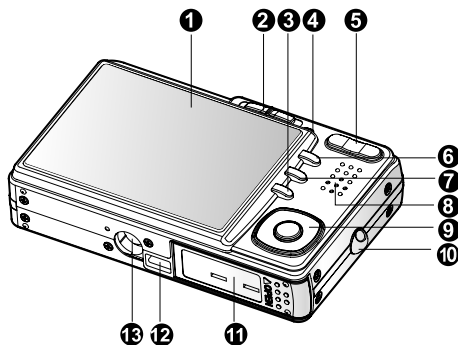
#	Name	Description
1.	LCD monitor	Provides menu information to operate the camera, and previews the image before capturing it and review it afterwards.
2.	Mode switch 🗗 Capture mode 🎬 Video mode ▶ Playback mode	Sets the camera mode. Selects this when capturing still images. Selects this when recording video clips. Performs image playback and deletion.
3.	▢ Display button	Turns the OSD display on and off.
4.	Status LED	Displays the camera current state.
5.	♦ Zoom in button ♦♦♦ Zoom out button	Zooms the lens to telephoto position. Zooms the lens to wide-angle position.
6.	**MENU** button	Toggles OSD menu on and off.
7.	🗑 Erase button	Allows you to erase the image.
8.	Speaker	Produces camera sounds and plays recorded audio.
9.	**SET** /Direction button	Allows you to scroll through menus and image, and then select choices.
10.	Strap holder	Camera strap attachment.
11.	Battery / SD memory card cover	Allows access to the battery and insert or remove the memory card.
12.	Camera connector	Connects with the docking station.
13.	Tripod socket	Allows tripod mounting.

SET /Direction button
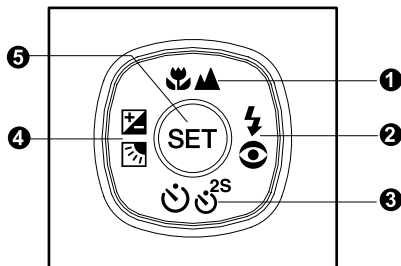
#	Name	Description
1.	▲ button 🌷/▲ Focus button	Scrolls upwards. Allows you to choose the appropriate focus setting.
2.	▶ button 👁⚡ Flash button	Scrolls right. Allows you to choose the appropriate flash setting.
3.	▼ button ⟳⟳²ˢ Self-timer button	Scrolls downwards. Allows you to toggle the self-timer on and off, selects the desired self-timer mode.
4.	◀ button 🔲 🔳 Exposure compensation / Backlight correction button	Scrolls left. Allows you to toggle the exposure compensation / backlight correction on and off.
5.	**SET** button	Enters the menu page and confirms the chosen setting.

Docking station

With the docking station, you can position your camera and play back your images and video clips on your desktop. You also need the docking station to charge the camera battery with an AC power adapter, and connect to a USB cable.
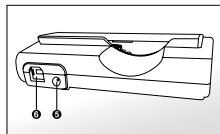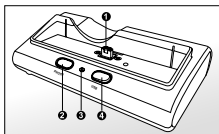
#	Name	Description
1.	Docking station connector	Connects with the camera.
2.	PHOTO button	Allows you to playback images or video clips on the LCD monitor.
3.	Status LED	Displays the docking station current state.
4.	USB button	Allows you to enter USB mode.
5.	DC IN 5V terminal	Allows you to connect to an AC power adapter to charge the battery or act as power supply during playback or USB mode.
6.	USB terminal	Allows you to connect to a USB cable.

Status LED Indicator

Camera status LED

Color	State	During photography
Green	On	AE or AF is locked with the shutter button held halfway.
Red	On	Accessing files in progress.
	Flashing	When the image is not in focus.
Orange	On	Flash charging in progress.

Docking station status LED

Color	State	Description
Red	On	Charging process in progress.
Green	On	Charging process is completed.

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
4. Flash mode
   [Blank] Auto
   [◉⚡] 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
   [▢] 2816 x 2112
   [▢] 2272 x 1704
   [▢] 1600 x 1200
   [▢] 640 x 480
9. Possible number of shots
10. Quality

[★★★] Fine
[★★] Standard
[★] Economy
11. Date and time
12. Self-timer icon
    [⟳ 10s] 10 sec.
    [⟳ 2s] 2 sec.
    [⟳ 10+2s] 10+2 sec.
13. Unsteady hold warning icon
14. [▤] Exposure compensation
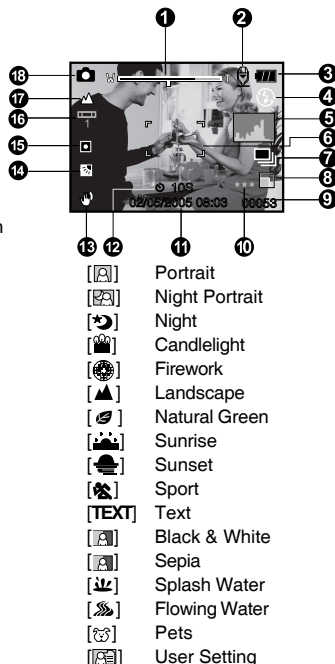   [▨] Backlight correction
15. Metering
    [Blank] Multi
    [▣] Spot
16. White balance
    [Blank] Auto
    [♤] Incandescent
    [▭] Fluorescent 1
    [▭] Fluorescent 2
    [☀] Day Light
    [☁] Cloudy
    [▰] Manual
17. Focus mode
    [Blank] Auto focus
    [♣] Macro
    [▲] Infinity
18. Scene mode
    [⚬] Auto

Icon	Mode
[▨]	Portrait
[▨]	Night Portrait
[⊃]	Night
[▥]	Candlelight
[◉]	Firework
[▲]	Landscape
[ǵ]	Natural Green
[▨]	Sunrise
[▮]	Sunset
[✾]	Sport
[TEXT]	Text
[▨]	Black & White
[▨]	Sepia
[▨]	Splash Water
[▨]	Flowing Water
[▨]	Pets
[▨]	User Setting

NOTE

■ Each press of the button switches one step in the sequence of OSD full display, OSD full with Histogram, OSD display off, Panorama, LCD monitor off.

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Video mode [🎥]

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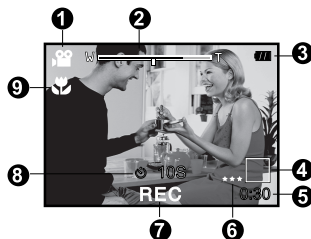3. Remaining battery status
4. Image size
5. Possible recording time / elapsed time
6. Quality
7. Recording indicator
8. Self-timer icon
9. Focus icon

Playback mode [▶] -Still image playback

1. Playback mode
2. File number
3. Folder number
4. Protect icon
5. Voice memo
6. DPOF icon
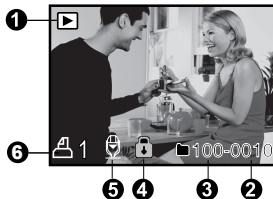
Playback mode [▶]-Video playback

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. Quality
10. Size
11. Frame rate
12. Total recorded time

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GETTING STARTED

Attaching the Camera Strap

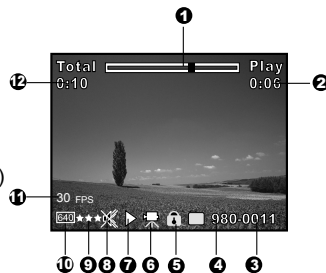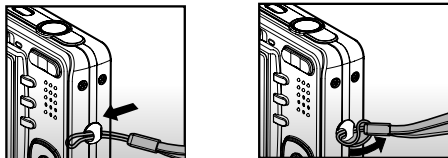Attach the camera strap as shown in the illustration.

Inserting and Removing the Battery (Optional Accessory)

We highly recommend using specified rechargeable lithium-ion battery (3.7V, 750mAh-820mAh) 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 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 memory card cover.
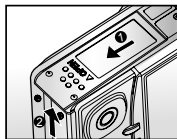
Removing the Battery

Open the battery / SD 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.
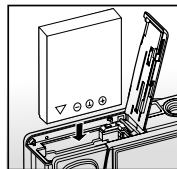
Charging the Battery

You need to use the docking station and AC power adapter to charge the battery. Make sure that the power of the camera is off and then insert the battery before starting.

1. Position the camera on the docking station.
2. Insert one end of the AC power adapter into the DC IN 5V terminal of the docking station.
3. Insert the other end of the AC power adapter into a wall outlet.
   - The docking station LED lights red while the battery is charging and turns into green when the battery is fully charged.
   - It is recommended to fully discharge or exhaust the battery before being charged.
   - Charging time varies according to the ambient temperature and the status of battery.
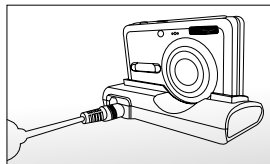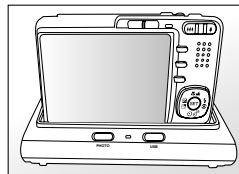
> **NOTE**
> - This camera must be used with specified battery, docking station and AC power adapter for battery charging. Damage caused by the use of an incorrect adapter is not covered under the warranty.
> - The battery may feel warm after it has been charged or immediately after being used. This is normal and not a malfunction.
> - When using the camera in cold areas, keep the camera and battery warm by holding them inside your outer cloth.
> - We recommend the battery should be charged 8 hours as first time use.

Inserting and Removing the SD Memory Card (Optional Accessory)

Images captured with this camera will be stored in the SD memory card. Without inserting the SD memory card, you cannot capture images using the camera.

Inserting the SD memory card

1. Open the battery/SD memory card cover.
2. Insert the SD memory card in the correct orientation shown.
   - Hold the SD memory card with its front side of the SD 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 memory card cover.
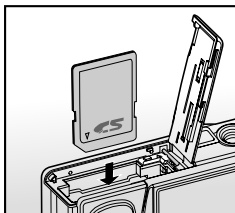
Removing the SD memory card

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

NOTE
- If the camera is powered on without an SD memory card inserted, a message "NO CARD" appears on the LCD monitor.
- To prevent valuable data from being accidentally erased from an SD memory card you can slide the write-protected tab (on the side of the SD memory card) to "LOCK".
- To save, edit or erase data on an SD memory card, you must unlock the card.
- Be sure to format an SD memory card with this digital camera before using it. Refer to section in this manual titled "Formatting the SD Memory Card" for further details.
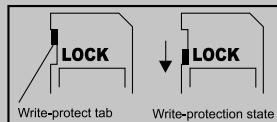
Turning the Power On/Off

Load the battery and insert an SD memory card before starting.

Turning the power on

Press the **POWER** 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.

Turning the power off

Press the **POWER** button to turn the power off.
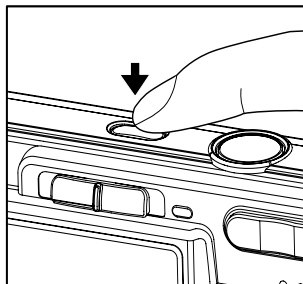
NOTE
- The power is turned off automatically when the camera has not been operated for a fixed period time. To resume the operation condition, turn the power on again. Refer to section in this manual titled "Auto OFF" in the Setup Menu (In Photography Mode) for further details.
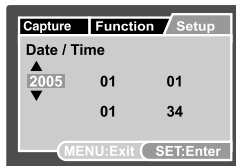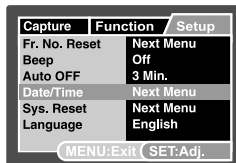
Setting the Date and Time

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.

Capture	Function	Setup
Fr. No. Reset		Next Menu
Beep		Off
Auto OFF		3 Min.
Date/Time		Next Menu
Sys. Reset		Next Menu
Language		English

MENU:Exit   SET:Adj.

Capture	Function	Setup
Date / Time		
▲		
2005	01	01
▼		
	01	34

MENU:Exit   SET:Enter
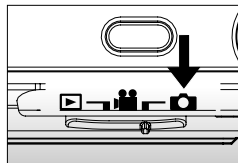
Choosing the Language

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

1. Slide the mode switch to [🔲] or [📹] or [▶].
2. Press the **MENU** button and select [Setup] menu with the ▶ button.
   - If no images / video clips are recorded on the SD memory card, press the **MENU** button and then [Setup] menu is displayed.
3. Select [Language] with the ▲ / ▼ buttons and press the **SET** button.
   - The Language setting screen will be displayed.
4. Select the displayed language with the ▲ / ▼ buttons and press the **SET** button.
   - The setting will be stored.

Capture	Function	Setup
Fr. No. Reset		Next Menu
Beep		Off
Auto OFF		3 Min.
Date/Time		Next Menu
Sys. Reset		Next Menu
Language		English

MENU:Exit SET:Adj.

[🔲]/[📹] Mode

Play	Setup
Beep	Off
Format	Next Menu
Fr. No. Reset	Next Menu
Card Info	Next Menu
System Info.	Next Menu
Language	English

MENU:Exit SET:Adjust
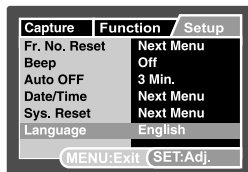
[▶] Mode with images/video clips on SD memory card

Setup	
Beep	Off
Format	Next Menu
Fr. No. Reset	Next Menu
Card Info.	Next Menu
System Info.	Next Menu
Language	English

MENU:Exit SET:Adj.

[▶] Mode without images/video clips on SD memory card

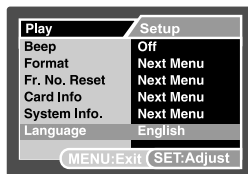## Formatting the SD Memory Card

This utility formats the SD memory card and erases all stored images and data.
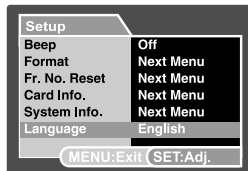
1. Slide the mode switch to [▶].
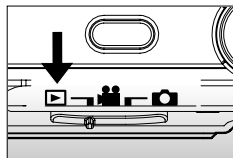
2. Press the **MENU** button and select [Setup] menu with ▶ button.
   ■ If no images / video clips are recorded on the SD memory card, press the **MENU** button and then [Setup] menu is displayed.
3. Select [Format] with the ▲ / ▼ buttons, then press the **SET** button.
4. Select [Execute] with the ▲ / ▼ buttons, and press the **SET** button.
   ■ To cancel formatting, select [Cancel] and press the **SET** button.

Play	Setup
Beep	Off
Format	**Next Menu**
Fr. No. Reset	Next Menu
Card Info.	Next Menu
System Info.	Next Menu
Language	English

MENU:Exit SET:Adj.

Play	Setup
Format SD Card	

Cancel
Execute

MENU:Exit SET:Enter
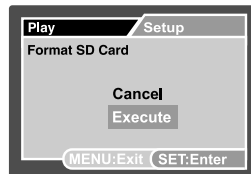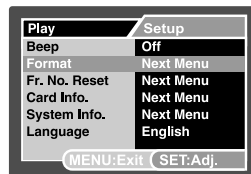
NOTE

■ Formatting the SD 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 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.

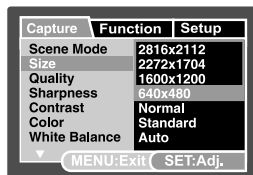High resolution and quality settings are recommended for printed output and situations requiring the finest detail. Lower resolution/quality images take up less memory space and may be quite suitable for sharing images via e-mail, in a report, or on a web page.

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.

Capture	Function	Setup
Scene Mode		2816x2112
Size		2272x1704
Quality		1600x1200
Sharpness		640x480
Contrast		Normal
Color		Standard
White Balance		Auto

MENU:Exit SET:Adj.

[◘] Mode

Capture	Function	Setup
Size		Fine
Quality		Standard
Contrast		Hard
Color		Standard

MENU:Exit SET:Adj.
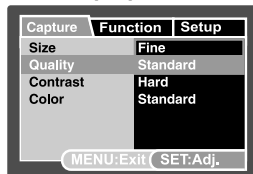
[♣] Mode

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 SD memory card.

Size	Quality		SD memory card capacity					
			32MB	64MB	128MB	256MB	512MB	1GB
2816 x 2112	★★★ Fine		9	19	38	75	149	296
	★★ Standard		18	38	76	153	296	592
	★ Economy		36	74	150	300	581	1162
2272 x 1704	★★★ Fine		14	27	59	118	228	458
	★★ Standard		28	54	116	232	451	902
	★ Economy		43	82	178	354	686	1374
1600 x 1200	★★★ Fine		28	54	110	226	445	892
	★★ Standard		54	106	212	435	843	1678
	★ Economy		99	192	388	772	1530	3021
640 x 480	★★★ Fine		145	288	582	1160	2284	4530
	★★ Standard		237	464	948	1882	3728	7527
	★ Economy		379	752	1516	3021	5845	11782

Possible recording time / sec (video clip)

Size	Quality	SD memory card capacity					
		32MB	64MB	128MB	256MB	512MB	1GB
640 x 480	★★★ Fine	0:19	0:38	1:22	2:46	5:34	11:07
	★★ Standard	0:26	0:52	1:51	3:45	7:31	15:00
320 x 240	★★★ Fine	1:43	3:19	7:09	14:23	27:52	57:34
	★★ Standard	2:33	4:58	10:40	21:28	43:03	85:51

* The data shows the standard testing results. The actual capacity varies according to the shooting conditions and settings.

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/movie clips or adjust menu settings.

1. Press the **POWER** button to turn the power on.
2. Slide the mode switch to [◘].
3. Compose your image in the LCD monitor.
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 and the status LED lights green 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 and the status LED flashes red.
   - If the photographic preview is set to "On", the captured image will be displayed while the image is being recorded onto the SD memory card.
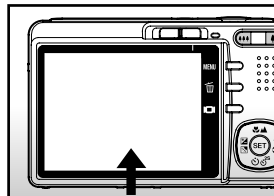
① Press down halfway
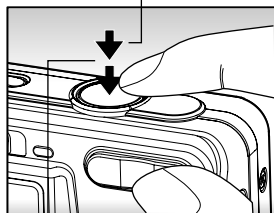
② Press down fully

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 [![camera]].
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.
   - ■ [![mic icon]] icon is displayed on the screen.

Capture	Function	Setup
Capture Mode		AEB
Voice Memo		On
LCD Bright.		Off
Digital Zoom		Off
Preview		Off
Date Print		Off
MENU:Exit	SET:Adj.	

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.
   - ■ A [![mic icon]] icon is displayed with images that have been recorded with a voice memo.
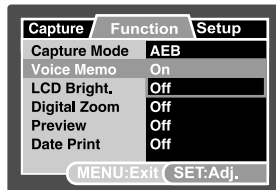
NOTE
- ■ Voice memo is only available in [Single] capture mode.
- ■ Voice memo is automatically fixed at [Off] in [Continuous] or [AEB] capture mode.

Using the Optical Zoom

Zoom photography allows you to capture zoom images up to 3 times the size or wide-angle photography depending on the distance up to the subject. You can also enlarge the center of the screen and capture images in the digital zoom mode.

1. Slide the mode switch to [🗖] or [🎬].
2. Compose the image with the zoom button.
   - ■ Pressing the ♦ button zooms in on the subject, and enlarges the subject on the LCD monitor.
   - ■ Pressing the ♦♦ button provides a wider angle image.
   - ■ The lens position moves according to the zoom button setting.
3. Press the shutter button down halfway, then press it down fully.
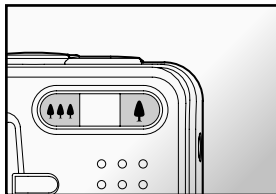
Using the Digital Zoom

Using a combination of 3 times optical zoom and 4.4 times digital zoom permits zoom photography of up to 13.2 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.

W ▮████████████████████▯ **T**

Optical zoom 1X to 3X   Digital zoom 1X to 4.4X
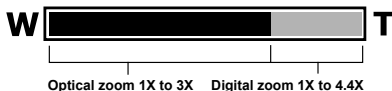
3. Press the shutter button to capture a "zoomed" image.

> ■ The zoom setting is automatically cancelled by either turning the camera off or the activation of the Auto OFF function.
>
> **NOTE**

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 ☻ᐟ button to select the desired flash mode.
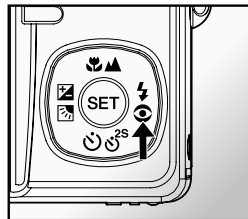
The available flash settings in different photography modes:

		[Blank] Auto	◉⚡	⚡	⚡̸
Scene Mode	Auto	○	○	○	○
	Portrait	X	○	X	X
	Night Portrait	X	○	○	X
	Night	X	X	X	○
	Candlelight	X	X	X	○
	Fireworks	X	X	X	○
	Landscape	X	X	X	○
	Natural Green	X	X	X	○
	Sunrise	X	X	X	○
	Sunset	X	X	X	○
	Sport	X	X	X	○
	Text	X	X	X	○
	Black & White	○	○	○	○
	Sepia	○	○	○	○
	Splash Water	○	○	○	○
	Flowing Water	X	X	X	○
	Pets	○	○	○	○
	User Setting	○	○	○	○
Capture Mode	Single	○	○	○	○
	Continuous	X	X	X	○
	AEB	X	X	X	○
Focus Mode	Auto	○	○	○	○
	Macro	○	○	○	○
	Infinity	X	X	X	○

* This table is for reference only and varies according to different combination of photography modes.

* ○: Available X: Unavailable

The available flash settings in different photography modes:

Flash mode	Description
[Blank] Auto	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. The flash always fires twice, and the image is captured at the second firing.
[↯] 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.
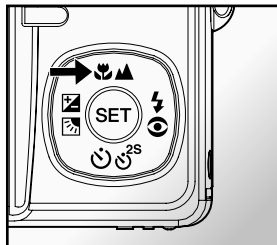
The table below will help you choose the appropriate focus mode:

Focus mode	Description
[Blank]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 50 cm to infinity (both Wide and Tele)
[♣] Macro	Selects this when you want to capture a close up image. Wide (zoom off) : Approximately 6 cm to infinity Tele (at optical zoom 3x) : Approximately 35 cm 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 [![camera icon]] or [![video icon]].
2. Toggle the ♂²ˢ button to select the setting.
   - For the [![camera icon]] mode.

   OFF →[♂ **10s**] 10 sec. → [♂ **2s**] 2 sec.
   ↑————[♂ **10+2s**] 10+2 sec. ←————

   - For the [![video icon]] mode.
   OFF →[♂ **10s**] 10 sec. → [♂ **2s**] 2 sec.
   ↑—————————————————————————
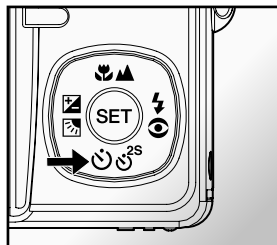
3. Compose the image, press the shutter button down halfway, then press it down fully.
- The self-timer LED flashes and the image is captured after the preset time has elapsed.
- The countdown is displayed on the LCD monitor.
- To cancel the self-timer during operation, press the **SET** button.

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.

1. 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.
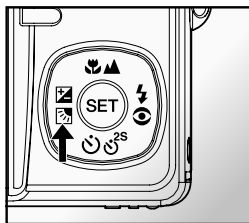
2. Set the exposure value with the ▲ / ▼ buttons.
- Press the ▲ button to increase the value.
- Press the ▼ button to decrease the value.
- The setting range of the exposure compensation is as follows.
  -2.0, -1.7, -1.3, -1.0, -0.7, -0.3, 0, +0.3, +0.7, +1.0, +1.3, +1.7, +2.0
- Press the 🔲🔳 button to 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.
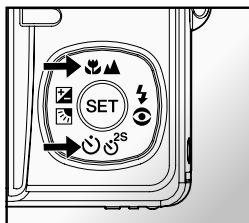
Effective Subjects and Set Values

- + (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 18 modes, you can capture the image with most appropriate settings.
1. Slide the mode switch to [◻].
    a. Press the **MENU** button.
    b. Select [Scene Mode] with the ▲/▼ buttons, and press the **SET** button.
    c. Select the desired scene mode with the ▲/▼ buttons, and press the **SET** button.
2. 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
[◻] Auto	Select this mode to capture images without having to set special functions or manual adjustments.
[◻] Portrait	Select this mode when you want to capture an image that makes the person stand out against a defocused (blurred) background.
[◻] Night Portrait	Select this mode when you want to capture people with an evening or night scene background.
[★] Night	Select this mode when you want to capture dark scenes such as night views.
[☺] Candlelight	Select this mode when you want to capture photos of candlelit scene, without spoiling the atmosphere.
[⊕] Fireworks	Select this mode when you want to capture fireworks clearly with optimal exposure. The shutter speed becomes slower, so using a tripod is recommended.
[▲] Landscape	Select this mode when you want to capture landscape photos with bright color.
[🍃] Natural Green	Select this when you want to capture the green scenery background such as forest.
[🔆] Sunrise	Select this mode when you want to capture photos of sunrise scene. This mode helps keep the deep hues in the scene.

Scene mode	Description
[☀] Sunset	Select this mode when you want to capture photos of sunset scene. This mode helps keep the deep hues in the scene.
[🏃] Sport	Select this mode when you want to capture fast-moving subjects.
[**TEXT**] Text	Select this mode when you want to capture an image that contains black and white subjects like printed documents.
[🖼] Black & White	Select this mode when you want to capture a black & white image.
[🖼] Sepia	Select this mode when you want to capture a sepia image.
[💧] Splash Water	Select this mode when you want to capture photos of splashing water.
[🌊] Flowing 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.
[🐾] 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 photo. 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. Toggle the |□| button to Panorama mode.
3. Shoot the first image.
   ■ The next image appears beside the previous image.
4. 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.
5. Follow the same steps to capture subsequent images in the sequence.
6. Finish the sequence by pressing the **SET** button after the last image has been recorded.
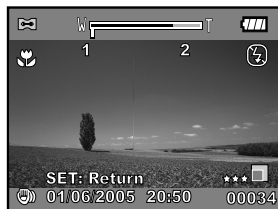
■ The digital zoom function and menu access are not available at this mode.

NOTE

[🎥] Video Mode

This mode allows you to record video clips at a resolution of 320 x 240 / 640 x 480 pixels. Voice can also be recorded.

1. Slide the mode switch to [🎥].
2. Compose the image.
   - ■ Optical zoom can be set while composing the scene.
   - ■ Digital zoom can be set at the resolution of 320 x 240 pixels only.
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.
- ■ In the [🎥] mode, the LCD monitor cannot be turned off.
- ■ If the access speed of your SD memory card is not enough for recoding video clips in the currently selected quality, a warning icon [📵] will appear, and then the movie 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.

1. Slide the mode switch to [▶].
   - The last image appears on the screen.
2. The images can be fed in reverse or fed forward with the ◄ / ►buttons.
   - To view the previous image, press ◄.
   - To view the next image, press ►.

Image Display Information

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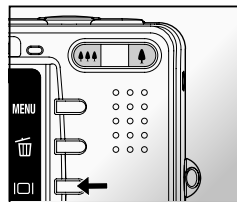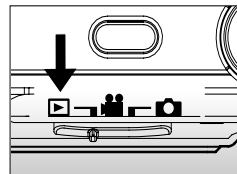
NOTE

- Pressing the ▲ / ▼ buttons during image playback will result in a 90 degree rotated display.
- The ▲ button rotates the image clockwise and displays it, whereas the ▼ button rotates the image counterclockwise 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.
- [🎥] 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.

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.

Button Operations

	During Playback	During a Pause	During a Stop
▶ button	(Forward play) Pressing the ▶ button will sequentially invoke 2x fast-forward, 4x fast-forward, regular play.	1-frame feed	The next image is displayed.
◀ button	(Reverse play) Pressing the ◀ button will sequentially invoke 2x fast-reverse, 4x fast- feed reverse, regular play.	Reverse 1-frame	The previous image is displayed.
▲ button	Sound On/Off		
▼ button	Stop (The display returns to the 1st frame playback).		
SET button	Pause	Cancel pause	Regular forward play

NOTE

■ Video clips cannot be displayed rotated or enlarged.

Playing Back Still Images/Video Clips on the Docking Station

You can also playback your images or video clips on the docking station.

1. Position the camera on the docking station.
   - ■ It is recommended to use the AC power adapter when playing back images or video clips on the docking station.
2. Slide the mode switch to [▶].
   - ■ The camera has no function at [◖] or [◖] mode when using with the docking station.
3. Press **PHOTO** button.
   - ■ You may press the **POWER** button to turn on the camera.
   - ■ The last image appears on the screen.
4. 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.
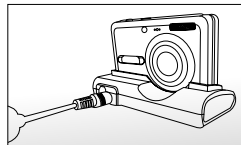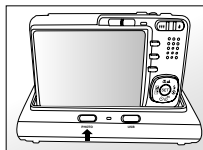
Attaching Voice Memos

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

1. Slide the mode switch to [▶].
   - ■ The last image appears on the screen.
2. Select the image that you want to attach the voice memo with the ◀ / ▶ buttons.
3. Press the shutter button.
   - ■ [VOICE RECORDING] is displayed on the screen and recording starts.
4. 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.

Thumbnail Display

This function allows you to view 9 thumbnail images on the LCD monitor at the same time, which can quickly search for the image that you want.

1. Slide the mode switch to [▶].
   - ■ The last image appears on the screen.
2. Press the ✚✚✚ button.
   - ■ The images are displayed in the thumbnail display. Images that have been selected with the ▲ / ▼ / ◀ / ▶ buttons will be indicated by a green frame.
   - ■ When there are ten or more images, scroll the screen with the ▲ / ▼ buttons.
3. Press the ▲ / ▼ / ◀ / ▶ buttons to select the image to be displayed at regular size.
4. Press the **SET** button.
   - ■ The selected image is displayed at its regular size.

Page Jump Function

This function allows you to select the image to be displayed immediately from a lot of recorded images.

1. Slide the mode switch to [▶].
2. Press the ✚✚✚ button to enter thumbnail display.
3. Press the ▢ button to enter page jump function and the image is indicated by a red frame.
4. For page selection, follow the steps below:
   - ■ Pressing the ▲ button jumps to the first image.
   - ■ Pressing the ▼ button jumps to the last image.
   - ■ Pressing the ◀ button jumps to the previous thumbnail page.
   - ■ Pressing the ▶ button jumps to the next thumbnail page.
5. Press the ▢ button to resume normal thumbnail display.
   - ■ To select the image to be displayed at regular size, follow the steps 3-4 in the above section.

NOTE

■ A [🖉], [🔒], [🎥], [🖨] icon will be displayed in a thumbnail display.

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 white frame and green frame are displayed on the LCD monitor.

Entire image — Current position of enlargement

   - The white frame indicates the entire image, while the green 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.
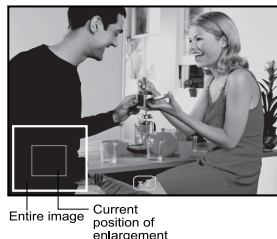
NOTE
- Pressing the ♦ button magnifies the image from 1x —>2x—> 4x—>8x.
- Pressing the ♠ button reduces the image from 8x—>4x —>2x—> 1x.

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Slideshow Display

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

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

Play	Setup
Slide Show	Execute
DPOF	Next Menu
Protect	Next Menu
LCD Bright	0
MENU:Exit	SET:Adj.

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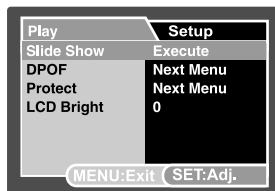
- The Auto OFF function does not operate during slide show.
- All still images in the folder are automatically played back.

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.

Play	Setup
Slide Show	Execute
DPOF	Next Menu
Protect	Next Menu
LCD Bright.	0

MENU:Exit   SET:Adj.

Play	Setup
Protect	
Single	
All	
Select	

MENU:Exit   SET:Enter

Play	Setup
Protect	
Single	
Set	
Cancel Protect	
Exit	

MENU:Exit   SET:Enter
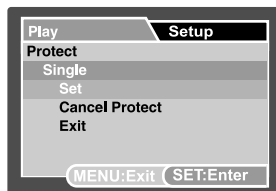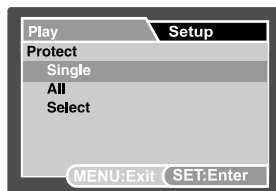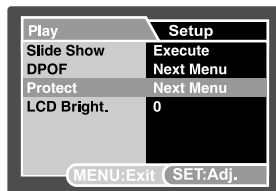
Canceling the Protection

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 |□| button.
   - ■ The protect icon [🔒] is displayed with protected images. Selecting a protected image and pressing the |□| 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 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.

1. Slide the mode switch to [▶].
2. Select the image that you want to set DPOF with the ◀ / ▶ buttons.
3. Press the **MENU** button.
   - ■ The playback menu is displayed.

Play	Setup
Slide Show	Execute
DPOF	Next Menu
Protect	Next Menu
LCD Bright.	0

MENU:Exit   SET:Adj.

4. Select [DPOF] with the ▲ / ▼ buttons, and press the **SET** button.
   - ■ The DPOF setting screen is displayed.
5. 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.

Play	Setup
DPOF	
Single	
All	

MENU:Exit   SET:Enter

6. Select [Print Num.] with the ▲ / ▼ buttons, and press the **SET** button.
   - ■ This displays the number of prints setting screen.
7. Set the number of prints with the ▲ / ▼ buttons, and press the **SET** button.
   - ■ You can set up to 9 prints for each image.
8. Select [Date] with the ▲ / ▼ buttons, and press the **SET** button.
   - ■ The date setting screen appears.

Play	Setup
DPOF	
Single	
Print Num.	1
Date	On
Print Enable	Execute

MENU:Exit   SET:Enter
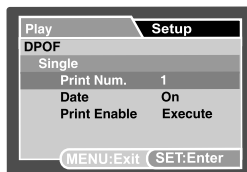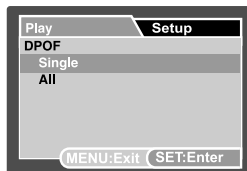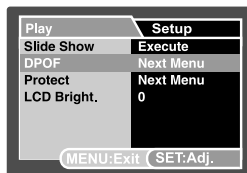
9. Select date to [On] or [Off] with the ▲ / ▼ buttons, and press the **SET** button.
   - ■ On: The date of the photograph will also be printed.
   - ■ Off: The date of the photograph will not be printed.
10. Select [Print Enable] with the ▲ / ▼ buttons, and press the **SET** button.
11. Select [Execute] 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 have set up DPOF settings.

NOTE

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

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. Press the 🗑 button again to delete the image.
   - ■ You may also press the **SET** button to confirm the deletion.
   - ■ To not delete, select [Cancel], and press the **SET** button.
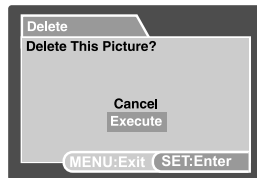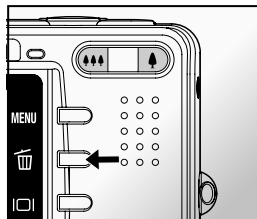
Erasing at Playback Mode
Erasing single image / Erasing all images

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.

Delete
Delete This Picture?

Cancel
Execute

MENU:Exit SET:Enter

Delete
Single
All
Select

MENU:Exit SET:Enter

- All: Erases all of the images on the SD memory card 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 [![icon]].
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.

Capture	Function	Setup
Scene Mode	Auto	
Size	2816x2112	
Quality	Fine	
Sharpness	Normal	
Contrast	Normal	
Color	Standard	
White Balance	Auto	
▼ MENU:Exit SET:Adj.		

Capture	Function	Setup
Manual WB	Adjust	
ISO	50	
Metering	Spot	
▲ MENU:Exit SET:Adj.		
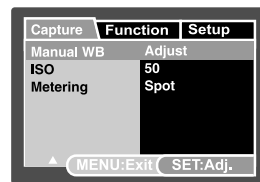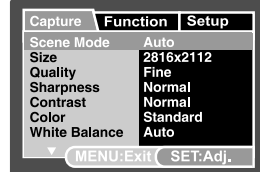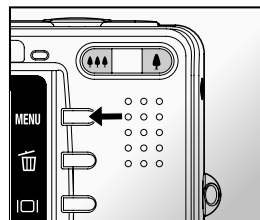
Scene Mode

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.

* [▢] 2816 x 2112
* [▢] 2272 x 1704
* [▢] 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 photographed.

* Hard / Normal / Soft

Contrast

This sets the difference between the bright and dark portions of the images that will be captured.

* Hard / Normal / Soft

Color

This sets the color of the image that will be photographed.

* Standard / Vivid / Sepia / Monochrome

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 / Auto

Metering

This sets the metering method for calculating the exposure.

* **[Blank]** Multi: The entire area of the screen is measured, and the exposure is calculated.
* **[●] 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	Function	Setup
Capture Mode		AEB
Voice Memo		Off
LCD Bright.		0
Digital Zoom		Off
Preview		Off
Date Print		Off
MENU:Exit		SET:Adj.
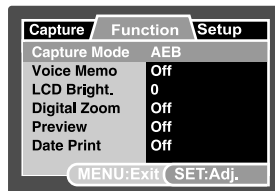
Capture Mode

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

* [**Blank**] Single: Capture an image at a time.
* [🔲] Continuous: Permits continuous photography of 5 images max.
* [**AEB**] AEB: Permits 3 consecutive images in the order of standard exposure, underexposure and overexposure compensation.

> **NOTE**
>
> ■ 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

> **NOTE**
>
> ■ When [Voice Memo] is set to [On], the preview setting is also fixed at [On].

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.
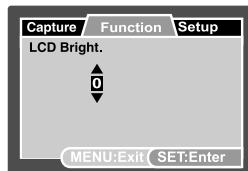
Digital Zoom

This sets whether or not to use digital zoom at the time of photography.
* On / Off

Preview

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

> **NOTE**
> ■ 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.

Capture	Function	Setup
Size		640 x 480
Quality		Fine
Contrast		Hard
Color		Standard

MENU:Exit SET:Adj.
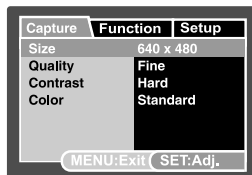
Size

This sets the size of the image that will be photographed.
*   [☐] 640 x 480
*   [☐] 320 x 240

Quality

This sets the quality (compression rate) at which the image is captured.
*   [★★★] Fine
*   [★★] Standard

Contrast

Refer to the section in this manual titled "Contrast" in "Capture Menu (Capture)" for further details.

Color

Refer to the section in this manual titled "Color" in "Capture Menu (Capture)" for further details.

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 movie menu, press the **MENU** button.
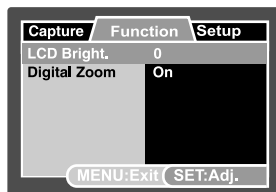
Capture	Function	Setup
LCD Bright.	0	
Digital Zoom	On	

MENU:Exit SET:Adj.

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

Digital Zoom
Digital zoom can be set at the resolution of 320 x 240 pixels only.
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.

Play	Setup
Slide Show	**Execute**
DPOF	Next Menu
Protect	Next Menu
LCD Bright.	0
MENU:Exit	SET:Adj.
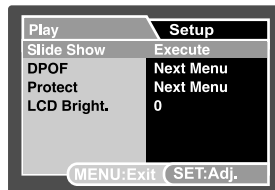
Slide Show
Refer to section in this manual titled "Slideshow Display" for further details.

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.

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.

Capture	Function	Setup
Fr. No. Reset		Next Menu
Beep		Off
Auto OFF		3 Min.
Date/Time		Next Menu
Sys. Reset		Next Menu
Language		English
MENU:Exit	SET:Adj.	
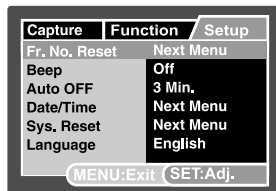
Fr. No. Reset
This creates a new folder. The photographed images are recorded to the newly created folder from number 0001.
* Cancel / Execute

Beep
This sets whether or not to mute the camera sound each time you press the camera button.
* On / Off

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.

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
Refer to section in this manual titled "Choosing the Language" for further details.

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.
   - If no images/video clips are recorded on the SD memory card, press the **MENU** button and then [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.

Play	Setup
Beep	Off
Format	Next Menu
Fr. No. Reset	Next Menu
Card Info.	Next Menu
System Info.	Next Menu
Language	English
MENU:Exit	SET:Adj.

Setup	
Beep	Off
Format	Next Menu
Fr. No. Reset	Next Menu
Card Info.	Next Menu
System Info.	Next Menu
Language	English
MENU:Exit	SET:Adj.

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 Memory Card" 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 memory card.

System Info.
This displays the firmware version of the camera.

Language
Refer to section in this manual titled "Choosing the Language" for further details.
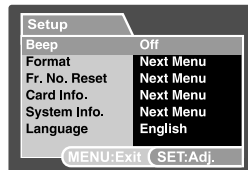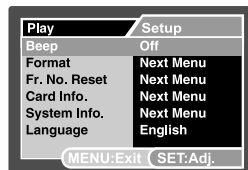
TRANSFERRING RECORDED IMAGES AND VIDEOS TO YOUR COMPUTER

To transfer images/video clips from the camera to your computer, follow these steps:

Step 1: Installing the USB driver (Windows 98 and Mac OS 8.6 users only)

Step 2: Connecting the camera to your computer

Step 3: Downloading images and video files

System Requirements (Windows)

- Pentium 166 MHz or higher
- Windows 98/98SE/Me/2000/XP
- 64MB RAM
- 128MB hard disk space
- CD-ROM drive
- Available USB port

System Requirements (Macintosh)

- PowerPC G3/G4
- OS 8.6 or later
- 64MB RAM
- 128MB hard disk space
- CD-ROM drive
- Available USB port

Step 1: Installing the USB Driver

Windows 98 computers
The USB driver on the CD-ROM is exclusively for Windows 98 computers. Installing the USB driver on computers running Windows 2000/ME/XP is not necessary.
1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "**INSTALL USB DRIVER**". Follow the on-screen instructions to complete the installation. After the USB driver has been installed, restart your computer.

Macintosh OS 8.6 computers
Mac OS 8.6 users must install a USB driver. For Mac OS 9.0 or higher, the computer will automatically recognize the camera and load its own USB drivers.
1. Insert the CD-ROM that came with the camera into your CD-ROM drive.
2. Select and double-click "**Digital Camera Driver Installer**".
3. Select "**Install Location**" and click "**Install**".
4. Follow the on-screen instructions to complete the installation. After the USB driver has been installed, restart your computer.

Step 2: Connecting the Camera to Your Computer

1. Position the camera on the docking station.
2. Connect one end of the USB cable to the USB terminal of the docking station.

USB cable   AC power adapter
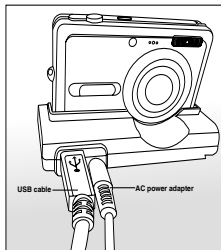
3. Connect the other end of the USB cable to an available USB port on your computer.
4. Press the **USB** button.
   - The USB menu appears on the screen.
5. Select [PC] and press the **SET** button.
   - USB screen appears on the screen.
6. From the Windows desktop, double click on "My Computer".
7. 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.
8. Double click on the removable disk and locate the DCIM folder.
9. 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.
10.To exit from USB mode, press the **USB** button.
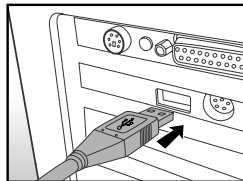
Mac users: Double-click the "untitled" or "unlabeled" disk drive icon on our desktop. iPhoto may automatically launch.

NOTE
- The data saved to the SD memory card may be damaged if the power to the camera is cut off during image transfer. We recommend that you use the AC power adapter when connecting the camera to the PC.

Step 3: 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.

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.

NOTE
- For more information about the operation of Photo Explorer application software, refer to its respective help documentation.
- For Windows 2000/XP users, please make sure to install and use the Photo Explorer in "Administrator" mode.
- Photo Explorer is not supported on the Mac. iPhoto or iPhoto2 is recommended.

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.

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

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 Cool 360 application software, refer to its respective help documentation.
- For Windows 2000/XP users, please make sure to install and use the Cool 360 in "Administrator" mode.
- Cool 360 is not supported on the Mac.

CAMERA SPECIFICATIONS

Item	Description
Image sensor	1/2.5" CCD sensor (6.0 Mega pixels)
Image resolution	<Still image> 2816 x 2112, 2272 x 1704, 1600 x 1200, 640 x 480 <Video clip> 640 x 480, 320 x 240
LCD monitor	2.5" full color LTPS-TFT LCD (230K pixels)
Recording media	Supports SD memory card (up to 1 GB) (optional)
Compression format	JPEG
File format	DCF, EXIF 2.2, DPOF, AVI
Lens	3x optical zoom lens F =2.8(W) – 4.8(T) f =5.8mm – 17.4mm (equivalent to 35mm – 105mm on a 35mm camera)
Focus range	Standard: Approx. 50cm to infinity Macro: Approx. 6cm to infinity (Wide) Approx. 35cm to infinity (Tele)
Shutter speed	1/2 – 1/1000 sec.
Frame rate	VGA (640 x 480): 30 frames/sec. QVGA (320 x 240): 15 frames/sec.
Digital zoom	4.4x (Capture mode) 8x (Playback mode)
Flash effective range	0.5m – 2.4m (Wide)
Terminal	DC in & USB (with docking station)
Power supply	Rechargeable Lithium-ion battery (3.7V, 750mAh-820mAh) (optional) AC power adapter with docking station (5V/3A) (optional)
Dimension (W x H x D)	Approx. 87 x 54 x 18mm (without protruding parts)
Weight	Approx. 125g (without battery and SD 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 in 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 discharge it for at least one complete cycle before use to maximize its performance and lifetime.
	The battery is not used for an extended period of time after charged.	
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.
	The memory card is write-protected.	Remove the write-protection.
Images do not appear on the LCD monitor.	The power is not on.	Turn the power on.
	LCD monitor is dark.	Adjust the brightness of the LCD monitor in the menu.
Although it is set to auto focus, it does not focus.	The lens is dirty.	Wipe clean with a soft, dry cloth or lens paper.
	The distance to the subject is smaller than the effective range.	Get your subject within the effective focus range.
The flash does not fire. The flash cannot recharge.	The flash is set to flash off.	Set the flash to something other than flash off mode.
Even though the flash fired, 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 dark.	The image is captured in a dark place while set to flash off.	Set the flash to something other than flash off mode.
	It is under-exposed.	Set the exposure compensation to a larger value.
The image is too bright.	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 in 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 AC power adapter with docking station.
		Turn the power on.
	The USB driver is not installed (for Windows 98/98SE and Mac OS 8.6).	Install USB driver.
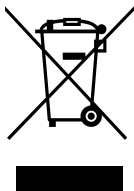
A. Information on Disposal for Users (private households)

1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.
Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local dealer may also take back your old product free of charge if you purchase a similar new one.
*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

B. Information on Disposal for Business Users

1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your local dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.

For Spain: Please contact the established collection system or your local authority for take-back of your used products.

2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.

Attention: Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.