

READ THIS FIRST

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- Other names and products may be trademarks or registered trademarks of their respective owners.

Product Information

- 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.
- The product and accessories that come with your digital video camera may be different from those described in this manual. This is due to the fact that different retailers often specify slightly different product inclusions and accessories to suit their market requirements, customer demographics, and geographical preferences. Products very often vary between retailers especially with accessories such as batteries, chargers, memory cards, cables, carrying cases/pouches, and language support. Occasionally a retailer will specify a unique product colour, appearance, and internal memory capacity. Contact our helpline for precise product definition and included accessories.
- The illustrations in this manual are for the purpose of explanation and may differ from the actual design of your digital video camera.
- The manufacturer assumes no liability for any errors or discrepancies in this user manual.
- For user manual and driver updates, refer to our website or contact our helpline.

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, refer to our website or contact our helpline.



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.



During the course of a thunderstorm, please do not operate the camera or use its AC Adaptor.



Cautions

Insert the battery paying careful attention to the polarity (+ or –) of the terminals.

Inserting the battery with its polarity 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.



This camera is a precision instrument. Do not drop it, strike it or use excessive force when handling it.

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:

- Use only the specified battery (NP60, 3.7V).
- Avoid using the battery in extremely cold environments as low temperatures can shorten the battery life and reduce digital video camera performance.
- Fully charge and discharge battery for one complete cycle prior to first use. Using new rechargeable batteries, or batteries which have not been used for a long time, without first charging/discharging may cause the battery life to be shorter than optimum.
- The battery may feel warm after long periods of continuous use of the digital video camera or the flash. This is normal and not a malfunction.
- The digital video camera may feel warm after long periods of continuous use. This is normal and not a malfunction.
- If the battery is not to be used for a long periods of time, remove it from the digital video camera to prevent leakage or corrosion.
- If the battery is not to be used for a long periods of time, store it after the battery power has been drained. If the battery is stored for a long time in a fully charged state, its performance may be impaired.
- Always keep the battery terminals clean.
- There is a risk of explosion if battery is replaced with an incorrect type.
- Dispose of used batteries according to the instructions.

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I. INTRODUCTION

Thank you for purchasing the new digital video camera!

This digital video camera is designed as an "entry-level" handy cam.

Equipped with a 5.0-megapixel CMOS sensor, your video camera delivers good quality, 2560 x 1920 resolution images.

Other features provided by the digital video camera include the following:

LCD monitor -	2.5" full colour LTPS LCD monitor (230K pixels) makes it easy to frame your subject when capturing images. It also displays the images you have captured.
Recording media -	64 MB internal memory (56 MB available for image storage). External memory supports SD memory cards up to 2 GB.
Digital Recorder/Player -	Store and play movies, video, music, pictures and MP3.
TV and PC connection -	You may view your images on a television monitor or a computer using the USB or A/V cables.
Digital zoom -	8x digital zoom enables zoom photography.
Flexible flash settings -	You may adjust the flash setting according to your lighting environment.

I. INTRODUCTION

Package Contents

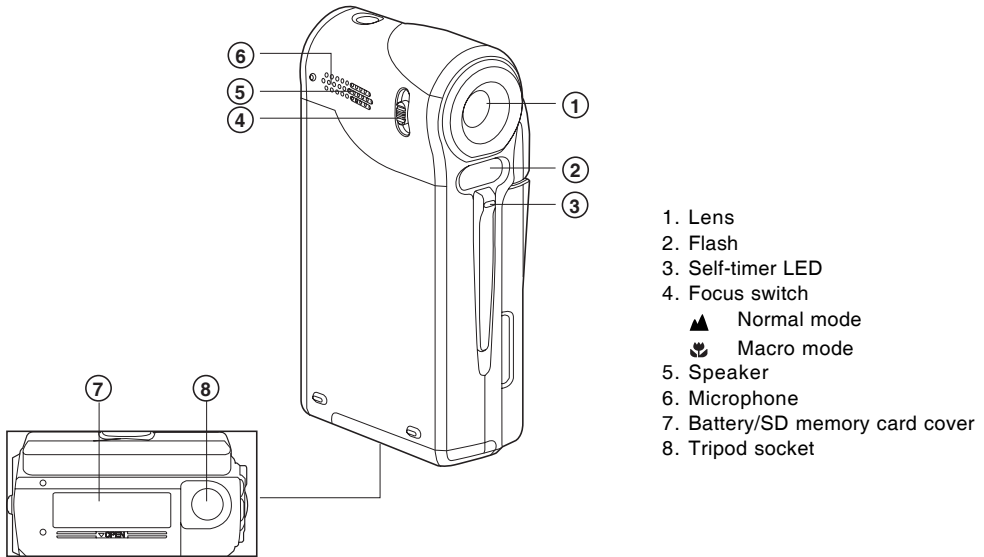
Carefully unpack your kit box and ensure that you have the following items. In the event that any item is missing or if you find any mismatch or damage, promptly contact our helpline.

Common product components:

- Digital video camera
- User's Manual
- USB Cable
- Software CD-ROM
- Rechargeable Lithium-ion battery
- Battery charger
- A/V OUT Cable
- Earphones
- Camera Strap
- Camera Pouch
- Mini Tripod

2. GETTING TO KNOW YOUR DIGITAL VIDEO CAMERA

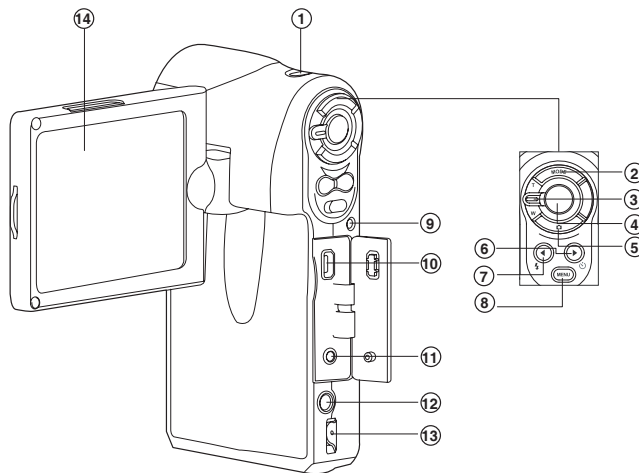
Front View



2. GETTING TO KNOW YOUR DIGITAL VIDEO CAMERA

Rear View

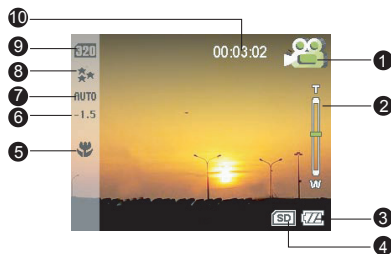
1. ① Power button
2. **MODE** Mode button
3. Zoom lever
T Zoom in
W Zoom out
4. ○ Record button
5. 📷 Image button
6. ▶ Right button
7. ⌚ Self-timer button
8. ◀ Left button
9. ⚡ Flash button
8. **MENU** Menu button
9. Status LED indicator
10. USB connector
11. A/V OUT terminal
12. 🎧 Earphone connector
13. Strap holder
14. LCD panel / monitor



2. GETTING TO KNOW YOUR DIGITAL VIDEO CAMERA

LCD Monitor Information

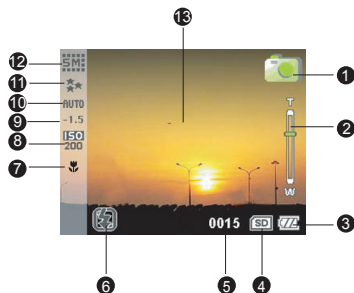
■ Video Mode:



1. video mode icon
2. Zoom status
3. Battery power indicator
 - Full battery power
 - Medium battery power
 - Low battery power
 - Virtually no battery power
4. SD memory card indicator
 - An SD memory card is loaded
 - No SD memory card is loaded
 - SD memory card is full
5. Macro mode
6. EV compensation
7. White balance
 - AUTO AUTO**
 - DAYLIGHT
 - LAMP
 - FLUORESCENT-1
 - FLUORESCENT-2
 - SHADE
8. Video quality
 - ** SUPER FINE**
 - * FINE**
 - ★ NORMAL**
9. Video resolution
 - 640 640 x 480 pixels
 - 320 320 x 240 pixels
10. Available recording time (Before recording)/ Elapsed time (While recording)

2. GETTING TO KNOW YOUR DIGITAL VIDEO CAMERA

■ Camera Mode:




1. Still image mode icon
2. Zoom status
3. Battery power indicator
4. SD memory card indicator
5. Available number of shots
6. Flash mode
 - Flash off
 - Auto flash
 - Auto flash with red-eye reduction
7. Macro mode

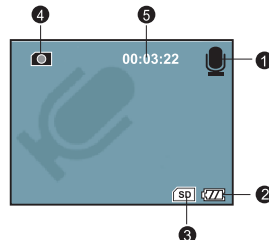
8. ISO sensitivity
 - ISO AUTO
 - ISO 100
 - ISO 200
 - ISO 400
9. EV compensation
10. AWB (White balance)
11. Image quality
 - SUPER FINE
 - FINE
 - NORMAL

12. Image resolution
 - 2560 x 1920
 - 2048 x 1536
 - 1280 x 960
 - 640 x 480
13. Self-timer indicator
 - 3-seconds delay
 - 10-seconds delay








2. GETTING TO KNOW YOUR DIGITAL VIDEO CAMERA

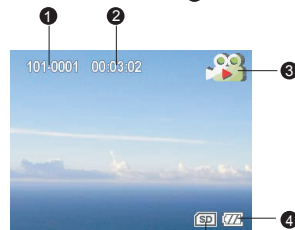
■ Audio Recording Mode

1.  Audio recording mode
2. Remaining battery status
3. SD memory card indicator (if present)
4. Recording indicator
5. Available recording time (Before recording)/
Elapsed time (While recording)

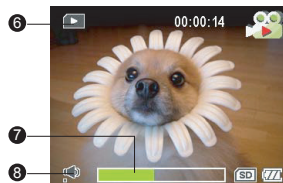


■ Video Playback

1. Folder and file name
2. Duration of current video
(Before playback)/
Elapsed time (During playback)
3.  Video playback mode icon
4. Battery power indicator
5. SD memory card indicator
6. Playback indicator
7. Video status bar
8. Sound level (speaker volume)
 -  Low volume
 -  Mild volume
 -  Medium volume
 -  High volume
 -  Full volume
 -  Mute (no sound)




Before playback

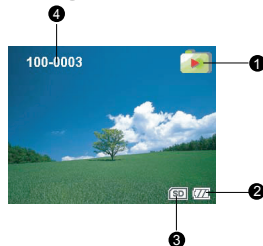


During playback






2. GETTING TO KNOW YOUR DIGITAL VIDEO CAMERA

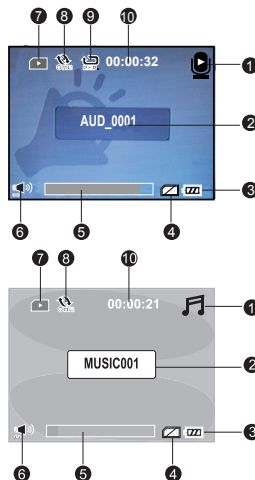
■ Still Image Playback

1.  Still-image playback mode
2. Battery power indicator
3. SD memory card indicator
4. Folder and file name



■ Audio / MP3 Playback

1.  Audio/MP3 playback mode icon
2. File name
3. Battery power indicator
4. SD memory card indicator
5. Audio/MP3 status bar
6. Sound level (speaker volume)
7. Playback indicator
8. Play mode indicator
 -  Play one file
 -  Play all files
 -  Play the selected files
9.  Repeat indicator
10. Elapsed time

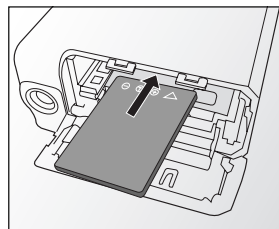


3. GETTING STARTED

Installing the Battery


We highly recommend using the specified rechargeable lithium-ion battery to realize the full capability of your digital video camera. Charge the battery before using the digital video camera. Make sure that the digital video camera is turned off before inserting or removing the battery.

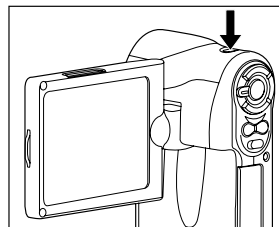
1. Slide the battery/SD memory card cover.
2. Insert the battery in the correct orientation, as shown.
3. Close the battery/SD memory card cover firmly.



Turning the Power On/Off

Press and hold the  button until the digital video camera turns on.

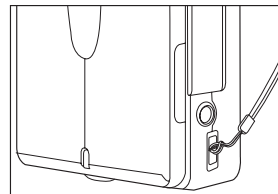
- To turn the power off, press and hold the  button again.



3. GETTING STARTED

Attaching the Hand Strap

Attach the strap as shown in the illustration.



LED Indicators

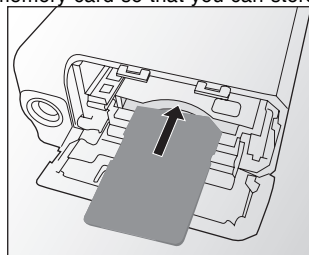
Indicator	State	Description/Activity
LED indicator	Solid green	1. The digital video camera is powering up. 2. The digital video camera is ready to record images (or video clips).
LED indicator	Blinking green	USB communication/transfer is in progress.
LED indicator	Blinking red	Charging the flash.
Self-timer indicator	Blinking red	The self-timer function is activated.

3. GETTING STARTED

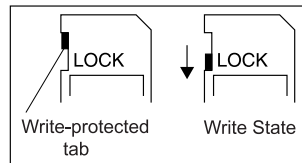
Loading an SD Memory Card

The digital video camera comes with 64MB of internal memory (56MB available for image storage), allowing you to record video clips, captured still images, MP3 and audio files in the digital video camera. However, you can also expand the memory capacity by using an SD memory card so that you can store more files.

1. Open the battery/SD memory card cover.
2. Insert the SD memory card.
 - If the card cannot be inserted, check the orientation.
3. Close the battery/SD memory card firmly.
 - To remove the SD memory card, make sure the camera is turned off. Open the battery/SD memory card cover, then press lightly on the edge of the memory card and it will eject.



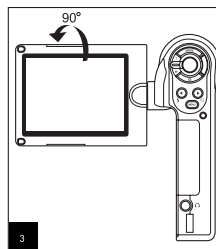
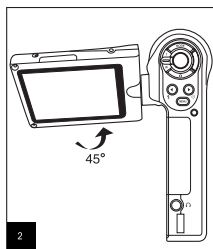
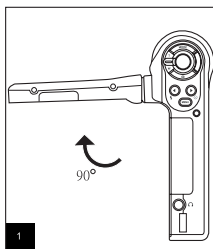
- Be sure to format an SD memory card with this digital video camera before using it. Refer to section in the manual titled "Formatting an SD memory card" for further details.
- To prevent valuable data from being accidentally erased from an SD memory card, you can slide the write protect tab (on the side of the SD memory card) to "LOCK".
- To save, edit, or erase data on an SD memory card, you must unlock the card.



3. GETTING STARTED

Using the LCD Panel

1. Open the panel by pulling it away from the digital video camera.
2. Choose the angle of the monitor that suits you best by rotating the panel.



- Make sure you open the LCD panel at 90 degrees before attempting to rotate it.
- Rotate the LCD panel carefully in the correct direction. Turning it too far or in the wrong direction may damage the hinge that connects the LCD monitor to the digital video camera.
- Avoid contact with the LCD monitor when moving the LCD panel.
- Do not hold the digital video camera by the LCD panel.

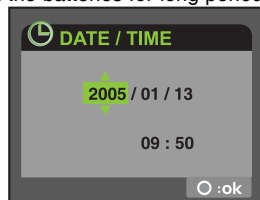
3. GETTING STARTED

Setting the Date and Time

The date/time setting screen will automatically appear:

- When the digital video camera is switched on for the first time.
- When the power is turned on after leaving the digital video camera without the batteries for long period of time.

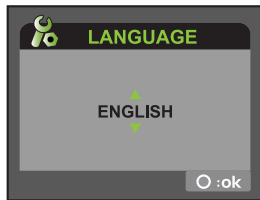
1. Turn on your digital video camera.
2. Press the **MENU** button.
3. Move to [SYSTEM MENU] by using the ◀ button.
4. Select [DATE SETUP] with the zoom lever, and press the ○ button.
 - The [DATE SETUP] setting screen is displayed.
5. Select the item's field with the ◀/▶ buttons and adjust the date and time with the zoom lever.
6. After confirming all settings are correct, press the ○ button.



Choosing the Display Language

Choose a language for information displayed on the LCD monitor.

1. Turn on your digital video camera.
2. Press the **MENU** button.
3. Move to [SYSTEM MENU] by using the ◀ button.
4. Select [LANGUAGE] with the zoom lever, and press the ○ button.
 - The [LANGUAGE] setting screen is displayed.
5. Select the desired language using the zoom lever, and press the ○ button to confirm the selection.



3. GETTING STARTED

Formatting Internal Memory or an SD Memory Card

Formatting erases all images, videos, sound, MP3 files and folders that are stored on the SD memory card or internal memory. Formatting is not possible if an SD memory card is locked.

1. Turn on your digital video camera.
2. Press the **MENU** button.
3. Move to [SYSTEM MENU] by using the ◀ button.
4. Select [FORMAT] with the zoom lever, and press the ○ button.
5. Select [YES] with the zoom lever, and press the ○ button.



- You should format an SD memory card before using it for the first time.
- Formatting an SD memory card also erases the protected images. All data other than images are also erased. Before formatting the card, make sure that all the images are unnecessary.
- Formatting is an irreversible action and data cannot be recovered at a later time.
- If an SD memory card has any problem, it cannot be properly formatted.

3. GETTING STARTED





Setting Image Resolution and Quality

Resolution and quality settings are determined by the number of pixels(dimensions), image file size, and compression ratio for your images. These settings affect the number of images that can be stored. As you get to know the camera, it is recommended that you try each quality and resolution setting to get an appreciation for the effects that these settings will have on your images.

Higher resolution and higher quality images offer the best photographic results, but produce large file sizes. Therefore, few images will take up a lot of memory space.

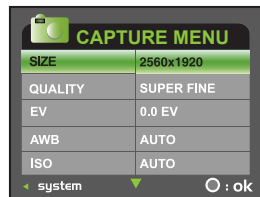
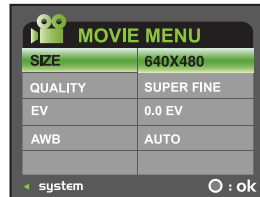
High resolution and quality settings are recommended for printed output and situations requiring the finest detail. Lower resolution/quality images take up less memory space and may be quite suitable for sharing images via e-mail, in a report, or on a web page.

To change image resolution or image quality, perform these steps below:

1. Turn on your digital video camera.
2. Press the **MODE** button continuously until the Capture or Video Mode appears.
3. Press the **MENU** button.
 - The [CAPTURE MENU] or [MOVIE MENU] screen is displayed.
4. Select [SIZE] with the zoom lever, and press the  button to view the resolution choices.
5. Select the desired resolution with the zoom lever, and press the  button to confirm.
6. Select [QUALITY] with the zoom lever, and press the  button to view the quality choices.
7. Select the desired quality with the zoom lever, and press the  button to confirm.







- The possible number of shots and recording time depend on the storage size, resolution and quality settings and the subject of the image to be captured.



3. GETTING STARTED



Possible number of shots (still image)

This table shows approximate shots that you can capture at each setting, based on the internal memory or an SD memory card.

Resolution	Quality	Internal memory	SD memory card					
			64MB	128MB	256MB	512MB	1GB	2GB
2560 x 1920 	★* SUPER FINE	7	19	40	79	154	309	632
	* FINE	15	39	79	158	308	616	1265
	★ NORMAL	23	59	120	239	464	929	1878
2048 x 1536 	★* SUPER FINE	11	30	62	124	241	483	984
	* FINE	23	60	123	247	479	959	1937
	★ NORMAL	35	91	185	370	718	1438	2952
1280 x 960 	★* SUPER FINE	30	78	159	317	616	1233	2480
	* FINE	59	153	312	622	1207	2417	4769
	★ NORMAL	88	226	458	916	1776	3554	6888
640 x 480 	★* SUPER FINE	115	295	600	1197	2322	4648	8857
	* FINE	214	480	975	1946	3774	7553	15500
	★ NORMAL	249	640	1300	2595	5032	10070	20666

3. GETTING STARTED

Possible recording time / sec (video clip)


Resolution	Quality	Internal memory	SD memory card					
			64MB	128MB	256MB	512MB	1GB	2GB
640 x 480 	✪ SUPER FINE	0:43	1:53	3:53	7:47	15:08	30:20	1:02:18
	✪ FINE	0:57	2:31	5:10	10:21	20:07	40:19	1:22:48
	★ NORMAL	1:11	3:08	6:26	12:54	25:04	50:14	1:43:09
320 x 240 	✪ SUPER FINE	1:08	3:01	6:11	12:24	24:05	48:15	1:39:05
	✪ FINE	1:42	4:29	9:12	18:27	35:50	1:11:48	2:27:27
	★ NORMAL	2:15	5:56	12:10	24:24	47:24	1:34:59	3:15:02

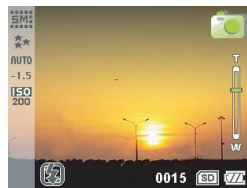
* The data shows the standard testing results. The actual capacity varies according to the shooting conditions and settings.

4. PHOTOGRAPHY MODES

Capturing Still Images





In this mode, you may capture still images.

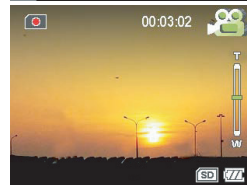
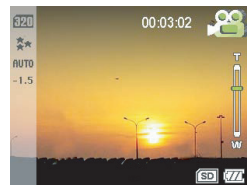
1. Turn on your digital video camera.
2. Press the **MODE** button continuously until the Capture Mode appears.
3. Compose your image on the LCD monitor.
4. Press the  button to capture a still image.
 - The actual captured image appears to be larger than the one on the LCD preview after the image was captured.



Recording Video Clips

In this mode, you may record video clips.

1. Turn on your digital video camera.
2. Press the **MODE** button continuously until the Video Mode appears.
3. Compose the shot.
4. Press the  button.
 - The recording of the video clip will start.
 - Pressing the  button again will pause the recording. Pressing the  button during pause will resume recording.
5. Press the  button to stop recording.





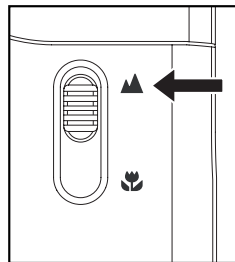
- When recording video clips, the flash and self-timer cannot be used.

4. PHOTOGRAPHY MODES

Normal Mode




This mode is suitable for scenery and portrait shooting.

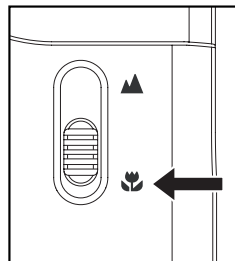
1. Turn on your digital video camera.
2. Slide the focus switch to the ▲ side.
3. Compose the shot.
4. Press the  button to capture a still image.
 - To record video clips, press the ○ button to start recording, and then press the  button to end the recording.



Macro Mode

Select this when you want to take a close-up photo.

1. Turn on your digital video camera.
2. Slide the focus switch to the  side.
3. Compose the shot.
4. Press the  button to capture a still image.
 - To record video clips, press the ○ button to start recording, and then press the  button to end the recording.






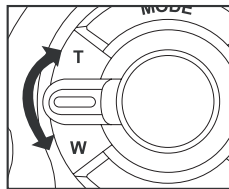
- After a macro shot is taken **DO NOT FORGET** to reset the lens to the normal position.
- Flash mode is automatically set to OFF once you switch to Macro mode.

4. PHOTOGRAPHY MODES

Using the Digital Zoom

Zoom photography allows you to capture telephoto and wide-angle shots.

1. Turn on your digital video camera.
2. Compose the shot with the zoom lever.
 - The subject appears closer by sliding the zoom lever to the **T** side.
 - The subject appears farther away by sliding the zoom lever to the **W** side.
3. Press the  button to capture a “zoomed” image.
 - To record video clips, press the  button to start recording, and then press the  button to end the recording.
 - You can also use the zoom lever to zoom in or out on the subject while recording the video clips.




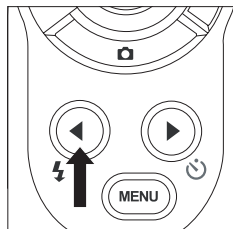
- The digital zoom range is from 1x to 8x.
- Digital Zoom works by interpolating the image. This produces a lower quality or grainier image.

4. PHOTOGRAPHY MODES




Setting the Flash

Set the flash to suit the photographic conditions.

1. Turn on your digital video camera.
2. Press the  button to select the desired flash mode.



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

Flash Mode	Description
 Flash off	The flash will not fire. Select this mode when capturing images in a place where flash photography is prohibited, or when the distance to the subject is beyond the effective range of the flash.
A  Auto flash	The flash fires automatically according to the ambient lighting conditions. Select this mode for general flash photography.
 Auto flash with red-eye reduction	Use this mode to reduce the red-eye phenomenon when you want to take natural-looking photographs of people and animals in low-light conditions. When taking photographs, the red-eye phenomenon can be reduced by asking the subject to look at the digital video camera.







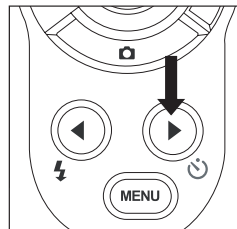
- The flash cannot be set in the video mode.

4. PHOTOGRAPHY MODES





Setting the Self-Timer

This setting allows still images to be captured with the self-timer.

1. Turn on your digital video camera.
2. Press the  button to select the setting.
3. Compose the shot.
4. Press the  button.
 - The self-timer LED and self-timer icon flash, and then the image is captured after the preset time has elapsed.
 - To cancel the self-timer during operation, press the  button again.
 - Once the self-timer has been activated and the  button has been pressed, you can not slide the zoom lever.



The table below will help you choose the appropriate self-timer mode:

Self-timer mode	Description
 3 sec.	The picture is taken about 3 seconds after the  button is pressed.
 10 sec.	The picture is taken about 10 seconds after the  button is pressed.



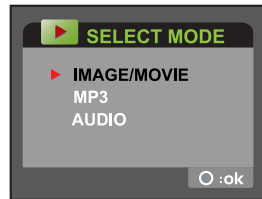
- Self-timer cannot be set in the video mode.
- The self-timer setting is automatically cancelled after an image is captured.

5. PLAYBACK MODE

Playing Back Still Images/ Video Clips

You can play back still images on the LCD monitor.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the **O** button.
 - The last image/video clip appears on the LCD monitor.
4. Select the desired images with the zoom lever.
 - To view the previous image, slide the zoom lever to the **T** side.
 - To view the next image, slide the zoom lever to the **W** side.
 - To start playing back the video clips, follow the steps 1-4 above, then press the **O** button.
 - Press of the **◀▶** buttons during playback for fast forward play / fast reverse play.
 - To pause video playback, press the **O** button; to cancel pause, press the **O** button again.
 - To stop video playback, press the **■** button. This stops playback and returns to the start of the video clip.



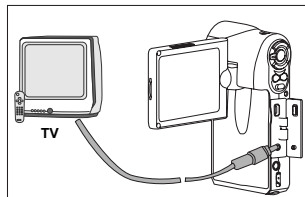
- If the video cannot be played back in WMP 9.0, please update WMP from the Microsoft website.
- To adjust the sound level, slide the zoom lever to the **T** side to increase the volume, and to the **W** side to decrease the volume.

5. PLAYBACK MODE

Playing Back Still Images/Video Clips on TV

You can also play back your images on a TV screen. Before connecting to any devices, make sure to select NTSC / PAL system to match the video output system of the video equipment you are going to connect to the digital video camera, then turn all devices off.

1. Connect one end of the A/V OUT cable to the A/V OUT terminal of the digital video camera.
2. Connect the other end to the AV input of the TV set.
3. Turn on the TV and digital video camera.
4. Play back the still images / video clips.
 - The method of operation is the same as playing back still images and video clips on the digital video camera.

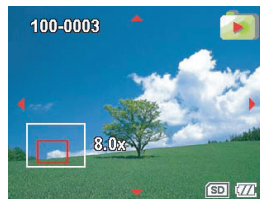


5. PLAYBACK MODE

Zoom Playback

Images that are being played back can be enlarged. The zoom factor displayed on the screen shows the current magnification ratio.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the \bigcirc button.
4. Select the desired image with the zoom lever.
5. The displayed image can be enlarged by each press of the ⏏ button. The magnification factors range from 1x to 8x (in 16 stages: 1.0x, 1.5x, 2.0x, 2.5x, 3.0x, 3.5x, 4.0x, 4.5x, 5.0x, 5.5x, 6.0x, 6.5x, 7.0x, 7.5x, 8.0x and thumbnail display).
 - During zoom playback, the outer frame indicates the entire image; while the inner frame indicates the location of the currently enlarged area.
6. Slide the zoom lever upward or downward or press the $\blacktriangleleft/\blacktriangleright$ buttons to select the area to enlarge.



Thumbnail Display

This function allows you to view 9 thumbnail images on the LCD monitor at the same time, which can let you quickly search for the image that you want.



1. Follow "Zoom Playback" section steps 1-5 until the thumbnail display appears on the screen.
2. Press the $\blacktriangleleft/\blacktriangleright$ buttons or the zoom lever to select the image/video clip to be displayed at regular size.
3. Press the ⏏ button.

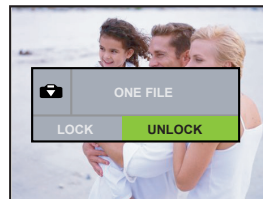
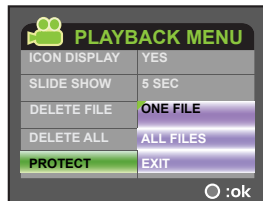


5. PLAYBACK MODE

Protecting Still Images/Video Clips

Set the data to read-only to prevent images from being erased by mistake.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the \bigcirc button.
4. Select the still image/video clip that you want to protect with the zoom lever.
 - You may select the still image/video clip that you want to protect from the thumbnail display.
5. Press the **MENU** button.
 - The [PLAYBACK MENU] is displayed.
6. Select [PROTECT] with the zoom lever, and press the \bigcirc button.
7. Select [ONE FILE] or [ALL FILES] with the zoom lever, and press the \bigcirc button.
8. Select [LOCK] by pressing the $\blacktriangleleft/\blacktriangleright$ buttons, and press the \bigcirc button.
 - Protect is executed and the digital video camera returns to play mode.
 - The protect icon  is displayed with protected images. When [ALL FILES] is selected,  is displayed with all the images.
 - To cancel protection, follow steps 5-8 to select [UNLOCK] by pressing the $\blacktriangleleft/\blacktriangleright$ buttons, and press the \bigcirc button.
 - The removal of image protection is executed and the digital video camera returns to the play mode.

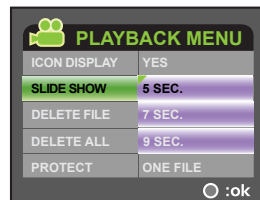


5. PLAYBACK MODE

Slide Show Display

The slideshow function enables you to play back still images/video clips automatically in the right order one image at a time.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the \odot button.
4. Press the **MENU** button.
5. Select [SLIDE SHOW] with the zoom lever, and press the \odot button.
6. Set the playback interval with the zoom lever, and press the \odot button.
 - The slide show starts.
 - The video clips are displayed in the first frame image, and not played back.
 - To stop slide show, press the \odot button.

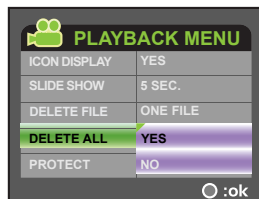
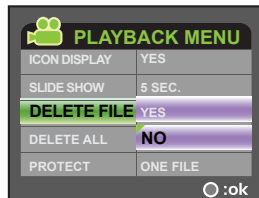


- You can adjust slide show display interval within the range of 5 SEC, 7 SEC, and 9 SEC.

5. PLAYBACK MODE

Deleting Still Images/Video Clips

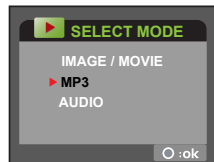
1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the \bigcirc button.
4. Select the still image/video clip that you want to erase with the zoom lever.
 - You may select the still image/video clip that you want to erase from the thumbnail display.
5. Press the **MENU** button.
6. Select [DELETE FILE] or [DELETE ALL] with the zoom lever, and press the \bigcirc button.
 - [DELETE FILE]: Delete the current still image/video clip.
 - [DELETE ALL]: Delete all still images/video clips.
7. Select [YES] with the zoom lever, and press the \bigcirc button.
 - To not delete, select [NO], and press the \bigcirc button.
 - If all video clips/images are deleted, [NO FILE!] pops up.
 - To change to photography mode, press the **MODE** button.



6. MP3 MODE

The digital video camera enables you to playback MP3 files. You may download MP3 files to your computer and then copy them into the digital video camera via the USB cable or insert an SD memory card with MP3 files recorded into the digital video camera.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [MP3] with the zoom lever and press the **O** button.
 - The MP3 LIST appears on the screen.






Button operations

State	MP3	
BUTTON	Playlist	During playback
⓪	Power off (press & hold)	Power off (press & hold)
T	Scroll up	Volume +
W	Scroll down	Volume -
◀	Previous page	-
▶	Next page/Add selection	-
MODE	Back to LCD preview	-
MENU	Enter MP3 menu	-
📷	-	Stop playing MP3 music
⓪	Start to play MP3 music	Pause playing MP3 music

7. AUDIO RECORDING MODE

The digital video camera enables you to record and play back audio files anytime and anywhere.

Recording Audio Files

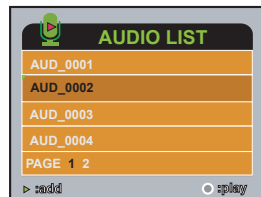
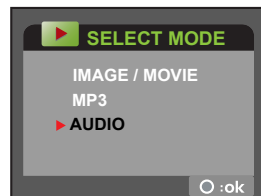
1. Turn on your digital video camera.
2. Toggle the **MODE** button to select audio recording mode as in the illustration.
3. Press the  button.
 - Voice starts recording.
 - To pause recording, press the  button again.
 - To stop recording, press the  button.



7. AUDIO RECORDING MODE

Playing Back Audio Files

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [AUDIO] with the zoom lever and press the **O** button.
 - The AUDIO LIST appears on the screen.



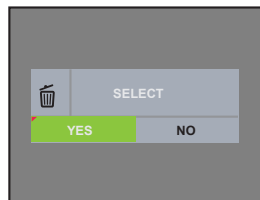
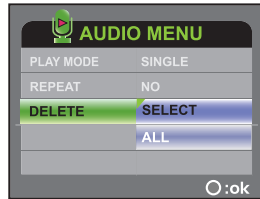
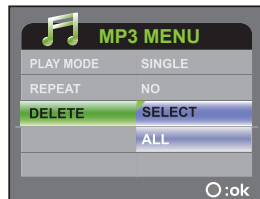
Button operations

Button \ State	Audio	
	Playlist	During playback
O	Power off (press & hold)	Power off (press & hold)
T	Scroll up	Volume +
W	Scroll down	Volume -
◀	Previous page	-
▶	Next page/Add selection	-
MODE	Back to LCD preview	-
MENU	Enter AUDIO menu	-
📷	-	Stop playing audio file
O	Start to play voice file	Pause playing audio file

7. AUDIO RECORDING MODE

Deleting MP3 / Audio Files

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [MP3] / [AUDIO] with the zoom lever and press the \bigcirc button.
 - The MP3 / AUDIO LIST appears on the screen.
4. Press the **MENU** button.
 - The [MP3 MENU] or [AUDIO MENU] appears on the screen.
5. Select [DELETE] with the zoom lever and press the \bigcirc button.
 - [SELECT]: Delete the selected audio or MP3 file.
 - [ALL]: Delete all audio or MP3 files in a single operation.
6. Select [YES] with the zoom lever, and press the \bigcirc button.
 - To not delete, select [NO], and press the \bigcirc button.
 - If all files are deleted, [NO FILE!] pops up.
 - To change to photography mode, press the **MODE** button.

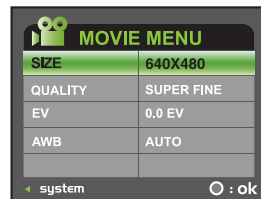


8. MENU OPTIONS

Video Menu

This menu is for the basic settings to be used when capturing video clips in the photography mode.

1. Turn on your digital video camera.
2. Press the **MENU** button. The [MOVIE MENU] is displayed on the screen.
3. Select the desired option item with the zoom lever, and press the button.
4. Select the desired setting with the zoom lever, and press the button.
5. To exit from the menu, press the **MENU** button.



SIZE

Sets the desired video resolution.

640: 640 X 480

320: 320 X 240

QUALITY

Sets the quality (compression rate) at which the video is to be recorded.

★★: SUPER FINE

★: FINE

★: NORMAL

8. MENU OPTIONS

EV

Your digital video camera adjusts the exposure of each shot automatically. However, if the subject is very dark, or very bright, you may override the digital video camera's automatic exposure determination to make the subject brighter or darker. This is called EV compensation. The EV compensation can be adjusted from -1.8EV to +1.8EV.

AWB

This sets the white balance under a variety of lighting conditions and permits images to be recorded that approach conditions as seen by the human eye.

[AUTO] AUTO: Automatic adjustment

[☀] DAYLIGHT: For recording outdoors on a bright day

[💡] LAMP: For recording under lamp light

[☀] FLUORESCENT-1: Cool white fluorescent (W3900-4500K)

[☀] FLUORESCENT-2: Day white fluorescent (W4600-5400K)

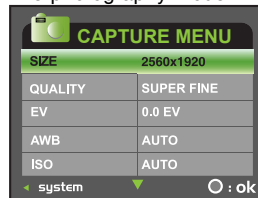
[☁] SHADE: For recording outdoors on a cloudy day

8. MENU OPTIONS

Capture Menu

This menu is for the basic settings to be used when capturing still images in the photography mode.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to access in camera mode, then press the **MENU** button.
 - The [CAPTURE MENU] is displayed on the screen.
3. Select the desired option item with the zoom lever, and press the \odot button.
4. Select the desired setting with the zoom lever, and press the \odot button.
5. To exit from the menu, press the **MENU** button.



SIZE

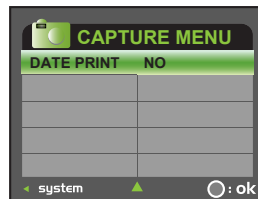
Sets the desired image resolution.

- 5M**: 2560 x 1920
- 3M**: 2048 x 1536
- 1.2M**: 1280 x 960
- 0.3M**: 640 x 480

QUALITY

Sets the quality (compression rate) at which the still image will be compressed and stored as JPG files.

- ★★**: SUPER FINE
- ★**: FINE
- ★**: NORMAL



8. MENU OPTIONS

EV

Refer to section in this manual titled “EV” in Movie Menu for further details.

AWB

Refer to section in this manual titled “AWB” in Movie Menu for further details.

ISO

Sets the sensitivity for photography. When the sensitivity is raised (and the ISO figure is increased), photography will become possible even in dark locations, but the more pixelated (grainier) the image will appear.

[AUTO]: Auto adjustment

[100]: Equivalent to ISO 100

[200]: Equivalent to ISO 200

[400]: Equivalent to ISO 400

DATE PRINT

The capture date can be printed directly on your still images. This function must be activated before the image is captured.

[YES]: Imprints the date on the still images when capturing images.

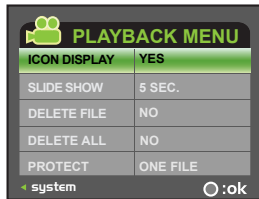
[NO]: Does not imprint the date on the still images when capturing images.

8. MENU OPTIONS

Playback Menu

This menu chooses which settings are to be used for playback.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [IMAGE/MOVIE] with the zoom lever and press the button.
4. Press the **MENU** button.
 - The **PLAYBACK MENU** is displayed on the screen.
5. Select the desired option item with the zoom lever, and press the button.
6. Select the desired setting with the zoom lever, and press the button.
7. To exit from the menu, press the **MENU** button.



ICON DISPLAY

This sets whether or not to display the image with icons in the playback mode.

* [YES] / [NO]

SLIDE SHOW

Refer to section in this manual titled "Slide show display" for further details.

DELETE FILE

Refer to section in this manual titled "Deleting Still Images/Video Clips" for further details.

DELETE ALL

Refer to section in this manual titled "Deleting Still Images/Video Clips" for further details.

PROTECT

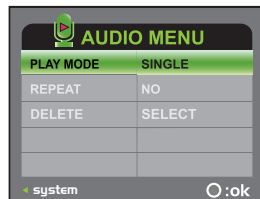
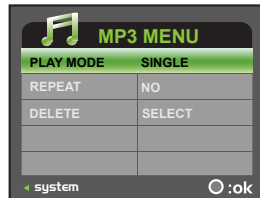
Refer to section in this manual titled "Protecting Still Images/Video Clips" for further details.

8. MENU OPTIONS

MP3 / Audio Menu

This sets whether or not to play MP3 files repeatedly or delete MP3 files.

1. Turn on your digital video camera.
2. Toggle the **MODE** button to go to [SELECT MODE].
3. Select [MP3] or [AUDIO] with the zoom lever, and press the \bigcirc button.
4. Press the **MENU** button.
 - The [MP3 MENU] or [AUDIO MENU] is displayed on the screen.
5. Select the desired option item with the zoom lever, and press the \bigcirc button.
6. Select the desired setting with the zoom lever, and press the \bigcirc button.
7. To exit from the menu, press the **MENU** button.



PLAY MODE

Sets the method of the files playback mode.

[SINGLE]: Play only one audio or MP3 file.

[SELECT]: Play the selected audio or MP3 files.

[ALL]: Play all audio or MP3 files.

REPEAT

Sets to playback the files repeatedly.

[NO]: Play the listed files only once.

[YES]: Repeatedly play your audio or MP3 files according to your preference.

DELETE

Refer to section in this manual titled “Deleting MP3 / Audio Files” for further details.

8. MENU OPTIONS

System Menu

Sets your digital video camera's operating environment.

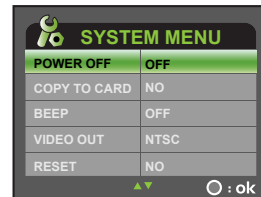
1. Turn on your digital video camera.
2. Toggle the **MODE** button to access video, camera or playback (SELECT MODE) mode, then press the **MENU** button.
3. Press **◀** to access SYSTEM MENU.
4. Select the desired option item with the zoom lever, and press the **○** button.
5. Select the desired setting with the zoom lever, and press the **○** button.
6. To exit from the menu, press the **MENU** button.

LANGUAGE

Refer to the section in this manual titled "Choosing the Display Language" for further details.

FORMAT

Please refer to the section in this manual titled "Formatting Internal Memory or an SD Memory Card" for further details.



8. MENU OPTIONS

LCD BRIGHT

Adjusts the brightness of the LCD monitor. The LCD becomes brighter by sliding the zoom lever to the **T** side and darker by sliding it to the **W** side. The adjustment range is from -5 to +5.

DATE TYPE

Sets the displayed type of date and time on the screen.

[Y/M/D]: Year/Month/Day

[D/M/Y]: Day/Month/Year

[M/D/Y]: Month/Day/Year

DATE SETUP

Refer to section in this manual titled “Setting the Date and Time” for further details.

POWER OFF

If no operation is performed for a specific period of time, the power to the digital video camera is automatically turned off. This feature is useful to reduce battery wear.

* [OFF] / [1 MIN.] / [3 MIN.] / [5 MIN.] / [10 MIN.]

8. MENU OPTIONS

COPY TO CARD

Allows you to copy your files from the digital video camera's internal memory to a memory card. Of course, you can only do this if you have a memory card installed and files in the internal memory.

* [YES] / [NO]

BEEP

Enables or disables the sounds (beeps) associated with digital video camera button functions.

[ON]: Enables sounds/beep tones.

[OFF]: Disables sounds/beep tones.

VIDEO OUT

Sets video compatibility with the equipment you are going to connect to the digital video camera.

[NTSC]: NTSC system

[PAL]: PAL system

RESET

Returns all basic settings to the digital video camera's default settings.

[YES]: Returns to the default settings.

[NO]: Does not return to the default settings.

LIGHT FREQ.

When photographing under artificial lighting, select the correct frequency setting depending on your country's electrical standard.

* [60HZ] / [50HZ]

9. CONNECTING TO A PICTBRIDGE COMPATIBLE PRINTER

If a printer that supports PictBridge is available, images can be printed by connecting the digital video camera directly to the PictBridge-compatible printer without using a computer.

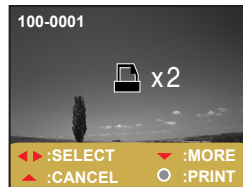
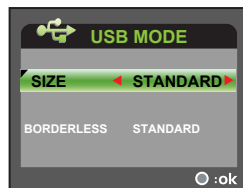
1. Connect the digital video camera to the printer using the USB cable.
2. Turn on the printer and digital video camera.
 - The [USB MODE] screen appears on the screen.
3. Select [PICTBRIDGE] with the zoom lever, and then press the \bigcirc button.



4. Select [SIZE] or [BORDERLESS] with the zoom lever and select its print type with the $\blacktriangleleft / \blacktriangleright$ buttons. Then press the \bigcirc button to confirm the selection.

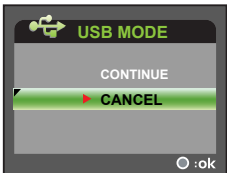
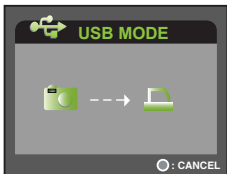
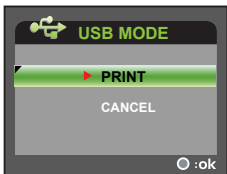
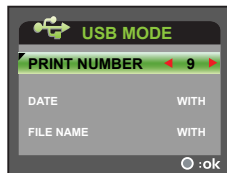
- [SIZE]: You may select the desired item according to the type of printer being used.
- [BORDERLESS]: You may select the desired item according to the type of printer being used.

5. Select the image that you want to print with the $\blacktriangleleft / \blacktriangleright$ buttons, and then use the zoom lever to set more detailed print settings.



9. CONNECTING TO A PICTBRIDGE COMPATIBLE PRINTER

6. Select [PRINT NUMBER], [DATE] or [FILE NAME] with the zoom lever and change their settings with the ◀ / ▶ buttons. Then press the ○ button to confirm the selection.
 - [PRINT NUMBER]: Select the number of frames to be printed up to 10.
 - [DATE]: Select [WITH] to print the image with date imprint.
 - [FILE NAME]: Select [WITH] to print the image with file name.
7. Use the zoom lever to select [PRINT]. Then press the ○ button to confirm the print settings and start printing.
8. The printing starts and the figure shown on the right hand side appears until the printing is complete.
9. To cancel printing, press the ○ button while the printing is proceeding.
 - A selection screen appears. Use the zoom lever to select [CANCEL]. Then press the ○ button to cancel printing.



IO.TRANSFERRING RECORDED FILES TO YOUR COMPUTER

To transfer the recorded files from the digital video camera to your computer, follow these steps:

Step 1: Install the USB driver (requirement for Windows 98 only)

Step 2: Connect the digital video camera to your computer

Step 3: Download image, audio and video files

System requirements (Windows)

- Pentium III 600 MHz or higher
- Windows 98/98SE/ME/2000/XP
- 64MB RAM
- 128MB hard disk space
- CD-ROM drive
- Available USB port

Step I: Install the USB driver (requirement for Windows 98 only)


Windows 98 computers

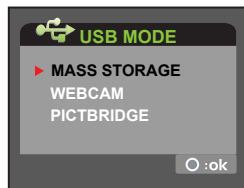
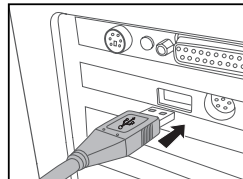
The USB driver on the CD-ROM is exclusively for Windows 98 computers. Installing the USB driver on computers running Windows 2000/ME/XP is not necessary.

1. Insert the CD-ROM that came with the digital video camera into your CD-ROM drive. The welcome screen appears.
2. Click "**Install USB/PC-Cam driver**". Follow the on-screen instructions to complete the installation. After the USB driver has been installed, restart your computer.

10. TRANSFERRING RECORDED FILES TO YOUR COMPUTER

Step 2: Connect the digital video camera to your computer

1. Connect one end of the USB cable to the USB connector on the digital video camera.
2. Connect the other end of the USB cable to an available USB port on your computer.
3. Turn on your digital video camera.
 - The [USB MODE] screen appears on the screen.
4. Select [MASS STORAGE] with the zoom lever, and press the  button.
5. From the Windows desktop, double click on "My Computer".
6. Look for a new "Removable disk" icon. This "Removable disk" is actually the memory or memory card in your digital video camera.
7. Double click on the removable disk and locate the DCIM, MP3 and AUDIO folders.
8. Double click on the folders to open them to find more folders.
 - Your recorded images, video clips and audio files will be inside these folders.
 - Copy, Paste or Drag-N-Drop images, videos, and audio to a folder on your computer.



- When the USB power supply is used while transferring images to your computer, the other buttons on your digital video camera will not operate.

10.TRANSFERRING RECORDED FILES TO YOUR COMPUTER

Step 3: Download still images, video clips and audio files

When the digital video camera is turned on and connected to your computer, it is considered to be a disk drive, just like a floppy disk or CD. You can download (transfer) images by copying them from the "Removable disk" to your computer hard drive.

Windows

Open the "removable disk" and subsequent folders by double clicking on them. Your images, videos, and audio files are inside these folders. Select the files that you want, and then choose "Copy" from the "Edit" menu. Open the destination location (folder) and choose "Paste" from the "Edit" menu. You may also drag and drop image files from the digital video camera to a desired location.



- The recorded audio files are stored in the "AUDIO" folder.
- For transferring MP3 files, simply copy the MP3 files from your computer hard drive to the "MP3" folder.
- Memory card users may prefer to use a memory card reader.
- A video playback application is not included with the package. Make sure that a video playback application has been installed on your computer. You can obtain the latest Windows Media Player from the Microsoft website.

II. INSTALLING VIDEOSTUDIO

Ulead® VideoStudio is home video-editing software that makes editing video clips as much fun as shooting them. Users can make one in three easy steps using the new Movie Wizard mode. VideoStudio features fully customizable filters and special effects and shares finished projects on diversified devices by supporting the latest formats.

To install VideoStudio:

1. Insert the CD-ROM that came with the camera into your CD-ROM drive.
The welcome screen appears.
2. Click "**Install Ulead® VideoStudio**". Follow the on-screen instructions to complete the installation.



-
- For more information about the operation of VideoStudio application software, refer to its respective help documentation.
 - For Windows 2000/XP users, please make sure you install and use the VideoStudio in "Administrator" mode.
 - VideoStudio is not supported by Mac.

12. USING THE DIGITAL VIDEO CAMERA AS A WEBCAM

Your digital video camera can act as a webcam, which allows you to videoconference-with business associates, or have a real-time conversation with friends or family.

To use the digital video camera as a webcam, follow these steps:

Step 1: Install the webcam driver (same CD-ROM as USB driver) (see pg. 55)

Step 2: Connect the digital video camera to your computer (see pg. 56)

Step 3: Run your application software (i.e. Windows NetMeeting) (see pg. 56)



- Video conferencing (or video editing) software is not included with the digital video camera.
- This mode is not supported by Mac.

General system requirements for video conferencing

To use the digital video camera for video conferencing, your computer system must include:

- Microphone
- Sound card
- Speakers or headphones
- Network or Internet connection

12. USING THE DIGITAL VIDEO CAMERA AS A WEBCAM

Step 1: Install the webcam driver (same CD-ROM as USB driver)

The webcam driver included on the CD-ROM is exclusively for Windows. The webcam function is not supported by Mac platforms.

1. Insert the CD-ROM that came with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "**Install USB/PC-Cam driver**". Follow the on-screen instructions to complete the installation. After the driver installation is completed, restart your computer.

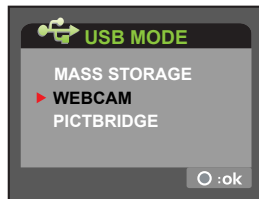


-
- The USB driver on the CD-ROM performs 2 functions: USB and webcam driver.
 - a) On Windows 98, the Windows OS will install both USB & webcam drivers.
 - b) On Windows 2000/ME/XP, it will only install webcam driver.

12. USING THE DIGITAL VIDEO CAMERA AS A WEBCAM

Step 2: Connect the Digital Video Camera to Your Computer

1. Connect one end of the USB cable to the USB connector on the digital video camera.
2. Connect the other end of the USB cable to an available USB port on your computer.
3. Turn on your digital video camera.
 - The [USB MODE] screen appears on the screen.
4. Select [WEBCAM] with the zoom lever, and press the \bigcirc button.
5. Position the digital video camera steadily on top of your computer using the included mini tripod.



Step 3: Run Your Application Software (i.e. Windows NetMeeting)

To use Windows NetMeeting for video conferencing:

1. Go to **Start** => **Programs** => **Accessories** => **Communications** => **Net Meeting** to launch the NetMeeting program.
2. Click the Start Video button to view live video.
3. Click the Place Call button.
4. Type the e-mail address or the network address of the computer that you are calling.
5. Click Call. The person that you are calling must also have Windows NetMeeting running and be willing to accept your call to start the video conference.



- The video resolution for video conferencing applications is generally 320 x 240.
- For more information about the operation of video conferencing application software, refer to its respective help documentation.
- When the webcam function is activated (i.e. images are being transferred), the LED (green colour) blinks. If the USB cable is unplugged at the time of transferring images, the screen will be blank the next time when you run the webcam function. In this situation, you should restart the computer. The proper operating method should be: Close the webcam application, then remove the USB cable.

13. SPECIFICATIONS

Item	Description
Image Sensor	CMOS sensor (5.0 megapixels)
Image size	Still image: 2560 x 1920, 2048 x 1536, 1280 x 960, 640 x 480 Video clip: 640 x 480 (30fps), 320 x 240 (30fps)
Recording media	64 MB internal memory (56 MB available for image storage) Supports SD memory card (up to 2 GB)
Compression format	MPEG 4 SP (Video), IMA-ADPCM (Audio)
File format	EXIF 2.1, DCF 1.0, JPEG, ASF (Video)
Lens	Aperture range: 3.3 Focal Length: 6.95mm
Focus range	Normal: 1m - infinity Macro: 0.6m - 1m
LCD monitor	2.5" full colour LTPS LCD (230K pixels)
Shutter speed	1/2000 ~ 1/2 sec.
Self-timer	3-sec delay, 10-sec delay
Interface	USB connector, A/V OUT terminal, earphone jack
Power	Rechargeable lithium-ion battery (NP60)
Dimension	Approx. 118 x 58 x 28mm (without protruding parts)
Weight	Approx. 140g (without battery and the SD memory card)

14.TROUBLESHOOTING



Refer to the symptoms and measures listed below before sending the digital video camera for repairs. If the problem persists, contact the helpline or website.

Power Supply

Symptom	Cause	Measure
The power does not come on.	The battery is not loaded.	Load the battery correctly.
	The battery is exhausted.	Recharge the battery.
	The AC power adaptor is not connected correctly.	Reconnect it properly.
The power cuts out during use.	The digital video camera was left unattended and unused, so the auto power off cuts it off.	Turn the power back on.
	The battery is exhausted.	Recharge the battery.
The power does not go off.	Digital video camera malfunction.	Reload the battery.
	It is being used in extreme low temperature.	
The battery runs out quickly.	Many images are shot indoors in dark places where flash is required.	
	The battery is not fully charged.	Fully charge the battery and discharge it for at least one complete cycle before use to maximize its performance and lifetime.
	The battery is not used for an extended period of time after being charged.	
The battery or digital video camera feels warm.	Long period of continuous use of the digital video camera or the flash.	

14.TROUBLESHOOTING

Shooting

Symptom	Cause	Measure
Even if I press the shutter button, the digital video camera does not shoot.	The battery is running low.	Recharge the battery.
	The power is not on.	Turn the power on.
	The digital video camera is not in shooting mode.	Slide the mode switch to shooting mode.
	The shutter button is not pressed all the way.	Press the shutter button all the way.
	The internal memory or memory card does not have any free space.	Load a new memory card, or delete unwanted files.
	End of memory card life.	Load a new memory card.
	The flash is recharging.	Wait until the system LED is off.
	The memory card is unrecognized by the digital video camera.	Format the memory card in this digital video camera before its first use or if it has been used in another device.
Images do not appear on the LCD monitor.	The auto power off function is activated.	Turn the power on again.
	The power is not on.	Turn the power on.
The flash does not fire. The flash cannot recharge.	The LCD monitor is dark.	Adjust the brightness of the LCD monitor in the SYSTEM MENU.
	The digital video camera is set to  mode.	Set the focus switch to  position.
	The flash is set to flash off.	Set the flash to something other than flash off mode.

14.TROUBLESHOOTING

Symptom	Cause	Measure
Even though the flash fired, the image is dark.	The distance to the subject is greater than flash effective range.	Get closer to your subject to capture it properly.
The image is too dark.	The image was captured in a dark place while set to flash off.	Turn Flash On.
	It is under-exposed.	Set the exposure compensation to a larger value.
The image is too bright.	It is over-exposed.	Set the exposure compensation to a lower value.
The image lacks natural colour.	The image was captured in difficult conditions for auto white balance.	Add a white object to the composition.

Playback

Symptom	Cause	Measure
Cannot play back.	It is not set to playback mode.	Slide the mode switch to playback mode.
The contents of memory card cannot be replayed.	You played back a memory card that was not formatted by this camera.	Load a card that was formatted and stored on this camera.
Files cannot be deleted.	The file is protected.	Cancel protection.
	You played back a memory card that was not formatted by this camera.	Load a card that was formatted and stored on this camera.
Cannot format a memory card.	The memory card is write-protected.	Remove the write-protection.
	End of memory card life.	Load a new memory card.
The playback image is dark though I used the flash.	The LCD monitor is too dark.	Adjust the brightness of LCD monitor in the SYSTEM MENU.

14.TROUBLESHOOTING

Other Problems

Symptom	Cause	Measure
Cannot load the memory card.	The card is facing the wrong way.	Load correctly.
Even when the digital video camera's buttons are pressed, it does not operate.	The battery is running low.	Recharge the battery.
	Digital video camera malfunction.	Turn the power off and remove the battery, then try again.
The date and time are wrong.	The correct date and time are not set.	Set the correct date and time.
The date set has disappeared.	The battery was removed with the power still on.	Set the date and time again.

About connecting to your computer/software

Symptom	Cause	Measure
Cannot download files.	The free space on the hard disk drive of your computer may be insufficient.	Check whether the hard disk drive has enough space for running Windows, and if the drive for loading files has a capacity of at least that of the memory card inserted in the digital video camera.
	No power supply.	Recharge the battery or turn the power on.
	The USB driver is not installed (for Windows 98/98SE).	Install USB driver.



Electrical and electronic equipment (EEE) contains materials, parts and substances which can be dangerous to the environment and harmful to human health if waste of electrical and electronic equipment (WEEE) is not disposed of correctly.

Equipment which is marked with the WEEE logo (as shown on the left), should not be thrown away with your household waste. Contact your Local Authority Waste Disposal Department as they will be able to provide details of the recycling options available in your area.