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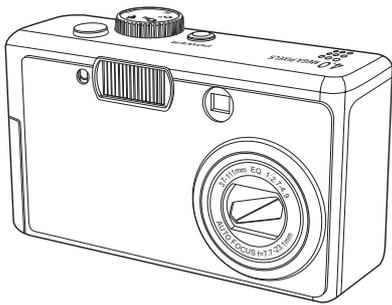
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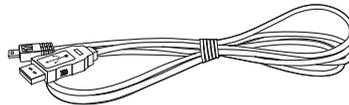
1 Getting Started

Package Contents

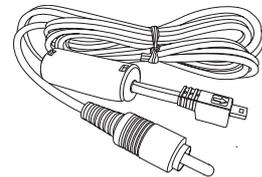
Contact your dealer immediately if any of the items listed below are missing or damaged.



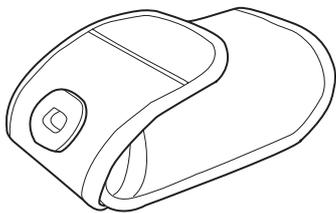
Camera



USB cable



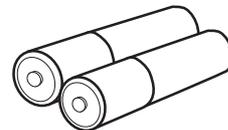
TV out cable



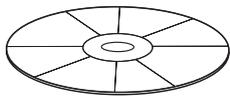
Soft case



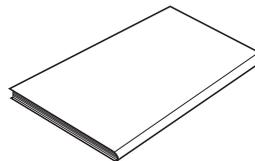
Strap



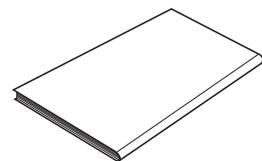
2 AA batteries



**Software Installation
CD-ROM**



User Manual



Quick Start Guide

System Requirements

Windows:

- PC with processor better than MMX Pentium 233 MHz
- Windows XP/2000/ME/98SE/98
- Minimum 32 MB RAM
- USB port
- CD-ROM drive
- 800x600 pixels, 16-bit color display compatible monitor

Macintosh:

- Power Mac G3 or later
- Mac OS 9.0, 9.1, 9.2 and OS X
- Minimum 64 MB RAM
- USB port
- CD-ROM drive
- 800x600 pixels, 16-bit color display compatible monitor

Specifications are subject to change without prior notice.

Safety Information

- Do not try to open the case of the camera or attempt to modify this camera in any way. High-voltage internal components create the risk of electric shock when exposed. Maintenance and repairs should be carried out by authorized service providers.
- Do not fire the flash too close to people or animal's eyes, especially for young children. Eye damage may be caused.
- Keep the camera away from water and other liquids. Do not use the camera with wet hands. Never use the camera in the rain or snow. Moisture creates the danger of fire and electric shock.
- Keep the camera and its accessories out of the reach of children and animals to prevent accidents or damage to the camera.
- If you notice smoke or a strange odor coming from the camera, turn the power off immediately and unplug the AC adapter from the power outlet. Take the camera to the nearest authorized service center for repair. Never attempt to repair the camera on your own.

FCC Compliance and Advisory

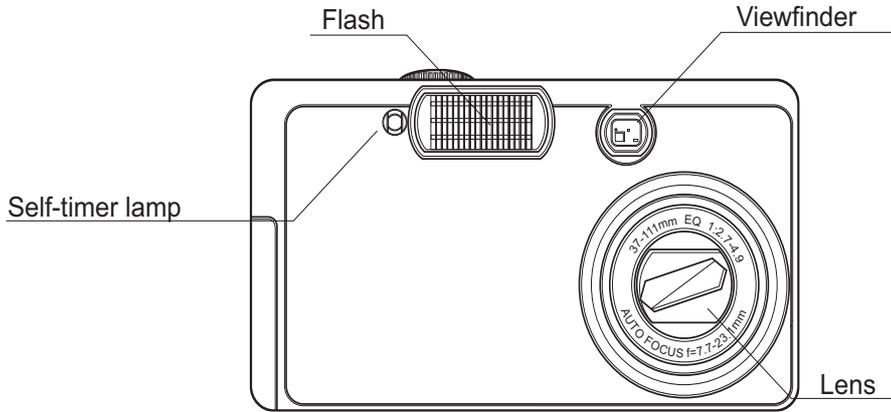
This device complies with Part 15 of the FF Rules. Operation is subject to the following two conditions: 1.) this device may not cause harmful interference, and 2.) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B peripheral, 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 communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause a 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.

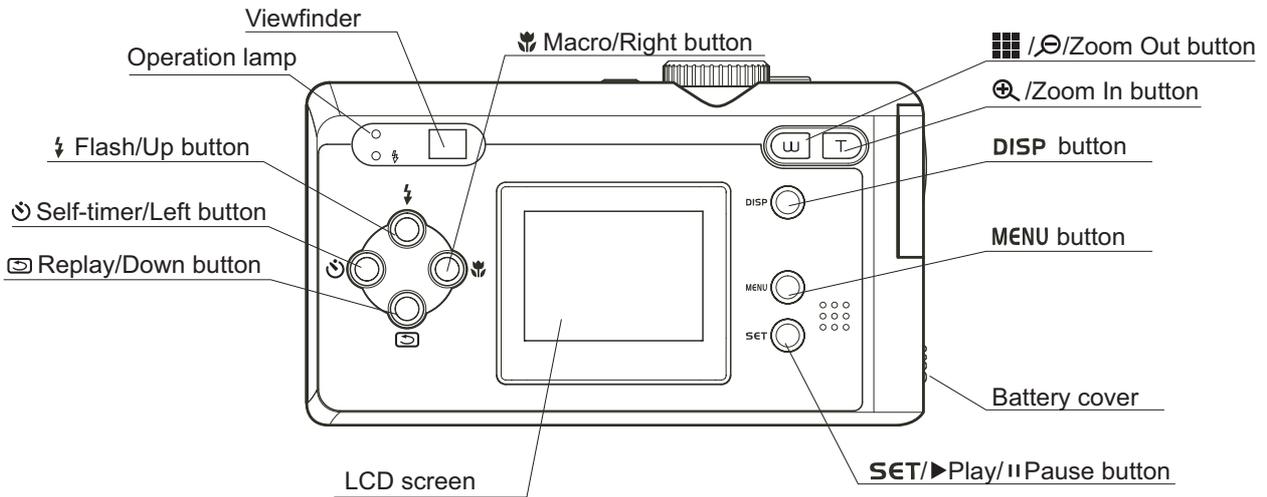
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulation.

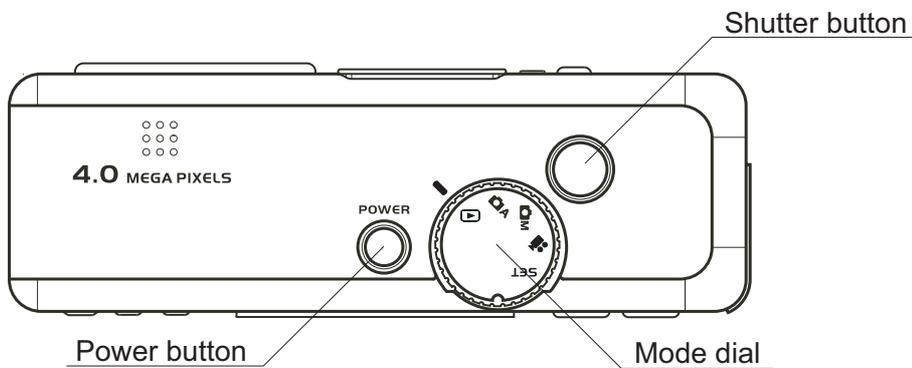
Camera Components



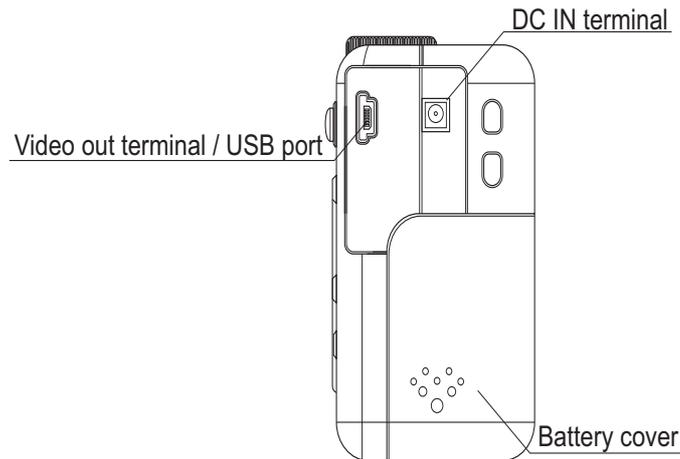
Front



Rear



Top



Side

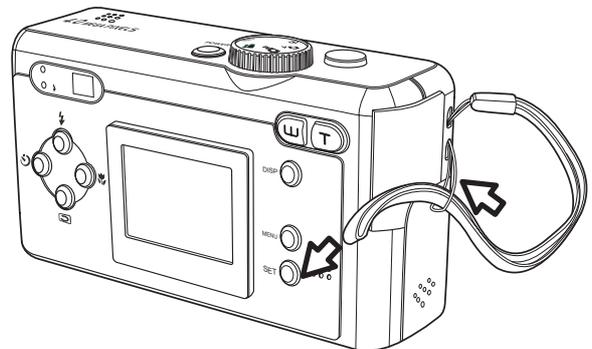
Using the Included Accessories

Attaching the Wrist Strap

The illustration shows how to attach the wrist strap to your camera.

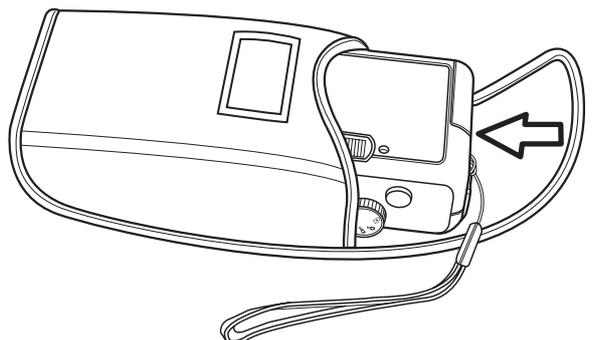
NOTE:

Don't swing the camera when carrying it by the wrist strap.



Using the Soft Case

- Store the camera in the included soft case when not in use.
- Slide the camera in the case with the LCD screen facing down as illustrated.

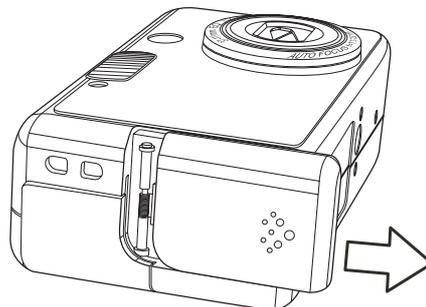


2 Preparing to Take Pictures

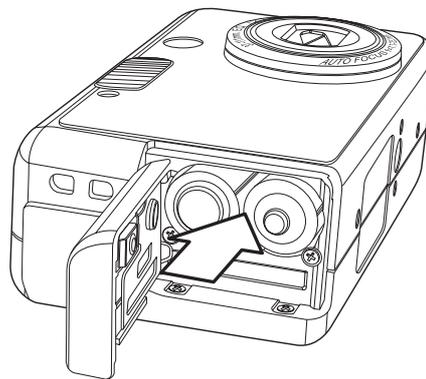
Installing the Batteries

The camera is powered by two AA-size alkaline batteries or two rechargeable Li CR-V3 batteries. Although an AC power adapter is not included, a standard 3.3 VDC/2.0A adapter can be purchased separately and used to power the camera.

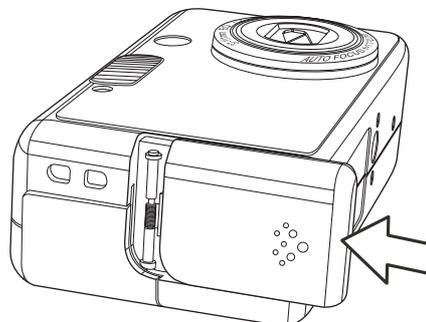
- 1 Slide open the battery cover.



- 2 Insert two AA-size alkaline batteries with the positive (+) and negative (–) poles matching the directions indicated inside the battery cover.



- 3 Slide the battery cover back into the closed position.



Low Battery Indicator

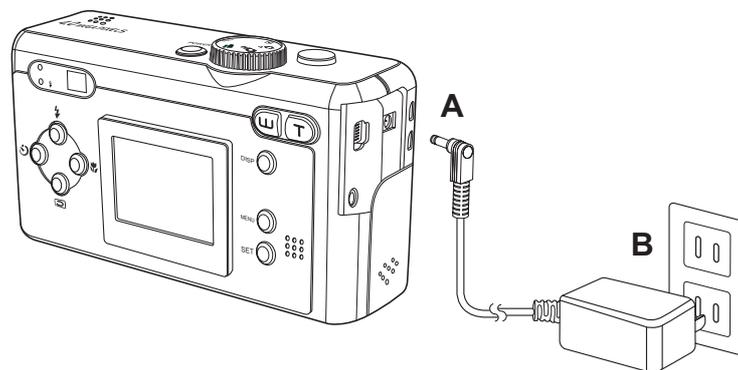
The low battery indicator  appears on the LCD monitor when the batteries near depletion. Change the batteries when the low battery indicator appears.

NOTES:

- Do not use manganese batteries. Manganese batteries cannot supply sufficient power to support camera operation.
- Replace all batteries at the same time. Never mix old and new batteries.
- Remove batteries from the camera if you do not plan on using it for more than two weeks.
- The camera body will feel warm after extended use. This is normal.
- Use an optional AC power adapter when using the camera for extended periods.

Using an Optional AC Power Adapter

Plug the small AC power adapter connector into the DC-in jack on the side of the camera (A). Plug the other end of the adapter into a wall socket (B).



NOTE:

Use an AC adapter that meets the camera's power specifications (DC3.3V/2.0A). Using an incorrect AC power adapter may result in permanent damage to the camera.

Preparing to Take Pictures

NOTES:

- Turn the camera off before connecting or disconnecting the power adapter.
- The camera automatically switches to AC power adapter-powered operation when the adapter is plugged into the camera.
- Use the power adapter when using the camera for extended periods, such as when connected to a computer.

Turning the Power On

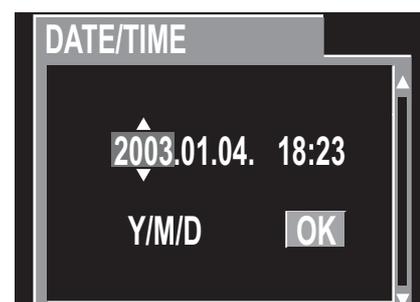
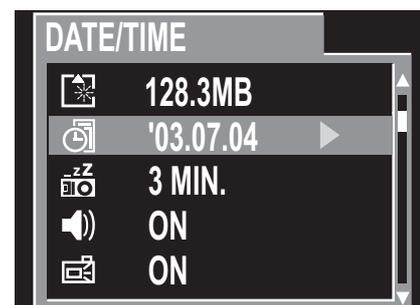
Press and hold the **POWER** button until the LED indicator begins flashing green. It takes about 3 seconds to power on the camera.

NOTE:

- Set the date and time after turning on the camera for the first time.
- The lens barrel will not extend if the camera is turned on while the Mode dial is set to **SET** or Playback  modes.

Setting the Date and Time

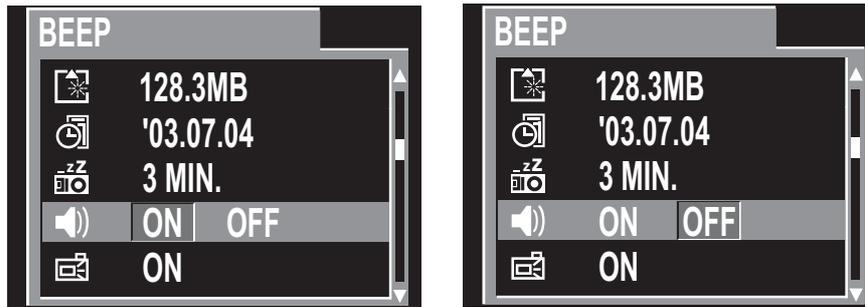
- 1 Turn the mode dial to **SET**.
- 2 Press the down  button until the DATE/TIME icon  is highlighted.
- 3 Press **SET** to enter the DATE/TIME menu.
- 4 Press  /  to change the year.
- 5 Press  /  to advance to the month setting. Repeat to set the date and time.
- 6 Press  /  to change the date format: Y/M/D, M/D/Y, or D/M/Y.
- 7 Select OK and press **SET** to save the new date and time.



Setting the Beep Sound

The camera “beep” sound can be turned on or off in the **SET** mode menus.

- 1 Turn the mode dial to **SET**.
- 2 Press  until the BEEP  icon is selected.
- 3 Press  /  to select ON or OFF.



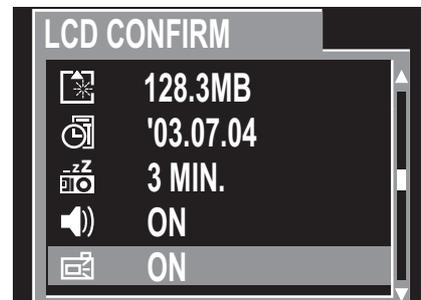
Note:

The default BEEP setting is ON.

LCD Photo Confirmation Setup

The camera displays a photo on the LCD screen immediately after it is taken when the LCD Confirm function is turned on. This function can be turned on or off in the **SET** mode menus.

- 1 Turn the mode dial to **SET**.
- 2 Press  until the LCD CONFIRM  menu is selected.
- 3 Press  /  to select ON or OFF.

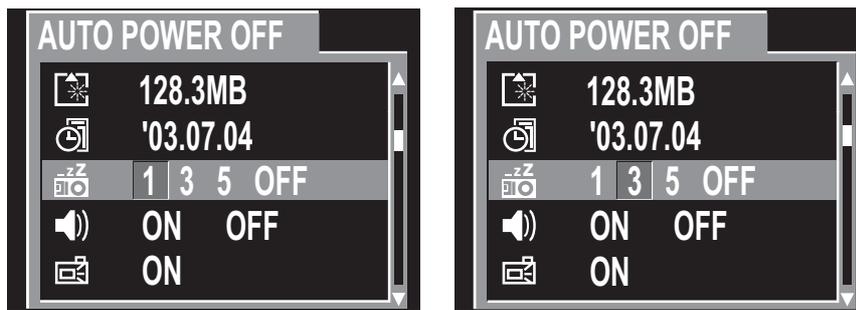


Auto Power Off Settings

The camera can turn itself off automatically after a set period of inactivity. Change the auto power off duration in the **SET** mode menus.

- 1 Turn the mode dial to **SET**.
- 2 Press  until the AUTO POWER OFF  menu is selected.
- 3 Press  /  to select OFF, 1 (min.), 3 (min.), or 5 (min.).

Preparing to Take Pictures



Note:

The default auto power off setting is 3 minutes.

1 minute: The camera automatically turns off the LCD screen if there is no activity after one minute. Press **POWER** to turn on the camera.

3 minutes: The camera automatically turns off the LCD screen if there is no activity after three minutes. Press **POWER** to turn on the camera.

5 minutes: The camera automatically turns off the LCD screen if there is no activity after five minutes. Press **POWER** to turn on the camera.

Off: The camera does not turn off automatically.

NOTE:

The auto power off function is disabled when an AC power adapter is used to power the camera.

TV Out Signal Set-Up

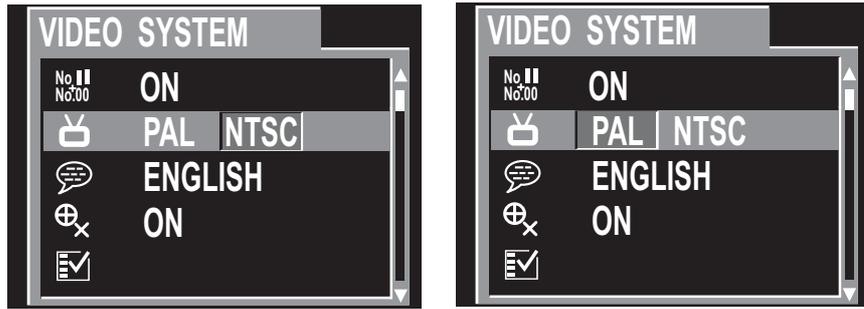
The camera can be connected to a TV as described in Chapter 6, “Making Connections”. Connecting to a TV allows you to preview photos and video clips on the television screen.

The TV output signal should be set to either NTSC or PAL depending on your region and the type of television you have. The default camera setting varies according to the country of purchase.

NTSC: U.S.A., Canada, Taiwan, Japan, etc.

PAL: Europe, Asia (excluding Taiwan), etc.

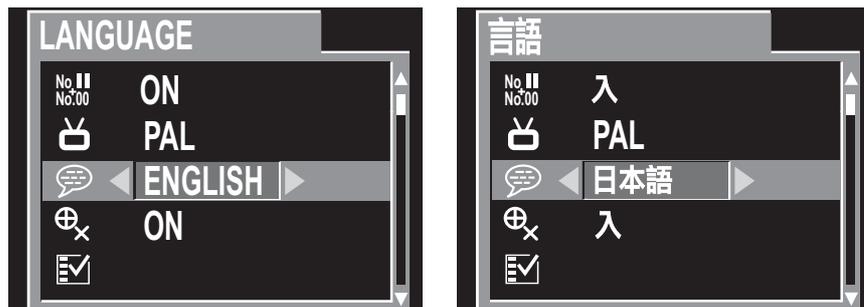
- 1 Turn the mode dial to **SET**.
- 2 Press  until the VIDEO SYSTEM  menu is selected.
- 3 Press  /  to select NTSC or PAL.



Setting the Language

The camera can display menus and other information in a number of different languages. The language can be changed in the **SET** mode menus.

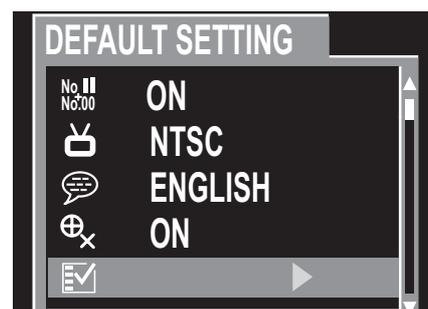
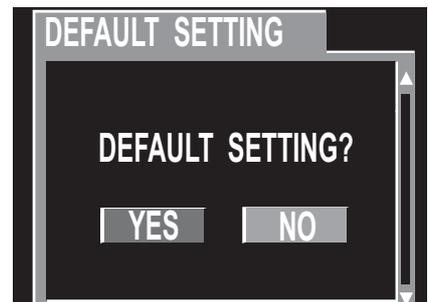
- 1 Turn the mode dial to **SET**.
- 2 Press until the LANGUAGE menu is selected.
- 3 Press / to select the language.



Restoring Default Settings

You can easily change all the settings you made back to their initial setting.

- 1 Turn the mode dial to **SET**.
- 2 Press until the DEFAULT SETTING menu is selected.
- 3 Press to enter the menu.
- 4 To return all settings to their default values, press to select YES.
- 5 Press **SET** to confirm and restore default settings.



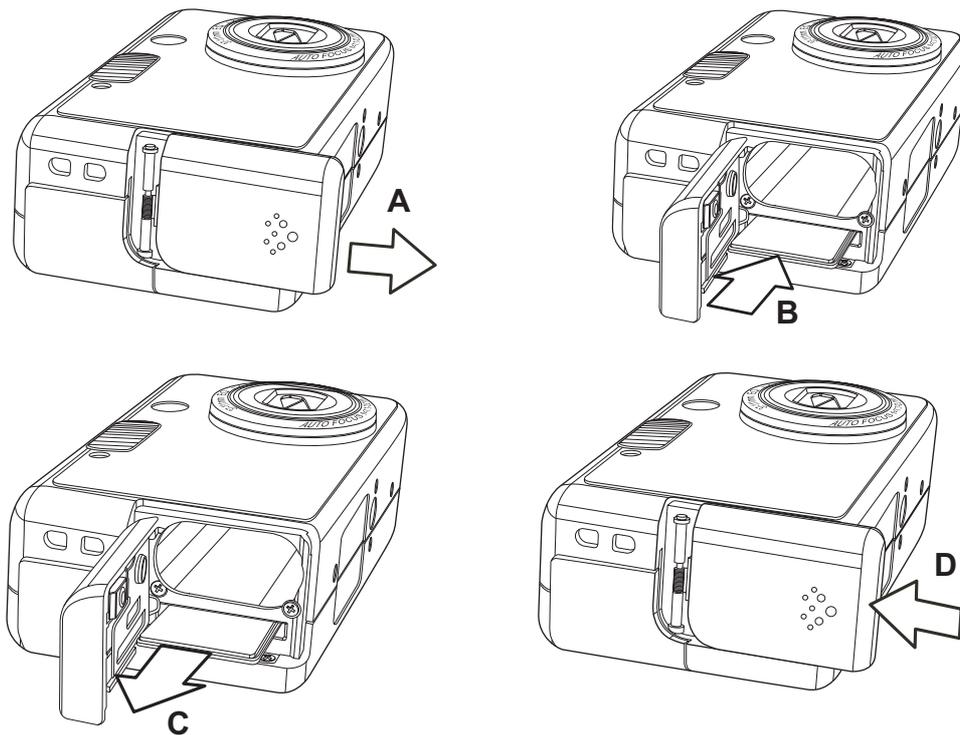
Using a Memory Card

Inserting an SD memory card

- 1 Slide open the battery cover (A). The card slot is located next to the battery compartment.
- 2 Slide the SD card into the slot in the direction illustrated (B).

Removing an SD memory card

- 1 Slide open the battery cover (A).
- 2 Gently press the SD card toward the camera and release it. The SD card ejects part way out of the slot (C).
- 3 Hold the card and pull it out of the slot.
- 4 Close the battery cover (D).



Setting the Camera Mode

Turn the Mode dial at the top of the camera to change the camera's function mode. The camera has five modes to choose from as described below.

Auto Photo Mode A

In auto photo mode, the camera automatically adjusts exposure and white balance to suit the shooting environment.

Manual Photo Mode M

Manual photo mode let you set exposure and white balance settings before taking a photo.

Playback Mode

In playback mode you can review, erase, and protect photos and video clips.

Video Mode

The camera can record video clips with audio in video mode. White balance can be set manually before recording a video clip.

Set Mode **SET**

Set mode allows you to change a number of camera settings such as the date and time, auto power off setting, and others.

NOTE:

When the camera is connected to a computer with the included USB cable, the camera mode is set to Mass Storage Mode regardless of the mode dial setting.

3 Taking Pictures

Previewing a Picture

Preview photos on the LCD screen before pressing the shutter button.

- 1 Turn the Mode dial to Auto  or Manual  mode.
- 2 Press **POWER** to turn on the camera.
- 3 The LED indicator next to the viewfinder flashes green.
- 4 The image automatically appears on the LCD screen together with information about current camera settings.

Setting the LCD Display Mode



Turn the LCD screen preview on or off by pressing **DISP**.

- 1 Press **DISP** once to turn the on-screen information display (OSD) off.
- 2 In Auto, Manual, and Video modes, press **DISP** once to turn the OSD off, twice to turn the LCD off, and once again to turn the LCD and OSD on.
- 3 Press **DISP** again to turn the image-only OSD on.



Auto Mode: the image and on-screen information OSD are shown on the LCD screen



Image Only Mode: the OSD information does not appear on the LCD screen

NOTE:

The LCD display mode (Auto / Image Only / Off) is saved when the camera is turned off. The display mode setting remains when the camera is turned on again.

OSD information appears on the LCD screen for only three seconds when the display mode is set to Image Only or LCD Off mode. OSD information remains on the screen in Auto display mode.

Using the Auto Focus Indicator



When using the LCD screen to frame a shot, align the auto focus indicator in the center of the screen with the subject.

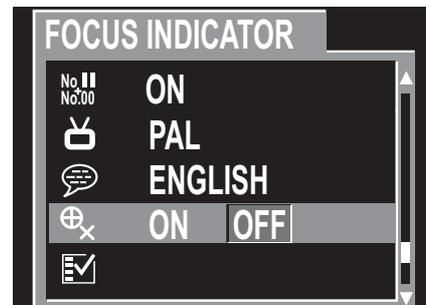


AF Indicator

Turning off the Auto Focus Indicator

Follow these steps to turn the auto focus indicator off.

- 1 Turn the mode dial to **SET**.
- 2 Press  until the auto focus indicator  is highlighted.
- 3 Press  to select OFF. The setting is saved and applied immediately.



AF Indicator OFF

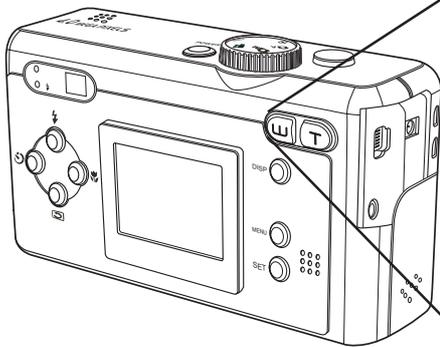
Using the Zoom Feature



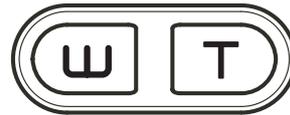
The digital camera allows you to zoom in on a subject for a telephoto shot, or zoom out for a wide-angle shot.

NOTE:

The lens barrel slides in and out from the camera body when the zoom is adjusted. Be careful not to block or touch the lens.



Press **W** to zoom out for a wide-angle shot (subject appears further away).



Press **T** to zoom in for a telephoto shot (subject appears

Using the Digital Zoom

The digital camera is equipped with digital zoom capabilities that further enhance the optical zoom properties of the lens.

Digital zoom works by enlarging the center portion of an image through a software interpolation process. When the camera's optical zoom factor reaches 3.0X, the digital zoom is used to achieve magnification levels up to 6.0X in combination with the optical zoom.



The upper part of the zoom slider indicates the digital zoom. Optical zoom is represented by the lower part of the slide.

Using the Auto and Manual Photography Modes

The digital camera offers two photography modes: Auto  and Manual .

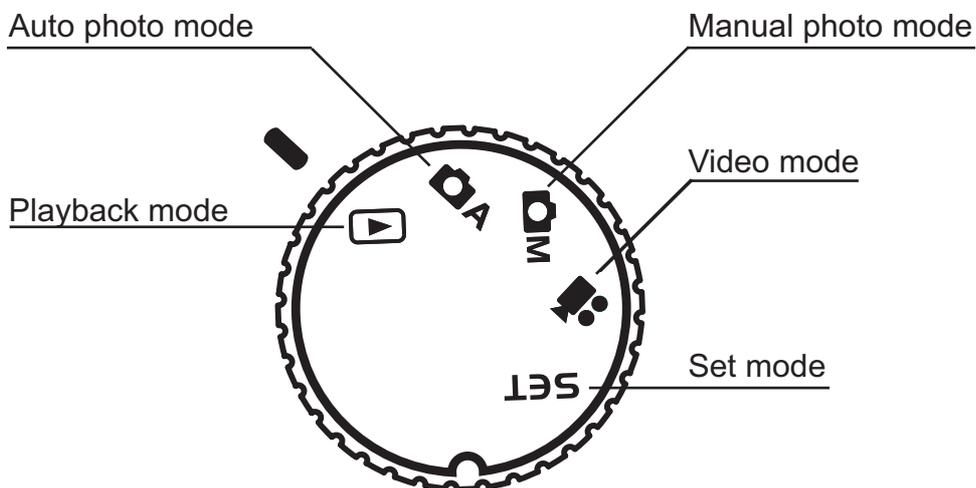
Auto mode is the simplest to operate and is recommended for beginners. Photos in Auto mode are captured by pressing the shutter button and letting the digital camera adjust settings to match lighting conditions, focus range, and other environmental factors automatically.

Manual mode allows users to manually adjust camera settings such as exposure and white balance, allowing skilled users to fine-tune settings to suit conditions, and to achieve a variety of special photographic effects.

If an SD card is not inserted in the camera, photos are stored on the camera's internal memory. When an SD card is inserted, the camera reads and writes to the SD card, not to the internal memory. Remove the SD card to access the camera's internal memory.

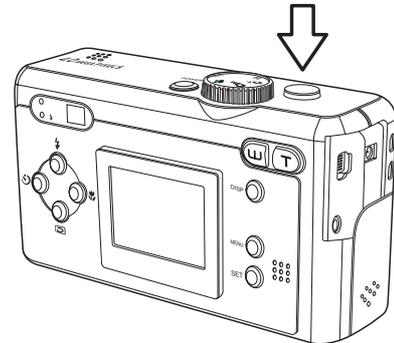
Using the Mode Dial

Turn the mode dial at the top of the camera to change the camera's working mode at any time.



Taking Pictures in Auto Mode

- 1 Turn the Mode dial to Auto  mode.
- 2 Press **POWER** to turn the camera on.
- 3 Press the shutter button down halfway and align the auto focus indicator with the center of the subject. The auto focus indicator turns green and the LED next to the viewfinder flashes green when the focus is locked.
- 4 Capture the photo by pressing the shutter button down until the camera beeps. The photo is captured and stored on the camera's internal memory, or on the SD card if inserted.



NOTE:

- The auto focus indicator  does not appear if the auto focus indicator setting is turned off in the **SET** menu.
- The beep does not sound if the beeper setting is turned off in the Set menu.

- 6 The LED flashes green while the image is being stored in memory.

NOTES:

- A “shaking hand” icon  appears below the auto focus indicator if the camera is not held steady.
- **Low light warning:** The icon also appears when the shutter speed is greater than 1/40 seconds and the flash is turned off. For example, a shutter speed of 1/30 seconds with the flash set to Force Off results in a low light warning.
- When the shutter button is pressed half way down, check the exposure value that appears on the LCD screen to make sure it is appropriate for the current light conditions.
- The auto focus indicator on the LCD screen turns green when the camera has successfully locked the exposure, white balance, and focus.
- The auto focus indicator is red when the camera's exposure, white balance, and focus is not yet locked or when lighting conditions exceed camera settings. Photos taken may appear over exposed or too dark.

Setting the Image Quality and Size in Auto Mode



- 1 Turn the Mode dial to Auto  mode.
- 2 Press **MENU**.
- 3 Press  /  to set the image QUALITY and SIZE.
- 4 Press **SET** to complete the setting.



Icon	Display	Quality 	Resolution 
	2272	Fine	2272 x 1704
	2272	Normal	2272 x 1704
	1120	Normal	1120 x 840
	544	Normal	544 x 408
	3:2	Fine	2272 x 1504 (3:2)
	3:2	Normal	2272 x 1504 (3:2)

Taking Pictures in Manual Mode



- 1 Turn the Mode dial to Manual  mode.
- 2 Press **POWER** to turn the camera on.
- 3 The shooting procedures are the same as described in “Taking Pictures in Auto Mode” on page 18.

Changing the Image Resolution and Quality

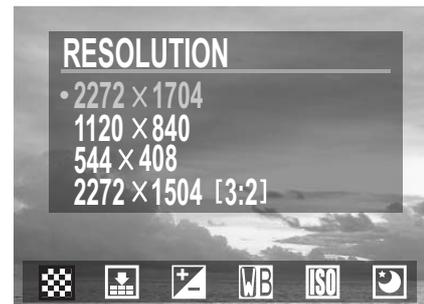


You can change the resolution and quality of images captured when the digital camera is in Manual mode.

Icon \ Display	Resolution 
	2272 x 1704
	1120 x 840
	544 x 408
	2272 x 1504 (3:2)

Changing Image Resolution

- 1 Turn the Mode dial to Manual  mode.
- 2 Press **MENU**.
- 3 Press  /  to select the image RESOLUTION  menu.
- 4 Use  /  to select an image resolution value: 2272x1704, 1120x840, 544x408, or 2272x1504 (3:2).
- 5 Press the **MENU** button again to complete the setting or press  /  to move to another menu.



The resolution icon on the LCD screen changes to reflect the new resolution setting.

Changing Image Quality (Compression):

- 1 Turn the Mode dial to Manual  mode.
- 2 Press **MENU**.
- 3 Press  to select the compression  menu.
- 4 Press  /  to select the FINE or NORMAL image compression setting.
- 5 Press **MENU** again to confirm the setting or press the  /  buttons to move to the next menu.



The quality icon on the LCD screen changes to reflect the new quality setting.

Icon	Display	Compression (Quality) 
		Fine
		Normal

Adjusting the Exposure



Set the exposure value (EV value)  manually to compensate for certain lighting conditions including: backlighting, indirect indoor lighting, and dark backgrounds.

- 1 Turn the Mode dial to Manual  mode.
- 2 Press **MENU**.
- 3 Press  to select EXP [+/-] .
- 4 Press  /  to set the exposure value. Available settings are: -2.0, -1.7,-1.3,-1.0,-0.7,-0.3,0.0, +0.3,+0.7, +1.0,+1.3,+1.7,+2.0
- 5 Press **MENU** to confirm the setting or press  /  to move to the next menu.



The exposure value appears on the LCD screen when the camera is in Manual mode.

Setting the White Balance

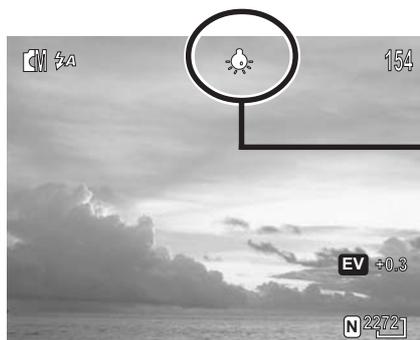


Adjust the white balance to match different light sources such as the sun, and tungsten (incandescent) or fluorescent lighting.

- 1 Turn the Mode dial to Manual mode.
- 2 Press **MENU**.
- 3 Press to select WHITE BALANCE .
- 4 Press / to set the white balance mode.
- 5 Press **MENU** to confirm the setting or press / to move to the next menu.



Mode	Name	Usage
AUTO	Auto	Normal conditions (the camera adjusts itself automatically)
	Sun	Outdoor daylight
	Cloudy	Outdoor cloudy conditions.
	Tungsten	Tungsten lighting (indoor incandescent lighting)
	Fluorescent	Indoor fluorescent lighting
	Black & White	Converts image to black and white



The white balance setting appears on the LCD screen when the camera is in Manual mode.

Adjusting the ISO Speed

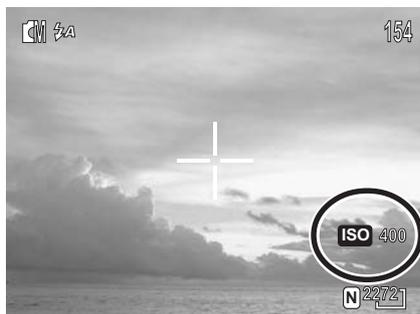


Change the camera's sensitivity to light by selecting the ISO value.

- 1 Turn the Mode dial to Manual mode.
- 2 Press **MENU**.
- 3 Press to select ISO SETTING .
- 4 Press / to set the ISO value. Available settings are: 100, 200, 400, or Auto.
- 5 Press **MENU** to confirm the setting or press / to move to the next menu.



Mode	Description
AUTO	The camera's sensitivity to light is automatically adjusted according to light conditions and the brightness of the subject.
100/200/400	In the same lighting conditions, a higher ISO value will result in a faster shutter speed.



The ISO setting appears on the LCD screen when the camera is in Manual mode.

Setting Slow Shutter Speed

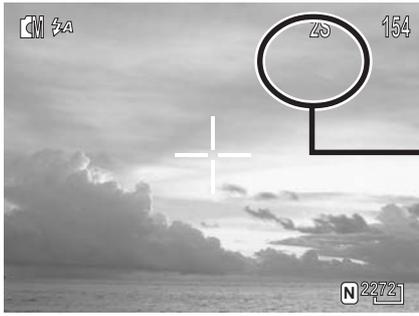


The camera's normal shutter speed ranges between 1/2000 second to 1 second; however, slower shutter speeds of 1, 2, 4, and 8 seconds can be set in Slow Shutter mode.

- 1 Turn the Mode dial to Manual mode.
- 2 Press **MENU**
- 3 Press to select SLOW SHUTTER .
- 4 Press / to set the slow shutter speed: 1, 2, 4, 8 seconds, or OFF.
- 5 Press **MENU** to confirm the setting or press / to move to the next menu.



Taking Pictures



The slow shutter speed setting appears on the LCD screen when:

1. the camera is in Manual mode,
2. the shutter is pressed halfway down, and
3. the subject is in focus

NOTE:

Set the camera on a tripod (not included) when taking photos with slow shutter speeds to avoid blurred results.

Setting the Flash

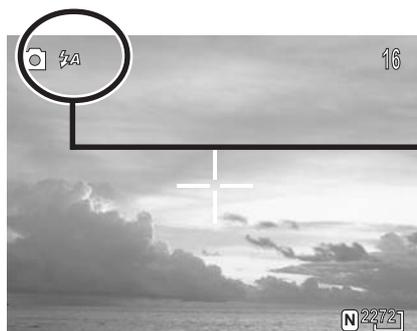


Press the FLASH  button to select the flash mode. The flash can be used in Auto and Manual photography modes, but not in Video mode.

Mode	Auto 	Manual 	Video 
	○	○	×
	○	○	×
	○	○	×
	○	○	×

○ Available

× Not available



The flash icon appears on the LCD screen when the camera is in Auto or Manual mode.

Using the Macro Mode



Press the MACRO  button to take close-up photos. Macro mode allows photos of subjects 10 cm away from the camera lens at the maximum wide angle (zoomed out) setting and 16 cm at the maximum telephoto (zoomed in) setting.

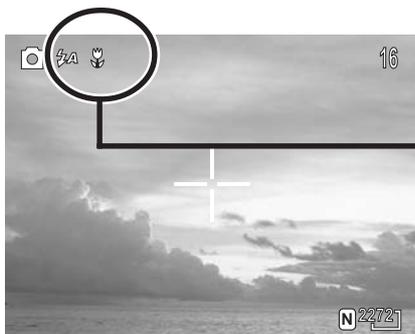
Mode	Auto	Manual	Video
Macro	○	○	○

○ Available

✕ Not available

NOTES:

- Distances referred to measure the distance between the camera lens surface and the subject.
- Any flash setting (OFF, ON, AUTO, and Red-Eye Reduction) can be used in Macro mode.
- Entering Macro mode doesn't change the current flash setting.



The macro icon appears on the LCD screen when the camera is in Auto or Manual mode.

Setting the Self-Timer

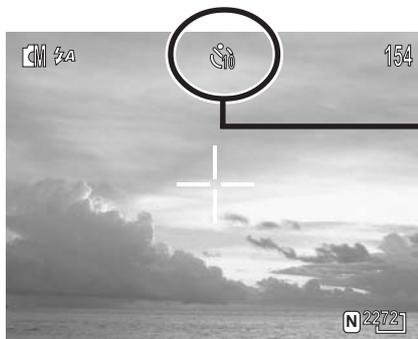


Use the self-timer to set a delay between the time the shutter button is pressed and the time the image is captured.

- 1 Turn the Mode dial to Auto or Manual mode.
- 2 Press the SELF-TIMER button () to cycle between the settings.
- 3 Make sure the self-timer icon (2 seconds) or (10 seconds) appears on the LCD screen, then press the shutter button.

Setting	Description
OFF	Turns self-timer off.
	Two seconds. Press once.
	Ten seconds. Press again.

- 4 The self-timer LED at the front of the camera flashes red if the flash is turned on. The LED flashes green if the flash is turned off.



The self-timer setting appears on the LCD screen.

NOTE:

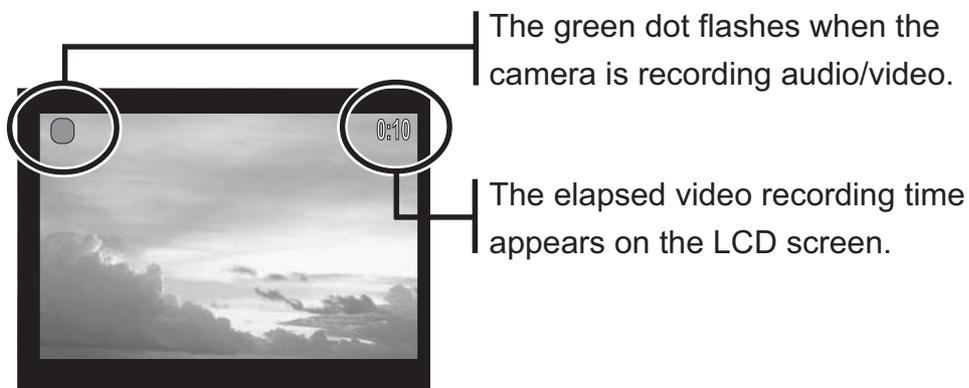
Press to cancel the self-timer at any time.

Recording Video Clips



The digital camera can record video clips with audio.

- 1 Turn the Mode dial to Video  mode.
- 2 Press the shutter button to start recording.
- 3 Press the shutter button again to stop the recording.
- 4 The camera stops recording automatically when the memory capacity has been reached.



NOTES:

- In Video mode, the resolution is set to 320x208 pixels. Video resolution cannot be changed.
- Be careful not to touch the microphone while recording.
- The maximum length of an individual video clip depends on the amount of available memory. Use a higher capacity SD card to record longer video clips.
- Video recording stops automatically when memory is full.
- Adjust the white balance before recording video.

Functions Available in Each Camera Mode



Function	Mode	Auto	Manual	Video
EXPOSURE 	Exposure Value: -2.0 to +2.0	×	○	×
	AUTO	×	○	○
WHITE BALANCE 	DAYLIGHT	×	○	○
	CLOUDY	×	○	○
	TUNGSTEN	×	○	○
	FLUORESCENT	×	○	○
	BLACK & WHITE	×	○	○
ISO 	100/200/400/AUTO	×	○	×
SLOW SHUTTER	1 sec./2 sec./4 sec./8 sec.	×	○	×
RESOLUTION 	2272x1704	○	○	×
	1120x840	○	○	×
	544x408	○	○	×
	2272x1504	○	○	×
COMPRESSION (QUALITY) 	FINE	○	○	×
	NORMAL	○	○	×
FLASH 	AUTO	○	○	×
	RED-EYE	○	○	×
	FILL	○	○	×
	OFF	○	○	×
MACRO FOCUS		○	○	○
SELF-TIMER		○	○	×
ZOOM		○	○	Optical zoom only

○ Available

× Not available

4 Reviewing Photos & Video Clips

Viewing Pictures



View photos and video clips that are stored in the camera's memory (internal or SD card) on the LCD screen when the camera is in Playback  mode.

- 1 Turn the Mode dial to Playback  mode. The last recorded image or video clip appears on the LCD screen.
- 2 Press  /  to scroll through the files.



NOTE:

- Image information is not shown on the LCD screen when **DISP** is pressed.
- To control video clip playback: press **SET** to play; press **SET** again to pause. Press  /  to stop and skip to the previous or next file.
- After a video clip plays to the end of the file, the first frame appears on the LCD screen.

Replaying the Last Image Quickly



View a photo or video clip on the LCD screen immediately after it is captured. The quick review function is available in each capture mode.

- 1 Press  to view the most recently captured photo or video clip.
- 2 To delete the file, press **SET**. Press  /  to select YES or NO and press **SET** to confirm the choice.
- 3 Press  again to return to capture mode.



Viewing Pictures in Thumbnail Mode



The THUMBNAIL  function allows you to view up to nine images at a time on the LCD screen.

- 1 Turn the Mode dial to Playback  mode.
The last recorded photo or video clip appears on the LCD screen.
- 2 Press the wide angle **W** button to view thumbnail images.
- 3 The selected image (the image that was displayed when **W** was pressed) is highlighted.
- 4 Use  /  /  /  to select an image.
- 5 Press the telephoto **T** button to display the selected image in full screen size.



Zooming the Displayed Image



Magnify a image in Playback mode by zooming in on it from 1.0X to 8.0X.

1. Turn the Mode dial to Playback  mode.
2. Press **T** to magnify the image.
3. Press **W** to zoom out to the original full-sized image.

When an image is zoomed in Playback mode, a scale indicator appears on the lower left side of the LCD screen. The zoom factor is also shown.



The scale indicator shows that the image is displayed at full size.



Panning Across an Image

Use  /  /  /  to pan across a magnified image. The portion of the image that is visible depends on the magnification factor.

NOTE:

To return to full screen size, press **MENU** twice or press **W** until the image fills the LCD screen.

Erasing Files from Memory

Erase photos and video clips that you don't want to keep to make more memory available for new files. You can erase individual files or all files when the camera is in Playback  mode.

Erasing a Single Image

- 1 Turn the Mode dial to Playback  mode.
- 2 Press **MENU**.
- 3 Press **SET** to enter the ERASE ONE  menu .
- 4 Press  /  to select YES to erase the file or select NO to cancel the action and return to the main menu.
- 5 Press **MENU** to return to the main menu or press **SET** to erase the file.



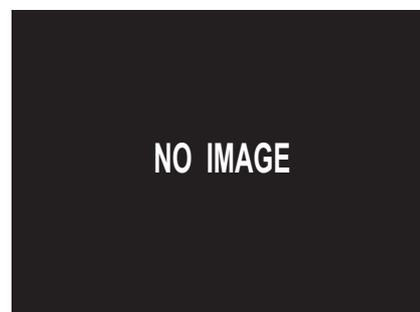
Reviewing Photos and Video Clips

Erasing All Unprotected Images

- 1 Turn the Mode dial to Playback  mode.
- 2 Press **MENU**.
- 3 Press  to select ERASE ALL .
- 4 Press **SET** to enter the ERASE ALL  menu.
- 5 Press  /  to select YES to erase all files or select NO to cancel the action and return to the main menu. Press **SET** to confirm the choice.



If all files (photos and video clips) are erased, the message “NO IMAGE” appears on the LCD screen.



NOTES:

- Files that are erased cannot be recovered. Make sure you have selected the images you want to erase.
- Files that have been protected (see the following section) are not erased even if “Erase All” is selected.

Protecting Photos and Video Clips



Individual files can be protected (locked) or unprotected (unlocked). Protect any photos or video clips that you want to keep to ensure that they are not accidentally erased.

- 1 Turn the Mode dial to Playback  mode.
- 2 Press  /  to scroll through the files until you reach the photo or video clip you want to protect.
- 3 Press **MENU**.
- 4 Press  to select PROTECT .
- 5 Press **SET** to enter the protect menu. Press **SET** again to protect an unprotected file or to disable protection on a protected file. Press **MENU** to save changes.



- 6 Press / to scroll to the previous or next photo or video clip.

NOTE:

- The protect icon appears on the LCD display for all protected files.



Removing Protection

If a file is protected, follow steps 1 to 4 above and press **SET** again to remove protection. The icon does not appear when unprotected images are viewed on the LCD screen.

Playing a Slide Show (Auto Play)



In slide show mode, photos are displayed in sequence on the LCD screen for a period of three seconds each.

- 1 Turn the Mode dial to Playback mode.
- 2 The last photo taken appears on the LCD screen.
- 3 Press **MENU**.
- 4 Press to select SLIDE SHOW and press **SET**.
- 5 The slide show begins automatically, starting from the first picture.



Reviewing Photos and Video Clips

NOTES:

- Press **SET** to pause the slide show. Press SET again to continue playing the slide show.
- Press **MENU** to stop the slide show and return to the main menu.
- Press ◀ / ▶ to immediately scroll to the previous or next photo.
- The slide show starts again from the first photo after all of the photos have played.
- The slide show plays until the power runs out.
- Use an optional AC power adapter if you plan to play a slide show for extended periods.

Copying Flash Memory Images to a Memory Card



The camera allows you to copy individual or all files (photos and video clips) that are stored in the camera's internal memory to an installed SD memory card.

- 1 Turn the Mode dial to Playback  mode.
- 2 Press **MENU**.
- 3 Press ▶ to select COPY TO CARD .
- 4 Press **SET** to enter the COPY TO CARD menu.
- 5 Press ◀ / ▶ to select ONE or ALL.

ONE: A single selected file stored in the camera's internal memory is copied to the installed SD card.

ALL: All files stored in the camera's internal memory are copied to the installed SD card.

- 6 If ONE is selected, press ◀ / ▶ to select the image you want to copy to the SD card.
- 7 If ALL is selected, the images appear on the LCD screen in thumbnail format as they are copied to the SD card.





NOTES:

- Files cannot be copied from the SD card to the camera's internal memory.
- Pause the COPY TO CARD process by pressing SET or MENU. Press SET or MENU again to continue copying.
- A new folder is automatically created on the SD card. Files copied from the internal memory are stored in this folder.

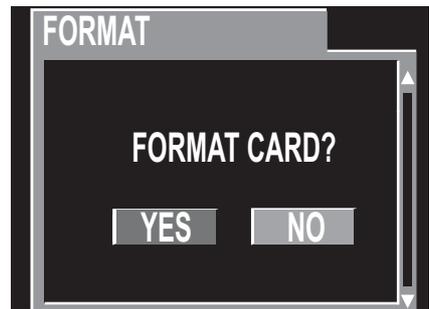
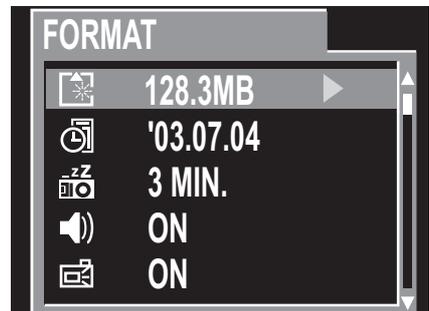
Formatting Internal or SD Card Memory

- 1 Turn the Mode dial to **SET**.
- 2 Press / to select **FORMAT** .
- 3 Press to enter the **FORMAT** menu.
- 4 Press / to select YES or NO.
- 5 Press **SET** to confirm the selection.

YES: formats the memory card.
NO: cancels the formatting operation.

- 6 If YES is selected, the camera begins formatting the internal or SD card memory.
- 7 The message "NO IMAGE" appears on the LCD screen (in Playback mode) when formatting is complete.

NOTE:
 Formatting memory permanently erases the contents of memory. Photos and video clips cannot be recovered from memory after formatting. Transfer any files that you want to keep to a computer before formatting memory.



5 File Names & Printing

Folder Names

The digital camera automatically creates a directory of folders in the internal memory or SD card that it uses to organize photos, video clips, and other information.

Folder Example:

100V4800
Serial Number

- i. Folder numbers start from 100.
- ii. Each folder holds up to 999 files. If a photo is taken when the folder with highest folder number contains a picture file number equal to or greater than 0999, the camera creates a new folder by adding one to the current folder number. For example, if the current folder is “100V4800”, the new folder is named “101V4800”).
- iii. The maximum folder number is 999.
- iv. If the highest folder number is 999 and highest file number exceeds 0999, the camera will display the warning message “FILE NUMBER OVER”.
- v. If “FILE NUMBER OVER” appears, follow one of the two methods below:
 - a) Format the memory. The folder number and file number are initialized and renumbered from 100 and 0001 respectively.
 - b) Turn on File Number Reset in the Set menu and plug in a new memory card.

File Names

The camera automatically assigns a file name to each photo and video clip captured. File names start with “PIC_” and are followed by a four-digit number that increases in sequence.

File Example:

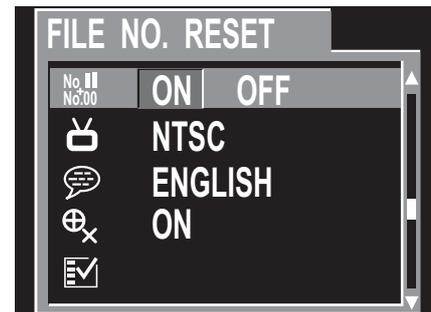
PIC_0001.JPG
Extension File Name
Serial Number
Underline

- i. Each folder can hold up to 999 pictures. If a photo is taken when the current folder contains a file numbered 0999, the DSC creates a new folder and stores the new image in the new folder.
- ii. File numbering starts from 0001 when a new folder is created.

File Number Reset

Use File Number Reset if the camera experiences a “FILE NUMBER OVER” error or if you want to restart file numbering, for example, after erasing all files.

- 1 Turn the mode dial to **SET**.
- 2 Press  to select FILE NO. RESET .
- 3 Press  /  to select ON or OFF.
- 4 Press  /  to complete the setting and move to another menu.



OFF: The camera assigns all subsequent file numbers sequentially in ascending order, starting from the last number used. If a new SD card is inserted in the camera, the file numbering continues from the last number used.

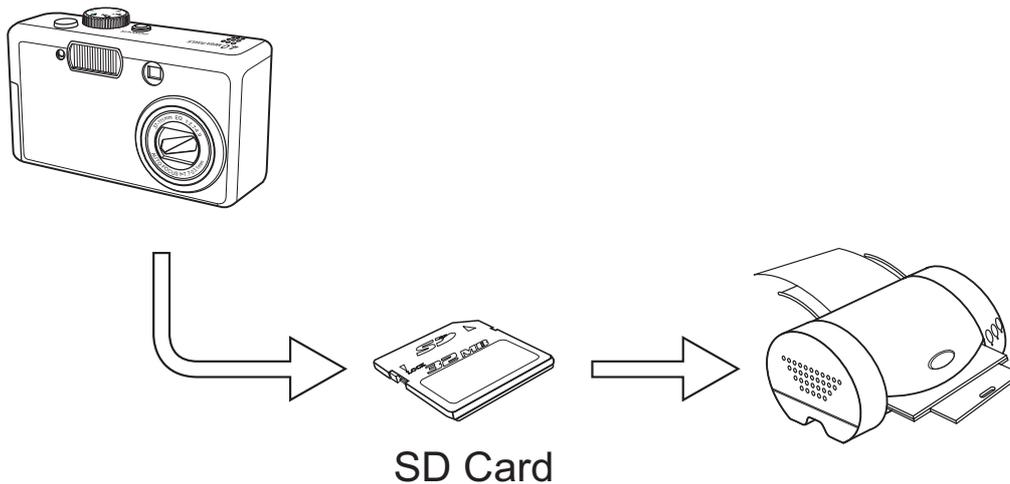
ON: The camera stores the last file number used. When another SD card is inserted or if a new folder is created, the file number starts from the lowest number available on that card.

NOTE:

If the memory card is formatted, the folder number and the file number are initialized and the count starts from 100 and 0001. If the File Number Reset is set to OFF, the numbering starts after format with the last file and folder number stored in the camera.

DPOF Print Settings

The Digital Print Order Format (DPOF) settings allow you to select photos stored on an SD card that you want to print. This function is convenient when used with a printer or commercial printing service that supports DPOF printing.



NOTE:

DPOF is not available for video clip (AVI) files.

Print Order Setting

- 1 Turn the Mode dial to Playback  mode.
- 2 Press  /  to select a photo and set a print order.
- 3 Press **MENU**.
- 4 Press  to select PRINT SETTING .
- 5 Press **SET** to enter the PRINT SETTING menu.
- 6 In the SETTING MODE menu, press **SET** to confirm the print setting  for the selected photo.
- 7 After setting the first image, press  /  to scroll to another image and repeat the procedure
- 8 Press **MENU** to return to the main Playback menu.



When Print Setting is turned on,
the checkbox is marked.



RESET Mode

The Reset feature clears all DPOF settings.

PRINT Image Matching



The digital camera supports PRINT Image Matching (PIM). Photos captured include information about the mode settings and camera setup that is embedded in a header file. When you print a photo on a printer that supports PRINT Image Matching, the printer reads this data and adjusts the printed image according to the captured settings. Images printed this way have superior results. Refer to the documentation that came with your printer for full details about PRINT Image Matching.

(PRINT Image Matching is copyrighted by Seiko Epson Corporation.)

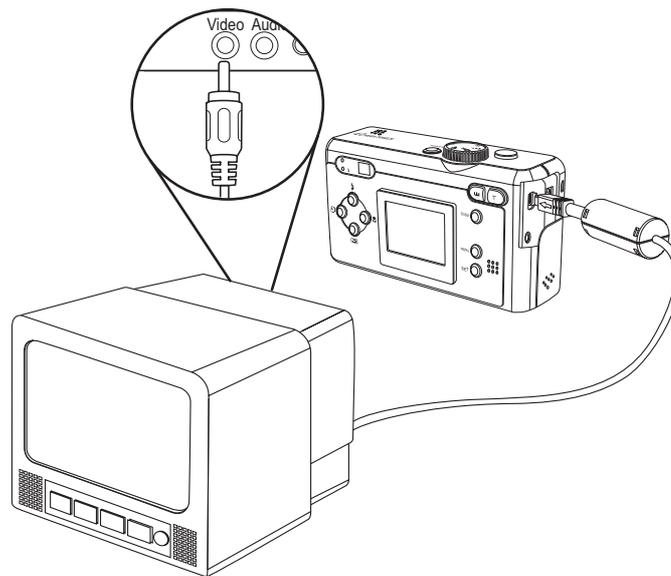
NOTE:

The PIM feature is only supported for photos stored on an SD card. Photos stored in the camera's internal memory do not have the necessary PIM information.

6 Making Connections

Viewing Images on a TV

Images displayed on the camera's monitor screen can also be displayed on a television screen.



- 1 Use the included audio/video cable to connect the camera to the TV set as illustrated above.
- 2 Set the TV input signal to Video In. Refer to the documentation included with your TV for more information.
- 3 Everything that would normally appear on the camera's LCD screen, such as photo and video clip playback, slide shows, and image or video capture, appears on the TV.

NOTE:

The camera LCD screen turns off automatically during video output.

Selecting the Video Output Signal Mode

The digital camera supports both NTSC (used in U.S.A., Japan, and other countries) and PAL (used in Europe and other areas) video signal systems. See page 10 for information on setting the camera's video system to match your region.

Downloading Images to a Computer

There are two ways to download files from the camera's internal memory or SD card to a computer:

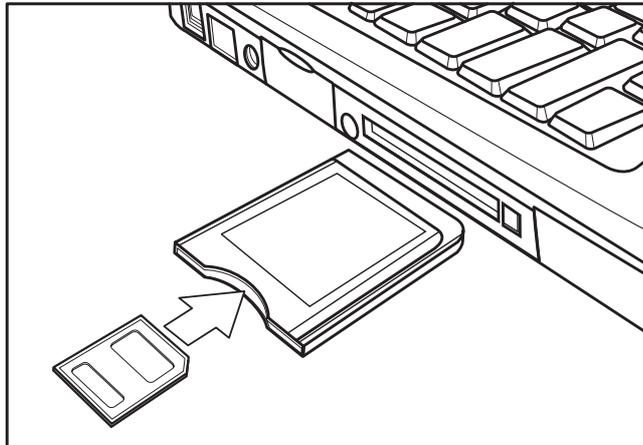
- by inserting the SD card into a flash memory card reader
- by connecting the camera to a computer using the included USB cable

Using a Flash Memory Card Reader

1. Eject the SD card from the camera and insert it in an SD card reader that is connected to a computer.

NOTE:

If you are using a PC card reader with a notebook computer, first insert the SD card into the PC card adapter (optional), and then insert the PC card adapter into the computer's PC card slot.



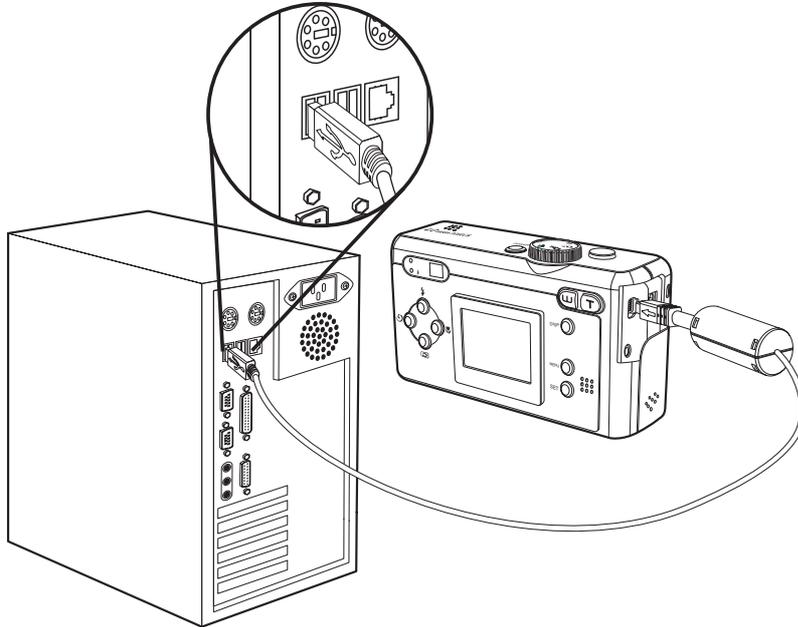
Using an SD card reader connected to a notebook computer

2. Open My Computer or Windows Explorer and double-click the removable drive icon that represents the SD card.
3. Copy images from the card into a directory of your choice on the computer's hard disk.

Making Connections

Connecting the Camera to a Computer with a USB Cable

- 1 Install the USB software driver included with the bundled CD-ROM.
- 2 Connect the supplied USB cable to the computer's USB port



NOTES:

- You don't have to turn off the computer or camera when making this connection.
- Refer to your computer's manual for information regarding the USB port location.

- 3 Turn on the camera.
- 4 The LCD screen turns off when the connection to the computer has been successfully completed.

NOTES:

- The camera will turn off automatically if the USB cable is disconnected.
- Use an optional AC power adapter when connected to a computer to save battery power.
- Windows 98/98SE: If this is the first time the camera has been connected to the computer, Windows detects the camera as an "Unknown device" and automatically completes the required software installation.

- 5 Open My Computer or Windows Explorer. A “Removable Disk” appears in the drive list.
- 6 Double-click the “Removable Disk” icon to view its contents.
- 7 Files stored on camera are located in the folder named “DCIM”.

Understanding Camera Memory and Storage

Internal Memory

The digital camera is equipped with internal memory. If an SD card is not installed in the camera, all photos and video clips recorded by the camera will be stored in the internal memory. If an SD card is installed, photos and video clips are stored on the SD card.

Optional SD Memory Card

Photos, video clips, and other information recorded by the camera is stored on the SD card using the Design rule for Camera File system (DCF) protocol. The DCF protocol is designed to accommodate file and data exchange between digital cameras and other devices.

DCF Protocol

The DCF protocol defines the format for image file data as well as the directory structure for the memory card. Photos that are taken by a DCF camera can be viewed on DCF-compatible cameras from other manufacturers.

7 Installing Software

Installing the Software Driver

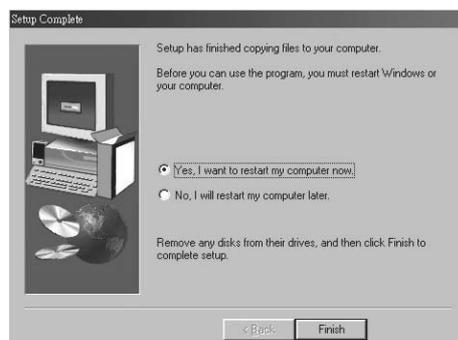
You must install the camera software drivers if your computer's operating system is Windows 98 or Windows 98SE. To install the drivers:

- 1 Insert the included software installation CD-ROM in your computer's CD-ROM drive.
- 2 The installation program starts automatically.
- 3 Follow the on-screen instructions to install the drivers.



NOTES:

- If the installation program does not start automatically, open the CD-ROM in My Computer or Windows Explorer and double-click on the file named "install.exe" to start the program. You can also click Run in the Windows Startup menu, enter "(the CD-ROM drive):/install.exe", and then click OK.
- Restart your computer after installing the drivers.



Installing MGI PhotoSuite 4 SE

MGI PhotoSuite 4 SE is a photo editing application that is included for free on the software installation CD-ROM. You must use Windows XP/ME/2000/98SE/98 on your computer to use this software.

Follow these steps to install the photo editing application.

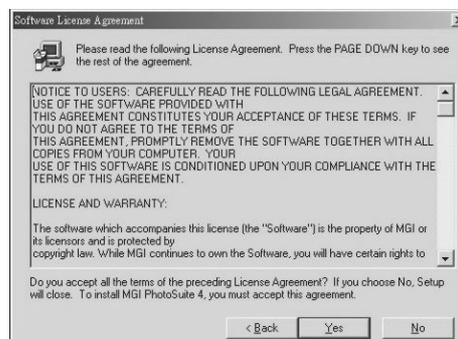
1. Insert the software installation CD-ROM in your computer's CD-ROM drive.
2. The installation program starts automatically.
3. Follow the on-screen instructions to install the software.



4. A welcome window appears. Click Next to continue with the installation.

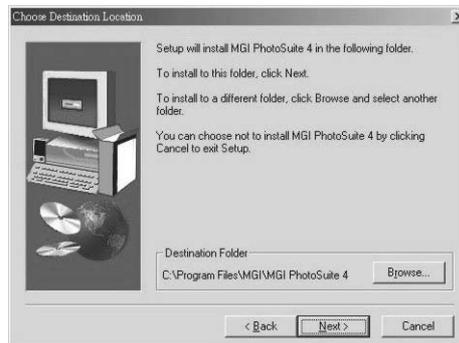


5. The Software License Agreement window appears. To accept the license, click Yes to continue. If you disagree with the license, click No to exit the installation program.

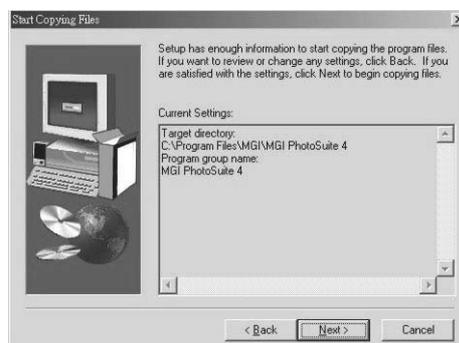


Installing Software

- 6 Select a destination folder in which the software will be installed. For most users, C:\Program Files\ is the most appropriate choice.



- 7 Click Next to begin copying files from the CD-ROM to the computer hard drive.



- 8 When installation is complete, select "Yes, I want to restart my computer now" to restart your computer.



NOTE:

If the installation program does not start automatically, open the CD-ROM in My Computer or Windows Explorer and double-click on the file named "install.exe" to start the program. You can also click Run in the Windows Startup menu, enter "(the CD-ROM drive):/install.exe", and then click OK.

Using the MGI PhotoSuite 4 SE Application

PhotoSuite 4 SE gives you the ability to edit, crop and print the photos you download to your computer from the digital camera. Refer to the application help documentation for information on using the software.

To start the program, click Start > Programs > MGI PhotoSuite 4 > MGI PhotoSuite 4.

8 Appendix

Indicator Lamp Status

Mode	No.	Camera Status		LED	Always On	Blinking (ms)		Auto	Manual	Video	Play-back	
						ON	OFF					
General	1	Power On (until ready)		Green		130	130	○	○	○	○	
	2	Dial Mode Change		Green		130	130	○	○	○	○	
	3	Mass Storage	Standby	Green					○	○	○	○
			Busy	Red		130	130	○	○	○	○	
	4	LCD Off		Green	○				○	○	○	○
Record	1	Flash Charging ('til ready)		Red		130	130	○	○			
	2	Video AF Lock		Green	○					○		
	3	Video Recording		Green		500	500			○		
	4	Still AF/AE/ AWB Lock	w/ Flash	Red	○				○	○		
			w/o Flash	Green	○				○	○		
	5	Capture Still Image		Green		130	130	○	○			
	6	Saving Image		Green		130	130	○	○			
	7	Self-timer Capture (10 sec./2 sec.)	w/ Flash	Red					○	○		
			w/o Flash	Green					○	○		
	8	Self-timer Capture 2 sec.		Self-timer		125	125	○	○			
9	Self-timer Capture 10 sec.	1-4 sec.	Self-timer		500	500	○	○				
		5-8 sec.	Self-timer		250	250	○	○				
		9-10 sec.	Self-timer		125	125	○	○				
Play	1	Erase All		Green		130	130				○	
	2	Slide Show (Reading)		Green		130	130				○	
	3	Copy to Card (Copying)		Green		130	130				○	

Troubleshooting

Problem	Cause	Solution
Power does not turn on.	<ul style="list-style-type: none"> - batteries are inserted in the wrong direction - batteries are dead - the battery compartment door is open 	<ul style="list-style-type: none"> - reload batteries in the correct direction - replace with new batteries - make sure the battery compartment door is securely closed
The camera does not take pictures.	<ul style="list-style-type: none"> - the mode dial is set to Playback mode - the flash is charging - memory is full - SD card is not formatted correctly - maximum file number is exceeded 	<ul style="list-style-type: none"> - turn the mode dial to Auto, Manual, or Video mode - wait for the flash to charge - reformat the SD card - the card may be defective, use a new card - turn "File No. Reset" on, then format the card or insert a new card
Image is not recorded when the shutter button is pressed.	<ul style="list-style-type: none"> - the mode dial is set to Playback mode - the flash is charging - memory is full 	<ul style="list-style-type: none"> - turn the mode dial to Auto or Manual mode - wait until the flash has finished charging - make space in memory by deleting images you don't want, or by downloading files to a computer and erasing all files or formatting memory
The flash doesn't fire.	<ul style="list-style-type: none"> - flash mode is set to OFF 	<ul style="list-style-type: none"> - set the flash to any mode except OFF
Images are blurry or out of focus.	<ul style="list-style-type: none"> - the camera was moving when the image was captured - the subject was beyond the range within which the camera can focus 	<ul style="list-style-type: none"> - hold the camera steady when shooting pictures - turn the Macro mode on if the subject is with 10 cm (zoomed out) or 16 cm (zoomed in) - do not use Macro mode when shooting distant subjects
Images are not displayed on the LCD screen.	<ul style="list-style-type: none"> - a memory card with non-DCIF images (recorded with another camera) is loaded 	<ul style="list-style-type: none"> - this camera cannot display non-DCIF images
Recorded images are not saved in memory.	<ul style="list-style-type: none"> - the camera was turned off/powering down before the image was stored in memory 	<ul style="list-style-type: none"> - if the battery low indicator appears on the LCD screen, replace the batteries immediately.
Cannot transfer images to a computer after connecting the USB cable.	<ul style="list-style-type: none"> - USB driver is not installed 	<ul style="list-style-type: none"> - install the USB driver before you connect the camera to a computer - turn the camera on
Images do not appear on the television.	<ul style="list-style-type: none"> - the cable is not connected securely - the video system setting is incorrect 	<ul style="list-style-type: none"> - use the included video cable to connect the camera to a TV - set the video system to the correct setting, NTSC or PAL

Reference

Default Settings

Mode	Description	Default Setting
Playback	Information OSD Display	IMAGE ONLY
Auto Mode	Quality/Size	2272X1704/NORMAL
	Flash	FORCE OFF
	Preview Display Mode	OSD AND IMAGE
Manual Mode	Size	2272X1704
	Quality	NORMAL
	Flash	FORCE OFF
	Exposure Compensation	0.0
	White Balance	AUTO
	ISO	AUTO
	Preview Display Mode	OSD AND IMAGE
Video Mode	White Balance	AUTO
	Preview Display Mode	OSD AND IMAGE
Set Mode	Beep	ON
	Date Style	Y/M/D
	Focus Indicator	ON
	Auto Power Off	3 MIN.
	LCD Confirm	ON
	TV Out	NTSC
	Language	ENGLISH
	File No. Reset	ON

Reference

Specifications

Sensor	4.13 megapixel CCD
Lens	F 2.7 ~ 4.9
Built-In Viewfinder	Optical viewfinder
Focus Range	Normal: 40 cm ~ infinity Macro: (W) 10cm ~ Infinity / (T) 16cm ~ Infinity
Sensitivity	Auto, 100, 200, 400
LCD Display	1.5" color TFT LCD panel
Still Image Resolution	2272x1704, 1120x840, 544x408, 2272x1504
Video Resolution	320x208
Still Image Quality	Fine: 5X compression rate Normal: 10X compression rate
Exposure Meter	Center-weighted average, Multi-pattern TTL AE
Exposure Control	Auto & manual
Exposure Compensation	-2EV to +2EV (-2.0, -1.7, -1.3, -1.0, -0.7, -0.3, 0.0, +0.3, +0.7, +1.0, +1.3, +1.7, +2.0)
Shutter Control	Mechanical shutter, shutter speed: 1/2000 ~ 8 sec. With CCD variable electronic shutter
Digital Zoom	Preview Mode: up to 2X continuous Playback Mode: up to 8X scrollable
Image File Format	EXIF 2.1 compatible format (JPEG compression) DCF compatible. Supports DPOF, PIM II
White Balance	Auto/Manual (5 modes in manual selection: day light/ cloudy/ tungsten/fluorescent/black & white)
Picture Storage	Internal: 16 MB embedded Nandgate flash memory External: SD memory card up to 256 MB
Microphone	Built-In
Sound Feedback	Buzzer
Communication Interface	USB 1.1
Self-Timer	2 steps, 2/10 sec. with beep sound
Playback Mode	Single/9 thumbnails/slide show
TV System	NTSC/PAL selectable
Power Supply	AA-size alkaline batteries x 2, Rechargeable NiMH accumulator (min: 1600 mAh, 1.2V) DC input: +3.3V, 2.0A DC adapter
Dimensions	Camera body: 107.5 x 60.5 x 35.7 mm
Weight	Camera body without battery: 160g

* **Specifications are subject to change without notice.**