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.
- SD[™] is a trademark.
- PhotoSuite and PhotoVista are trademarks.
- Other names and products may be trademarks or registered trademarks of their respective owner.

READ THIS FIRST

Please start by reading the important messages below first.

- 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's 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, carrying cases/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 manufacturer assumes no liability for any errors or discrepancies in this user's manual.
- 4. For driver updates, refer to our website or contact your dealer.

WARNINGS

- Do not use this camera if it is emitting smoke (or an unusual odor), if it becomes unusually hot to be touched, produces a peculiar noise, or exhibits any other abnormal conditions. Operating the camera in any of these circumstances may cause a fire or an electrical shock. Stop using the camera immediately, turn the camera off, remove the batteries, and disconnect the power source if you are using an AC power adapter. Contact your dealer or authorized service facility for repairs. Never attempt to repair this camera by yourself, as this may be dangerous.
- Do not expose the camera to moisture and make sure no water gets into the camera. Take particular care when using the camera under extreme weather conditions, such as rain or snow, or when operating the camera at the beach on near water. Avoid using this camera in places subject to extreme moisture. Do not use the camera if water has entered the camera. Turn the camera off, remove the batteries, and disconnect the power source if you are using an AC power adapter. Unplug the adapter from the AC power outlet after you have disconnected the camera. Contact your dealer or authorized service facility. Do not continue to use the camera as this may cause a fire or an electrical shock.
- Do not touch the power plug during a thunderstorm if you are using the AC power adapter. This may cause an electrical shock.
- Do not use the camera if any foreign objects have entered the camera. Turn the camera off, remove the batteries, and disconnect the power source if you are using an AC power adapter. Unplug the adapter from the AC power outlet after you have disconnected the camera. Contact your dealer or authorized service facility. Do not continue to use the camera as this may cause a fire or an electrical shock.
- Do not place the camera in an unstable location such as on a wobbly table or sloping surface where the camera may fall or tip over and cause injury. If the camera has been dropped or damaged, turn the camera off and remove the batteries or AC power adapter. Contact your dealer or authorized service facility. Do not continue to use the camera as this may cause a fire or an electrical shock.
- Do not insert or drop metallic or other foreign objects into the camera through access points such as the SD memory card slot. This may cause a fire or an electrical shock.
- Do not attempt to modify this camera. Do not remove the camera casing. This may cause a fire or an electrical shock. Internal inspection and repairs should only be carried out by an authorized service facility.
- Never operate this camera in any way while driving a vehicle. This may cause a traffic accident.

CAUTIONS

- Do not place the camera in damp or dusty locations. This may cause a fire or an electrical shock.
- Do not place the camera in a location affected by oil fumes or steam, such as near a cooking stove or humidifier. This may cause a fire or an electrical shock.
- Do not cover or wrap the camera or the AC power adapter with a cloth or quilt. This may cause heat to build up, distort the case and cause a fire. Always use the camera and its accessories in well-ventilated locations.
- Handle the camera carefully and do not bump the camera into any hard object. Handling the camera roughly may cause a malfunction.
- Do not move the camera while it is switched on. (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have switched off the camera.) Ensure that any connector cords or cables to other devices are disconnected before moving the camera. Failure to do so may damage the cords or cables and cause a fire or an electrical shock.
- When leaving the camera unused for long periods, such as during a vacation, always unplug the camera from the power source (batteries or AC power adapter) for safety. (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Failure to do so could result in a fire.
- Do not use batteries other than those specified for use with the camera. The use of unsuitable batteries may result in the batteries splitting or leaking and causing a fire, injury, or soiling of the battery compartment.
- When fitting batteries into the camera, check the polarity markings on the battery (- and +) to ensure that you insert the battery correctly. Incorrect battery polarity may result in the batteries splitting or leaking and causing a fire, injury, or soiling of the battery compartment.
- Remove the batteries if the camera will not be used for an extended period of time. The batteries may leak and cause a fire, injury or soiling of the battery compartment. If the batteries leak, clean and wipe the battery compartment carefully and install new batteries. Wash your hands carefully if you touch the battery fluid.

CONTENTS

INTRODUCTION 7

Overview	7
Package Contents	7
Optional Accessories	7

GETTING TO KNOW YOUR

CAMERA .	8	3
----------	---	---

Front View	8
Rear View	9
Mode Dial	10
LED Indicators	10
LCD Monitor Information	11

GETTING STARTED 16

Installing the Batteries	16
Using the AC Power Adapter	
(optional accessory)	16
Using an SD Memory Card	
(optional accessory)	17
Attaching the Camera Strap	17
Setting the Time and Date	18
About the Remote Controller	18

TAKING PHOTOGRAPHS 19

Record Mode	19
Selecting the Scene Mode	20
Selecting the Focus	21
Selecting the Flash Mode	22
Using the Self-timer	24
Using the Digital Zoom	25
Taking Photographs with the Ren	note
Controller	26
Manual Record Mode	27
Selecting the Exposure (EXP)	27
Selecting the White Balance	29
Selecting the Photometry Mode	30
Selecting the Exposure Compensation	31

Selecting the Capture Mode
MOVIE MODE 33
Recording Video Clips
Viewing Video Clips
PLAYBACK MODE
Viewing Captured Images
Displaying Image Information
Displaying Thumbnail Images 36
Zoom Playback
Slide Show Display
Protecting Images/Video Clips 38
Protecting one image/video clip
Removing protection from one
image/video clip
To delete one image/video clip
at a time
To delete all images/video clips
at once
Formatting the SD Memory Card 40
DPOF Settings41
TRANSFERRING RECORDED
IMAGES / VIDEO CLIPS TO YOUR
COMPUTER 43
Step 1: Installing the USB Driver on
Windows Computers 44
Installing the USB Driver on Macintosh
Computers 44
Step 2: Connecting the Camera to Your

INSTALLING PHOTOSUITE 46			
INSTALLING PHOTOVISTA 47			
MENU OPTIONS 48			
Record Menu 48			
ISO			
DIGITAL ZOOM 48			
QUALITY SETTING 48			
CREATE FOLDER 49			
PICTURE 49			
DISPLAY SETTINGS 50			
LCD BRIGHTNESS 50			
Manual Record Menu51			
ISO 51			
DIGITAL ZOOM51			
QUALITY SETTING 51			
CREATE FOLDER 51			
PICTURE 51			
DISPLAY SETTINGS 51			
LCD BRIGHTNESS 51			
Playback Menu52			
PROTECT 52			
DPOF 52			
SLIDE SHOW 52			
RESIZE 52			
DISPLAY SETTINGS53			
LCD BRIGHTNESS 53			
Movie Menu54			
ISO 54			
DIGITAL ZOOM54			
QUALITY SETTING 54			
CREATE FOLDER 54			
PICTURE			
DISPLAY SETTINGS54			
LCD BRIGHTNESS 54			
Setup Menu55			
SOUND 55			
AUTO POWER OFF 56			
CUSTOMIZE 56			

LANGUAGE 5	56
VIDEO OUT 5	56
TIME & DATE 5	56
SYSTEM 5	56

CONNECTING YOUR CAMERA TO

OTHER DEVICES .		57
------------------------	--	----

CAMERA SPECIFICATIONS... 58

INTRODUCTION

Overview

Your new digital camera delivers high quality, 2048 x 1536 resolution images using a 3.2 Megapixels CCD sensor. Using either the optical viewfinder or the 2.5" TFT color image LCD monitor, you can compose images and then examine them in detail. An auto-flash sensor automatically detects the shooting (lighting) conditions and determines whether the flash should be used. This feature helps ensure that your images turn out right.

In addition to still images, you can also record short videos by using the movie function.

Images you have taken can be downloaded to your computer using the USB cable (USB driver is required only for Win 98 and Mac OS 8.6). You can enhance and retouch your images on your computer by using the provided editing software, or image editing software you may already own. You may share your images with your friends via e-mail, in a report, or on a website.

DPOF functionality allows you to print your images on a DPOF compatible printer by simply inserting the SD memory card.

Package Contents

Carefully unpack your kit box and ensure that you have the following items. In the event that any item is missing or if you find any mismatch or damage, promptly contact your dealer.

- Digital camera
- User's manual
- USB cable
- Video cable

- Software CD-ROM
- Camera strap
- Lens strap

Optional Accessories

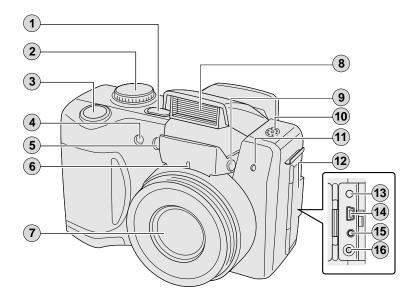
- Camera pouch
- SD memory card
- AC power adapter and Remote control
- 4 x AA (Alkaline or Ni-MH) batteries or 2 x CR-V3 batteries



• Accessories and components may vary by retailer.

GETTING TO KNOW YOUR CAMERA

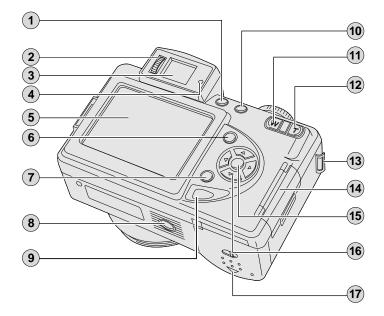
Front View



- 1. Power switch
- 2. Mode dial
- 3. Shutter button
- 4. Remote control sensor
- 5. Flash adjustment sensor
- 6. Front LED
- 7. Lens
- 8. Flash
- 9. Flash open button

- 10. Speaker
- 11. Microphone
- 12. Terminal cover
- 13. MIC terminal
- 14. Digital terminal
- 15. A/V OUT (Audio/Video) out terminal
- 16. DC IN 5V terminal

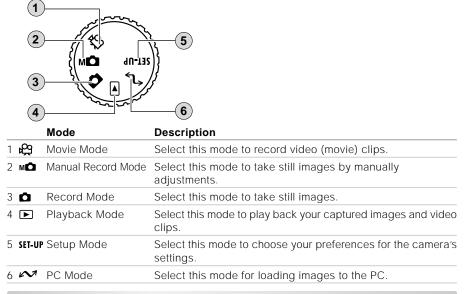
Rear View



- 1. 🕲 🔋 i Self-timer & remote controller/ INFO. button
- 2. Diopter adjustment dial
- 3. Viewfinder
- 4. Viewfinder LED
- 5. LCD monitor
- 6. 🖾 Menu button
- 7. 🛍 Delete button
- 8. Tripot socket
- 9. IOI Display button

- 10. 5 Flash button
- 11. W Wide-angle button
- 12. T Telephoto button
- 13. Strap eyelet
- 14. SD card cover
- 15. OK OK button
- 16. \blacktriangle / \checkmark / \blacklozenge / \blacklozenge Arrow buttons
- 17. Battery cover

Mode Dial



LED Indicators

Color	State	During photography	During playback	During connection to a PC
Green	On	Auto focusing successful (without unsteady hold warning)	_	While the camera is connected to a PC
	Flashing	Auto focusing successful (with unsteady hold warning)		—
Red	On	During SD card accessing	During SD card accessing During creation of DPOF file	During SD card accessing
	Flashing	Auto focusing failure		—
Orange	On	During photographic processing Flash charging in progress Zoom initialization in progress		Not recognized by the PC or other status
	Flashing	No battery power left Camera malfunction	No battery power left	No battery power left

LCD Monitor Information

These indicators are displayed during record mode:



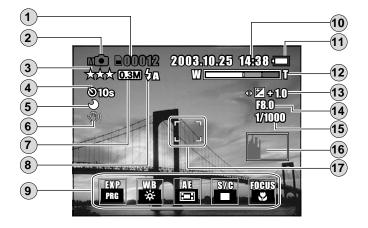
- 1. Possible number of shots
- 2. Record Mode icon
- 3. Quality
 - [★★★] Fine
 - [★★] Normal
 - [★] 🛛 Basic
- 4. Self-timer mode
 - [**\O10s**] 10-second delay
 - [82s] 2-second delay
- 5. AE indicator
- 6. Hand shake
- 7. Image size
 - [**3M**] 2048 x 1536 [**2M**] 1600 x 1200 [**1.2M**] 1280 x 960 [**0.8M**] 1024 x 768
 - [**0.3M**] 640 x 480

- 8. Flash mode
 - [🗛] Auto
 - [50] Red-eye reduction

(10)

- [**4**] Forced flash
- [🛞] Suppressed flash
- [🔂] Slow sync
- 9. Photography tab menu
- 10. Shooting date and time
- 11. Battery level
 - [[] Full battery power
 - [[] Fairly consumed
 - [🔲] Nearly exhausted
 - [🔲] Virtually no battery power
- 12. Zoom state
- 13. Focus area

These indicators are displayed during manual record mode:



- 1. Possible number of shots
- 2. Manual Record Mode icon
- 3. Quality
 - [★★★] Fine
 - [★★] Normal
 - [★] Basic
- 4. Self-timer mode [**⊗10s**] 10-second delay [**⊗2s**] 2-second delay
- 5. [] Long exposure mode
- 6. Hand shake
- 7. Image size
 - [**3M**] 2048 x 1536
 - [**2M**] 1600 x 1200
 - [**1.2M**] 1280 x 960
 - [**0.8M**] 1024 x 768
 - [**0.3M**] 640 x 480
- 8. Flash mode
 - [4A] Auto
 - [50] Red-eye reduction
 - [**4**] Forced flash
 - [🛞] Suppressed flash
 - [4] Slow sync
- 9. Photography tab menu

- 10. Shooting date and time
- 11. Battery level



- Full battery power
- Fairly consumed Nearly exhausted
- Nearly exhau
- [🔚] Virtually no battery power
- 12. Zoom state
- 13. Exposure compensation
- 14. Aperture
- 15. Shutter speed
- 16. Histogram
- 17. Focus area

These indicators are displayed when playing back still images:

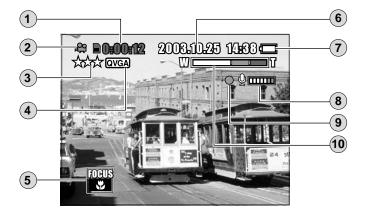


- 1. Playback Mode icon
- 2. Quality
 - [★★★] Fine
 - [★★] Normal
 - [\star] 🛛 Basic
- 3. Image size

[3M]	2048 x 1536
[2M]	1600 x 1200
[[1.2M]	1280 x 960
[0.8M]	1024 x 768

- [**0.3M**] 640 x 480
- 4. File number
- Protect icon (when playing back protected images)
- 6. Battery level
 - [[] Full battery power
 - [] Fairly consumed
 - [🔲] Nearly exhausted
 - [🔲] Virtually no battery power
- 7. Shooting date and time

These indicators are displayed during recording video clips:



- 1. Possible shooting time
- 2. Movie Mode icon
- 3. Quality



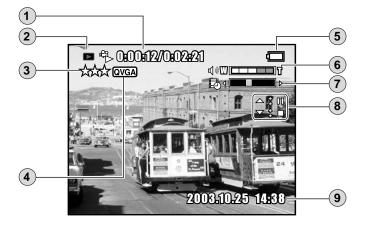
- [★] Basic
- 4. Image size [@VGA] 320 x 240
- 5. Photography tab menu

- 6. Shooting date and time
- Battery level
 [□] Full battery power

[ſ]
[]
[]
[]

- Fairly consumed
-] Nearly exhausted
-] Virtually no battery power
- 8. Sound input level meter
- 9. Recording mark
- 10. Zoom state

These indicators are displayed when playing back video clips:



- 1. Elapsed time/total time
- 2. Playback Mode icon
- 3. Quality
 - [★★★] Fine
 - [**] Normal Basic
 - [★]
- 4. Image size [QVGA] 320 x 240

5. Battery level

[Full battery power
[Fairly consumed
[💷]	Nearly exhausted

- learly exhausted
- Virtually no battery power [
- 6. Volume
- 7. Movie status bar
- 8. Movie guide
- 9. Shooting date and time

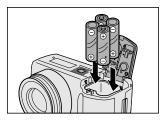
GETTING STARTED

You can use either 4 AA size batteries (Alkaline or Ni-MH), 2 CR-V3 Lithium battery packs or an AC power adapter (optional accessory) to power the camera. Battery power is convenient for capturing images or video clips while an AC adapter power is useful when transferring recorded images to your computer.

Installing the Batteries

- 1. Make sure the camera is turned off.
- 2. Unlock the battery cover lock, and slide the battery cover.
- 3. Insert the batteries, noting the correct polarity marks (+ or -).
- 4. Close the battery cover firmly.

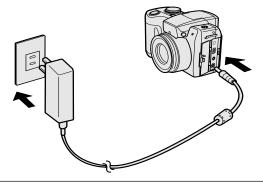
Note



- If you will not be using the batteries for an extended period of time, remove them from the camera to prevent leakage or corrosion.
- Never use manganese batteries.
- Never use batteries of different type (together) or mix old and new batteries.
- Avoid using batteries in extremely cold environments as low temperatures can shorten the battery life and reduce camera performance. (Such damage is not covered under the warranty).

Using the AC Power Adapter (optional accessory)

- 1. Make sure the camera is turned off.
- 2. Connect one end of the AC power adapter to the jack labeled "DC IN 5V" terminal.
- 3. Connect the other end to an electrical outlet.



- Make sure to use only the AC power adapter specified for the camera. Damage caused by the use of an incorrect adapter is not covered under the warranty.
 - Using an AC power adapter while transferring images to your computer prevents unexpected automatic power off of the camera.

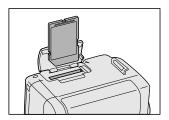
Using an SD Memory Card (optional accessory)

Images photographed with this camera will be needed to store in the SD memory card. Without inserting the SD memory card, you won't be able to capture image using the camera.

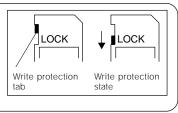
- 1. Make sure the camera is turned off.
- 2. Slide the SD memory card cover.
- 3. Insert the SD memory card.
 - The front side of the memory card should face towards the front side of the camera.
 - If the card cannot be inserted, check the orientation.
- 4. Close the SD card cover.

To remove an SD memory card

- 1. Make sure the camera is turned off.
- 2. Open the SD card cover.
- 3. Press lightly on the edge of the memory card and it will eject.



- To prevent valuable data from being accidentally erased from an SD card you can slide the write protect 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.

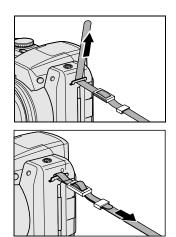


Attaching the Camera Strap

To prevent accidental dropping of the camera, always use the camera strap.

Attach the camera strap as follows:

- 1. Pass the end of the camera strap through the strap attachment and fasten it to the fixture.
- 2. Attach the other end of the camera strap in the same way.



Setting the Time and Date

The Time and Date screen will be presented if/when:

- The camera is turned on for the first time;
- The camera is turned on after removing the batteries/ AC power adapter or replacing the batteries.

When the date and time setting screen appears, follow the steps below to set the correct time and date. You may skip this procedure by choosing **CANCEL**.

- Select the desired item with the
 button. Enter the values of the time and date by using the ▲ /▼ button.
 - To increase the value for each option, press the ▲ button.
 - To decrease the value for each option, press the ▼ button.
 - Seconds cannot be set.

Note

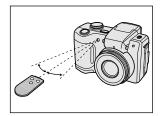
2. Press **OK** after all options are set.



When the mode dial is set to [□] [M□] [PΩ]], the viewfinder display is active, and when the mode dial is set to [□], the LCD monitor display is active. To switch between these displays, press the □] button.

About the Remote Controller

The remote controller allows you to capture or play back images away from the camera.





 Be extremely cautious not to drop, violently shake or subject the remote controller to strong impact.

- Be aware of not spill water on the remote controller.
- Do not disassemble the remote controller.
- Avoid the remote controller near hot or humid locations.
- Do not expose the remote control sensor to direct sunlight or other bright light sources.

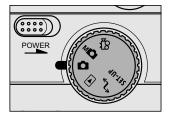
TAKING PHOTOGRAPHS

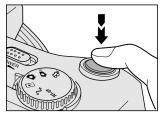
Record Mode

Note

In this mode, photographs can be taken easily as the majority of the settings are adjusted by the camera. Simply point at the subject and then shoot.

- 1. Turn the camera on by sliding the **POWER** switch.
- 2. Rotate the mode dial to [1 record mode.
- 3. Compose and adjust the image through the LCD monitor or the viewfinder.
- 4. Press the shutter button down halfway and then fully down.





- After the image is taken, the viewfinder LED stays lit for the time that the captured images can be recorded to the SD card. When the viewfinder LED is lit red, be sure not open the battery cover or the card cover, or remove the batteries or the SD memory card.
- Open the flash to take pictures with the according flash mode.
- When taking photographs, be aware of the strap or your fingers not to interfere with the lens, flash or flash adjustment sensor.

Selecting the Scene Mode

Set the scene to photograph such as [**AUTO**] AUTO, [**L**] PORTRAIT, [**L**] LANDSCAPE, [**X**] SPORTS, [**L**] PORTRAIT + LANDSCAPE, [**X**] NIGHT SCENE or [**H**] MULTI.

- The setting still remains after the power is turned OFF manually or by auto power OFF.
- 1. Rotate the mode dial to [🗖] record mode.
- 2. Press the **OK** button.
- 3. Select [**SCENE**] with the **◄** / **▶** button, and then press the **▲** button.
 - A list of scene mode icons is displayed.
- 4. Choose the icon of the desired scene mode with the
 ✓ / ▶ button, and press the OK button.
 - To cancel the selected scene mode, press the ▼ button.
- 5. Press the **OK** button again and the camera is now ready to take a photograph.





Description
Select this when you want to leave the settings up to the camera to take photographs with ease. All flash modes can be set.
Select this mode to make the main subject stands out pre- cisely while the background details are out-of-focus. Flash mode is fixed at [\$ A] Auto with [\$] Red-eye Reduction.
Select this mode to enhance color, saturation shown in mountains, forests and other landscape scenery, or to take portraits that feature a landmark in the background. Flash mode cannot be set.
Select this mode to capture the fast-moving subjects. Flash mode cannot be set.
Select this mode to take photographs of people against a scenery or landscape background. Flash mode is fixed at [\$A] Auto with [\$@] Red-eye Reduction.
Select this mode to capture human subjects against a sunset or night-time background. Flash mode is fixed at [5] Slow Sync.
Select this mode to capture images of moving subjects continuously. Flash mode cannot be set.

Selecting the Focus

You can take photographs with the distance to the subject set by **[AF]** AUTO FOCUS, [♥] MACRO, [∞] INFINITY, [**1m**] FIXED AT 1M or [**3m**] FIXED AT 3M.

- The setting still remains after the power is turned OFF manually or by auto power OFF.
- 1. Rotate the mode dial to one of [] record mode, [] manual record mode or [] movie mode.
- 2. Press the **OK** button to enter the photography tab menu mode.
- Select [FOCUS] with the
 ▶ button, and then press the ▲ button.
 - A list of focus mode icons is displayed.
- Choose the icon of the desired scene mode with the
 ↓ button, and press the OK button.
 - To cancel the selected scene mode, press the ▼ button.
- 5. Press the **OK** button again and the camera is now ready to take a photograph.



Focus Mode	Description
[AF] AUTO FOCUS	Select this mode when you want to leave the settings up to the camera to take photographs with ease.
[📽] MACRO	Select this mode when you want to take photographs of subjects within 10cm to 50cm (wide: zoom off)/ 90cm to 120cm (tele: optical zoom 10X) of the camera.
[🗙] INFINITY	Select this mode when you want to take photographs of subjects about 5m or more from the camera.
[1m] FIXED AT 1M	Select this mode when you want to take photographs of subjects about 1m from the camera.
[3m] FIXED AT 3M	Select this mode when you want to take photographs of subjects about 3m from the camera.



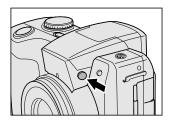
 \bullet When [1m], [3m] or [∞] is set, the camera takes images with the focus set to a fixed distance.

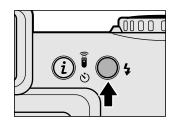
- This camera offers an accurate auto-focus mechanism. However, sometimes will be difficult to focus or not be able to focus under the follwing situations:
 - When there are objects before or behind the subject;
 - Very shiny subjects such as a mirror or car body;
 - Subjects that hardly reflect any light such as hair or fur;
 - When the contrast is extremely low;
 - Subjects moving at high speed;
 - Subjects without substance such as smoke or flame;
 - Subjects viewed through glass;
 - Subjects are far away and dark.

Selecting the Flash Mode

The flash is designed to function automatically when lighting conditions warrant the use of flash. You can take an image using a flash mode suitable to your circumstances.

- The effective flash firing distance is about 0.5m to 4.4m (wide, ISO400).
- The setting still remains after the power is turned OFF manually or by auto power OFF.
- 1. Rotate the mode dial to either [1] record mode or [1 manual record mode.
 - In the [] record mode, it is possible to set the flash if the scene mode is set to [AUTO].
 - Flash settings may be limited depending on the scene mode.
- 2. Press the flash open button to open the flash.
- 3. Press the flash button to set the desired mode while viewing on screen.
 - - [4] Auto $\rightarrow [4]$ Red-eye Reduction \rightarrow
 - [↓] Forced Flash → [⑦] Suppressed Flash → [↓] Slow Sync.
 - When scene mode is set to [M▲] manual reocrd mode. The modes appear cyclically:
- 4. Compose your image, press the shutter button down halfway and then fully down.
 - When the shutter button is pressed halfway down when the flash fires, the flash icon on screen will be displayed in yellow.
 - The flash is limited to certain set modes.





The table below will help you to choose the appropriate flash mode:

Flash	Mode	Description
[4A]	Auto	The flash fires automatically according to the ambient lighting conditions. Select this mode for general photography. When the scene mode is set to [▲] PORTRAIT or [▲▲] PROTRAIT + LANDSCAPE in [✿] record mode, the flash fires twice for [�] red-eye reduction, and the image is taken at the second firing.
[4	Red-eye Reduction	The flash emits a precursor-flash before the main flash fires. This causes the pupil in the human eye to constrict, reducing the red- eye phenomenon. Select this mode when taking images of people and animals in low- light conditions. The flash always fires twice, and the image is taken at the second firing.
[4]	Forced Flash	The flash will always fire regardless of the surrounding brightness. Select this mode for recording images with high contrast (backlighting, fluorescent lighting, etc.) and deep shadows.
[😭]	Suppressed Flash	The flash will not fire. Select this mode when taking images in a place where flash photography is prohibited, or when the distance to the subject is beyond the effective range of the flash.
[40]	Slow Sync	The flash is fired at a slower shutter speed. This flash mode is effective when taking pictures so that not only the subject but also the background are both clearly reproduced in artificial light (backlighting, fluorescent lighting, etc.) or with people against the night as a background scene.

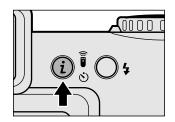
Firing is fixed at "disabled" when the flash is closed.
When the scene mode is set to [▲] LANDSCAPE or [※]SPORTS, firing is fixed at "disabled" and flash photography cannot be set.
When the scene mode is set to [▲] NIGHT SCENE, firing is fixed at [↓] Slow Sync.

Using the Self-timer

Note

When the self-timer is set, the camera automatically takes a shot after 10 or 2 seconds. This allows you to get into the scene when taking group images.

- The setting is canceled after the power is turned OFF manually or by the auto power OFF.
- 1. Rotate the mode dial to one of [🗖] record mode, [м] manual record mode or [🕰] movie mode.
- 2. Press the 👏 🖥 self-timer and remote controller button.
- When [] remote controller is set, photographs can be taken using the remote controller.
- 3. Compose your image, press the shutter button down halfway and then fully down.
 - The front LED, then blinks, and the photograph is taken after the preset time (2 or 10 seconds) has elapsed.
 - The countdown displays on the screen.
 - To cancel the self-timer midway, press the ▼ button.



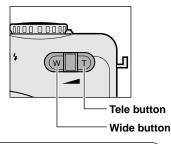
- After one shot is taken, the self-timer mode is turned to OFF.
- When the self-timer is set to [**\O10s**] or [**\O2s**], the setting is automatically canceled after an image is taken.
- \bullet Using the self-timer [O2s] is effective to prevent the camera from hand shake when pressing the shutter button.

Using the Digital Zoom

The lens moves during the zoom photography. Zoom photography allows you to capture telephoto and wide-angle shots. By using the digital zoom, images can be enlarged by pressing the (\mathbf{T}) telephoto button so that the subject appears closer or appears further away by pressing the (\mathbf{W}) wide-angle button. However, the more the image is enlarged, the grainier the image will become.

Zoom photography up to a maximum of 40X is possible using the 10X optical zoom and 2X or 4X digital zoom depending on the distance up to the subject.

- 1. Rotate the mode dial to one of [☐] record mode, [☑] manual record mode or [☑] movie mode.
- 2. Compose the image with the [**T**] telephoto button or [**W**] wide-angle button to set the zoom.
 - The position of the lens moves depending on the **T** / **W** button setting.
- 3. Compose your image, press the shutter button down halfway and then fully down.

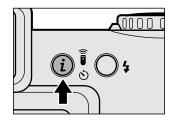


You can turn the digital zoom ON or OFF on the photography menu.
 The T / W button setting is automatically canceled by turning the power OFF or by activation of the auto power OFF function.
 You can check the zoom state in the screen.
 The color of the digital zoom bar changes as follows according to the resolution and digital zoom magnification.
 Color Description
 Yellow Image quality is hardly impaired and sharp-looking photographs can be taken.
 Orange Image quality is slightly impaired but the subject will look larger in the photograph.

Taking Photographs with the Remote Controller

You can take photographs with the remote controller.

- 1. Rotate the mode dial to one of [1] record mode, [1] manual record mode or [1] movie mode.
- 2. Press the 🕲 🖥 self-timer and remote controller button to set the [
 - The modes appear cyclically:
 [DISPLAY OFF] No setting → [𝔅 10s] 10-second timer → [𝔅 2s] 2-second timer → [𝔅 2 s] 2-second timer → [𝔅 3 s] 10-second ti
- 3. Compose the picture, point the remote controller at the remote control sensor on the camera, and press the [
 - In the [] record mode or [M] manual record mode, the photograph is taken, and the image is recorded to the SD memory card.
 - In the [♀] movie mode, the camera starts to record the movie. To stop recording the video clip, press the [] record button again.



- The remote setting is held until you press the self-timer & remote controller/INFO. button and change to another setting.
- You can also use zoom to take photographs using the ◀ ▶ button.

Note

Manual Record Mode

Selecting the Exposure (EXP)

With the exposure settings, [**PRG**] PROGRAM, [**Av**] APERTURE PRIORITY, [**Tv**] SHUTTER SPEED PRIORITY and [**M**] MANUAL, you can capture images with your specific requirements.

[PRG] PROGRAM

The camera automatically sets the shutter speed and the aperture value according to the brightness of the subject. This allows you to capture images with ease just like when **[AUTO]** in the [**D**] record mode.

In the program mode, white balance, photometry mode, and other settings can be switched before taking photographs.

- Rotate the mode dial to [MD] manual record mode, and press the OK button.
- Select [EXP] with the ◀ / ▶ button, and press the ▲ button.
 - A list of exposure mode icons is displayed.
- Select [**PRG**] with the ◀ / ▶ button, and press the **OK** button.
- 4. Press the **OK** button again and the camera is ready to take the next shot.



[Av] APERTURE PRIORITY

In this mode, photographs are taken with the priority given to the aperture setting. The shutter speed is automatically set according to the aperture.

- 1. Rotate the mode dial to [M☑] manual record mode, and press the OK button.
- Select [EXP] with the ◀ / ▶ button, and press the ▲ button.
 - A list of exposure mode icons is displayed.
- Select [Av] with the < / ▶ button, and press the OK button.
- 4. Press the **OK** button again and the camera is ready to take the next shot.

5. Set the aperture with the \blacktriangle / \checkmark button.



- The setting range is: F2.8/F3.2/F3.6/F4.0/F4.5/F5.0/F5.6/F.6.3/F7.1/F8.0
- When aperture F2.8 is set, the shutter speed is limited to a maximum speed of 1/1000 sec.
 If the appropriate combination cannot be set, the histogram frame turns red.
- The aperture value you set differs form the aperture value used in actual photography depending on the position of the zoom lens.

[Tv] SHUTTER SPEED PRIORITY

In this mode, images are taken with the priority given to the shutter speed. The aperture is automatically set according to the shutter speed. If you set a fast shutter speed, you can take photographs of moving subjects that look they are still. If you set a slow shutter speed, you can take photographs that make you feel as if the subject is rushing by.

- 1. Rotate the mode dial to [M▲] manual record mode, and press the **OK** button.
- Select [EXP] with the
 ▶ button, and press the ▲ button.

■ A list of exposure mode icons is displayed.

- 3. Select [**Tv**] with the **◄** / **▶** button, and press the **OK** button.
- 4. Press the **OK** button again and the camera is ready to take the next shot.
- 5. Set the shutter speed with the \blacktriangle / \blacktriangledown button.
 - For a faster shutter speed press ▲ button.
 - For a slower shutter speed press ▼ button.



Aperture value Shutter speed value

[M] MANUAL

Note

In this mode, set the aperture value and shutter speed to individual values before taking photographs.

- 1. Rotate the mode dial to [MD] manual record mode, and press the **OK** button.
- Select [EXP] with the
 ▶ button, and press the ▲ button.
 - A list of exposure mode icons is displayed.
- 3. Select [**M**] with the **◄** / **▶** button, and press the **OK** button.
- 4. Press the **OK** button again and the camera is ready to take the next shot.
- Adjust aperture with the ▲ /▼ button and the shutter speed with the ◀ / ▶ button.



• If the histogram frame turns red, this indicates that the exposure is not appropriate.

- When the manual mode is set, the
 / ▶ button sets the shutter speed, and exposure compensation cannot be set. To set the appropriate exposure, adjust the shutter speed and aperture.
 - When aperture F2.8 is set, the shutter speed is limited to a maximum speed of 1/1000 sec.

Selecting the White Balance

The human eye adapts to changes in light so that white objects still appear white even when the light changes. With cameras, however, the color of the subject is influenced by the color of the light surrounding it. This color adjustment is called "white balance adjustment". This setting allows you to set the white balance when taking photographs under specific lighting condition.

- 1. Rotate the mode dial to [M▲] manual record mode, and press the **OK** button.
- Select [WB] with the
 ▶ button, and press the ▲ button.
 - A list of white balance icons is displayed.
- 3. Select the icon of the desired setting item with the
 ✓/ ▶ button, and press the ▲ button.
- 4. Press the **OK** button again and the camera is ready to take the next shot.



WB icons	Description
[AW] AUTO	Automatic adjustment
[🔅] SUNLIGHT	Photography under sunlight
[🖒] CLOUD	Photography under cloudy skies.
[Photography under daylight fluorescent lamp (bluish glow fluorescent lamp)
[Photography under daylight fluorescent lamp (reddish glow fluorescent lamp)
[🕂] INCANDESCENT LAMP	Photography under incandescent lamp
[PRE [SET1] PRESET 1 [SET2] PRESET 2	Manually set white balance and register the setting. Up to two white balance patterns can be registered. Use this setting when the white balance does not go smoothly.

Selecting the Photometry Mode

Set the metering method to calculate the exposure.

- 1. Rotate the mode dial to [M▲] manual record mode, and press the **OK** button.
- Select [AE] with the
 button, and press the ▲ button.
 - A list of photometry mode icons is displayed.
- 3. Select the icon of the desired setting item with the
 - \blacktriangleleft / \blacktriangleright button, and press the \blacktriangle button.
 - CENTER PRIORITY PHOTOMETRY [] (The exposure is set by giving precedence to the center of the image when metering the entire image)
 - SPOT PHOTMETRY []
 (The exposure is set by giving precedence to an extremely narrow area in the center of the image).
- 4. Press the **OK** button again and the camera is ready to take the next shot.



Selecting the Exposure Compensation

Your camera adjusts the exposure of each scene automatically. However, if the subject is very dark, or very bright, you may override the camera automatic exposure determination to make the subject brighter or darker. This is called EV compensation.

The EV compensation of the camera can be adjusted from -2.0EV to +2.0EV in 0.3EV steps.

- 1. Rotate the mode dial to [M] manual record mode.
- 2. Adjust the exposure with the \triangleleft / \blacktriangleright button.
- Compose your image, press the shutter button down halfway and then fully down.

Effective Subjects and Set Values

Positive (+) Compensation

- Copying of printed text (black characters on white paper)
- Backlit portraits
- Very bright scenes (such as snowfields) and highly reflective subjects
- Shots made up predominantly of sky.

Negative (-) Compensation

- Spot lighted subjects, particularly against dark backgrounds
- Imaging of printed text (white characters on black paper)
- Scenes with low reflectivity, such as shots of green or dark foliage.



● When the [M] manual mode is set, the ◀ / ▶ button sets the shutter speed, and exposure compensation cannot be set.

Exposure setting value



Selecting the Capture Mode

Set the capturing method that is used for taking images.

- 1. Rotate the mode dial to [Ma] manual photography mode, and press the **OK** button.
- Select [S/C] with the
 button, and press the ▲ button.
 - A list of capture mode icons is displayed.
- Select the icon of the desired setting item with the I > button, and press the OK button.
 - []] 1 Shot;
 - [] Normal Continuous Shooting: You can take 14 frames or more at 1.0 second intervals. However, the number of frames varies according to the photographic conditions (subject, recording medium, etc.)
 - $[\overset{\textbf{AEB}}{\textbf{3}}]$ AEB 3-Frame Shooting: The shutter operates three times and photographs are taken with the exposure changed in three stages -0.3, 0 and +0.3.
 - [AEB]AEB 5-Frame Shooting: The shutter operates five times and photographs are taken with the exposure changed in five stages -0.7, -0.3, 0 +0.3 and +0.7.
- 4. Press the **OK** button again and the camera is ready to take the next shot.

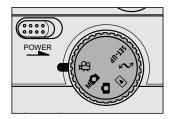


MOVIE MODE

Recording Video Clips

The [μ_{Ω}] movie mode allows you to record video clips at a resolution of 320x240 pixels. Voice can also be recorded.

- 1. Slide the **POWER** switch and power on the camera.
- 2. Rotate the mode dial to [🋱] movie mode.
- 3. Fully press the shutter button.
 - This starts taking of the movie, and the front LED lights.
 - Fully press the shutter button again to stop taking the movie and save the images to the SD memory card.





• You can also use the external microphone to record voices.

Flash photography is not possible in the [A g] movie mode.

Viewing Video Clips

Play back video clips recorded on the camera. Voice is also played back.

- 1. Rotate the mode dial to [**D**] playback mode.
 - The last image appears on the screen.
 - Adjust the brightness if the LCD monitor is too light or too dark.
- 2. Select the preferred video clip with the ◀ / ► button.
 - You can also select the desired movie from the thumbnail display.
 - When using the remote controller, select the preferred video clip with the ◀ ▶ button on the remote controller.
- Press the ▲ button.

Note



• Video clips cannot be displayed rotated or enlarged.

PLAYBACK MODE

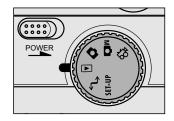
Note

In the [\triangleright] Playback mode, you can view, magnify your images or play video clips back. This mode even provides thumbnail images display and slide show, allowing you to quickly search for the image that you want or play the images back one by one automatically.

Viewing Captured Images (Single-Frame Playback)

Play back photographed still images; one image at a time.

- 1. Turn the camera on by sliding the **POWER** switch.
- 2. Rotate the mode dial to [] playback mode.
- View and select your recorded images by using the ✓ / ▶ button.
 - When using the remote controller, press the ◀ ► button on the remote controller to feed forward or reverse.

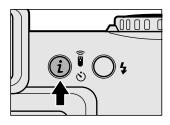


- Pressing the ▲ /▼ buttons during image playback displays rotated the image 90° at a time.
 Pressing the ▼ button displays rotated the image clockwise, while pressing the ▲ button displays rotated the image anticlockwise. Video clips cannot be displayed rotated during playback.
 - All of the images in a folder can be played back by pressing the ◀ / ▶ button if multiple folders exist during image playback.

Displaying Image Information

Switch the state of the information display when playing back images.

- 1. Rotate the mode dial to [🗩] playback mode.
- 2. Select the images with the ◀ / ► button.
- 3. Press the *i* INFO. button.
 - The information appear cyclically: Normal → Non-display → Detailed display → Histogram



Status	Description
Normal	Displays the state during regular playback. (state that is currently set at "Display Settings" in the playback menu).
Non-display	Hides the image information.
Detailed display	Displays detailed information of the image.
Histogram	Displays a graph indicating the distribution of brightness in the image. The vertical axis indicates the number of pixels and the horizontal axis indicates brightness.



Histogram







□ B100D0027
RESOLUTION : 2048 X 1536
QUALITY : ***
SHUTTER SPEED: 1/500
APERTURE : F2.8
EXPOSURE+/-: +1.0
ISO : 100
FLASH CFF
FILLE SIZE : 480KB
-2003.10.25 14:38

Displaying Thumbnail Images

This function allows you to view nine thumbnail images on the LCD monitor simultaneously so that you can quickly scan for a particular image.

- 1. Rotate the mode dial to [🕨] playback mode.
- 2. Press the **OK** button or **[W]** wide-angle.
 - Nine thumbnail images appear on the LCD monitor (assuming there are nine or more recorded images in the memory).
- Use the ▲, ▼, ◀ or ▶ button to move the cursor to select the image to be displayed at regular size.
- 4. Press the **OK** button to display the selected image on the full screen.



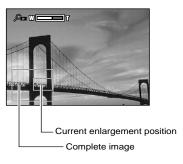
- All of the images in a folder can be displayed as thumbnails by pressing the ▲ /▼ / ◀ / ▶ button if multiple folders exist when viewing thumbnails.
 - In the thumbnail display, enlarged display or when playing back video clips, the display is switched between normal and non-display.
 - If the thumbnail display contains video clip data, the 🛱 movie mode is displayed.

Zoom Playback

Note

While reviewing your images, you may enlarge a selected portion of an image. This magnification allows you to view fine details.

- 1. Rotate the mode dial to [🕞] playback mode.
- Use the ◀ or ▶ button to select the frame you want to enlarge.
- 3. Adjust the zoom ratio by using the **[T]** telephoto button or **[W]** wide-angle button.
 - Pressing the [T] telephoto button will enlarge the image.
 - To return to normal magnification, press the [**W**] wide-angle button.
 - The image is displayed enlarged, you will see a green frame with a green box inside. The green frame indicates the entire image, while the green box shows the location of the currently enlarged area.
- Use the ▲, ▼, ◀ or ▶ button to select the area to enlarge.
- 5. To return to the regular display from 4X-enlarged status, press the **OK** button.



Slide Show Display

The slide show function enables you to play your images back automatically in sequential order as a slide show. This is a very useful and entertaining feature reviewing recorded images and for presentations.

- 1. Rotate the mode dial to [🗩] playback mode.
- Press the mess menu button.
 The playback menu appears.
- 3. Select [SLIDE SHOW] with the ▲/▼ button from the playback menu, then press the ▶ button.
 The slide show setting screen appears.
- Select the [PLAY INTERVAL] with the ▲ /▼ button, then press the ▶ button.
- Select the [ANIMATION] with the ▲ /▼ button, then press the ▶ button.
- Select the item with the ▲ /▼ button, then press the OK button.
 - This sets the slide show settings.
- 7. Select the [SLIDE SHOW] with the ▶ button.
 - The slide show starts.
 - To stop the slide show, press the ▼ button again.
 - Slide show is repeated until you press the ▼ button again.





 You can pause slide show by pressing the ▲ button. Pressing the ▲ button resumes the slide show.

- The auto power OFF function does not operate during slide shows.
- All images in the folder are automatically played back.
- Only the first frame of movies is played back.

Protecting Images/Video Clips

This feature prevents images or video clips from being deleted accidentally (Protect).

Protecting one image/video clip

- 1. Rotate the mode dial to [🕞] playback mode.
- 2. Press the 🖻 menu button.

Note

- The playback menu appears.
- Select [PROTECT] with the ▲ /▼ button, then press the ▶ button.
 - The protect setting screen appears.
- Set the desired image to protect with the
 ▶ button, and press the OK button.
 - If there are two or more images to protect, repeat the above procedure.
- Select [EXECUTE] with the ▲ /▼ button, then press the OK button.
 - The image is protected, and the screen returns to the playback menu.
 - To cancel a protect setting, select [CANCEL], and press the OK button.

▶MENU	
PROTECT	•
DPOF	
SLIDE SHOW	
RESIZE	
DISPLAY SETTINGS	
LCD BRIGHTNESS	

- All of the images in a folder can be selected by press the I button if multiple folders exit.
- To display the image full on screen for confirmation, press the **[T]** telphoto button. To return the original screen, press the **[W]** wide-angle button.

Removing protection from one image/video clip

- 1. Select [**PROTECT**] with the ▲ /▼ button from the playback menu, and press the ▶ button.
- Select the desired image to unprotect with the ◀ / ▶ button, and press the OK button.
 - To cancel removal of protection, press the **OK** button.
 - If there are two or more images to unprotect, repeat the above procedure.
- 3. Select the [EXECUTE] with the ▲ /▼ button, then press the OK button.
 - To not cancel a protect setting, select [CANCEL], and press the OK button.



Deleting Images

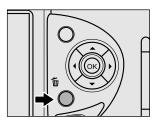
To delete one image or one video clip , use the fm delete button on the rear side of the camera. To delete all images or video clips at once, use the delete option in Playback menu.

To delete one image/video clip at a time

- 1. Rotate the mode dial to one of [▶] playback mode, [▶] record mode, [₩▶] manual record mode.
 - If you selected [▶] playback mode, select the image you want to delete by pressing the </ > button.
 - If you selected [▲] record mode, [м▲] manual record mode or [♣] movie mode, the last image will be deleted.
- 2. Press the 🛍 delete button.
- Select [] with the < / ▶ button, and press the OK button.

■ The message "ERASE?" is displayed on the screen.

- Select [YES] with the ▲ /▼ button, and press the OK button.
 - If you want to cancel the deletion, select [NO] and press the **OK** button.
- 5. To continue deleting images, repeat steps above.





• Even if you take photographs after deleting an image, files are assigned serial numbers from the next number from the very last number assigned after the image was deleted.

• Images can also be deleted in the thumbnail display. After the image is deleted, the screen returns to the thumbnail display.

To delete all images/video clips at once

- Rotate the mode dial to one of [▶] playback mode,
 [▶] record mode, [▶] manual record mode or
 [▶] movie mode.
- 2. Press the 🖬 delete button.

Note

- Select [□] with the
 button, and press the OK button.
- Select [YES] with the ▲ /▼ button, and press the OK button.
 - The message "ERASE?" is displayed.
- Select [YES] with the ▲ /▼ button, and press the OK button.
 - Except for image protected, all images currently recorded on SD card are deleted, and the camera returns to the mode selected on the mode dial.
 - To not delete, select [NO], and press the **OK** button.



Formatting the SD Memory Card

Formatting the SD memory card will delete all the images on the SD memory card. Be sure the SD memory card is properly inserted into the camera before formatting it. The SD memory card cannot be formatted if it is LOCK state.

- 1. Rotate the mode dial to one of [🗩] playback mode,
 - [🖸] record mode, [M🖸] manual record mode or
 - [🎝] movie mode.
- 2. Press the 🛍 delete button.
- 3. Select [] FORMAT with the ◀ / ▶ button, and press the OK button.
 - The message "FORMAT CARD?" is displayed.
- Select [YES] with the ▲ /▼ button, and press the OK button.
 - The message "SURE?" is displayed.
 - To not format, select [NO], and press the **OK** button.
- 5. Select [YES] with the OK button.
 - This formats the SD memory card.
 - After formatting completed, the message "RESET FILE NUMBER?" is displayed.
- Select [YES] with the ▲ /▼ button, and press the OK button.
 - This resets the file No., and the camera returns to the mode selected on the mode dial.
 - To not reset the file No., select [NO].



- If you reset a file number, the file number is assigned as a running number following the last assigned number after taking photographs.
- If all images are earsed, [NO IMAGE AVAILABLE] pops up.



DPOF Settings

DPOF (Digital Print Order Format) allows you to embed printing information on your SD memory card .

By using DPOF, you can select an image to be printed and then specify how many prints or which image you would like. Take your SD memory card to a DPOF enabled printer or through laboratory printing services that accept memory cards. The DPOF/card-compatible printer will read the embedded information on the memory card and print your images as specified.

Setting the DPOF format

- 1. Rotate the mode dial to [🕨].
- 2. Press the 🔚 menu button.
 - The playback menu appears.
- Select [DPOF] with the ▲ /▼ button, and press the ▶ button.
 - The DPOF setting screen appears.
- Select [SELECT IMAGE] with the ▲ /▼ button, and press the ▶ button.
- 5. Select [SELECT] or [ALL] with the ▲ /▼ button, and press the ▶ button.
- 6. Select the preferred image with the
 Image with
 - You can set up to 99 prints for each captured image.
- 7. Press the **OK** button.
- Select [YES] with the ▲ /▼ button, and press the OK button.
 - To not print the date on the image, select [NO], and press the **OK** button.
 - The message "CREATE DPOF FILE?" is displayed.
- Select [EXECUTE] with the ▲ /▼ button, and press the OK button.

PROTECT
PROTECT
DPOF
SLIDE SHOW
RESIZE
DISPLAY SETTINGS
LCD BRIGHTNESS

 DPOF
 E1000 0022

 00
 03
 00

 TOTAL
 65
 COPIES

 02: OK
 00
 00

Note

• To display the full image on the screen for confirmation, press the [**T**] telephoto button. To return to the original screen, press the [**W**] wide-angle button.

Checking the DPOF settings

- 1. Select [CONFIRM SETTING] with the ▲ /▼ button in the DPOF setting screen, and press the ▶ button.
- 2. Press the OK button.■ The screen returns to the DPOF setting screen.
- 3. Press the ◀ button.
 - The screen returns to the playback menu.

▶DPOF
SELECT IMAGE
CONFIRM SETTING
CLEAR ALL

Cancel the DPOF settings

- Select [CLEAR ALL] with the ▲ /▼ button in the DPOF setting screen, and press the ▶ button.
 - The message "ALL SETTINGS WILL BE RESET" appears.
- Select [EXECUTE] with the ▲ /▼ button, and press the OK button.

■ The message "RELEASE ALL PROTECT? " appears.

 Select [EXECUTE] with the ▲ /▼ button, and press the OK button.

■ The screen returns to the DPOF setting screen.

- 4. Press the ◀ button.
 - The screen returns to the playback menu.

▶DPOF	
SELECT IMAGE	
CONFIRM SETTING	
CLEAR ALL	ŀ

TRANSFERRING RECORDED IMAGES/VIDEO CLIPS TO YOUR COMPUTER

You can share recorded images/ video clips with your family or friends via e-mail or post them on the Web. Before doing those things, you need to connect the camera to your computer by using the USB cable and then transfer the images/video clips.

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

- Step 1: Installing the USB driver (only for Windows 98)
- **Step 2:** Connecting the camera to your computer

Step 3: Downloading images/video clips

	System Requirements (Windows)	System Requirements (Macintosh)
CPU	Pentium 166 MHz processor or higher	PowerPC G3/G4
OS	Windows 98/98SE/Me/2000/XP	OS 8.6 or higher
Memory	32MB (64MB RAM recommended)	32MB (64MB RAM recommended)
Free Space on Hard Disk	128 MB hard disk space	128 MB hard disk space
Required Devices	A CD-ROM Drive, An Available USB Port	A CD-ROM Drive, An Available USB Port
Color Monitor	Color Monitor (800x600, 24-bit or higher recommended)	Color Monitor (800x600, 24-bit or higher recommended)

Step 1: Installing the USB Driver on Windows Computers

The USB driver on the supplied CD-ROM is exclusively for Windows 98. Installing the USB driver on computers running **Windows 2000/Me/XP** is not necessary.

1. Insert the CD-ROM packaged with the camera into the CD-ROM drive.

The welcome screen appears.

 Click "Install USB Driver". Follow the on-screen instructions to complete the installation. After the USB driver installation is complete, restart your computer.



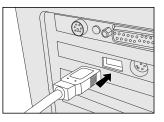
Installing the USB Driver on Macintosh Computers

Mac OS 8.6 users must install a USB driver. For Mac OS 9.0 or higher version, the computer will automatically recognize the camera and load its own USB drivers.

- 1. Insert the CD-ROM packaged 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 and restart your computer.

Step 2: Connecting the Camera to Your Computer

- 1. Connect one end of the USB cable to an available USB port on your computer.
- 2. Connect the other end of the USB cable to the USB connector on the camera.
- 3. Turn the camera on.
- Look for a new "Removable Disk" icon appearing in the "My Computer" window. Your recorded images/ video clips will be in a folder on this "removable disk". (For Mac users, double-click the "untitled" disk on the desktop.)



Step 3: Downloading Recorded Images/Video Clips

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" disk on a Macintosh) to your computer hard driver.

For Computers Running Windows

Open the "removable disk" by double clicking on it. Double click on the folder that contains your recorded images/video clips. Select the images/video clips that you prefer and then choose "Copy" from the "Edit" menu. After that, open the destination location and choose "Paste" from the "Edit" menu.

For Computers Running Mac OS

Note

Open the "untitled" disk window and the hard disk or the destination location. Drag and drop from the camera disk to the desired destination.

 It is recommended that you use the AC power adapter as a power supply for the camera while transferring your images/video clips from the camera to your computer to avoid the camera maybe cut off unexpectedly when the batteries run out.

• Memory card users may prefer to use a memory card reader (highly recommended).

INSTALLING PHOTOSUITE

PhotoSuite is a very user-friendly image-editing program. With PhotoSuite, you can breezily retouch, compose and organize your images. It contains a variety of templates, such as photo frames, birthday cards, calendars and more. Get your images ready and go explore this amazing program.

To Install PhotoSuite

- 1. Insert the CD-ROM packaged with the camera into the CD-ROM drive.
 - The welcome screen appears.

Note

2. Click "Install PhotoSuite". Follow the on-screen instructions to complete the installation.



- For information on how to use PhotoSuite to edit and retouch your recorded images, please refer to its online help.
- For Windows 2000/XP users, make sure to install and use the PhotoSuite while logged in as a user with an Administrator account.
- PhotoSuite is not supported on the Mac.

INSTALLING PHOTOVISTA

PhotoVista is an easy-to-use program that lets you create spectacular 360^o panoramic images in a snap. When you view these panoramas, you get the experience of being totally immersed in a realistic environment. PhotoVista's powerful engine quickly and automatically stitches images together, and its intuitive interface will let even a novice get great results in minutes.

To Install PhotoVista

 Insert the CD-ROM packaged with the camera into the CD-ROM drive.

The welcome screen appears.

Note

2. Click "Install PhotoVista". Follow the on-screen instructions to complete the installation.



• For information on how to use PhotoVista to create spectacular 360° panoramic images, please refer to its online help.

- For Windows 2000/XP users, make sure to install and use the PhotoVista while logged in as a user with an Administrator account.
- For Windows XP users which OS version does not include Service Pack 1 or higher, be sure to link to http:java.sun.com/getjava/download.html first and download the Java Virtual Machine installation. For more detail information about Java, please refer to its on-line help at http:java.sun.com/getjava/help.html.

After java software installation, you can start to install iSee Media Photovista Panorama. Hereunder is iSee Media Photovista Panorama system requirements and recommendations: Windows 95/ Windows 98/ Windows NT 4 (Service Pack 3 or higher) Windows 2000*/ Windows Me*/ Windows XP* (Service Pack 1 or higher)

Dhote)/ista is not supported on the Mas

PhotoVista is not supported on the Mac.

MENU OPTIONS

Record Menu

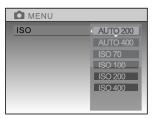
Record menu items: ISO, DIGITAL ZOOM, QUALITY SETTING, CREATE FOLDER, PICTURE, DISPLAY SETTINGS and LCD BRIGHTNESS.

- The setting will remain in the memory after the power is turned OFF manually or by the auto power OFF function.
- 1. Rotate the mode dial to [
- 2. Press the 🖼 menu button.
- Scroll through the options by pressing ▲ /▼ button, and press the ▶ button.
- Change the setting by using the ▲ or ▼ button and press the OK button.
 - The setting is completed, and the screen returns to the record menu.
- 5. To exit the record menu, press the 🖼 menu button.

ISO

Select the photographic ISO to be used when a photograph is taken. The higher the ISO sensitivity value, the greater sensitivity, but the greater the noise. With a higher sensitivity selected, bright photographs can be taken with less light.

: ISO70 to ISO200 Automatic
: ISO70 to ISO400 Automatic
: Equivalent to ISO70
: Equivalent to ISO100
: High-sensitive photography
equivalent to ISO200
: High-sensitive photography
equivalent to ISO400



ISO

DIGITAL ZOOM

QUALITY SETTING

CREATE FOLDER

PICTURE

DISPLAY SETTINGS LCD BRIGHTNESS

MENU

DIGITAL ZOOM

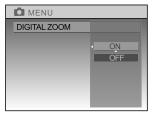
You can take digital zoom shots by activating the digital zoom function.

[ON]	: Enables digital zoom photography
[OFF]	: Disables digital zoom photography

QUALITY SETTING

Set the size of the image to photograph and the quality.

[**3M**] 2048 x 1536 [**2M**] 1600 x 1200 [**1.2M**] 1280 x 960 [**0.8M**] 1024 x 768 [**0.3M**] 640 x 480



QUALITY SETTING		
SIZE QUALITY	• <u>3M</u> 2M 1.2M 0.8M 0.3M	

CREATE FOLDER

Create new folders. This function is handy for separating the shooting date, shooting time and the shooting place.

 Captured images are recorded to the new folder you made starting from number 0001.

PICTURE

Set the color, detail and contrast of the image to photograph.

- Select [PICTURE] with the ▲ /▼ button from the record menu, and press the ▶ button.
- 2. Select one of [COLOR], [CONTRAST] or [SHARPNESS] with the ▲ /▼ button, and press the ▶ button.
- Select the setting item with the ▲ /▼ button, and press the ▶ button.

	PICTURE	
•	COLOR	NORMAL
	CONTRAST	NORMAL
	SHARPNESS	NORMAL

■[COLOR]	: [NORMAL] [VIVID]	: Color : Bright colors	
		: Black-and-white	
	[SEPIA]	: Sepia	
■[CONTRAST]	: [NORMAL]	: Automatic	
	[HARD]	: Increases the contrast	
	[SOFT]	: Decreases the contrast	
■[SHARPNESS]	: [NORMAL]	: Leaves the image detail as captured	
	[HARD]	: Sharpens the edges of the image	
	[SOFT]	: Softens the edge of the image	



DISPLAY SETTINGS

Set to display a photographed image on LCD monitor immediately after you have taken the shot.

- Select [DISPLAY SETTINGS] with the ▲ /▼ button from the auto photography menu, and press the ▶ button.
- Select [PREVIEW], [DISPLAY SETTINGS] with the ▲ / ▼ button, and press the ▶ button.
- Select the item with the ▲ /▼ button, and press the ▶ button.

: [ON]

[OFF]

[ON]

■ [PREVIEW]

: Displays images

- : Does no display images
- : Set the simple display
 - : Displays the photography tab menu

LCD BRIGHTNESS

This option adjusts the brightness of the LCD monitor.

■ < button: Darkens the display

■ [DISPLAY SETTINGS] : [AUTO]

■ ▶ button: Lightens the display



DISPLAY SETTINGS

DISPLAY SETTINGS AUTO

ON

PREVIEW

Manual Record Menu

Manual record menu items: ISO, DIGITAL ZOOM, QUALITY SETTING, CREATE FOLDER, PICTURE, DISPLAY SETTINGS and LCD BRIGHTNESS.

- 1. Rotate the mode dial to [M] manual record mode.
- 2. Press the 🖼 menu button.
- Scroll through the options by pressing ▲ /▼ button, and press the ▶ button.
- Change the setting by using the ▲ or ▼ button and press the OK button.
 - The setting is completed, and the screen returns to the manual record menu.
- 5. To exit the manual record menu, press the 🔳 menu button.

ISO DIGITAL ZOOM QUALITY SETTING CREATE FOLDER PICTURE DISPLAY SETTINGS LCD BRIGHTNESS

ISO

Refer to "ISO" in Record menu.

DIGITAL ZOOM

Refer to "DIGITAL ZOOM" in Record menu.

QUALITY SETTING

Refer to "QUALITY SETTING" in Record menu.

CREATE FOLDER

Refer to "CREATE FOLDER" in Record menu.

PICTURE

Refer to "PICTURE" in Record menu.

DISPLAY SETTINGS

Refer to "DISPLAY SETTINGS" in Record menu.

LCD BRIGHTNESS

Refer to "LCD BRIGHTNESS" in Record menu.

Playback Menu

Playback menu items: PROTECT, DPOF, SLIDE SHOW, RESIZE, DISPLAY SETTINGS and LCD BRIGHTNESS

- 1. Rotate the mode dial to [**•**] playback mode.
- 2. Press the 🖽 menu button.
- 3. Scroll through the options by pressing \blacktriangle / \bigtriangledown button, and press the ▶ button.
- 4. Change the setting by using the \blacktriangle or \blacktriangledown button and press the **OK** button.
 - The setting is completed, and the screen returns to the playback menu.
- 5. To exit the playback menu, press the 🖻 menu button.



PROTECT

This feature prevents images from being deleted accidentally. Refer to section in this manual titled "Protecting Images/Video Clips" for further detail.

DPOF

DPOF allows you to embed printing information on your memory card. Refer to section in this manual titled "DPOF Settings" for further detail.

SLIDE SHOW

Your camera can display your images sequentially as a slide show. Refer to section in this manual titled "Slide Show Display" for further detail.

RESIZE

Change the size of image to 320x 240 pixels or 160x120 pixels to create a different image.

- 1. Select [RESIZE] with the \blacktriangle / \bigtriangledown button from the playback menu, and press the ▶ button.
- 2. Select the image with the \checkmark button, and set the size with the **OK** button.
- 3. Select [EXECUTE] with the \blacktriangle / \checkmark button from the playback menu, and press the **OK** button.
 - To cancel a resize setting, select [CANCEL], and press the **OK** button.





The following images cannot be resized:

- Images captured on another camera;

 movies;

• when the SD memory card is LOCK state; • images created with resize cannot be resized.

DISPLAY SETTINGS

Refer to "DISPLAY SETTINGS" in Record menu.

LCD BRIGHTNESS

Refer to "LCD BRIGHTNESS" in Record menu.

Movie Menu

Movie menu items: ISO, DIGITAL ZOOM, QUALITY SETTING, CREATE FOLDER, PICTURE, DISPLAY SETTINGS and LCD BRIGHTNESS.

- 1. Rotate the mode dial to [\Re] movie mode.
- 2. Press the 🖼 menu button.
- Scroll through the options by pressing ▲ /▼ button, and press the ▶ button.
- Change the setting by using the ▲ or ▼ button and press the OK button.
 - The setting is completed, and the screen returns to the movie menu.
- 5. To exit the movie menu, press the 🖻 menu button.

ISO

Refer to "ISO" in Record menu.

DIGITAL ZOOM

Refer to "DIGITAL ZOOM" in Record menu.

QUALITY SETTING

Refer to "QUALITY SETTING" in Record menu.

CREATE FOLDER

Refer to "CREATE FOLDER" in Record menu.

PICTURE

Refer to "PICTURE" in Record menu.

DISPLAY SETTINGS

Refer to "DISPLAY SETTINGS" in Record menu.

LCD BRIGHTNESS

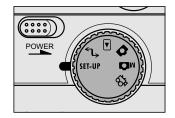
Refer to "LCD BRIGHTNESS" in Record menu.

MENU	
ISO	
DIGITAL ZOOM	
QUALITY SETTING	
CREATE FOLDER	
PICTURE	
DISPLAY SETTINGS	
LCD BRIGHTNESS	

Setup Menu

Setup menu items: SOUND, AUTO POWER OFF, CUSTOMIZE, LANGUAGE, VIDEO OUT, TIME & DATE and SYSTEM.

- 1. Rotate the mode dial to [SET-UP] setup mode.
- Scroll through the options by pressing ▲ /▼ button, and press the ▶ button.
- 3. Change the setting by using the ▲ or ▼ button and press the **OK** button.
 - The setting is completed, and the screen returns to the setup menu.
- 4. To exit the setup menu, rotate the mode dial setting.



NEXT MENU
1 MIN.
NEXT MENU
ENGLISH
NTSC
NEXT MENU
NEXT MENU

SOUND

Set the beep that output by the camera during operation.

- 1. Select [SOUND] with the ▲ /▼ button from the setup menu, and press the ▶ button.
- Press the ▶ button to display the tab menu, select [OFF] or [SELECT] in the tab menu with the ▲ /▼ button, and press the OK button.

[OFF] : The beep is disabled in any operation

- [SELECT] : The beep is enabled in any operation
- If you selected [SELECT], proceed to step 3.
- If you selected [OFF], press the ◀ button to return to the setup menu.
- Select the item with the ▲ /▼ button, and press the ▶ button.
 - [OPERATION] : Sets the beep when some kind of operation has been performed
 - [SHUTTER] : Sets the beep when the shutter is operated
- Select [ON] or [OFF] with the ▲ /▼ button, and press the OK button.
- Repeat steps 3 and 4 to set all items, then press the
 button.
 - The screen returns to the setup menu.

SELECT >
ON
ON

AUTO POWER 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], [3 MIN], [5 MIN]

CUSTOMIZE

Set the color and lit state of the front LED and the screen that is displayed when power is turned ON.

[LED COLOR]

: You can set how the front LED lights and its color



LANGUAGE

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

■ The provided languages are [ENGLISH], [Français], [Deutsch], [Español], [日本語], [中國語(繁體)], [中国语(简体)]

VIDEO OUT

Set the video output format for displaying recorded images on a television.

- [NTSC] : Select this standard when located in the U.S.A., Canada, Japan, Korea, Taiwan, Central America, or Mexico.
- [PAL] : Select this standard when located in Australia, Belgium, China, Denmark, Finland, Germany, Great Britain, Holland, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand or Norway.

TIME & DATE

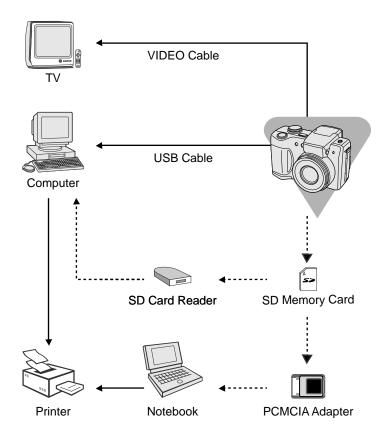
Set current date and time.

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

SYSTEM

Show the firmware version and SD memory card information on this camera.

CONNECTING YOUR CAMERA TO OTHER DEVICES



CAMERA SPECIFICATIONS

Item	Description
Image sensor	1/2.7" CCD
Effective pixels	3.2 Million
Image size	Still Image: 2048 x 1536
	1600 x 1200
	1280 x 960
	1024 x 768
	640 x 480
	Movie image: 320 x 240
Image quality	Fine
	Normal
	Basic
Recording media	SD memory card (optional) (up to 512MB capacity)
Lens	10X optical zoom
	F-number: 2.8~3.1
	Focal distance: 5.7mm~57mm
LCD monitor	2.5" low-temperature polysilicon TFT
Self-timer	2-second delay
	10-second delay
Zoom	Optical: 1X to 10X; Digital: 1X to 4X
Exposure compensation	Auto; Manual: -2.0 ~ +2.0 EV (0.3 EV Step)
White Balance	Auto;
	Manual : Sunlight, Cloud, Fluorescent light 1, Fluorescent light 2, Incandescent Lamp, Preset 1, Preset 2
Sensitivity	Automatic setting: ISO70/100/200/400/70 to 200/70 to 400 Manual setting: ISO70/100/200/400
Compressed format	JPEG
Standards	JPEG, EXIF 2.2, DPOF 1.0, DCF1.1, AVI
Interface	AV terminal, USB connector, VIDEO OUT jack (NTSC or PAL), MIC (external microphone IN) terminal (compatible mike:
	ø3.5 mini-plug, monophonic, output impedance 1.8K Ω)
Operating environment	Operation: $\pm 0^{\circ}$ C ~40°C, 30% ~80% humidity
	Storage: -20°C ~60°C
Power	4 x AA Alkaline batteries,
	4 x AA Ni-MH batteries,
	2 x CR-V3,
	AC power adapter (5.0V/3A)
Tripod socket	Yes
Dimensions	109.6mm x 76.8mm x 66.0mm (WxHxD)
Weight	Approx. 310g
	(without batteries and the SD memory card)

* Design and specifications are subject to change without notice.