

Digital Camera



User Manual

020810

About this Manual

This manual makes using the Digital Camera as easy as possible. Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice.

Copyright

(c) Copyright 2003

This document contains proprietary information protected by copyright. All rights are reserved.

Trademarks

All trademarks and registered trademarks are the property of their respective owners.

Table of Contents

Chapter 1 – Getting Started	1
Safety Information	2
Included Components	3
Camera Overview.....	4
Front View.....	4
Back View.....	6
Bottom View.....	9
Installing the Memory Card	10
Installing the Batteries	12
Choosing a Language	14
Setting the Time and Date	16
Chapter 2 - Taking Pictures	20
Preparing the Camera	20
Selecting the Camera Mode	21
Framing the Shot.....	21
Zooming and Shooting	22
Turning off the Camera	22
Chapter 3 - Reviewing Your Pictures	23
Switching to Playback Mode	23
Full-Screen Review	23
Thumbnail Review	24
Chapter 4 - Connecting to a Computer	25
Installing Software.....	25
Making the Connection	28
Copying Photos to a PC.....	28
Using as a PC Camera.....	29

Chapter 5 - Mode / Operation Guide.....	31
Snapshot Mode	31
Video Mode	32
Preset Mode	33
Landscape	33
Portrait	34
Night Scene.....	34
Self-Timer	34
Macro.....	35
Playback Mode	35
Setup Mode.....	36
Delete All	37
Format	37
Quality.....	38
Buzzer	39
DPOF	39
Date/Time.....	40
Memory Type	40
Language.....	42
Video Out	42
ISO.....	43
Opening.....	43
PC Camera Mode.....	44
Chapter 6 - Using the LC Display	45
LCD Icon Descriptions	46
Appendix 1 – Button Function Guide	48
Appendix 2 – Troubleshooting Guide	49

Chapter 1 – Getting Started

This chapter describes the features of the camera along with the components, a camera overview, and instructions on getting started.

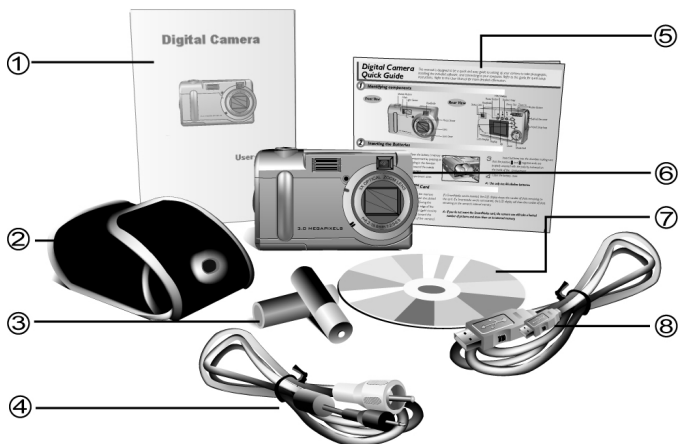
- Features
- Optical Zoom (3x), Digital Zoom (4x)
- Up to 2496 x 2016 resolution
- Color LCD viewfinder screen
- Audio-Video Clip Recording
- USB 1.1 interface
- Auto exposure, user-defined exposure, auto focus as well as others
- Flash:
 - Auto
 - Always On
 - Red-Eye Reduction
 - Off
- White Balance Modes:
 - Auto
 - Daylight
 - Shade
 - Tungsten
 - Fluorescent
- 10-second Timer mode
- Full screen or Thumbnail photo review

Safety Information

- **Do not look at the sun through the viewfinder.** Viewing the sun or other strong light source through the viewfinder could cause permanent visual impairment.
- **Do not disassemble the camera.** Touching the product's internal parts could result in injury. In the event of a malfunction or if the camera is accidentally broken open, take the product to an authorized service center for inspection.
- **Avoid contact with liquid crystal.** Should the LC display break, care should be taken to avoid injury due to broken glass and to prevent the liquid crystal from touching the skin or entering the eyes or mouth.
- **Do not use in the presence of flammable gas.** Using electronic equipment near flammable gas could result in explosion or fire.
- **Observe proper precautions when handling batteries.** The camera uses only size AA alkaline batteries. Batteries may leak or explode if handled improperly. Remove the batteries (and the memory card) from the camera if you are going to store the camera for extended periods of time. Ensure the camera is turned off before inserting or removing batteries. Insert batteries backwards correctly. Do not expose batteries to flame or excessive heat. Do not immerse batteries in or expose to water. Discontinue use immediately if you notice any changes in the battery such as discoloration, deformation or leakage.
- **Observe caution when operating the flash.** Do not use the flash close to anyone's eyes. This can cause temporary damage to eyesight. Particular care should be observed when photographing infants - keep the flash at a distance of at least 1 meter from infants' eyes.

Included Components

Your digital camera comes equipped with the following components. Please check to make sure all items are included.

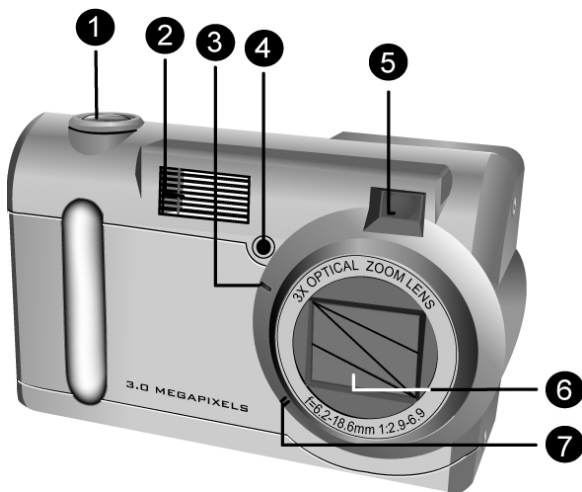


- | | |
|----------------------------------|--------------------------|
| 1. User's Manual on CD | 5. Quick Reference Guide |
| 2. Soft Carrying Case | 6. Digital Camera |
| 3. Two (2) AA Alkaline Batteries | 7. Installation CD-ROM |
| 4. Video Cable | 8. USB Cable |

Camera Overview

The front, rear, bottom and top views of the digital camera are shown on the following pages. Take a moment to review these illustrations to familiarize yourself with the terms used in the rest of this manual.

Front View

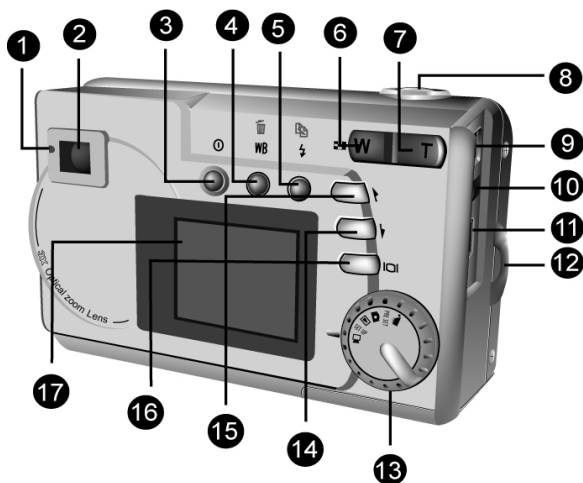


1. **Shutter Button:** Press this button to take pictures, or to select menu options.
2. **Built-in Flash:** The flash allows the camera to take pictures in low light conditions and can also be








used in bright conditions to remove unwanted shadows.

3. **Self-Timer LED:** When the mode dial is set to Preset and the Self-Timer option is selected before pressing the Shutter Button, this LED blinks for ten seconds before the camera takes a picture.
4. **Light Sensor:** The digital camera automatically detects ambient light levels and determines whether or not the flash will fire. Light measurements are made with this sensor. Take care not to block the sensor while taking pictures.
5. **Viewfinder:** The viewfinder helps you frame a picture. The actual picture is taken with the lens and not the viewfinder, however.
6. **Lens:** The lens focuses the light onto the digital image capturing circuitry. For the best picture quality, care should be taken to ensure it remains free of dust, fingerprints, and scratches.
7. **Microphone:** Records audio when you use the camera for filming movies.




Back View



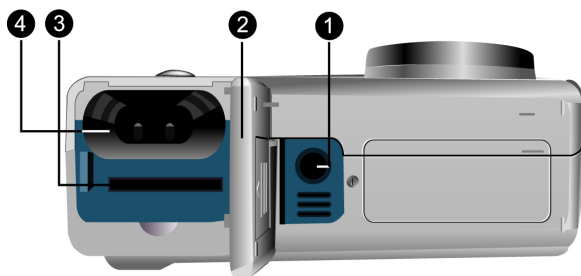
1. **Status LED:** When power is first turned on, or the camera is working (and not available to take a picture), the LED will flash. When the camera is ready to take a picture or accept user commands, the LED is a solid green color.
2. **Viewfinder:** The viewfinder is used to frame your pictures. The actual picture is taken with the lens and not the viewfinder.
3. **Power Button:** Press this button to turn on the digital camera. Press it again to turn it off.

4.  **WB/Delete:** Press this button to cycle through the White Balance presets: Auto, Daylight, Shade, Tungsten and Fluorescent.
5.   **Strobe / Copy:** Copies pictures during playback from internal, on-board camera memory to the SD/MMC Card.
6.  **Zoom Out Key:** While in Snapshot mode, press this key to zoom out. If pressed repeatedly during Playback, Zoom Out switches between thumbnail  and full-screen views. If zooming in on a photo during Playback mode, pressing this key zooms back out again.
7.  **Zoom In Key:** While in Snapshot mode, press this key to zoom in on your subject. In Playback mode, use this key to zoom in on a photo.
8. **Shutter Button:** Press this button to create a digital photo. While navigating the camera's options menus, use it to select menu items.
9. **Power Jack:** Plug the AC Adapter here to supply the camera with electricity from an external, non-battery power source.
10. **Video Out Jack:** Connect your video out cable here and the other end to your television set in order to use the camera as a digital video camera.
11.  **USB Port:** The USB (Universal Serial Bus) port is used to connect the camera to a PC as well as for

transferring photos. The USB port also enables you to use the camera as a PC Video Camera.

12. **Hand Strap Loop:** Attach the hand strap to this loop for ease of carrying.
13. **Mode Dial:** Rotate to select the camera mode: Video, Preset, Snapshot, Playback, Setup or PC Camera.
14.  **Down Button:** Used to move down through menus and to cycle to the right during picture Playback.
15.  **Up Button:** Used to move up through menus and to cycle to the left during picture Playback.
16.  **Display Button:** Press to cycle through the various display options: LCD, backlight and status information; LCD and backlight; LCD off; histogram.
17. **LCD Display:** Use the LC display to preview photos. While in the Setup menu, use the LCD to view messages and configure the camera.

Bottom View

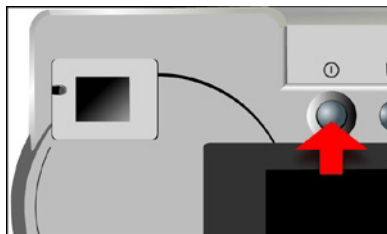


1. **Tripod Connector:** Attaches the camera to a tripod. This is an optional accessory that can be used to hold the camera still and is especially useful for low light night pictures.
2. **Battery / Memory Card Cover:** Opens to allow access to the battery chambers as well as the memory card slot.
3. **Memory Card Slot:** Holds a SD/MM Card to store images. For more information on this see Memory Type on page 40.
4. **Battery Chamber:** Takes two AA alkaline batteries.

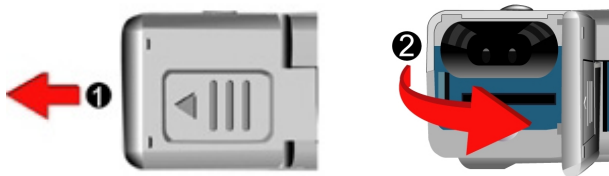
Installing the Memory Card

To install the memory card:

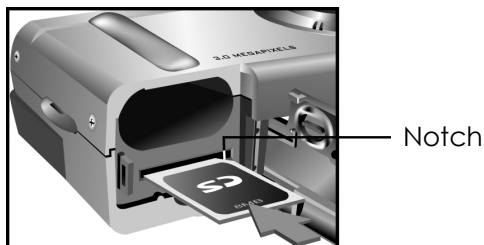
1. Turn off the camera.



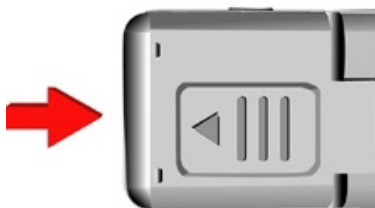
2. Open the battery / memory card compartment by pressing the cover and sliding in the direction of the arrow as shown.



3. Insert the memory card with the notched corner facing the outside edge of the camera (gold circuitry facing toward the back of the camera.)



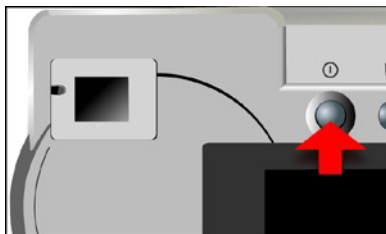
4. Close the battery / memory card cover.



Installing the Batteries

To install or replace the batteries:

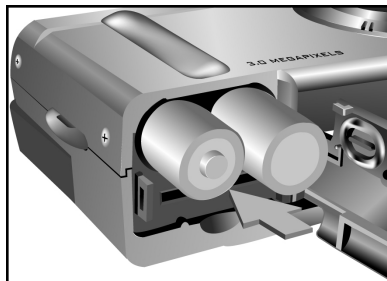
1. Turn off the camera.



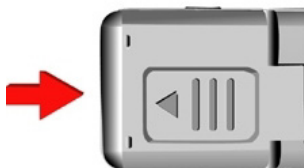
2. Open the battery compartment on the bottom of the camera by pressing the cover and sliding in the direction of the arrow as shown.



3. Insert batteries into the chamber making sure that the positive (+) and negative (-) ends are properly oriented, as indicated by the battery icons in the compartment.



4. Close the battery cover.

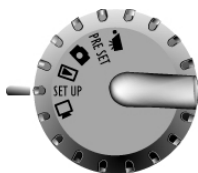


Choosing a Language

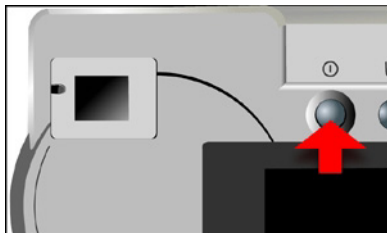
The digital camera can display text and messages in English, French, Spanish, German, Italian, Japanese and Simplified Chinese.

To select a different language:

1. Rotate the Mode Dial to Setup mode **SET UP**.



2. Turn the camera on.



3. Use the Down button (▼) to select Language and then press the Display button (|◻|).



4. Use the Up and Down buttons (▲) / (▼) to select the language you want to use.



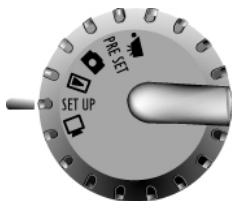
5. Press the Display button (|◻|) to set the language. The Setup Menu returns.

Setting the Time and Date

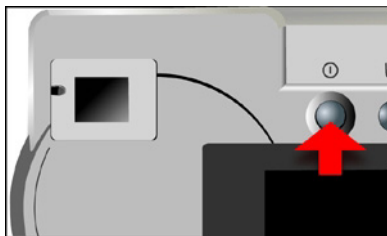
The time and date are stored with each photo you take. When you transfer a photo to a computer or print a photo, the time and date associated with that photo will be transferred or printed.

To set the date display style:

1. Rotate the Mode Dial to Setup SET UP.



2. Turn on the camera.



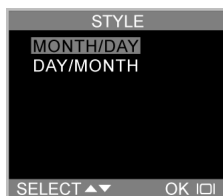
3. Use the Down button (▼) to select Date/Time and then press the Display button [OK].



4. Use the Down button (▼) to select Style and then press the Display button [OK].



5. Choose the display style for the date.



- When the settings are correct, press the Display button **|O|** to save the changes.

To set the date and time:

- Use the Down button **▼** to select Date/Time and then press the Display button **|O|**.







- Use the Down button **▼** to select the Clock option and then press the Display button **|O|**.



- Use the Up and Down buttons **▲** / **▼** to adjust the hour. Press the Strobe/Copy **⚡** **|O|** button to set the hour and then move on to minutes.



4. Set the minutes in the same manner. Press the Strobe/Copy button   to set the minutes and move on to the next option.
5. Repeat step 3 to set the year, the month, and the day.
6. When the settings are correct, press the Display button  to save the changes.

NOTE: If you make a mistake and need to go back, use the White Balance/Delete button WB .

Chapter 2 - Taking Pictures

This chapter shows you how to take pictures with your digital camera.

Preparing the Camera

To prepare the camera for taking pictures:

Press the Power button to turn the camera on. After a short pause, the LED will stop flashing, signaling that the camera is ready to use.

NOTES:

- Make sure you have installed two Alkaline size AA batteries.
- If you want to store your photos on a SD/MM Card, make sure it is installed before you turn on the camera. If you want to store images directly to the camera's internal memory, either remove the memory card, or select Internal from the Memory Type menu.
- Using the LC display consumes more battery power. To prolong the life of your batteries it is recommended to keep the LC display turned off when not in use.

Selecting the Camera Mode

There are two modes for taking pictures: Snapshot and Preset. Snapshot mode is for basic picture taking, while Preset mode allows you to take pictures in one of five preset schemes: Landscape, Portrait, Night Scene, Self-Timer and Macro.

Rotate the Mode Dial to the mode you wish to use.

For basic "point and click" picture taking, you can use the Snapshot mode indicated by the camera icon .



To use the self-timer, rotate the Mode Dial to Preset mode and then use the Up and Down buttons to select Self-Timer mode.

Framing the Shot

Hold the camera steady to avoid taking blurry pictures. Use either the Viewfinder or the LC display to frame the picture. Turning off the LC display and taking pictures with just the Viewfinder results in longer battery life. However, in some conditions it may be more convenient to use the LC display.

Zooming and Shooting

Zoom in on a particular object

You can use the Zoom In  or Zoom Out  buttons to narrow or widen the camera's field of view. Use the LC display to preview the effects of the zoom function.

Automatic Image Processing

Pressing the Shutter button half way down initiates the camera's internal image processing function. The camera adjusts the shot to compensate for ambient lighting, and, in auto-flash mode, detects whether or not the flash is required.

Shoot the picture

When you are happy with the preview, slowly press the Shutter button. (Take care not to press the Shutter button too rapidly or forcefully; otherwise you might shake the camera and get a blurry picture as a result.)


Turning off the Camera


When you are finished taking pictures, press the power button to turn it off. This conserves battery power and prevents unnecessary wear and tear on internal electronic parts.

Chapter 3 - Reviewing Your Pictures



One benefit of digital cameras is that you can immediately preview the shot you just took.





Switching to Playback Mode

To view the pictures that you have stored in internal memory or on the SD/MM Card, rotate the Mode Dial to **Playback Mode**  and turn the camera on.



If the LC display is not turned on, press the Display button . Cycle through the modes by repeatedly pressing the Display button.



Full-Screen Review

The default Playback method is to show each individual picture one at a time at full-screen size. For the Full-Screen Review method, press the Up and Down buttons  /  to cycle through the pictures you've taken.

You can also use the Zoom buttons  /  to see more detail on a picture. The default zoom setting is x1.0; Press Zoom In  to increase the zoom ratio from x1.0 to x8.0 in .5 increments. Press the Zoom Out button  to decrease zoom ratio.

Thumbnail Review

If you press the Zoom Out button  when the zoom ratio is at x1 (default), the camera switches to Thumbnail Review .

In Thumbnail Review, up to nine pictures are shown on the LCD simultaneously. Use the Up and Down buttons  /  to cycle through the thumbnail pages.

To return to Full-Screen Review, select the photo you want to view and press either the Shutter button or the Zoom Out button. The selected picture will then expand to fill the entire LC display.

Chapter 4 - Connecting to a Computer

The digital camera stores pictures as digital data rather than on film. Instead of making a trip to a developer and printing from negatives, you can copy your pictures to a computer for long-term storage. Once transferred, your pictures can be viewed, edited, printed, sent to friends and family via e-mail, or saved to any removable media device (such as floppy disk or CD-ROM) for delivery to a photofinisher. After transferring pictures to your computer, any copies stored on the memory card or on the camera's internal memory may be deleted to provide room for new pictures.

This chapter explains how to connect your digital camera to a computer to download pictures to a PC or to use as a PC Camera.

CAUTION: Do not connect the camera to your computer before installing the software. This may cause installation problems. Please make sure you install the software from the CD-ROM prior to connecting the camera to your computer.

Installing Software

Follow these instructions to install the digital camera drivers and software on your system.

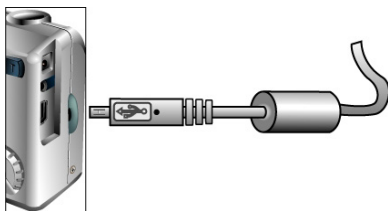
CAUTION: Have your Windows CD-ROM ready beforehand, as you may be prompted to insert it during the installation process.


Step 1: TWAIN Driver / Utility Installation

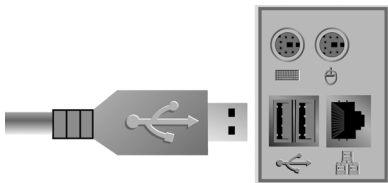
1. Insert the installation software CD into your CD-ROM drive. Don't connect the camera to the PC.
2. The installation program should start automatically. If not, double click the My Computer icon on your desktop, open the CD-ROM drive, and then run the 'setup.exe' found on the installation CD-ROM.
3. Follow the on-screen instructions. All the necessary software is installed automatically. The TWAIN drivers and utility program that allow the camera to 'talk' to the computer via the USB cable are also installed.

Step 2: MSD / PC Camera Driver Installation

1. To install the necessary drivers for Mass Storage Device (MSD) mode and PC Camera mode, first set the correct operational mode for that function. For example, set the Mode Dial to PC Camera mode to install those drivers, and to any other mode to install Mass Storage Device drivers.
2. Connect the small connector of the USB cable to the camera, as shown:



3. Connect the large head of the USB cable to an empty USB slot on your computer. To locate USB slots on your computer, look for the USB icon .



4. The Windows Add Hardware Wizard will automatically detect the camera and lead you through the installation procedures for the corresponding mode.
5. You will need to do this once for each mode (PC Camera and MSD.)

NOTE: You should reboot your computer before using camera and software for the first time. Remember to connect your camera to the PC with the USB cable before downloading pictures.

Making the Connection

The camera can be used in two different modes when connected to your computer:

- Mass Storage Device (MSD)
- PC Camera

MSD mode allows you to use the camera just like a standard storage device where you can copy, delete and move files to and from the camera just as you would a normal disk drive.

PC Camera mode allows you to use the camera as a standard PC video camera like the kind used for video teleconferencing, security, videophones, and so on.

Both MSD and PC Camera mode may only be used once you have connected the camera to your PC with the supplied USB cable.


Copying Photos to a PC

When connected to your computer in MSD mode, the digital camera behaves exactly like any other disk drive attached to your computer. This makes copying the images to your hard drive as easy as copying files from a floppy disk, zip drive or CD-ROM.

To copy photos to your computer:

1. Connect the digital camera to the computer with the USB cable.
2. Turn on the camera.
3. Open Windows Explorer. The contents of your computer will be displayed, including all your disk drives, and, if the camera is connected properly, an extra disk drive representing the camera's memory called "Removable Disk."
4. Select the digital camera drive. The camera's photos are listed. Select the photos and drag and drop them onto your computer's hard disk.

Using as a PC Camera

To use the camera as a PC Camera, you must put the camera in PC Camera mode  and then connect it to the computer via the USB port.

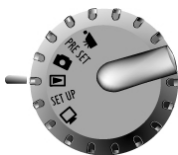
When connected, the camera may be used in conjunction with any commercially available video capture software to create your own home videos. Then you can edit and distribute your video files across the Internet or save them on CD-ROM for later viewing on your PC or with a VCD/DVD player.

PC Camera mode can also be used with real-time video conferencing software such as Microsoft NetMeeting™.

NOTE: To use the digital camera as a PC Camera you must set the camera to PC Camera mode. To use the digital camera in MSD mode, you can use any of the modes except for the PC Camera mode.

CAUTION: Do not disconnect the USB cable when the digital camera is functioning as a PC Camera (i.e. when the application's window shows the camera video output or when the application is recording video). Unexpected problems could result.

Chapter 5 - Mode / Operation Guide



The digital camera has six separate modes of operation. You can select which mode you want to use by rotating the Mode Dial to the correct position. This chapter describes each of these modes and their different button functions.

Snapshot Mode



Snapshot mode is used for taking pictures. All the basic principles of non-digital photography apply here, so the more you know about it the better your pictures will be.

Snapshot mode button functions:

- **▲ Up Button:** Increases the camera lens' exposure value, which allows in more light.
- **▼ Down Button:** Decreases the camera lens' exposure value, which gradually blocks light.
- **|□| Display Button:** Cycles through the following LC display settings: LCD, backlight and status information all turned on; LCD and backlight on but no status information; LCD off; histogram.
- **⚡ Strobe / Copy:** Determines how the strobe light (flash) is used. Pressing the Strobe key cycles through the following settings: Auto (A), On, Off, and Red-Eye Reduction.

- **WB / Delete:** Adjusts the White Balance settings. Pressing the WB key cycles through the following settings: Auto, Day Light, Shade, Light Bulb (incandescent light), and Fluorescent Light.
- **Zoom Out:** Widens the field framed by the camera's lens from x12.0 to x1.0.
- **Zoom In:** Narrows the field framed by the camera's lens optically from x1.0 to x3.0 in steps of 0.25; and digitally from x1.0 to x4.0 in steps of 0.2.

Video Mode



Video mode allows you take record movie (including audio) to your camera's on-board memory or the SD/MM Card.

To record a video clip:

1. Turn the Mode Dial to the Video Clip mode setting.
2. When the camera's LCD screen comes on, frame your shot.
3. Press the Shutter Button to begin recording. By default, the camera records until memory is full. However, if you press the Shutter Button a second time you can terminate the recording before that time is up.

Like Snapshot mode, you may also zoom in and out when recording videos. Although you cannot adjust the

optical zoom while the camera is recording video, you can adjust the digital zoom as follows:

Digital zoom: x1.0 to x2.0 in steps of 0.2 (while recording)

Optical zoom: from x1.0 to x3.0 in steps of 0.25 (adjust before recording)

Pressing the Up and Down buttons (▲) / (▼) while recording a video increases and decreases the lens' exposure value, which brightens or darkens the video as light is regulated.

Preset Mode

PRE SET

Preset Mode has five preset settings optimized for taking specific types of pictures: Landscape, Portrait, Night Scene, Self-Timer and Macro. Select the Preset option for the type of picture you want to take using the Up and Down (▲) / (▼) buttons, and then press the Shutter button.

Landscape



This preset is optimized for taking landscape pictures, with the lens focus universally distributed to encompass everything within the frame.

Portrait



This preset is optimized for taking "head shots" of people, focusing more on the center of the frame than on the peripheral areas.

Night Scene



This preset is optimized for taking photos at night, opening the lens aperture wider and longer to gather as much ambient light as possible. You should hold the camera perfectly still when taking night shot or place it on a stable surface or tripod to minimize blurring resulting from the longer exposure.

Self-Timer



With this preset the camera takes a photo after a ten second delay. This gives you the ability to take hands-free photos, such as self-portraits or group photos.

To Take a Group Photo

1. Position the camera on a stable surface (such as a tripod) and frame the shot.
2. Rotate the camera's Mode Dial to Preset mode

3. Use the Up and Down buttons to select the Self-Timer Preset.
4. Press the Shutter Button. The 10-second delay begins immediately. When the delay ends, the camera takes the picture.

With the exception of the Shutter button, all of the camera's other buttons behave the same as they do in the other Preset modes.


Macro



This preset optimizes the camera for taking close up shots of objects at a distance of 12 inches (30cm) or less from the camera. Close up photos taken with the Macro preset have better results than close up photos taken under other presets.







Playback Mode



The Playback mode is used to view the photos stored in the digital camera's on-board memory or on the SD memory card. To view the photos, rotate the Mode dial to the Review mode position. (Press the Display  button to turn it on.)

Playback mode button functions:

-  Up Button: Move to the previous photo.

-  Down Button: Move to the next photo.
-  Display Button: Cycles through the following LC display settings: LCD, backlight and status information all turned on; LCD and backlight on but no status information; and LCD off.
-  Strobe / Copy: Copies the selected image from on-board memory to the memory card or vice versa.
-  WB / Delete: Deletes selected photo.
-  Zoom Out: In Playback mode, the Zoom Out button switches the display to Thumbnail mode.
-  Zoom In: In Playback mode the Zoom In buttons magnifies the image shown on the LC display from x1.0 to x8.0 in steps of 0.5.

Setup Mode

SET UP

Setup Mode configures the camera. To open the Setup menu, rotate the Mode dial to the Setup position.

The Setup menu is displayed on the LCD as follows:



Delete All

To delete images from either the camera's internal memory or from the SD/MM Card, select Delete All from the Setup menu.



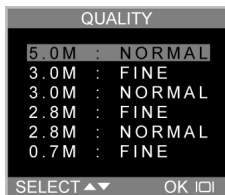
Format

This option completely erases and reformats of the storage device. It is similar in function to formatting or defragmenting a PC hard drive. Although Format takes longer than Delete, be sure to format your storage device occasionally to ensure the card continues to function optimally.



Quality

Adjust the image quality and resolution by selecting Quality from the Setup menu.



There are six different picture resolutions available:

5.0M	2496 x 2016	Normal
3.0M	2048 x 1472	Fine
3.0M	2048 x 1472	Normal
2.8M	2048 x 1376	Fine
2.8M	2048 x 1376	Normal
0.7M	1024 x 736	Fine

The higher the quality, the clearer your picture will be, but at the same time the image file size will be larger, and therefore you will be able to store fewer pictures in memory. An interpolation method is employed to achieve the maximum effective resolution of 5.0M (2496 x 2016).

Buzzer

When this feature is turned on, the camera makes a beep when you push its buttons or rotate its Mode dial.




To activate the beeps, select the Buzzer option from the menu. On the subsequent screen, select Yes to confirm and then press the Display button **|O|**.

DPOF

The Digital Print Order Format (DPOF) lets you print photos directly to a printer that supports this protocol.



Choose specific images with the Select Image option or select All Images to print the storage device's entire contents. Select Reset Setting to deselect images and disable the DPOF function. After making your selection, press the Display button  to register the change.

Date/Time

The digital camera marks each picture with a time stamp displaying the hour, minute and day the photo was taken. This is useful for organizing and keeping track of your photo collection.

For more on setting the time and date see page 16.

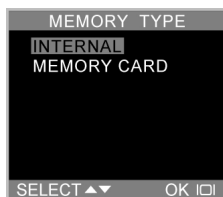
Memory Type

You can choose whether you want to store photos in the on-board (internal) memory or in the SD/MM Card.



To set the default storage media:

1. Rotate the Mode Dial to Setup SET UP.
2. Turn on the camera.
3. Use the Down button (▼) to select Memory Type and then press the Display button [OK].



4. Use the Up and Down (▲) / (▼) buttons to select either Internal, for the camera's on-board memory, or Memory Card, to use an installed SD/MM Card.
5. Press the Display button [OK] to confirm your selection and return to the main Setup screen.

Language


The digital camera can display menu items in the following languages: English, French, Spanish, German, Italian and Japanese.

For more on setting the default language, see page 14.

Video Out

If connecting your camera to a television set with the included video cable, you have the option to choose a transmission format compatible with that of your TV. This allows you to record video images sent to the TV with a VCR. The camera supports audio.



Select the Video Out option from the Setup menu, and then choose either NTSC or PAL, according to your hardware and region. Press the Display button  to confirm your choice.

ISO

You can adjust the camera's sensitivity to light by changing the ISO setting. Two presets are available:

ISO 100: For shooting in bright sunlight



ISO 200: For all-round situations



Opening

You can choose to display a splash screen when the camera is turned on.



To turn the splash screen on or off, scroll down to the Opening option, press the Display button , select Yes or No, and press  to confirm.

PC Camera Mode

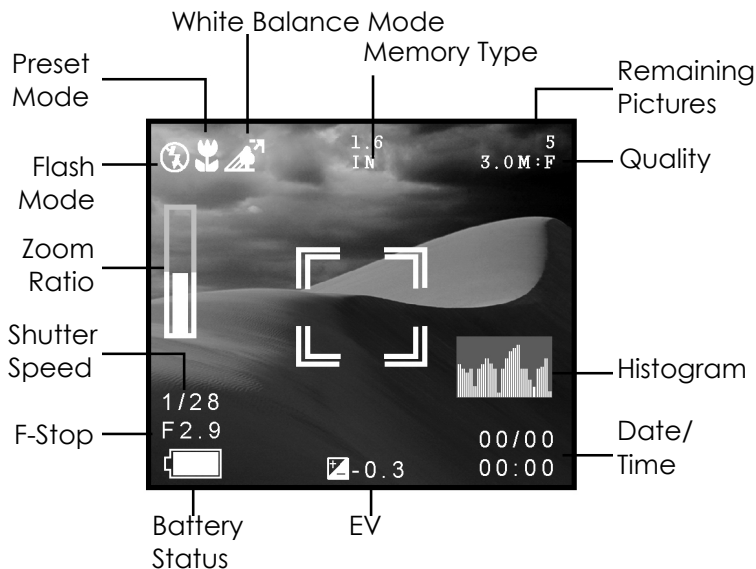


The digital camera can be used with any commercially available video software as a video camera. Simply connect it to your PC with the supplied USB cable, turn the Mode dial to PC Camera and then turn it on.







For more information regarding this mode, see page 26.









Chapter 6 - Using the LC Display

Icons on the LC display show the status of camera settings and functions such as quality, zoom ratio, and number of pictures. These icons are displayed in every camera mode except Setup mode. This chapter describes the LC display icons and their meanings.







LCD Icon Descriptions

Icon	Name	Description
	Auto Flash	The camera senses whether the flash is needed by detecting the amount of ambient light.
	Flash Off	Flash is turned off, regardless of the amount of light available.
	Red-Eye Reduction	Use the Red-Eye Reduction function to reduce the occurrence of "red-eye" (eyes appear red in the pictures due to flash reflection off the eyes' retinas.) This function causes the camera to flash quickly before the picture is taken to reduce red-eye.
	Flash On	Flash is always on, regardless of light available.
	Snapshot Mode	Indicates the camera is in Snapshot mode (the standard mode for taking pictures.)
	Self-Timer	Indicates the camera is using the Self-Timer preset. Pressing the Shutter button will initiate the 10-second countdown timer before taking a picture.
	Playback Mode	Indicates the camera is in Playback mode. This mode is used to view pictures stored on the camera's internal memory or on the memory card.

	Zoom	<p>Indicates the level of zoom currently applied.</p> <p>In Video Mode, optical zoom must be adjusted before recording; digital zoom can be adjusted during recording as follows x1.2, x1.4, x1.6, x1.8, x2.0</p> <p>In Snapshot Mode, optical zoom options are: x1.0, x1.25, x1.5, x1.75, x2.0, x2.25, x2.5, x2.75, x3.0; digital zoom options are: x1.0, x1.2, x1.4, x1.6, x1.8, x2.0, x2.2, x2.4, x2.6, x2.8, x3.0, x3.2, x3.4, x3.6, x3.8, x4.0.</p> <p>In Playback Mode, zoom options are: x1.0, x1.5, x2.0, x2.5, x3.0, x3.5, x4.0, x4.5, x5.0, x5.5, x6.0, x6.5, x7.0, x7.5 and x8.0.</p>
	Battery Indicator	Indicates the level of battery power remaining.
	White Balance	Indicates the current White Balance setting. The default setting is Auto.
	Auto WB	The camera automatically determines the White Balance setting.
	Daylight	Use this setting when taking pictures in bright daylight, to reduce the effect of "whitewashed" pictures.
	Shade	Use this setting when taking pictures in shade, or any time your pictures come out too dark.
	Tungsten	Use this setting for taking pictures under tungsten or incandescent light.
	Fluorescent	Use this setting for taking pictures under fluorescent light.
	Histogram	This graphically shows the distribution of brightness in an image. This information can be used to judge the exposure quality.

Appendix 1 – Button Function Guide

Mode	Shutter	Up	Down	Display	Strobe/ Copy	WB/ Delete	Zoom Out	Zoom In
 Snapshot	Single Capture	EV+	EV-	LCD + Light → LCD Off	Auto → On → Off → Red-Eye Reduction	Auto → Day light → Shade → Tungsten → Fluorescent	Zoom Out	Zoom In
PRE SET Preset	Single Capture	Select Landscape, Portrait, Night Scent, Self-Timer or Macro	Select Landscape, Portrait, Night Scent, Self-Timer or Macro	LCD + Light → LCD Off	Auto → On → Off → Red-Eye Reduction	Auto → Day light → Shade → Tungsten → Fluorescent	Zoom Out	Zoom In
 Playback	Select Photo	Page Up	Page Down	LCD + Light → LCD Off	Copy image to / from Internal / External	Delete	Zoom Out	Zoom In
 Video	Start / Stop Recording	EV+	EV-	LCD + Light → LCD Off	N/A	Auto → Day light → Shade → Tungsten → Fluorescent	Zoom Out	Zoom In
 PC Camera	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SET UP Setup	Execute Function	Select	Select	N/A	N/A	N/A	Select	Select

N/A = Not Available

Appendix 2 – Troubleshooting Guide

Problem	Possible cause	Solution
The camera has no power.	The camera is turned off.	Press the power button to turn the camera ON.
	The batteries are discharged.	Replace the batteries with fresh ones. Refer to Inserting Batteries.
	The batteries are inserted incorrectly.	Check the battery orientation. Refer to Inserting the Batteries.
The camera won't take a picture.	Ensure the green Camera Ready LED indicator is on and not flashing.	If the light is flashing, wait until it emits a steady light before taking a picture. The camera may be waiting for the flash to charge.
	Is the camera connected to a computer?	The camera's buttons are not functional when connected to a PC. Disconnect the camera to take more pictures.
The flash doesn't work.	Is the flash on?	Ensure the flash is set to auto or always on. Refer to Setting the Flash.
	The batteries may be weak.	If the batteries are too weak, the flash will be unable to recharge. Turn the camera off and wait a few seconds before turning it back on. If this doesn't work, replace the batteries.
The images are blurry.	The camera or subject was moving when the shot was taken.	Hold the camera steady or put it on a tripod to take pictures.
The computer does not recognize the camera	The camera was connected to a personal computer by USB before installing software.	Connect the camera to the computer with the USB cable. Select [My computer] > [Control panel] > [System] > [Device manager]. From [other devices] delete [Composite USB device] or [unknown device]. Disconnect the camera from the computer, install the software, and then reconnect the camera.

Digital Camera User's Manual

Windows ME and Windows 2000: when the USB cable is unplugged from the PC, an "Unsafe Removal Device Detected" error message appears.	When removing USB devices, it is recommended that users follow the "Safe Removal of USB Device" procedure.	<p>Procedure:</p> <ul style="list-style-type: none">A. Right-click the Unplug or Eject hardware icon at the bottom-right of your computer screen.B. Left-click the Unplug or Eject hardware text box to open the 'Unplug or Eject Hardware' screen.C. From the 'Unplug or Eject Hardware' screen, select the device to be disconnected and then click the Stop button to bring up the 'Stop a Hardware device' confirmation screen.D. From the 'Stop a Hardware device' confirmation screen select the device to be stopped and click OK to bring up the 'Safe To Remove Hardware' confirmation.E. Disconnect the Digital Camera from your PC.
Images lose formatting data during image capture in "PC Camera" mode.	If your hard disk's DMA setting is turned off images may lose formatting data during image capture. (Windows 98 and Windows ME only.)	<p>Please check to make sure your hard drive's DMA setting is enabled, as follows:</p> <ul style="list-style-type: none">1. From the Windows Start menu, select Settings, then Control Panel.2. In the Control Panel double-click System, then click the Device Manager tab.3. Select your hard drive from the list, then click Properties.4. Click the Settings tab.5. Make sure the box marked DMA is checked. If not, check the box to ensure that your hard drive will protect image attributes during capture.