



Nytech ND 3200

ENGLISH





Warranty Policy

This camera is under warranty for one full year from the date of purchase by the original purchaser. In case of defects in materials or workmanship, we will replace or repair the camera free of charge. This warranty applies to the camera only. This warranty does not include batteries, or other accessories which have not been manufactured by our company. This warranty will not be honored if the camera has been mishandled or tampered with, or altered by anyone other than the manufacturer. Other than for the warranty herein, we are not responsible for loss, damage, or inconvenience of any kind. A defective camera being returned under warranty must be accompanied by a brief description of the difficulties encountered and also by a proof of purchase with the date of purchase clearly indicated. All related transportation costs and insurances are at the owner's expense. Any alteration of this warranty cannot be made without the written approval from our company.



FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in commercial 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, detectable by turning the equipment in question 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 distance between the equipment and the receiver; Connect the equipment to an outlet on a different circuit than that which the receiver is connected to; Or consult the dealer or an experienced radio/TV technician for help.





NOTE

A shielded-type DC power cable incorporated with a ferrite core is required in order to meet the FCC emission limits and also to prevent interference to the nearby radio and television reception.

Use only shielded I/O cable incorporated with a ferrite core to connect this equipment to host computer and TV set. Shielded AC power cable and shielded I/O cables are required in order to meet the FCC emission limits. It is essential that only the supplied power cord and I/O cable(s) can be used.



WARNING

- ⊗ Do not use this camera if it is emitting smoke, becomes unusually hot to be touched, emitting any unusual odor or noise, or if it is in any other abnormal states.

Operating the camera in any of these situations may cause a fire or an electrical shock.

Stop using the camera immediately, turn the camera off, and then disconnect the power source (batteries or AC power adapter). (If you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.)

After checking that smoke is no longer being emitted, contact your dealer or your local authorized service facility and request repairs. Never attempt to repair this camera by yourself as this is dangerous.

- ⊗ Do not use the camera if any water has entered the camera.
Turn the camera off, and then disconnect the power source (batteries or AC power adapter). (if you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Then contact your dealer or your local authorized service facility.
Do not continue to use the camera as this may cause a fire or an electrical shock.

- ⊗ Do not use the camera if any foreign objects have entered the camera.
Turn the camera off, and then disconnect the power source (batteries or AC power adapter). (if you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Then contact your dealer or your local authorized service facility.
Do not continue to use the camera as this may cause a fire or an electrical shock.

- ⊗ If the camera has been dropped or if the camera case has been damaged, turn the camera off, and then disconnect the power source (batteries or AC power adapter). (if you are using the AC power adapter, unplug the adapter from the AC power outlet after you have disconnected the camera.) Then contact your dealer or your local 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 any unstable locations such as on a wobbly table or sloping surface where

- ⊗ the camera may fall or tip over and cause injury.
- ⊗ Do not expose the camera to moisture and make sure that there is no water getting 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 or near water.

Water in the camera may cause a fire or an electrical shock.

- 
- 
- 
- ⊗ Do not insert or drop metallic or inflammable foreign objects into the camera through access points such as the memory card slot.
This may cause a fire or an electrical shock.
 - ⊗ Do not attempt to modify this camera.
This may cause a fire or an electrical shock.
 - ⊗ Do not remove the camera casing.
This may cause an electrical shock.
Internal inspection, maintenance and repairs should only be carried out by your dealer or local authorized service facility.
 - ⊗ Avoid using this camera in the bathrooms.
Exposure to excessive moisture 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.
 - ⊗ Never operate this camera in any way while driving a vehicle.
This may cause a traffic accident.



CAUTION

- △ Do not place this camera in damp or dusty locations.
This may cause a fire or an electrical shock.
- △ Do not place this camera in a location affected by oil fumes or steam, such as near a cooking stove or humidifier.
- △ Do not leave this camera in a location subject to extremely high temperatures, such as in a sealed vehicle or in direct sunlight.
Exposure to high temperatures may adversely affect the camera case and internal components and may cause a fire.
- △ Do not cover or wrap the camera or the AC power adapter with a cloth or quilt.
This may cause heat to build up and 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 handling the camera, always unplug it 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 may result in 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 camera.)
Failure to do so could result in a fire.
- △ Do not use batteries other than those specified for use with your 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 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.

Table of Contents

Introduction

Preparing the Camera

Getting to Know the Camera.....	12
Name of Parts.....	12
Dial Knob.....	14
Attaching the Strap.....	15
Preparing power supply.....	15
Loading Batteries.....	15
Using the Power Adapter.....	17
Inserting/Removing the SD Card.....	18
Inserting a SD Card.....	18
Removing a SD Card.....	19

Getting Started

Turning the Camera On and Off.....	21
Turning the Camera On.....	21
Turning the Camera Off.....	21
Checking Batteries.....	22
Turning the LCD Monitor On and Off.....	22
Formatting the SD Card.....	23
SD Card Full.....	23

Auto Recording

Taking Pictures.....	24
Number of Recordable Images.....	25
Zoom Control.....	25

Optical Zoom.....	25
Digital Zoom.....	26
Focus Lock Recording.....	26
Selecting the Subject Modes.....	27
Scene Mode Menu.....	27
Focus Mode Setting.....	29
Selecting the Flash Mode.....	29
Self-timer Photography.....	30

Manual Recording

Manual Setting.....	31
Exposure Control Setting.....	31
White Balance Setting.....	31
Metering System Setting.....	32
Single, Continuous or AEB Photography	
Mode (S/C) Setting.....	32
Focus Mode Setting.....	32
Exposure Control.....	33
Program Mode.....	33
Aperture-Priority Mode.....	33
Shutter Speed-Priority Mode.....	34
Full Manual Mode.....	34
Exposure Compensation.....	35
Automatic Exposure Bracketing(AEB)	
Photography.....	36
Burst Photography.....	37
Bulb Photography.....	39

Making Movies



Preset Condition

Menu Button.....	41
Preview.....	41
Color.....	42
ISO.....	42
Sharpness.....	42
Contrast.....	43
Digital Zoom.....	43
LCD.....	43
Quality.....	43

Playback Mode

Playback Single Image.....	45
Playback Movies.....	46
Thumbnail Display.....	47
Zoom Playback.....	47
Playback of Multi Image Pictures.....	47

Playback Menu

Slide Show Mode.....	48
Resize Image.....	48
Compression Image.....	49
Protected.....	49
DPOF.....	50
LCD Brightness.....	51

Setup Mode

Auto Power Off.....	52
Sound.....	53
Time & Date.....	53

OSD Language.....	53
Video Out.....	54
Quality.....	54
Frame Number.....	55
System Info.....	56

Erase button

Erase One Image.....	57
Erase Images on a Folder/All Folders.....	57
Format SD Card.....	58

LCD button

In Playback Mode.....	59
In Photography Mode.....	60

Taking and Viewing Photo on a TV Monitor

Transferring Pictures to the Computer

System Requirements.....	62
Installing the Software (Driver & Image Application).....	62
Connecting the Camera to Your Computer.....	62
Downloading Pictures.....	63

Specifications



Introduction

Congratulations on your purchase of the new digital camera. Capturing high-quality digital pictures is fast and easy with this state-of-the-art smart camera. Equipped with a 3.2 Megapixel CCD, this camera is capable of capturing pictures with a resolution of up to 2048X1536 pixels. Aside from single-picture capture, the camera allows you to take sharp and clear pictures of fast sports actions. What's more, the camera also features movie mode which captures movie clip without voice recording. Other cool features provided by the camera include the following:

LCD Monitor

The 1.6" full-color LCD (liquid crystal display) at the back of the camera makes it easy to frame your subject when taking pictures. It also displays a preview of the pictures you have taken.

Digital Zoom

Use the digital zoom mode and get a larger, closer view of the subject.

Macro Mode

Take pictures of people portrait or objects at close range using Macro mode.

Flexible Flash Settings

Change the flash setting according to your lighting environment.

Camera Settings

Have more control over picture quality by adjusting settings such as White Balance, EV Compensation, Resolution, and more.

Thumbnail View

Display in sets of nine pictures on the LCD for easier and quicker selection of pictures.

Slideshow

Automatically display pictures on the LCD with the Slideshow feature.

TV Connection

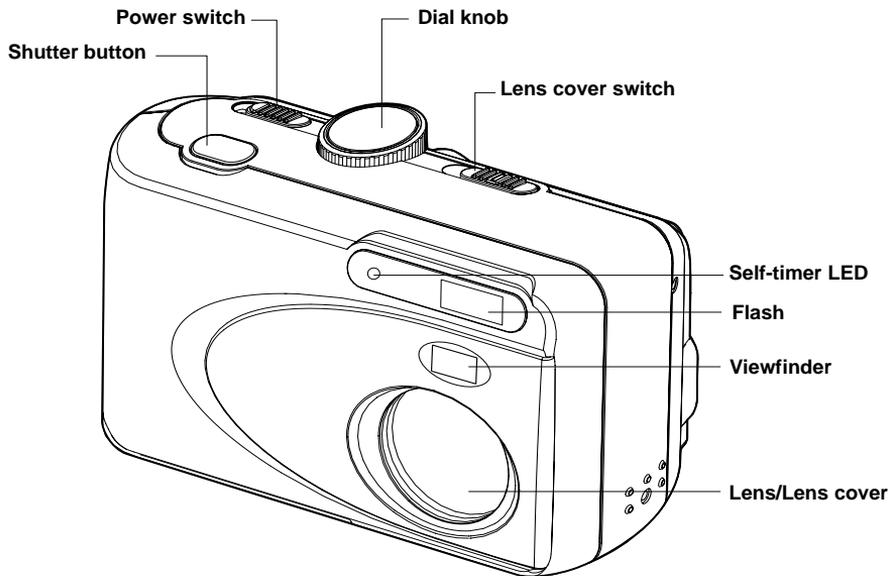
View pictures on a television monitor while browsing through your pictures or playing a slideshow.

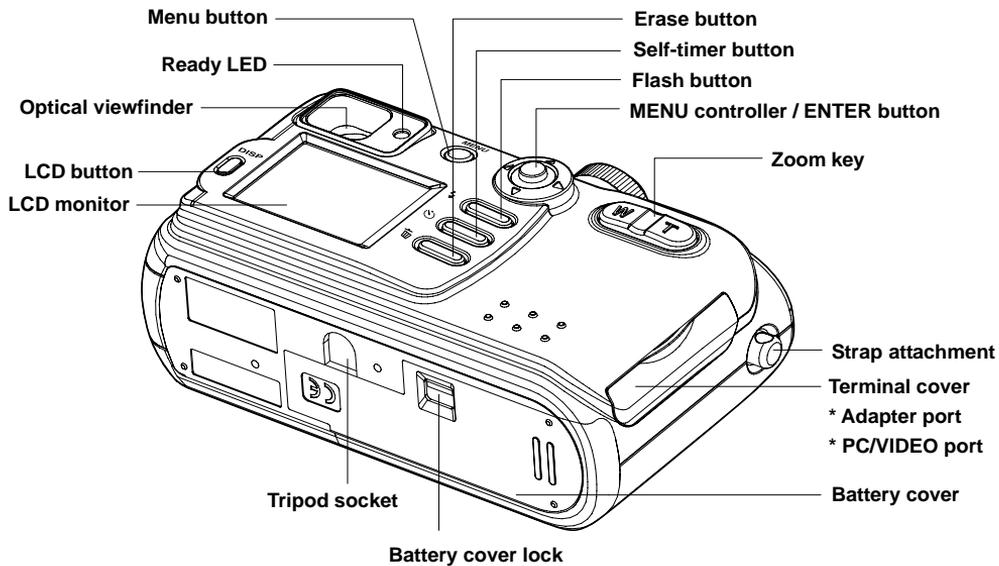
Preparing the Camera

This section introduces you to the digital camera. Follow the instructions in this section to install batteries, use the power adapter, and install a memory card.

Getting to Know the Camera

Names of Parts





Dial Knob

SET-UP mode

Sets basic camera settings
(AUTO POWER OFF, SOUND,
QUALITY, FRAME.)

PC mode

Transfers images to a PC.

Playback mode

In this mode, you can select image
Playback, size change, compression,
protect Mode, and writing of development
(printing) Information.

Auto Photography mode

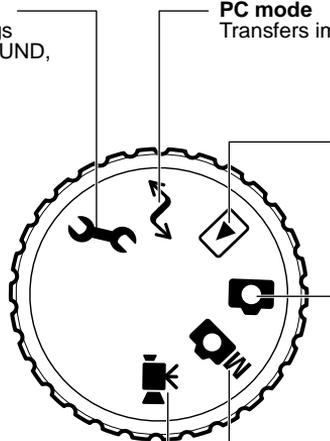
This mode enables automatic
photography in Accordance with the
photographic conditions.
In this mode, the exposure (combination
of Shutter speed and aperture) is
automatically Controlled to facilitate
photography.

Movie mode

Takes short Movies for playback
On camera or computer

Manual Photography mode

Manually sets white balance, exposure,
Aperture value, shutter speed and AE
(auto-exposure) position.



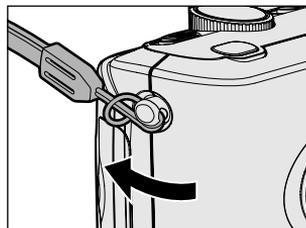
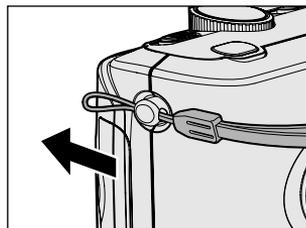
Attaching the Strap

To attach the strap to the camera:

- 1** Insert the small loop at the end of the strap into one side of the camera's strap holder.
- 2** Push inward until the loop comes out of the other side of the strap holder.
- 3** Insert the other end of the strap through the loop and pull it until the strap is securely attached to the camera.

Note:

* When the camera is not in use, be sure to close the lens by sliding the lens cover switch to close position. Turn off the power to retract the lens unit before closing the lens cover.



Preparing Power Supply

Always turn off camera's power before changing power supply.

Loading Batteries

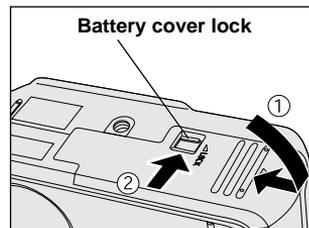
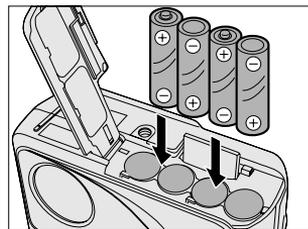
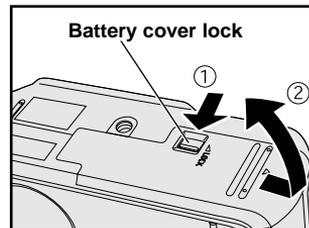
To load the batteries into the camera:

1 Unlock the battery cover lock ① .

2 Pull open the battery door in the direction of the open arrow ② .

3 Load batteries in the battery compartment. Make sure they are loaded in their polarity as shown inside the battery compartment.

4 Close the battery door ① and move the battery cover lock in the direction of the Lock arrow ② . Make sure that the battery cover is firmly closed.

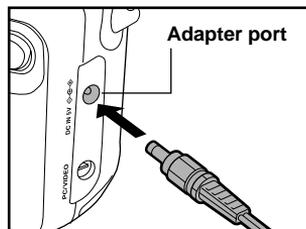


Notes:

- * If “ CARD COVER LOCK IS RELEASED” message popped out on the LCD monitor, please check the battery cover lock. Make sure it is locked in the direction of the Lock arrow.
- * If you are not going to be using the camera for an extended period of time, you should remove the batteries to prevent leaks or corrosion.
- * Do not use a mix of different types, manufactures, classification of batteries.
- * Low temperatures (under 0) may reduce the output efficiency of batteries, thereby shortening the operation time of camera.
- * AA alkaline batteries and AA nickel-hydrogen batteries can be used.
- * Rechargeable batteries cannot be charged in the camera.

Using the Power Adapter(optional accessory)

Simply connect the power adapter into the adapter port on the camera, and then plug the power adapter to a wall socket.



Notes:

- * Only use the AC adapter specified for this camera. Use of any other power source may cause damage to the camera and possibly start a fire.
- * The AC power adapter is an optional accessory which may (or may not) be included with your camera kit depending upon the retail bundling options specified by your camera dealer.
- * Grasp the adapter, not the cord, when unplugging the adapter from a wall socket.
- * If the power cord becomes damaged (exposed or severed wires, etc.), please purchase a new AC adapter. Use of a damaged cord may cause fire or electrical shock.
- * Switch off and disconnect the camera from the AC adapter before unplugging it from the wall socket.

Inserting/Removing the SD Card

Always turn off the camera's power before inserting/removing the SD card, otherwise the card may be damaged.

Inserting a SD Card

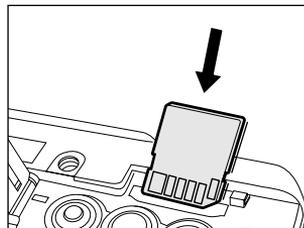
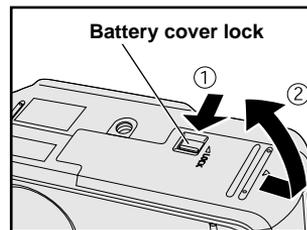
Your camera can store pictures on a removable memory card, which is known as the SD card.

Note:

* Make sure a SD card is inserted into the camera before you start taking pictures.

To insert a SD card into the camera:

- 1** Slide the **POWER** switch to **OFF** position, to turn the power off.
- 2** **Unlock the battery cover lock.**
Pull open the battery door in the direction of the open arrow.
- 3** **Firmly insert the SD card as far as it can go with the SD card electrodes (metal contacts) facing the front of the camera.**
- 4** **Close the battery door and move the battery cover lock in the direction of the Lock arrow.**
Make sure that the battery cover is firmly closed.



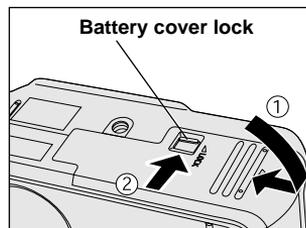
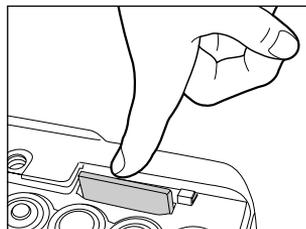
Notes:

- * If “CARD COVER LOCK IS RELEASED” message popped out on the LCD monitor, please check the battery cover lock. Make sure it is locked in the direction of the Lock arrow.
- * Before you use the new SD card for the first time, be sure to format the SD card.
- * Do not use force when inserting SD card. Damage may occur to the connector section.
- * The storage capability of the SD card will diminish with extended use. It may be necessary to purchase a new card periodically.

Removing a SD Card

To remove a SD card from the camera:

- 1 Slide the POWER switch to OFF position, to turn the power off.**
- 2 Unlock the battery cover lock.**
Pull open the battery door in the direction of the open arrow.
- 3 Push the SD card in as far as it can go, and pull it out with your fingers.**
If you push SD card once in as far as it can go, it will protrude slightly. Pull it out with your fingers.
- 4 Close the battery door and move the battery cover lock in the direction of the Lock arrow.**
Make sure that the battery cover is firmly closed.





Warning:

- * Never open the battery cover door or remove the SD card while data is being recorded to the SD card (ready LED lights(red)). This might damage the SD card or corrupt the data on the SD card.
- * Improper use of the SD card may cause data loss or damage. It is recommended to make a back up copy of any important data in another storage media, such as hard disk, CD-ROM, etc.
- * Keep away foreign objects from the terminal section.
- * Keep away from static electricity and electromagnetic fields.
- * Do not bend, drop or apply excessive force.
- * Keep away from heat, moisture and direct sunlight while using and for storage.

Getting Started

Once you have installed batteries or connected a power adapter and inserted a SD card into the camera, you are ready to use the camera.

Turning the Camera On and Off

You can turn camera on or off by sliding the power switch towards the arrow direction.

Turning the Camera On

Make sure that the SD card is correctly loaded.

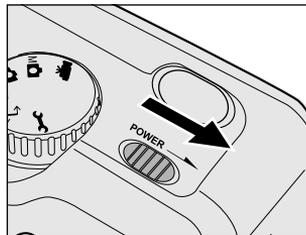
Slide the lens cover switch toward open direction ◀ .

Slide the POWER switch to ON position, to turn on the power.

When the camera is turned on, set the dial knob to the desired mode.

In the photography modes ( ,  or ), the lens extends from the camera body.

When the camera is turned ON, the Auto Power OFF function starts to work.



Turning the Camera Off

Slide the POWER switch to OFF position, to turn off the power.

The power is turned off, and the lens returns to its original position in the body.

Close the lens by sliding the lens cover switch to close position ● .

Note:

If "LENS COVER" message popped out and the ready LED flashes (red) rapidly, please check the lens cover switch. Slide the lens cover switch towards to open the lens cover, and the camera will operate normally.

Checking Batteries

Located on the LCD monitor, the Battery Status Indicator is active at all times while the camera is on. The number of pictures that can be taken varies according to the performance and usage conditions of the batteries. Power is consumed by the following operations even when not recording and these will reduce the number of images that can be recorded.

- Repeated focus operations by pressing the shutter button halfway
- Repeated zoom operations
- Extensive use of the LCD monitor in the Playback mode
- Communication with a PC

Battery Life Indicator:

Full Battery Power	
Medium Battery Power	
Low Battery Power	
No Battery Power	

Note: It is recommended that you do not use the Flash or Auto-Flash features while battery power is low.

Turning the LCD Monitor On and Off

To turn the LCD monitor off or back on, just toggle the LCD button. Since the LCD monitor consumes battery power fast, you may temporarily turn off the LCD monitor and use optical viewfinder instead when taking pictures.

Formatting the SD Card

In most cases, you can directly use a newly purchased SD card to store pictures. But to avoid any possible problems, it is recommended that a new SD card be formatted first before using it.

- 1 Set the dial knob to [] , [] , [] , [] .**
When [] , is selected, the last image frame or the thumbnail display appears on the LCD monitor.
- 2 Hold down the erase button  for two seconds.**
- 3 Use  or  button to select [] , and press ENTER button.**
To cancel formatting, select [] and press ENTER button.
- 4 To reset the image number, use  or  button to select [EXECUTE], and press ENTER button.**
To cancel resetting of image numbers, select [CANCEL].



WARNING:

If the SD card contains pictures, all files, including protected picture files, will be deleted when the SD card is formatted. The deleted files cannot be recovered. SD card cannot be formatted if it is write-protected.

SD Card Full

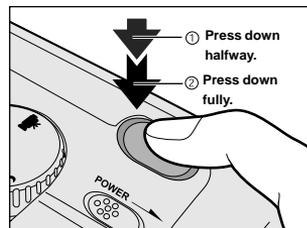
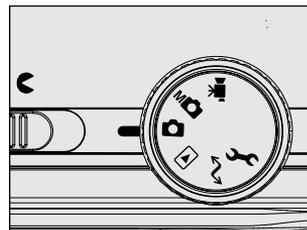
If you have taken many pictures and your SD card is full, the LCD display will show a "CARD FULL" message. If this happens, you must erase pictures from the SD card, or replace it with a brand new SD card. Before erasing pictures, make sure you transfer them first from the SD card to your computer.

AUTO RECORDING

Turn the dial knob to , all camera operations are fully automatic. It allows you to concentrate on the actual image to record. The auto focus, exposure and imaging system will work together to bring beautiful result effortless. Although many of the camera's system in this mode are automatic, several camera operations can be optimized. You can change the settings by accessing the Recording Menu.

Taking Pictures

- 1** Make sure that a SD card is properly inserted.
- 2** Slide the power switch to ON position, to turn on the power.
Slide the lens cover switch to open direction  beforehand.
- 3** Set the dial knob to .
- 4** Look at the image on the LCD monitor or viewfinder to compose the picture.
Press the zoom key to set the subject size and image composition.
- 5** Press the shutter button down half way 1, and press it down fully 2.
 - Pressing the shutter button down half way adjusts the exposure, and pressing the shutter button down fully takes the shot.
 - When the focus and exposure are adjusted, the ready LED lights(green).
 - If you shoot a picture, when preview is set to ON , a preview image is displayed on screen for about two seconds.
 - The ready LED lights(red) while image data is being recorded onto the SD card.



Number of recordable images

The frame counter indicates the approximate number of images that can be stored on the SD card at the camera's image quality and size settings. If the settings are changed, the frame counter adjusts accordingly. The number of recordable images may vary depending on the recorded subject and the capacity of the memory card, or if there are files other than images, or when recording is made while switching the picture quality/resolution.

<Still Image Mode> FULL size: 2048x1536 pixels HALF size: 1024x768 pixels SMALL size: 640x480 pixels	SD Memory Card	FULL			HALF			SMALL		
		***	**	*	***	**	*	***	**	*
	8MB	5	8	16	22	34	68	34	51	102
	16MB	12	18	36	50	75	150	75	113	226
	32MB	25	37	75	105	157	315	157	236	473
	64MB	51	77	154	215	322	645	322	484	968
	128MB	104	156	313	435	652	1305	652	979	1958
	256MB	208	312	624	867	1300	2601	1300	1950	3901

Zoom Control

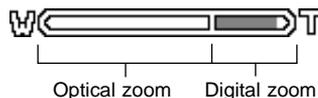
This camera features two types of zooming, optical zooming and digital zooming.

Optical Zoom

- 1** Press the zoom key towards W, the subject will move the lens towards to the wide-angle position, meaning zoom away from your subject.
- 2** Press the zoom key towards T will move the lens towards to the telephoto position, meaning zoom in your subject.

Digital Zoom

- 1** Turn on the LCD monitor.
- 2** Press the MENU button.
- 3** Use ▼ or ▲ button to select [DIGITAL ZOOM] and press ► button .
- 4** Use ▼ or ▲ button to select [ON] and press ENTER.
- 5** Press the MENU button.
- 6** To activate digital zoom, press the zoom key completely towards the T and hold it until the image on the LCD monitor expands.



Focus Lock Recording

For normal recording, aim at the subject using the entire viewfinder area. To focus, position the subject within the auto focus frame located at the center of the viewfinder. If the subject to record is not in the center of the viewfinder, position the subject so that it falls within the focus frame and lightly press the shutter button (halfway). While continuing to hold the shutter button lightly (halfway), reposition the subject for the desired composition and gently press the shutter button down completely to capture the image.



Auto Focus Frame

Selecting the Subject Modes

By selecting a preset subject mode using the ENTER button, [SCENE>] and [FOCUS>] displayed on the LCD monitor.

A user can select "Recording Condition" or "Focus Setting" by using ▲ or ▼ button. The selected item can be seen with highlighted icon.

[SCENE] Scene mode menu

[FOCUS] Focus mode setting



Scene Mode Menu

By pressing ENTER button when the [SCENE>] icon is highlighted, the Scene mode menu is selected.

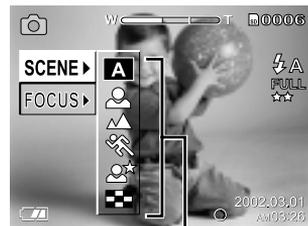
You can select one on the following options by using ▲ or ▼ button.

Automatically adjusts the focus and exposure mode

The camera automatically adjusts the focus and exposure settings to take photographs.

Portrait mode

Optimized to reproduce soft skin tones and a slight defocusing of the background. Most portraits look best a telephoto setting; the longer focal length does not exaggerate facial features and the shallower depth of field softens the background.



Options



▲ Landscape mode

Optimized to produce sharp, colorful landscapes. Used when recording scenery. The flash will not fire in this mode when set to auto flash mode.

🏃 Sport mode

Used when taking photographs of fast moving subjects. This mode automatically adjusts the camera to a higher shutter speed to "freeze" the subject in action. This makes the subject appears sharp and the background blurred, giving the picture a feeling of speed.

🌙 Night view mode

Used when recording portrait with night scenes. Set the flash mode to fill-in flash when taking portraits, and ask your subjects not to move after the flash burst; the shutter will still be open for the background exposure.

Under low light conditions, the shutter speed will become slow. Since this may result in the image becoming blurred, use of a tripod is also recommended.

Note:

If you take a photograph with a dark background or at a dark place, the shutter speed slows down, and the slow shutter speed warning is displayed. (When the shutter is pressed halfway down, the ready LED blinks green and the slow shutter speed mark [] is displayed in the LCD monitor.) To prevent distorted image, we recommend using a tripod to keep the camera stable.

📷 16-Multi photography

This mode takes 16 shots continuously at 0.13 second intervals (7.5 frames/second). The 16 photographed images are saved as one image (FULL size: 2048 x 1536 pixels).

This mode is effective for continuously photographing moving subjects.

Notes:

- * Though zoom playback is not possible, playback of multi image pictures is possible.
- * Digital zoom photography is not possible.
- * Photographs cannot be taken at HALF size or SMALL size. When HALF size or SMALL size is set before you select multi photography, the setting is automatically changed to FULL size. When multi photography is canceled, the setting returns to HALF size or SMALL size.

Focus Mode Setting

By pressing ENTER button when [FOCUS>] icon is highlight the focus mode setting selected. A user can select in the following order. Also the camera makes the macro mode with macro icon is the display monitor.

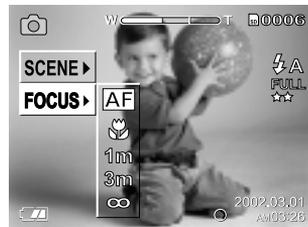
[A F] **Normal Focus**

[] **Macro Focus**

[1m] **The camera will focus on the subjects in a distance of 1m to take photos.**

[3m] **The camera will focus on the subjects in a distance of 3m to take photos.**

[] **The camera will focus on subjects in a distance of "infinity" to take photos.**



Selecting the Flash Mode

Toggle the flash button to select Auto Flash, Fill-in, Flash off, Fill-in flash with Red-eye reduction until desired mode is displayed on LCD monitor.

Auto Flash mode

When recording in a dark place and backlit conditions, the camera will automatically determine whether the flash is necessary.

Fill-In Flash mode

Used to soften dark shadows on the face of the subject due to backlight, strong direct light or sunlight. The flash will always be used regardless the surrounding brightness.

Flash Off mode

Used when recording in a place where flash photography is prohibited, or when utilizing the night view or indoor lightning for recording. The flash will always be off during recording. Under low light conditions, the shutter speed will become slow. Since this may result in the image becoming blurred, use of a tripod is recommended.

⚡👁️ Red-eye reduction mode

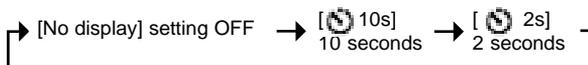
Pre-flash is performed before the main flash to reduce the red-eye; an effect caused by light reflected from the retina. Use in low light conditions when photographing people or animals. The pre-flashes contract the pupils of the subject's eyes.

Note:

The red-eye reduction may have little effect if the subject is not directly facing the pre-flash or main flash, or when there is some distance between the camera and the subject.

Self-timer Photography

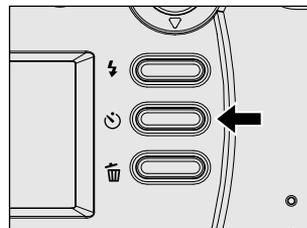
This mode automatically releases the shutter after a delay so that the person making the recording can be included in the image. The self timer button can select the capturing mode between Normal(default) and Self-timer (2 or 10 seconds).



The photograph is then taken after the preset time (2 or 10 seconds). When photographs are taken using the LCD monitor, the count down is displayed. To cancel photography midway, press ▼ button.

Notes:

- * Burst photography is not possible.
- * In movie mode, press the shutter button down fully to stop recording.
- * If this operation is not performed, photography is automatically stopped when the SD card runs out of free space or when the size of a single picture has reached the maximum recordable size.
- * The self-timer mode will automatically turn off after the image captured.



Manual Recording

The basic operation of this camera in manual recording is identical to auto recording mode. Thoroughly familiarize yourself with the previous section before moving on.

Manual Setting

By setting ENTER button, the manual setting items displayed on the LCD monitor. A user can select one of the following manual setting items by using ▲ or ▼ button. The selected setting item can be seen with highlighted icon.

- [EXP.] Exposure control
- [W.B.] White balance
- [A.E.] Metering system
- [S/C] Single, continuous or AEB mode
- [Focus] Focus mode

Exposure Control (EXP.) Setting

By pressing ► button when [EXP.] icon is highlighted. Exposure Control setting options as follows:

- [PRG] : program mode
- [Av] : aperture-priority mode
- [Tv] : shutter speed-priority mode
- [M] : full manual mode

White Balance (W.B.) Setting

The camera determines the white balance by averaging the various kinds of light that actually enters the lens. A user can set in advance the white balance when taking photographs under specific lighting conditions.

- [AW] : Automatic white balance mode
- [*] : Day light mode
- [☁] : Cloudy mode
- [𐄂] : bluish Fluorescent light mode



[] : reddish Fluorescent light mode

[] : Incandescent light mode

Metering System (A.E.) Setting

The camera calculates the exposure level before a photograph is taken.

[] : Multi metering mode can be set (default)

The exposure is measured and calculated for the entire area of the screen. By dividing the entire area of the screen, the exposure level for each unit is calculated. A well balanced exposure can be obtained.

[] : Spot metering mode can be set

The exposure is measured in a very small area at the center of the screen. It is possible to calculate the exposure of a subject without being affected by the surrounding environment.

Single, Continuous or AEB Photography Mode (S/C) Setting

[] : 1 shot mode can be set (default)

[] : Burst mode can be set

In this mode, photographs are taken continuously at a maximum speed of 0.8 second intervals. The maximum number of photographs that can be taken continuously is 3 photographs. Images are not recorded directly to storage media but are stored temporarily within the buffer memory. After photography is finished, check the images and record the selected ones to storage media.

[AEB] : Automatic Exposure Bracketing

In this mode, the camera takes three consecutive pictures in the order of standard exposure, overexposure (-0.5) and underexposure (+0.5) compensation.

Focus Mode Setting

By pressing ENTER button when [FOCUS>] icon is highlighted the focus setting selected. A user can select in the following order. Also the camera makes the macro mode with macro icon is the display monitor.

[AF] **Normal Focus**

[] **Macro Focus**

[1m] **The camera will focus on the subjects in a distance of 1m to take photos.**

[3m] **The camera will focus on the subjects in a distance of 3m to take photos.**

[] **The camera will focus on subjects in a distance of "infinity" to take photos.**

Exposure Control

Program Mode

In this mode, the camera automatically adjusts the shutter speed and the aperture value according to the brightness of an object.

It is possible to change the white balance and the metering system in program mode.

Aperture-Priority Mode

In this mode, photographs are taken with the priority given to aperture. The camera automatically sets the shutter speed according to the aperture.

By pressing  or  button, a user can set the aperture value. Also the aperture value and shutter corresponding to that value displayed on the LCD monitor.

The setting range is as follows: F8 / F6.8 / F5.6 / F4.8 / F4.0 / F3.4 / F2.9

Note:

* The larger the F value, the smaller the aperture size become and vice versa.

* Exposure compensation using  or  button to change exposure value.



Shutter Speed-Priority Mode

In this mode, photographs are taken with the priority given to shutter speed. The camera automatically sets the aperture according to the shutter speed.

By pressing ▲ or ▼ button, a user can set the shutter value.

The setting range is as follows:

1/1000, 1/750, 1/500, 1/350, 1/250, 1/180, 1/125, 1/90, 1/60, 1/45, 1/30, 1/20, 1/15, 1/10, 1/8, 1/6, 1/4, 1/3, 1/2, 0"7, 1", 1"5, 2", 3", 4", 6", 8", 10", 15".

Note:

* The shutter speed and the aperture value corresponding to the shutter speed are displayed on the LCD monitor. If the appropriate combination cannot be set even if the aperture is adjusted to its limit, the aperture value is displayed in red.



Full Manual Mode

In this mode can set the aperture value and shutter speed values separately:

The aperture value is as follows:

By pressing ▲ or ▼ button, a user can set the aperture value. The setting range is as follows: F8 / F6.8 / F5.6 / F4.8 / F4.0 / F3.4 / F2.9

The shutter speed is as follows:

By pressing ◀ or ▶ button, a user can set the shutter value.

The setting range is as follows:

1/1000, 1/750, 1/500, 1/350, 1/250, 1/180, 1/125, 1/90, 1/60, 1/45, 1/30, 1/20, 1/15, 1/10, 1/8, 1/6, 1/4, 1/3, 1/2, 0"7, 1", 1"5, 2", 3", 4", 6", 8", 10", 15".



Note:

* When pressing sort in the full manual mode, the shutter speed is adjusted, but the exposure compensation setting is not possible. However the exposure value is displayed on the LCD monitor. When the exposure value is displayed in red, it shows over-exposure or under-exposure.

It is recommended that the shutter speed and the aperture value be adjusted to obtain the proper level of exposure.

Exposure Compensation

This setting allows you to intentionally lighten or darken the entire image. Use this setting when the optimum brightness (exposure) cannot be obtained, for example, when the brightness between the subject and the background is not balanced or when the subject to photograph occupies only an extremely small part of the screen.

By pressing ◀ button, the EV value can be reduced to "-2.0EV". By pressing ▶ button, the EV value can be increased to "+2.0EV". Each step of adjusted value is "0.5EV". Adjusted value is displayed on the LCD monitor. The default is "0.0EV".

The setting range is as follows:



◀ (to - side)

-2.0 / -1.5 / -1.0 / -0.5 / +0.0 / +0.5 / +1.0 / +1.5 / +2.0

▶ (to + side)

Automatic Exposure Bracketing (AEB) Photography

When it is difficult to determine the necessary exposure compensation, this mode will automatically set the camera to photograph three consecutive pictures in -0.5, 0, and +0.5 compensation.

1 Set the dial knob to .

The manual setting values are displayed on the left of the LCD monitor screen.

2 Press ENTER button.

The manual setting items are displayed.

3 Press ▲ or ▼ button to select [S/C].

4 Press ► button to display option menu, press ▲ or ▼ button to select [AEB] and press ENTER button.

5 Press ENTER button.

The camera is ready to take photographs.

6 Compose the picture, press the shutter button fully.

The camera will automatically take a picture in -0.5 compensation, 0 compensation, and +0.5 compensation.



Burst Photography

In this mode, photographs are taken continuously at a maximum speed of 0.8 second intervals. The maximum number of photographs that can be taken continuously is three photographs. Images are not recorded directly to SD card but are stored temporarily within the buffer memory. After photography is finished, check the images and record the selected ones to SD card.

1 Set the dial knob to **M/A**.

The manual setting values are displayed on the left of the LCD monitor screen.

2 Press **ENTER** button.

The manual setting items are displayed.

3 Press **▲** or **▼** button to select [**S/C**].

4 Press **▶** button to display option menu, press **▲** or **▼** button to select **☐** and press **ENTER** button.

5 Press **ENTER** button.

The camera is ready for burst photography.

6 Compose the picture, press the shutter button down fully.

If you release the shutter button before the camera captures three images, the camera will stop taking pictures at that point.

After photography is finished, the LCD monitor automatically turns ON.

7 Press **◀** or **▶** button to verify the image.

You will be allowed to choose which image to save before it is recorded to the SD card.



**8 Use ▲ or ▼ button to select the recording method.
The camera is set to erase all images immediately after photography.**

[ ✓] : This setting is for saving and erasing the selected image.
Press ◀ or ▶ button to select the image, and press ENTER button. The red mark ✓ appears under the selected image. To cancel selection of the image, press ENTER button again.

[ ✓] : This setting is for saving all images.
Press ENTER button.
All images are selected, and all images with  turns into a red ✓ . This item cannot be selected if there is not enough space on the SD card.

[ ] : This setting is for erasing all images.
Press ENTER button.

**9 Use ▼ button to select  and press ENTER button.
The image is saved or erased, and the camera is then ready to take photographs.**

Note:

* Self-timer photography and flash photography are not possible.

Bulb Photography

This mode is used for taking subjects that require several seconds to photograph such as firework displays at night. When using this mode, be sure to use a tripod to keep the camera stable and prevent distortion of images.

- 1 Set the dial knob to **M**.**
- 2 Press ENTER button.**
The manual setting items are displayed.
- 3 Press **▲** or **▼** button to select [EXP.].**
- 4 Press **▶** button to display option menu, press **▲** or **▼** button to select [M] or [Tv] and press ENTER button.**
Pressing ENTER button selects the setting.
- 5 Press **◀** or **▶** button to set the shutter speed to 0.7 second or longer, **☾** is displayed on the LCD monitor.**
Make sure the flash mode is set to flash-off (**☹**) mode.
- 6 Compose the picture, press the shutter button down fully.**
The camera takes the picture at the set exposure time. During the exposure, the ready LED turns red.
It takes about twice the set time to complete taking the photography due to processing of the captured image.



Note:

- * Flash photography and burst photography are not possible.
- * The image taken in the exposure photography mode may be blurred.

Making Movies

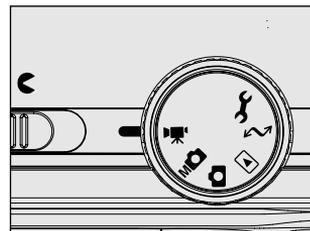
By switching the dial knob to  position, the camera can take moving image without voice recording. The camera shows the preview image on the LCD monitor. (In the  mode, the LCD monitor can not be turned off.)

- 1** Set the dial knob to  .
- 2** Compose the picture, press the shutter button down fully.
Photography begins.

The maximum photography time (seconds) appears on the LCD monitor.

- 3** To stop making movies, press the shutter button down fully again.

If you do not do this, photography is automatically stopped when there is no more free space on the SD card, or when the maximum size that a single movie can be recorded is reached.



Note:

* Flash photography is not possible.

* The image size displayed on the LCD monitor becomes FULL (320 x 240) or HALF (160 x 120). The movie made in FULL size is displayed on the entire LCD monitor, and that made in HALF size is displayed in the center of the screen.

Preset Condition

While the dial knob switch to ,  or  position the following common operations are possible.

Menu Button

Press the menu button, the recording menu is displayed. This menu is for setting the basic setting to be used for photography modes. The LCD monitor shows 7 items:

PREVIEW
COLOR
ISO
SHARPNESS
CONTRAST
DIGITAL ZOOM
LCD
QUALITY



A user can select the desired item by  or  button. The select item is highlighted.

By pressing  button, the options of highlighted item are displayed. Use  or  button to select the desired setting from the tab menu, and press ENTER button. After pressing ENTER button, this setting is saved.

Preview

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

- ◆ OFF : Do not display preview.
- ◆ ON : Display preview.

A photographed image is displayed on the LCD monitor for two seconds. By lightly pressing shutter button, preview is canceled. The three images that you took are displayed for about two seconds each in the AEB photography mode. In case of burst photography, the LCD monitor automatically turns on and display image after photography is finished. And select the recording method. In case of 16 multi-photography shot, 16 photography images are displayed as one image.



Color

Set the color of the images to be photographed.

- ◆ STANDARD : Standard color
- ◆ VIVID : Vivid color
- ◆ MONOCHROME : Black and white
- ◆ SEPIA : Sepia

ISO

Set the color mode and photographic sensitivity at which the image is to be recorded.

- ◆ NORMAL : Equivalent to color ISO100.
- ◆ 2X : High-sensitive photography equivalent to color ISO200.
- ◆ 4X : High-sensitive photography equivalent to color ISO400.

[In the  mode]

During 2X, the ISO will be automatically set between ISO100 and ISO200. During 4X, ISO will be automatically set between ISO100 and ISO400.

[In the  mode]

During 2X, the ISO will be automatically set to ISO200. During 4X, ISO will be automatically set to ISO400.

[In the  mode]

ISO will be automatically set between ISO100 and ISO400 regardless of its setting.

Sharpness

Set the sharpness at which the image is to be recorded.

- ◆ NORMAL : Normal sharpness
- ◆ SOFT : Soft effect



Contrast

Set the contrast of the image to be photographed.

- ◆ NORMAL : Automatic (standard) setting
- ◆ STRONG : Strong contrast
- ◆ SOFT : Soft contrast

Digital Zoom

Enlarges the center of the screen and takes photographs with the focal distance increased by factor of 2.2.

- ◆ ON : Enables digital zoom photography.
- ◆ OFF : Disable digital zoom photography.



LCD



Adjust the brightness of the LCD monitor.

By selecting LCD of menu, the image and the LCD control mode are displayed. Press ◀ button to darken the LCD monitor, or ▶ button to lighten the LCD monitor. The LCD monitor can be adjusted within the range -5 to +5. The default value is 0.

Quality

Set the size (number of pixels) and quality (compression ratio) of the image to be photographed.

Change the setting according to how the image is to be used and the remaining amount of space in the SD card.

- 1** Press the Menu button.
- 2** Select Quality Menu, keep pressing ▲ or ▼ button until the QUALITY is highlighted.
- 3** After pressing the ▶ button while the QUALITY is highlighted, the LCD shows the QUALITY menu.



4 By pressing ► button, user can select size.

The size item is reversely display in white. Press ▲ or ▼ button to select the size setting user desired to set, and press ENTER button.

5 By pressing ► button during the size item is highlighted, the QUALITY item is reversely displayed in white.

Press ▲ or ▼ button to select the quality setting and press ENTER button.

6 To select another option, press ▲ or ▼ button while STILL/MOVIE/OK/CANCEL is fully highlighted.

7 After pressing ENTER button while OK is highlighted, these combinations are set and the LCD monitor display returns to previous photography mode.

Playback Mode

Playback Single Image

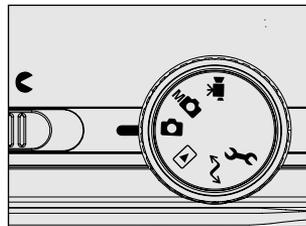
Turn dial knob to "□" position, the camera displays a latest stored image on the SD card. Only the images of which are recognized by the camera can be displayed. If no images in the card, the message of "NO IMAGE" is displayed.

The picture number displayed on the LCD is the number of which is currently assigned to. It may be moved over after some images.

During this mode, ◀ and ▶ buttons have the function to backward and forward the displayed image on the LCD monitor along the picture number.

Holding down ◀ and ▶ buttons move forward or reverse continuously.

By pressing ▲ button, rotated an image counterclockwise, and pressing ▼ button rotates it clockwise.



Playback Movies

After pressing ▲ button while the movie image is displayed, playback of the selected movie begins. The movies made in FULL size are displayed on the entire LCD monitor, and those made in HALF size are displayed in the center of the screen.

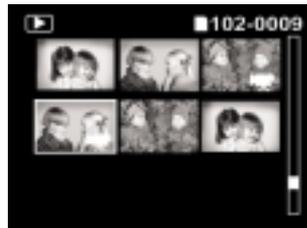
A user can control playback movie file as the following table.

	During playback	During pause	During stopping
▶ button	2x-speed playback	1-frame feed	-
◀ button	Reverse playback, 2x-speed playback	Reverse 1-frame feed	-
▲ button	Pause	Cancelling pause	Play back
▼ button	Playback returns to the start of the movie		-
ENTER button	The display returns to thumbnail playback		



Thumbnail Display

By pressing ENTER button while regular display, 9 reduce images are simultaneously displayed on the LCD monitor. By pressing ▲, ▼, ◀ or ▶ button, the cursor select image is displayed with frame. Pressing the ▶ button continuously moves the cursor continuously. By pressing ENTER button, the cursor select image is displayed on full screen. In the thumbnail display mode, movie icon  is displayed for the movie data.



Zoom Playback

This camera has 2 times playback digital zoom function. The center of playback image is extended, when the user presses the zoom key towards T. To return to normal magnification, press the zoom key towards W. Extended image area can scroll by pressing ▲, ▼, ◀ or ▶ button. By pressing ENTER button while playback digital zoom mode, normal playback image is displayed. The image is displayed enlarged, and frames are displayed on the LCD monitor. These frames indicates the entire images and the location of the currently enlarges area.



Playback of Multi Image Pictures

After pressing the zoom key towards T while multi image picture is displayed, automatic playback the 16 images photographed. A user can also select the image by the same operation as for thumbnail display.

Playback Menu

By pressing menu button while Playback mode, the LCD monitor shows 7 options. A user can select the where he requests by using ▲ or ▼ button. To quit the PLAYBACK MENU, press the menu button again.

Slide Show Mode

After pressing the ► button while the SLIDE SHOW is highlighted, the LCD monitor shows current picture. Displaying image data changes to next one passing every 3 seconds. The LCD monitor displayed the image when ENTER button is pressed. The slideshow is repeated until ENTER button is pressed.

Note:

The AUTO POWER OFF function does not operate during slide show. Movie files are displayed first frame image, and they are not played back.



Resize Image

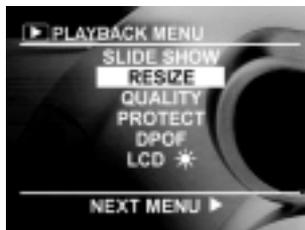
This function is changes FULL size images to HALF size, and further to SMALL size, and overwrites an old FULL size image with the new size image. But SMALL size images and multi photography and movies and protected images are can not be resized.

After pressing ► button while the RESIZE is highlighted, resize menu is displayed. A user can select the image by ◀ or ▶ button, and press ENTER button to set image size.

Each press of ENTER button changes the icons as follows:

[]HALF size []SMALL size

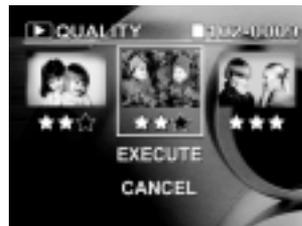
To cancel the selection, press ENTER button again. By pressing the zoom key towards T during image selection, the image is displayed to fit the entire screen. To redisplay the original image, a user presses the zoom key towards W. By pressing ▲ or ▼ button, select EXECUTE and press ENTER button to set image size. Then the screen indicating that the image is being resized appears. When resize end, the screen returns to PLAYBACK MENU.



Compressing Image

This function compress images down to half of their size or more, and overwrites an old size image with a newly compressed image. But BASIC quality images and movies and protected images cannot be compressed.

After pressing ► button, while the QUALITY is highlighted, quality set menu is displayed. A user can select the image by ◀ or ► button, and press ENTER button to set the compression ratio. Each press of ENTER button changes the compression ratio. By pressing the zoom key towards T during image selection, the image is displayed to fit the entire screen. To redisplay the original image, a user presses the zoom key towards W.



By pressing ▲ or ▼ button, select EXECUTE and press ENTER button to set compression. Then the screen indicating that the image is being compressed appears. When compression end, the screen returns to PLAYBACK MENU.

Note:

* It is possible to compress an image and decrease quality. It is not possible to uncompress an image to increase quality, or to restore an image after it has been compressed.

Protected

This feature prevents images from being erased.

After pressing the ENTER button while the PROTECT is highlighted, LCD monitor shows protect menu.

After pressing ENTER button, the one image displayed on the LCD monitor is locked indicated by O→ icon. To unprotect that image, press ENTER button once again.

By pressing ENTER button while EXECUTE is highlighted, image protection can be done and O→ is displayed under the image. If image protection cancel, select CANCEL.



By pressing the zoom key towards T during image selection, the image is displayed to fit the entire screen. To redisplay the original image, a user presses the zoom key towards W.

DPOF

The number of prints or the image date can be set in a DPOF (Digital Print Order Format) file for images to be printed (developed). This feature applies to still images only.

After pressing the ► button while the DPOF is highlighted, the camera enters into DPOF menu.

- 1 Use ▲ or ▼ button to choose one of options. Choose SELECT IMAGE to select image.**

Note:

A user selects CONFIRM, user can confirm the settings. If a user select CLEAR ALL, all settings are cleared. By selecting END, DPOF menu end and return to PLAYBACK MENU. If a user presses Menu button, LCD monitor show PLAYBACK MENU.

- 2 Use ▲ or ▼ button to select [SELECT] or [ALL], and press ENTER button.**

[SELECT]: Sets one image at a time.

[ALL]: Sets all images at once.



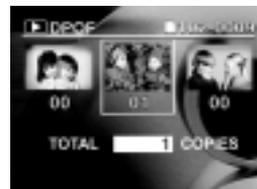
3 Set the number of prints.

A user can select image by using ◀ or ▶ button, and press ▲ or ▼ button to set the number of copies.

If ALL is selected in previous menu, all images are set the same number of copies. Up to 99 copies can be set for a single image.

By pressing the zoom key towards T during image selection, the image is displayed to fit the entire screen. To redisplay the original image, a user presses the zoom key towards W.

After finish this setting, press ENTER button.



4 Set the date.

Press ▲ or ▼ button to select [YES] or [NO], and press ENTER button.

If you want to print the date, select [YES] and press ENTER button.

If you don't want to print the date, select [NO] and press ENTER button.

The message "CREATE DPOF FILE?" is displayed on the LCD monitor.



5 By pressing ENTER button during EXECUTE is selected, the DPOF information file is created, and screen return to the DPOF control menu when the operation ends.

To continue setting, select [CHANGE SETTINGS]. To quit setting without creating a DPOF file and return to DPOF control menu, select CANCEL and press ENTER button.



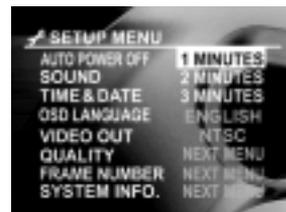
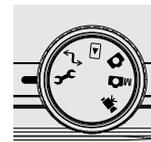
LCD Brightness

Please refer to LCD section on Preset Condition (page 42).

Setup Mode

This feature allows user to set up the default settings for using this camera. The settings are held in memory even if the camera is turned off. By switching the dial knob to , the SETUP MENU appears. A user can select the each setting mode by pressing  or  button.

AUTO POWER OFF	Selects the Time for Automatic Power Off
SOUND	Turns On and Off the Sound
TIME & DATE	Setting the Time and Date
OSD LANGUAGE	Selecting the Monitor Display Language
VIDEO OUT	Setting Video Output
QUALITY	Setting Image Quality and Size
FRAME NUMBER	Resetting Frame Number
SYSTEM INFO.	Returning Settings to the Defaults



Auto Power Off

If no operation is carried out for a fixed amount of time (default: about one minute), power consumption is set to its minimum state (power almost turned off) to prevent battery wear. This is called the Auto Power OFF. This setting allows you to set the time when the camera turns off automatically. To return to the normal state after the Auto Power OFF has been executed, press the POWER button to turn the power on again.

Press  or  button to choose one of the following options:

- [1 MINUTE]
- [2 MINUTES]
- [3 MINUTES]

Press ENTER button to confirm the setting.

Note:

This function is not activated during automatic playback or in the  PC mode.

Sound

Sets whether or not to sound the beep tone.

Press ▲ or ▼ button to choose one of the following options:

[ON]: Sounds the beep tone according to the operating state or operation.

[OFF]: Does not sound the beep tone in any state.

Press ENTER button to confirm the setting.

Time & Date

Sets the date and time.

Press ◀ or ▶ button to select the item to set, and press

▲ or ▼ button to set the value for each item.

Afterward pressing ENTER button when OK is highlighted,

date time data is updated and return to the previous main menu.

To quit setting, select [CANCEL] and press ENTER button.



OSD Language

Set the display language of menus displayed on the LCD monitor.

Press ▲ or ▼ button to choose one of the following languages to set as OSD language.

[ENGLISH]: English

[JAPANESE]: Japanese

[FRANCAISE]: French

[DEUTSCH]: German

[SPANISH]: Spanish

Press ENTER button to confirm the setting.

Video Out

Sets the video output system according to the country in which your camera used.

Press ▲ or ▼ button to choose one of the following options:

[NTSC]: NTSC system

[PAL]: PAL system

Press ENTER button to confirm the setting.

Quality

Set the size (number of pixels) and quality (compression ratio) of the image to be photographed.

Change the setting according to how the image is to be used and the remaining amount of space in the SD card.

- 1** Press the Menu button.
- 2** To select Quality Menu, keep pressing ▲ or ▼ button until the QUALITY is highlighted.
- 3** After pressing the ► button while the QUALITY is highlighted, the LCD shows the QUALITY menu.
- 4** By pressing ► button, user can select size.
The size item is reversely display in white. Press ▲ or ▼ to select the size setting user desired to set, and press ENTER button.



5 By pressing **▶** button during the size item is highlighted, the **QUALITY** item is reversely displayed in white.

Press **▲** or **▼** button to select the quality setting and press **ENTER** button.

6 To select another option, press **▲** or **▼** button while **STILL/MOVIE/OK/CANCEL** is fully highlighted.

7 After pressing **ENTER** button while **OK** is highlighted, these combinations are set and the LCD monitor display returns to previous **SETUP MENU**.

Frame Number

Sets whether or not to reset the image number when you take photographs. When the frame number is selected, the message "RESET FRAME NUMBER" is displayed.

Press **ENTER** button while **EXECUTE** item is highlighted, the camera can reset the frame number. (Default reset: folder number is 100 and file number is 0001).

Resetting of images is supported only for the still image mode.

To reset movie images numbers, you must delete the entire folder.

[**CANCEL**]: Does not reset the image number.

[**EXECUTE**]: Reset the image number.

System Info

Sets whether or not to return the settings in the SETUP MENU to the original factory settings.

(TIME&DATE and OSD LANGUAGE will not be reset.)

Press ▲ or ▼ button to choose one of the following options:

[CARD INFO.]:Displays the SD card information.

[RESET]:Returns to their default settings.

[CANCEL]:Keeps current setting.

Press ENTER button to confirm the setting.



Erase Button

The  button provides to erase image file and formatting SD card.

Erase One Image

In case of pressing ERASE button, last image data and erase menu appears on the LCD monitor.

Use  or  button to select  , and press ENTER.

This erases the image and returns to the previous mode. To cancel erasing of image data, select  and press ENTER button, and camera returns to preview mode.

Note:

* When [PROTECTED] is displayed on the LCD monitor, cancel the protection or remove DPOF write-protection.



Erase Images on a Folder/ All Folders

In case of pressing ERASE button for two seconds, last image data and erase menu appears on the LCD monitor.

Use  or  button to select  or  and press ENTER.

 : Erases images in the currently selected folder and folders.

 : Erases all folders recorded on the SD card.

The images or folders are erased, and the camera returns to the respective mode.

To cancel erasing of image data, select  and press ENTER button.

Note:

When  is selected, [NO IMAGE] is displayed after all folders have been erased (unless the SD card contains protected images).



Format SD Card

Formatting erases all images and reformats the SD card loaded in your camera. Protected images are also erased. SD card cannot be formatted if it is write-protected.

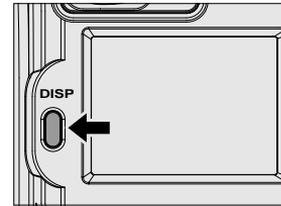
In case of pressing ERASE button for two seconds, last image data and erase menu appears on the LCD monitor.

- ◆ To format the SD card, use ▲ or ▼ button to select  and press ENTER button.
- ◆ To cancel formatting, select  and press ENTER button.
- ◆ To reset the image number (when the SD card formatted), use ▲ or ▼ button to select [EXECUTE], and press ENTER button.
- ◆ To cancel resetting of image numbers, select [CANCEL].



LCD Button (DISP)

The LCD button can select display format on LCD monitor.

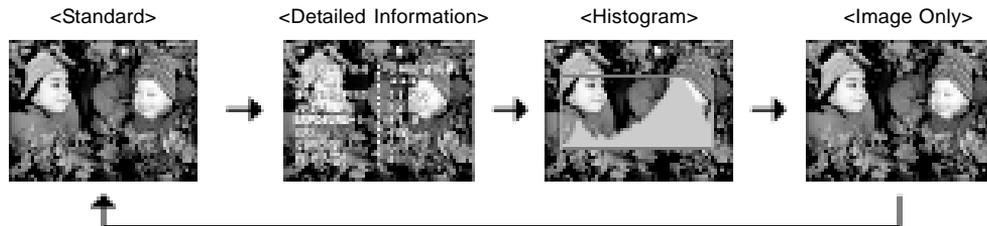


In Playback Mode

This item switches the display on the LCD monitor when playing back photographed images. You can switch the display to show a list of detailed information (size, compression ratio, shutter speed, aperture, etc.) or you can display histograms, etc.

Press ◀ or ▶ button to select the image and press the LCD button.

Each press of the **LCD** button switches the display format as follows:



In Photography Mode (, , ,)

This item switches the display on the LCD monitor when taking photographs.

Press the LCD button.

Each press of the **LCD** button switches the display format as follows:

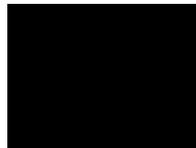
<OSD Full Display>



<OSD Display Off>



<LCD Monitor Off>

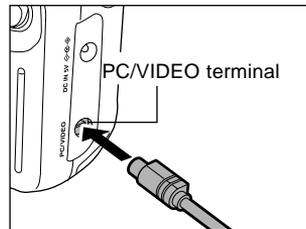


Note:

- * When any button is pressed while OSD display is off, the monitor displays the alteration on the screen for two seconds.
- * When the LCD monitor is off, the digital zoom function is forcibly canceled.
- * In the movie mode or macro photography mode, the LCD monitor can not be turned off.
- * When the LCD monitor is off, any setting for manual, exposure compensation, aperture value, shutter speed value or focus is not possible.

Taking and Viewing Photo on a TV Monitor

Television sets can be used to compose images for photography or playback. To do this, the camera must first be connected to the TV. We recommend using the AC adapter on an indoor power outlet when available.



- 1** First, connect the TV to your digital camera. Plug one end of the video cable to the PC/VIDEO port of the digital camera, and connect the other end of the cable to the video-in port on the television.
- 2** Select the appropriate video mode either NTSC or PAL, depending on what TV standard you are using.
- 3** Turn on the camera and television.
- 4** Take photographs or play them back.
Details of operation are the same as taking photographs and playing them back on the LCD monitor.



Transferring Pictures to the Computer

Before you can transfer the pictures from the SD card to your computer, you need to install first the camera software into your computer (Driver installation: Applicable only on Windows 98 and MAC OS 8.6)

System Requirements

Before installing the camera software, make sure your computer meets the following system requirements:
Windows 98/2000/Me/XP, Pentium 166 MHz or higher for PC Users
Mac OS 8.6/9.0/9.1/X, Power PC CPU for Macintosh Users
Color monitor (800x600 24-bit or higher recommended)
Available USB port, CD-ROM drive
80 MB available hard disk space
At least 32 MB RAM

Installing the Software(Driver & Image Application)

- 1** Insert your camera's Installation CD into your CD-ROM drive.
- 2** The installation program starts. Follow the on-screen instructions to complete the camera software installation.
- 3** Restart your computer.

Connecting the Camera to Your Computer

Your digital camera comes with a USB cable that you can use to connect the camera to your computer.

- 1** Plug the smaller connector of the USB cable into the PC/VIDEO port on your camera.
- 2** Plug the other end of the USB cable to your computer's USB port.



Note:

Since downloading pictures eats up battery power fast, use the AC power adapter whenever you are transferring pictures to your computer.

Downloading Pictures

Once you have properly connected the camera to your computer, you are now ready to transfer pictures.

1 Turn the dial knob to PC mode  .

2 Turn on your camera's power.

3 To access the pictures on the SD card:

If you are using Windows, double-click My Computer on the desktop. You will then see a drive labeled «Removable disk». Click that drive letter.

If you are using Macintosh, double-click the camera icon on the desktop.

4 Double-click the DCIM folder.

5 To copy the picture files:

Double-click the existing subfolders. Then, drag and drop the files to the desired location on your computer.

Note:

While the camera is connected to your computer, the camera will not allow you to take pictures. You will also not be able to view pictures on the camera.

Specifications

Image Sensor	3.2 Megapixels (1/1.8" CCD sensor)	
Image Resolution	<Still image> Full: 2048 x 1536 pixels Half: 1024 x 768 pixels Small: 640 x 480 pixels	<Movie image> Full: 320 x 240 pixels Half: 160 x 120 pixels
File Format	Exif ver. 2.1,AVI	
Recording Medium	SD card	
Lens	2.8X optical zoom lens F2.9-F4.8	
Focal length	F=7.25mm-20.3mm (equivalent to 35mm-100mm on a 35mm camera)	
Focal Range	Standard: 0.8m ~ infinity Macro: 0.10m (WIDE) to infinity	
Viewfinder Type	Real image zoom viewfinder	
Shutter Speed	1/2 ~ 1/1000 seconds	
Exposure Control	Metering system: Spot metering, multi metering Control system: Program AE, aperture-priority AE, shutter-priority AE. Exposure compensation: -2.0 EV to + 2.0 EV (in 0.5 EV increments)	
White Balance	Auto selected Manual setting possible (5 modes)	
Sensitivity	Equivalent to ISO 100/200/400	
Flash	Build-in: Auto, Fill-in, Flash Off, Red-eye reduction	
Flash Range	0.5m ~ 2.9m	
Self-timer	2 seconds/10 seconds delay	
LCD monitor	1.6" TFT (60K pixels) (279x220 pixels)	
Connectors	AC power port, USB / Video Output (NTSC/PAL)	
Weight	230g	
Dimension	115.5mm(W) x 69.2mm(H) x 46.1mm(D)	

* Design and Specifications are subject to change without notice.