WEEE Warning Message

Symbol for Separate Collection in European Countries

This symbol indicates that this product is to be collected separately.

The following apply only to users in European countries:

● This product is designated for separate collection at an appropriate collection point. Do not dispose of as household waste.

● For more information, contact the retailer or the local authorities in charge of waste management.

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1). This device may not cause harmful interference, and

(2). This device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

■ Reorient or relocate the receiving antenna

■ Increase the separation between the equipment and receiver

■ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Product Information

1. Product design and specifications are subject to change without notice. This includes primary product specifications, software, software drivers, and user's manual. This User Manual is a general reference guide for the product.

2. The product and accessories that come with your camera may be different from those described in

this manual. This is due to the fact that different retailers often specify slightly different product inclusions and accessories to suit their market requirements, customer demographics, and geographical preferences. Products very often vary between retailers especially with accessories such as batteries, memory cards, cables, carrying cases/pouches, and language support. Occasionally a retailer will specify a unique product color, appearance, and internal memory capacity. Contact your dealer for precise product definition and included accessories.

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

4. The manufacturer assumes no liability for any errors or discrepancies in this user manual.

5. For driver updates, you can check the "Download" section of our website, www.geniusnet.com

SAFETY INSTRUCTIONS

Read and understand all *Warnings* and *Cautions* before using this product.

Warnings

■ **If foreign objects or water have entered the camera, turn the power OFF and remove the batteries.**
Continued use in this state might cause fire or electric shock. Consult the store of purchase.

■ **If the camera has fallen or its case has been damaged, turn the power OFF and remove the batteries.**
Continued use in this state might cause fire or electric shock. Consult the store of purchase

■ **Do not disassemble, change or repair the camera.**
This might cause fire or electric shock. For repair or internal inspection, ask the store of purchase.

■ **Do not use the camera in areas near water.**
This might cause fire or electric shock. Take special care during rain, snow, on the beach, or near the shore.

■ **Do not place the camera on inclined or unstable surfaces.**
This might cause the camera to fall or tilt over, causing injury.

■ **Keep the batteries out of the reach of children.**
Swallowing batteries might cause poisoning. If the battery is accidentally swallowed, immediately consult a physician.

■ **Do not use the camera while you are walking, driving or riding a motorcycle.**
This might cause you to fall over or result in traffic accident.

Cautions

■ **Insert the batteries paying careful attention to the polarity (+ or –) of the terminals.**
Inserting the batteries with its polarities inverted might cause fire and injury, or damage to the surrounding areas due to the battery rupturing or leaking.

■ **Do not fire the flash close to anyone's eyes.**
This might cause damage to the person's eyesight.

■ **Do not subject the LCD monitor to impact.**
This might damage the glass on the screen or cause the internal fluid to leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, rinse with fresh water.

If the internal fluid has entered your eyes, consult a physician to receive treatment.

- **A camera is a precision instrument. Do not drop it, strike it or use excessive force when handling the camera.**
  This might cause damage to the camera.

- **Do not use the camera in humid, steamy, smoky, or dusty places.**
  This might cause fire or electric shock.

- **Do not remove the battery immediately after long period of continuous use.**
  The battery becomes hot during use. Touching a hot battery might cause burns.

- **Do not wrap the camera or place it in cloth or blankets.**
  This might cause heat to build up and deform the case, resulting in fire. Use the camera in a well-ventilated place.

- **Do not leave the camera in places where the temperature may rise significantly, such as inside a car.**
  This might adversely affect the case or the parts inside, resulting in fire.

- **Before you move the camera, disconnect cords and cables.**
  Failure to do this might damage cords and cables, resulting in fire and electric shock.

Notes on Battery Usage

When you use the battery, carefully read and strictly observe the Safety Instructions and the notes described below:

- Different battery types and surrounding temperatures may affect the battery performance.
- Avoid using batteries in extremely cold environments as low temperatures can shorten the battery life and reduce camera performance.
- The battery may feel warm when using the camera for an extended period of time or using the flash continuously. This is normal and not a malfunction.
- The digital video camera may feel warm when being used continuously or for an extended period of time. This is normal and not a malfunction.
- If you will not be using the batteries for an extended period of time, remove them from the camera to prevent leakage or corrosion.
- Always keep the terminals in a clean state.
- Never use manganese batteries.
- Risk of explosion if battery is replaced by an incorrect type.
- Use only the type of battery that came with your camera. Using any other type of battery may damage the equipment and invalidate the warranty.

Table of Contents

Preface

Congratulations on your purchase of this advanced video camera. Ensure that you read this manual carefully and keep it in a safe place for future reference.

About this manual

Every effort has been made to ensure that the contents of this manual are correct and up to date. However, no guarantee is made regarding the accuracy of the contents. If the contents of this manual are not tally with the camera, please take the camera as a criterion, and our company reserves the right to change the contents or technical rules without notice in advance. Also, the manufacturer reserves the right to change the technical specification without notice in advance.

If the accessories are not tally with the actual package, please take the actual package as a criterion.

Copyright

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All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, manual or otherwise, without the prior written permission of the manufacturer.

Before You Start

Take some test shots before performing a formal recording.

Before taking pictures with this DV camera in any important occasion (such as a wedding ceremony or an overseas trip), do test the DV camera beforehand to ensure that it functions properly. Any additional loss caused by the malfunction of this product (such as costs of photography or any loss of benefit generated by the photography) is not the responsibility of the manufacturer and no compensation will be given for it.

Copyright information

Take care to observe "No Photography" notices in certain locations. In these cases, you cannot record any live performance, improvisation or exhibits, even for personal purposes. Any transfer of pictures or memory card data must be conducted under the constraints of copyright law.

Introducing the camera

Read this section to learn about the features and functions of the video camera. This chapter also covers system requirements, package contents, and descriptions of the hardware components.

1.1 System requirements

The video camera requires a PC with the following specifications:
- Windows® Vista/XP operating system
- Intel® Pentium 4, 2.8 GHz CPU or higher
- At least 512 MB of RAM or higher
- Standard USB 1.1 port or higher
- Video Card 64MB or higher Video Card.

> ▪ **Note**: A USB 1.1 port will enable you to transfer files to and from your host PC, but transfer speeds will be much faster with a USB 2.0 port.

1.2 Features

The video camera offers a variety of features and functions including:
- 720p Digital camcorder
- Digital camera (max. 16 Megapixels)
- Mass storage

Additionally, the camera also features 8X digital zoom, 2X advanced zoom, Audio/Video out, USB mass storage, and an SD card reader.

1.3 Unpacking the video camera

The following items should be present in the package. If any item is missing or appears damaged, contact your dealer immediately.

Video camera	**USB / AV cable**	**Pouch**
4xAAA alkaline batteries	**CD-ROM (and application software)**	**Quick Start Guide**

1.4 About the camera

Refer to the following illustrations to familiarize yourself with the buttons and controls of this video camera.

1.4.1   Front view

Lens

REC / Self-timer
LED

Microphone

LED white light

1.4.2   Top view

Macro button

Shutter button   Zoom / Volume button

1.4.3   Bottom view

Tripod mount

Battery compartment
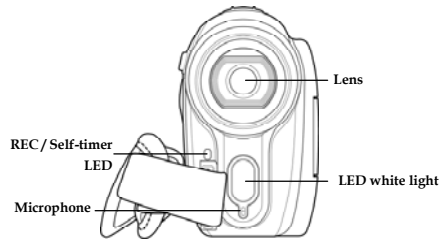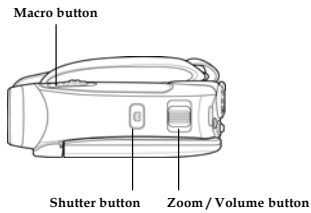
1.4.4   Right view
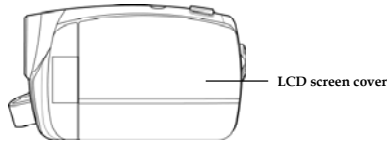
LCD screen cover

1.4.5   Left view

Macro switch

Hand strap

1.4.6   Back view

Playback button

Scroll wheel

USB / AV Output

Power LED

Mode dial

REC.STOP button
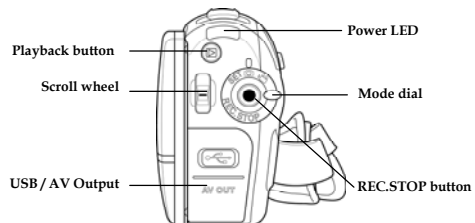
1.4.7   Adjusting the LCD display

Flip and twist the LCD screen as shown while capturing a still image or recording a video clip.
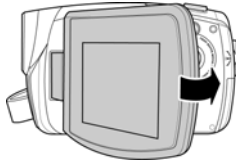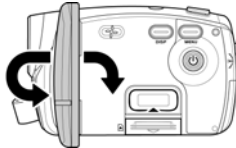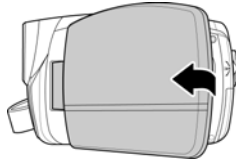
See the table below for a description of each button's function.

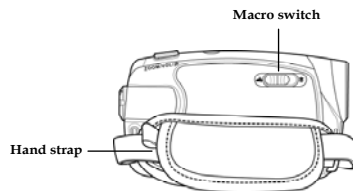| Button	Name	Function
	Power button	Press and hold to turn power on/off.
	Menu button	Press to display main OSD menus.
	Mode dial	Use to toggle **Movie, Photo,** and **SET** modes. In **Photo** mode, press the **REC. STOP** button to switch to the **Selftimer** mode. In **Movie** mode, press the **REC.STOP** button to start and stop recording. In **Movie Playback** mode, press to stop playing.
	Scroll wheel	• In **Photo** and **Movie** modes, press the up and down to adjust the exposure setting, and inwards to adjust the flashlight setting. • In **Photo Playback** mode: 1. Press up and down to scroll through stored images. 2. Press up and down to move the zoomed picture, and inwards to toggle the movement direction from up/down to left/right. • In **Movie Playback** mode: 1. Press up and down to scroll through stored movies, and inwards to play/pause movie playback. 2. Press up and down to fast forward and rewind the playback. 3. Press up and down to skip to the previous/ next playback. • In **SET** mode, press up and down to highlight menu items, and inwards to select.
	Shutter button	• In **Photo** mode, press to take a photo.

	Macro switch	Move the switch to the ✿ position to enable **Macro** mode.
	Playback button	● Press to enter playback mode.
DISP	Display button	Press once to display all OSD icons. Press again to turn all OSD icons off. Press a third time to turn off the LCD screen.
ZOOM/VOL	Zoom button	● In **Photo** and **Movie** modes, press to zoom in and out. ● In **Photo Playback** mode: 1. Press the button right to zoom in your photo. 2. Press the button left to show all stored files in a 2x2 matrix thumbnail view. Press again to a 3x3 matrix view. ● In **Movie Playback** mode: 1. Press the button left to show all stored video clips in a 2x2 matrix thumbnail view. Press again to a 3x3 matrix view. 2. Press to increase or decrease the playback volume during the video playback.

1.4.8   About the LEDs

The following table describes the camera LEDs:

LED	Color	Definition
Power	Green	Power-on
	Green Blinking	Indicates battery low
	Red Blinking	Camera busy
REC / Self-timer	Red	Video recording is in progress.
	Slow Red Blinking	Indicates self-timer is set.
	Fast Red Blinking	2 seconds self-timer left.

Getting started

Read this section to learn how to start using the video camera. This section covers basic functions such as switching on, inserting the battery and memory cards, and configuring preliminary settings. See later chapters for advanced functions.

1.5 Inserting an SD card

An SD card can be installed in the video camera to provide additional storage space for still images, video clips, or other files.

1.   Open the LCD screen cover and open the SD card compartment cover.

2. Insert an SD card as shown. Make sure the gold contacts are facing downwards.

3. Press down the SD card compartment cover.

4. Push the SD card compartment cover inwards.

1.6 Inserting the batteries

This video camera is designed to use four AAA batteries or Li-ion battery. Only use the battery supplied or similar battery recommended by the manufacturer or your dealer.

> ▪ **Note**: Install the batteries exactly as described here. Ensure that the polarity of the batteries is correct. Installing the batteries incorrectly could cause damage to the camera and possibly start a fire.

1.   Open the battery compartment cover.
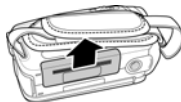
2.   Insert the batteries as shown.
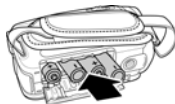
3.   Close the battery compartment cover.
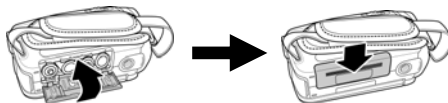
1.7 Turning on the video camera

Press and hold the power button to turn the video camera on/off.

1.8 Changing modes

The video camera can operate in three modes, **Movie**, **Photo**, and **SET**. Move the mode dial to toggle different modes.

1.9 Before you start

Before you start using the video camera, some basic settings such as date and time and languages need to be configured.

1.9.1 Setting the date and time

1. Turn on the video camera, and move the mode dial to **SET**. Move the scroll wheel up/ down to highlight **DATE/ TIME**. Press the scroll wheel inwards to confirm.
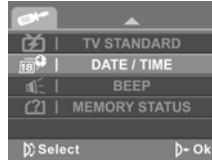
2. Press the scroll wheel up/ down to highlight each field and inwards to select a field.

3. Adjust each value by moving the scroll wheel up and down. Press the scroll wheel inwards to save your changes.

1.9.2 Setting the language

1. Turn on the video camera, and move the mode dial to **SET**. Move the scroll wheel up/ down to highlight **Language**. Press the scroll wheel inwards to confirm.
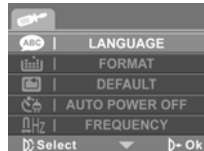
2. Use the scroll wheel to select the following languages: English, Arabic, Dutch, Portuguese, Turkish, Korean, Russian, Italian, Spanish, French, German, Japanese, Traditional Chinese, and Simplified Chinese. After the language is selected, press the scroll wheel inwards to confirm.

1.10 Movie and voice recorder mode

1.10.1 Shooting a video clip

1. Turn on the video camera and switch to **Movie** mode.

Movie mode————

2. Use the LCD screen to frame the video.

3. Press the **REC.STOP** button to start recording.

4. Press the **REC.STOP** button again to stop recording.

5. The video clip is automatically saved with a unique file name.

Notes:
- The maximum length of each video recording file is 4G.
- The size and quality affect the length of the recording.
- High resolution and high quality settings will result in larger files, and therefore shorter length.

1.10.2 Recording an voice file

1. Turn on the video camera and switch to **Voice** mode.

Voice mode ———
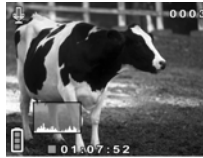
2. Press the **REC.STOP** button to start recording.

3. Press the **REC.STOP** button again to stop recording.

4. The voice file is automatically saved with a unique file name.

1.10.3 Playing the video clip

1. In **Movie** mode, press the **Playback** button and the most recent file displays on the LCD screen.

2. Move the scroll wheel up and down to scroll through the video clips. Press the scroll wheel inwards to playback the video clip.

3. To pause while playing back the video clip, press the scroll wheel inwards.

4. When viewing the video clip, press the zoom button left or right to adjust the volume.

5. To view the video clip in rewind and fast forward modes, long press and hold the scroll wheel up and down to fast forward and rewind at 2X, 4X or 8X speeds.

6. To skip to the previous or next clip, press the scroll wheel up or down.

7. Press the **REC.STOP** button to stop playing.

8. Press the **Playback** button again to return to **Movie** mode.

1.10.4   Playing back a voice file

1. In **Voice** mode, press the **Playback** button and the most recent file is
    displayed on the LCD screen.

Voice playback ———
mode indicator

2. Move the scroll wheel up and down to scroll through the audio files. Press
    the scroll wheel inwards to playback the audio file.

3. When viewing the audio, press the zoom button left or right to adjust the
    volume.

4. To skip to the previous or next file, press the scroll wheel up or down.

5. Press the **REC.STOP** button to stop playing.

6. Press the **Playback** button again to return to **Voice** mode.

1.11 Taking/viewing pictures

1.11.1   Taking a still picture

1.   Turn on the camera and switch to **Photo** mode.

Photo mode ——————

2.   Use the LCD screen to frame the picture.

3.   Press the shutter button to capture the image.

4.   The picture is automatically saved with a unique file name.

1.11.2   Viewing images

1. In **Photo** mode, press the **Playback** button and the most recent image displays on the LCD screen.

Playback mode ———

2. Press the scroll wheel up and down to scroll through the images.

3. Press the zoom button right to zoom in on the picture, and press left to zoom out.

4. Press the scroll wheel up and down to move the zoomed image vertically or horizontally. Press the scroll wheel inwards to change the direction of movement.

5. Press the zoom button left when fully zoomed out to view thumbnails of all stored files.

6. Press the **Playback** button again to return to **Photo** mode.

1.12 Connecting to a computer

Connect the video camera to a computer with the USB / AV cable provided.

1.13 Connecting to a TV

Connect the video camera to a TV as shown with the USB / AV cable provided.

Using the camera

Read this section to learn how to use the camera.

1.14 Movie mode

Use **Movie** mode to capture video clips and store them in the internal memory or on an SD card.

1.14.1   Movie mode icons

Use the following picture to familiarize yourself with the **Movie** mode icons and symbols.

See the table below for a description of each icon and symbol.

1	0003	Displays the number of files saved
2		Memory status indicator : indicates that an SD card is inserted and the storage capacity of an SD card is used : indicates that SD card is not inserted and internal memory is used
3	VGA	File resolution indicator
4		Image quality indicator
5	07:03:54 2009/01/08	Date and time
6	01:07:52	Remaining recording time
7		Battery indicator
8		Macro indicator
9		Histogram indicator
10		Effect indicator
11		White balance indicator
12		LED white light indicator
13		Movie mode indicator
14	EV+2.0	EV compensation indicator

15	⫸▭▭◖	Zoom indicator

1.14.2   Using the macro function

This function can capture subjects close to the lens. In macro mode, subjects can be as close as 15-16 cm.

While in **Photo** or **Movie** modes, move the macro button on the side of the video camera to activate macro function, and an icon ✿ displays on the LCD screen.

Move the macro button again to return to normal mode.

1.14.3   Using the zoom function

The camera is equipped with 16x digital zoom.

Move the zoom button **right** to get closer to a subject.

Move the zoom button **left** to move away from a subject.

1.14.4   Using the LED white light

Use the LED white light to illuminate subjects in dark environments.

Press the scroll wheel inwards to choose from the following lighting options: Off, On, and Night modes. An icon displays on the screen when activated.

1.14.5   Quick access controls

You can also adjust the settings of exposure and lighting by pressing the scroll wheel up and down or inwards.

In **Movie** mode, press the scroll wheel up or down to adjust the EV compensation setting. Press the scroll wheel inwards to choose from three lighting options.

1.15 Voice mode

Use **Voice** mode to record sound and store them in the internal memory or on an SD card.

1.15.1   Voice mode icons

Use the following picture to familiarize yourself with the **Voice** mode icons and symbols.

See the table below for a description of each icon and symbol.

1		Voice mode indicator
2	0003	Displays the number of files saved
3		SD card indicator
4	01:07:52	Remaining recording time
5		Battery indicator

1.16 Photo mode

Use **Photo** mode to capture still pictures and store them in the internal memory or on an SD card.

1.16.1   Photo mode icons

Use the following picture to familiarize yourself with the **Photo** mode icons and symbols.

See the table below for a description of each icon and symbol.

1	0003 0612	Displays the number of photos taken / remaining number of photos that can be taken
2		Memory status indicator : indicates that an SD card is inserted and the storage capacity of an SD card is used : indicates that SD card is not inserted and internal memory is used
3	5M	File size indicator
4		Picture quality indicator
5		Self timer indicator
6		Face detect indicator
7	07:03:54 2009/01/08	Date and time
8		Histogram indicator
9		Burst mode indicator
10		Battery indicator
11		Macro indicator
12		Date stamp indicator
13		Effect indicator

14	☀	White balance
15	🔆	LED white light indicator
16	📷	Photo mode indicator
17	EV±2.0	EV compensation indicator
18	▭▬▭	Zoom indicator

1.16.2   Using the macro function

See section 1.14.2 "Using the macro function".

1.16.3   Using the zoom function

See section 1.14.3"Using the zoom function".

1.16.4   Using the LED white light

See section 1.14.4 "Using the LED white light".

1.16.5   Quick access controls

You can also adjust the settings of the exposure and lighting by pressing the scroll wheel up, down or inwards.

In **Photo** mode, press the scroll wheel up or down to adjust the EV compensation settings. Press the scroll wheel inwards to choose from the three lighting options. Press the **REC. Stop** button to choose from the three selftimer options, as following: Off, 5sec, 10sec.

1.17 Movie Playback mode

Use **Movie Playback** mode to review all the movie files stored in the video camera.

1.17.1 Movie Playback mode icons

Refer to the following picture to familiarize yourself with the **Movie Playback** mode icons and symbols.

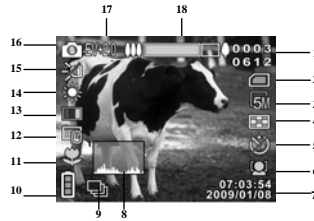See the table below for a description of each icon and symbol.

1	0003 0612	Displays the number of current movie / total number of recorded video clips
2	640X480	Displays movie resolution
3	07:03:31 2009/01/08	Date and time
4	►00:00:02/00:00:15	Shows time elapsed / total movie length
5		Battery status indicator
6		File protect indicator
7		Playback mode icon
8		Volume level

1.18 Photo Playback mode

Use **Photo Playback** mode to review all the image files stored in the video camera.

1.18.1 Photo Playback mode icons

Refer to the following picture to familiarize yourself with the **Photo Playback** mode icons and symbols.

See the table below for a description of each icon and symbol.

1	0003 0612	Displays the number of current image / total number of saved images
2	2592X1944	Displays photo size
3	07:03:54 2009/01/08	Date and time
4		Battery status indicator
5		File protect indicator
6		Playback mode icon

1.19 Thumbnail mode

When in **Photo Playback** or **Movie Playback** modes, press the zoom button left to show image as thumbnails.

1. Turn on the video camera and make sure it is in **Photo Playback** or **Movie Playback** mode.

2. The most recent image / video clip displays on the screen. Press the zoom button left to view **four** thumbnail images / video clips on the LCD screen. Press the zoom button left again to view **nine** thumbnail images / video clips on the LCD screen.

3. Press the scroll wheel up and down to highlight an image, or a video clip, and press inwards to view the image or playback the video clip in full screen mode.

4. Press the zoom button left to return to thumbnail view.

1.20 USB mode

You can use USB mode to connect to a printer or a host PC. When the video camera is connected to a computer or printer using the USB cable, the following menu displays.

Press the scroll wheel up and down to highlight an option and press the scroll wheel inwards to confirm.

1.20.1   Using the mass storage feature

When used as a USB mass storage device, the video camera displays as a removable drive in Windows Explorer. Drag and drop files to and from the removable drives just like any other storage device.

1.20.2   Using the DPS (Direct Print) feature

Connect to a printer using the USB cable exactly in the same way, as you would connect a PC.

> ▪   **Note:** Batteries are needed when using this feature, as the USB port does not supply power for the camera.

Using the menus

Read this section to learn how to configure the camera settings and use the advanced features.

1.21 Movie menu

When in **Movie** mode, press the **MENU** button to show the Movie options menu.

4.1.1. White balance

Use this option to correct color difference for different lighting conditions. When white balance is set to **Auto**, the video camera automatically compensates for different lighting conditions.

1.   Turn the video camera on and ensure it is in **Movie** mode.

2.   Press the **MENU** button and use the scroll wheel to highlight the **WHITE BALANCE** option. Press the scroll wheel inwards to display the submenu.

3.   Use the scroll wheel to select **Auto**, S**unny**, **Cloudy**, **Tungsten**, or **Fluorescent**. Press the scroll wheel inwards to confirm.
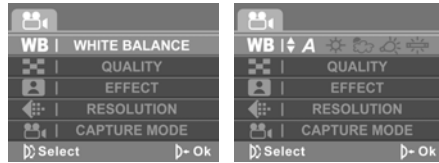
4. Press the **MENU** button again to exit the menu.

4.1.2. Video quality

There are two different levels of video quality setting. Higher quality video needs more memory storage space.

1. Turn the video camera on and ensure it is in **Movie** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **QUALITY** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Fine** or **Normal**. Press the scroll wheel inwards to confirm.
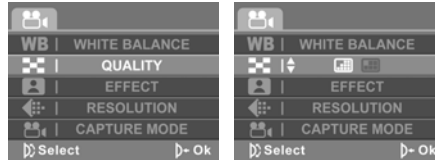
4. Press the **MENU** button again to exit the menu.

4.1.3. Color effect

The camera can capture standard color images, black and white images, or sepia tone to give an old-fashioned look.

1. Turn the video camera on and ensure it is in **Movie** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **EFFECT** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Color, Sepia** or **B&W**. Press the scroll wheel inwards to confirm.

4. Press the **MENU** button again to exit the menu.

4.1.4. Resolution

This function enables you to choose the file format to save the video clips you recorded. You can save the video clip in **QVGX, VGA, D1,   XGA** or **HD** format.

1. Turn the video camera on and ensure it is in **Movie** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **RESOLUTION** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **QVGX, VGA**, **D1, XGA** or **HD**. Press the scroll wheel inwards to confirm.

4. Press the **MENU** button again to exit the menu.

- **Note:** Make sure you use the correct software while playing the videos on PC.

4.1.5. Capture mode

Use this function to select the Capture mode for recording movie or recording voice.

1. Turn the video camera on and ensure it is in **Movie** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **CAPTURE MODE** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Movie** or **Voice** mode. Press the scroll wheel inwards to confirm.
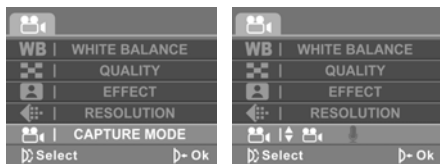
4. Press the **MENU** button again to exit the menu.

1.22 Movie playback menu

Use the playback menu to manage the files stored in the internal memory or on the SD card.

1.22.1 Delete

Use this function to delete files.

1. Turn the video camera on and ensure it is in **Movie** mode. Press the **Playback** button and then press the **MENU** button to display **Movie Playback** menu.

2. Use the scroll wheel to highlight the **DELETE** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Cancel, Delete One** or **Delete All**. Press the scroll wheel inwards to confirm.

If you select **Delete One**, the playback screen appears again. Use the scroll wheel to locate the file you want to delete and press inwards to confirm.

If you select **Delete All**, use the scroll wheel to select **OK** or **Cancel**, and press inwards to confirm.

4. Press the **MENU** button again to exit the menu.

- **Note**: Once deleted, files cannot be recovered. Make sure the files are transferred to PC via USB cable or saved to another storage device. Files that have been protected will not be deleted. You have to unlock the files first before deleting them.

1.22.2 Protect

Use this function to lock files to prevent accidental deletion.

1. Turn the video camera on and ensure it is in **Movie** mode. Press the **Playback** button and then press the **MENU** button to display **Movie Playback** menu.

2. Use the scroll wheel to highlight the **PROTECT** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Cancel**, **Protect One** or **Protect All**. Press the scroll wheel inwards to confirm.

If you select **Protect One**, the playback screen appears again. Use the scroll wheel to locate the file you want to protect and press inwards to confirm. A lock icon is displayed to show that the file is protected.

- **Note**: To unlock a file, repeat the above steps. The lock icon disappears when the file is unlocked.

If you select **Protect All**, three options are displayed. You can use the scroll wheel to highlight **X** to cancel, **protect all files**, or **unprotect all files**. Then press the scroll wheel inwards to confirm your selection.

4. Press the **MENU** button again to exit the menu.

1.23 Photo menu

In **Photo** mode, press the **MENU** button to show the Photo Options menu.

1.23.1 White balance

Use this option to correct color difference due to lighting conditions.

1. Turn the video camera on and ensure it is in **Photo** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **WHITE BALANCE** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Auto**, **Sunny**, **Cloudy**, **Tungsten**, or **Fluorescent**. Press the scroll wheel inwards to confirm.
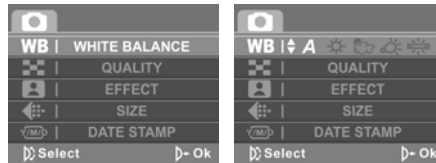
4. Press the **MENU** button again to exit the menu.

1.23.2 Image quality

Use this option to set the quality of the captured image. Higher quality images contain more details and therefore use more memory space.

1. Turn the video camera on and ensure it is in **Photo** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **QUALITY** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select from **Fine**, or **Normal**. Press the scroll wheel inwards to confirm.
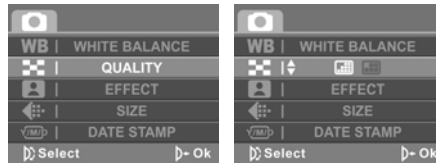
4. Press the **MENU** button again to exit the menu.

1.23.3 Color effect

The camera can capture standard color images, black and white images, or sepia tone to give an old-fashioned look.

1. Turn the video camera on and ensure it is in **Photo** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **EFFECT** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Color**, **Sepia**, or **B & W**. Press the scroll wheel inwards to confirm.

4. Press the **MENU** button again to exit the menu.

1.23.4 Size

Use this option to set the size of the captured image. Larger images contain more detail and therefore use more memory space.

1. Turn the video camera on and ensure it is in **Photo** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **SIZE** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **1M**, **3M**, **5M**, **12M** or **16M**. Press the scroll wheel inwards to confirm.

4. Press the **MENU** button again to exit the menu.

1.23.5   Date stamp

Use this option to turn on/off the date stamp when a photo is taken.

1.   Turn the video camera on and ensure it is in **Photo** mode.

2.   Press the **MENU** button and use the scroll wheel to highlight the **DATE STAMP** option. Press the scroll wheel inwards to display the submenu.

3.   Use the scroll wheel to select whether to show the date stamp on the screen. Press the scroll wheel inwards button to confirm.
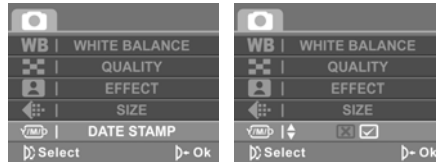
4.   Press the **MENU** button again to exit the menu.

1.23.6 Burst mode

The Burst mode allows you to take three consecutive photos by pressing the **Shutter** button. Use this option to select Single or Burst mode.

1. Turn the video camera on and ensure it is in **Photo** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **BURST MODE** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Single** or **Burst**. Press the scroll wheel inwards button to confirm.
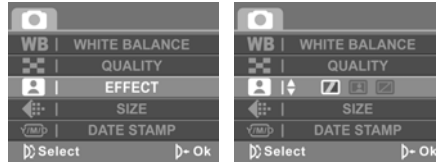

4. Press the **MENU** button again to exit the menu.

1.23.7   Face Detect

The Face Detect allows you to detect and track faces automatically. Use this option to enable/ disable Face detect.

1. Turn the video camera on and ensure it is in **Photo** mode.

2. Press the **MENU** button and use the scroll wheel to highlight the **FACE DETECT** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **OK** or **Cancel** to enable or disable the Face detect. Press the scroll wheel inwards button to confirm.

4. Press the **MENU** button again to exit the menu.

> ▪ **Note**: Face Detect may be unavailable in some specific mode settings or environments.

1.23.8 Photo playback menu

1.23.9 Delete

Use this function to delete files.

1. Turn the video camera on and ensure it is in **Photo** mode. Press the **Playback** button and then press the **MENU** button to display the **Photo Playback** menu.

2. Use the scroll wheel to highlight the **DELETE** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Cancel, Delete One** or **Delete All**. Press the scroll wheel inwards to confirm.

If you select **Delete One**, the playback screen appears again. Use the scroll wheel to locate the file you want to delete and press inwards to confirm.

If you select **Delete All**, use the scroll wheel to select **OK** or **Cancel**, and press inwards to confirm.

4.   Press the **MENU** button again to exit the menu.

▪   **Note**: Once deleted, files cannot be recovered. Make sure the files are transferred to PC via USB cable or saved to another storage device. Files that have been protected will not be deleted. You have to unlock the files first before deleting them.

1.23.10 Protect

Use this function to protect files.

1. Turn the video camera on and ensure it is in **Photo** mode. Press the **Playback** button and then press the **MENU** button to display the **Photo Playback** menu.

2. Use the scroll wheel to highlight the **PROTECT** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Cancel**, **Protect One** or **Protect All**. Press the scroll wheel inwards to confirm.

If you select **Protect One**, the playback screen appears again. Use the scroll wheel to locate the file you want to protect and press inwards to confirm. A lock 🔒 icon is displayed to show that the file is protected.

- **Note**: To unlock a file, repeat the above steps. The lock icon 🔒 disappears when the file is unlocked.

If you select **Protect All**, three options are displayed. You can use the scroll wheel to highlight **X** to cancel, **protect all files**, or **unprotect all files**. Then press the scroll wheel inwards to confirm your selection.

4. Press the **MENU** button again to exit the menu.

1.23.11 Slide show

The camera includes a slide show function, which displays each image in turn with a regular interval between pictures.

1. Turn the video camera on and ensure it is in **Photo** mode. Press the **Playback** button and then press the **MENU** button to display the **Photo Playback** menu.

2. Use the scroll wheel to highlight the **AUTOPLAY** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **OK** or **Cancel** and press the scroll wheel inwards to confirm.

4. The images will be displayed one after another. Press the scroll wheel inwards to stop the slide show.

1.23.12 DPOF

Use the DPOF (Digital Print Order Format) function to tag pictures stored in the memory card with print information. You can tag all pictures to be printed or select individual pictures.

1. Turn the video camera on and ensure it is in **Photo** mode. Press the **Playback** button and then press the **MENU** button to display the **Photo Playback** menu.

2. Use the scroll wheel to highlight the **DPOF** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select from **Cancel**, **Single Print** or **Print All**, and press the scroll wheel inwards to confirm.

1: **Single Print**

The most recent picture is displayed on the screen. Press the zoom button left and right to select the number of prints, and the scroll wheel up and down to select other photos. You can set a maximum of nine prints for each picture.

- **Note**: To remove DPOF from a marked photo, use the zoom button to reduce the number of prints to zero.

2: **Print All**

If you select **Print All**, three options are displayed. You can use the scroll wheel to highlight **X** to cancel, **print all files with the DPOF tag**, or **clear the**

DPOF tags from all files. Then press the scroll wheel inwards to confirm your selection.
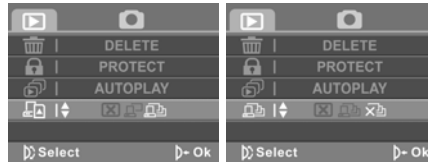
4. Press the **MENU** button again to exit the menu.

> ▪ **Note**: A memory card is required for DPOF function.

1.24 System menu

The system menu is used to configure miscellaneous camera functions.

1.24.1 Language

See section 1.9.2 "Setting the language".

1.24.2 Format

Use this function to format the current storage media. This format action will delete everything on the media.

1. Turn on the video camera and switch to **SET** mode.

2. Use the scroll wheel to highlight the **FORMAT** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **OK** or **Cancel**, and press the scroll wheel inwards to confirm.
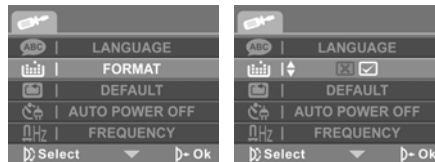
4. The current media (memory card or internal memory) is formatted.

1.24.3 Default

Use this option to reset all settings to the default settings.

1. Turn on the video camera and switch to **SET** mode.

2. Use the scroll wheel to highlight the **Default** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **OK** or **CANCEL**, and press the scroll wheel inwards to confirm.

1.24.4 Auto power off

Use this function to switch the camera off automatically after a period of inactivity for power saving.

1. Turn on the video camera and switch to **SET** mode.

2. Use the scroll wheel to highlight the **AUTO POWER OFF** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **Off**, **1 minute**, or **5 minutes.** Press the scroll wheel inwards to confirm.

1.24.5 Frequency

Use the Frequency option to set the frequency system for your area.

To set the frequency:

1. Turn on the video camera and switch to **SET** mode.

2. Use the scroll wheel to highlight the **FREQUENCY** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll to select **60 Hz or 50 Hz.** Press the scroll wheel inwards to confirm.

1.24.6 TV standard

Use the TV option to set the TV system for the area.

1. Turn on the video camera and switch to **SET** mode.

2. Use the scroll wheel to highlight the **TV STANDARD** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **NTSC** or **PAL**, and press the scroll wheel inwards to confirm.

1.24.7 Date/time

See section 1.9.1 "Setting the date and time".

1.24.8 Beep

Use this option to enable/ disable operation sound.

1. Turn on the video camera and switch to **SET** mode.

2. Use the scroll wheel to highlight the **BEEP** option. Press the scroll wheel inwards to display the submenu.

3. Use the scroll wheel to select **OK** or **CANCEL**, and press the scroll wheel inwards to confirm.

1.24.9   Memory status

This function displays the memory status and the number of video clips, photos, and voice files saved in the video camera.

1. Turn on the video camera and switch to **SET** mode.

2. Use the scroll wheel to highlight the **MEMORY STATUS** option. Press the scroll wheel inwards to display the submenu.

3. The number of files saved and the free memory space are displayed on the screen. Press the scroll wheel inwards again to exit.

Installing software

Read this section to learn how to install drivers and software for the camera.

Mass Storage

The digital camera offers Mass Storage function via the built-in card reader. You can treat this digital camera as a USB device.

Windows Vista/XP are plug and play operating systems and do not require a driver to be manually loaded.

When the camera is connected, the camera memory or any inserted SD card displays as Mass Storage in Windows Explorer. Files can be dragged and dropped in the same way as with an ordinary disk.

Presto! Video Works

Presto! Video Works is an advanced software application for editing video.

To install Presto! Video Works:

1. Insert the supplied CD-ROM in the CD-ROM drive.

2. If the CD-ROM does not automatically boot, use Windows Explorer to execute the **InstallMgr.exe** file in the root directory.

    The following screen is displayed.

3. Click the **Install** button to begin the installation and follow the instructions on-screen.

    —————— Install button

More information about Presto! Video Works can be found in the help files when the application is started.

1.25 Presto! Mr. Photo

Presto! Mr. Photo is an advanced photo editing software application.

To install Presto! Mr. Photo:

1. Insert the supplied CD-ROM in the CD-ROM drive.

2. If the CD-ROM does not automatically boot, use Windows Explorer to execute the **InstallMgr.exe** file in the root directory.

    The following screen is displayed.

3. Click **Install** to begin the installation process and follow the instructions on-screen.

More information about Presto! Mr. Photo can be found in the help files when the application is started.

1.26 User's Manual

The supplied CD-ROM includes the user's manual.

To view user's manual:

1. Insert the supplied CD-ROM in the CD-ROM drive.

2. If the CD-ROM does not automatically boot, use Windows Explorer to execute the **InstallMgr.exe** file in the root directory.

   The following screen is displayed.

   User's Manual

3. Click **User's Manual** to begin viewing the user's manual.

Specifications

General	
Imaging sensor	1/2.5″ CMOS 5.0 Megapixel sensor
Active pixels	5.0 Megapixel
Storage media	Built-in 128 MB flash memory (109 MB for storage) SD Card, SDHC Compatible (Up to SDHC 8GB Class 6)
Sensor sensitivity	ISO 100
Color effects	Color/B&W/Sepia
Lens	Fixed lens Wide: F/3.2, f=7.5mm
Focus range	Normal: 1.5m~infinity Macro: 15~16 cm
Still image	Formats: JPEG (EXIF 2.2), DCF, DPOF Resolution: 1M, 3M, 5M, 12M, 16M (Firmware Interpolation)
Movie clips	MJPEG (AVI) Resolution: **QVGX, VGA, D1, XGA,** **HD 720p** Frame rate: 30 fps (max.)
Zoom	Movie: Digital Zoom 8X, Advanced Zoom 2X Camera: Digital Zoom 8X, Advanced Zoom 2X Still Image Playback: Digital Zoom 16X (max.)
TFT Monitor	2.4″ TFT (480 x 234 pixels)

General	
LED Light	Effective range: < 1M Movie: On/Night Mode/Off Camera: On/Night Mode/Off
White balance	Auto/Sunny/Cloudy/Tungsten/ Fluorescent
EV compensation	-2.0 EV~+2.0 EV
Self-timer	Off, 5, 10 seconds
PC interface	USB 2.0 (high speed)
TV out format	NTSC/PAL
Shutter	Electronic shutter 1/8~1/2000 second
Auto power off	Off, 1 min., 5 min.
Power supply	4 x AAA Alkaline/Ni-Cd/Ni-Mh batteries (4 x 1.5V). or Li-ion Battery NP40
Dimension	68 (H) x 41 (W) x 111 (D) mm
Weight	Approx.218±5g (without batteries)

Troubleshooting

Problem	Possible Cause	Solution
Cannot turn on the video camera.	The batteries are not inserted correctly. The batteries have no power.	• Insert the batteries correctly. (See 1.6 Inserting the batteries.) • Replace the batteries
The camera suddenly turns off.	The auto power off function was enabled. The camera is running out of battery power.	• Turn the power on again. • Replace the batteries.
The captured image is not stored in memory.	Before the image is saved the power has been cut off.	When the battery indicator turns red, replace the batteries immediately.

The camera turns off when capturing image using self-timer.	The camera is running out of battery power.	• Replace the batteries.
The image is out of focus.	The subject is beyond focus range.	• Please take a picture within the available focus range and choose normal or macro mode. (See 1.16.2 Using the macro function).
Memory card cannot be used.	The memory card is protected. The memory card contains non-DCF images taken by other cameras.	• Unlock the memory card. Format the memory card. (See 1.24.2 Format.) Before formatting the card, ensure you back up the files.
All buttons are inactive.	Short circuit occurred when connecting the camera with other devices.	• Remove the batteries from the camera and insert again.