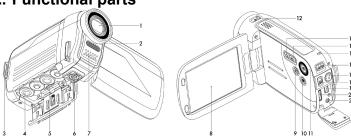


Manual

1. Key features of your camcorder

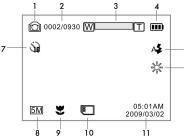
HD digital video camcorder - 1280x720 up to 30fps HDTV HDMI output Slot for SD Memory card, up to 32GB SD card capacity
Driver free for Windows XP / Vista and MAC 10.4.9 or above
Built-in IMAGE STABILIZATION function Macro / Normal lens setting

2. Functional parts



	Part	Function	
1	Lens	Optical lens for Video & picture taking	
2	Flash	Flash strobe activates when indoor or dark environment	
		pictures taken. The best flash distance is within 5 feet (1.5m).	
3	Strap hook	For attaching the wrist strap to the camera.	
4	Battery	Press up door latch, release and swing open battery door.	
	,	Insert 4x AA alkaline batteries into the camera	
5	SD card slot	Slide and carefully insert SD Card.	
6	Tripod socket	Use this socket to attach to tripod.	
7	Speaker	Built in Speaker.	
8	LCD screen	LCD shows images, video clips, camera Settings and Menu.	
9	Playback button	Press button to enter the Playback PICTURE mode, press	
	,	again switching to Playback VIDEO mode.	
10	Menu	Press to Set PICTURE / VIDEO recording options.	
11	Power Button	Press Power button to turn camera ON, press again to turn	
<u></u>		OFF	
		Macro mode: Select this mode only when taking close-up	
12	Macro / Normal Lens switch	pictures or video recording at 4 to 8inches (11 to18cm)	
'2		A Normal mode: Select this mode when taking typical	
		pictures or video at further than 2 feet (0.6M) from camera	
13	LEFT/ Flash button	Press for flash options selection in photo mode and for LEFT	
13	LEF I/ Flasii bulloli	selection in menu mode.	
14	RIGHT /	Press for RIGHT selection in menu mode and exposure value	
14	EV± button	setting in photo/video mode.	
15	Busy LED	When the indicator is lit. The camera is busy.	
16	Mode Button	Press button to select mode: PICTURE taking or VIDEO	
	Wode Bullon	recording.	
	Shutter / OK Button	Press this button to take Still PICTURE; to Start or Stop	
17		recording VIDEO clip, or to confirm changes (OK) in menu	
		mode.	
18	UP / DOWN Button	Zoom IN /OUT during recording mode. & browse UP/ DOWN	
1		for Menu options.	
19	USB interface	For transfer of images, video to computer via USB cable.	
20	HDMI socket	Slide open connectors' cover. Socket for cable connection: Use	
<u> </u>		supplied HDMI cable for HDTV connection.	
١.,	TV OUT socket	Slide open connectors' cover	
21		Socket for cable connection: Use supplied TV cable for video	
		and audio connection to standard TV.	

3. Explanation of the status icons



Item	Function	Description	
1	Recording mode	Photograph mode. Video mode.	
2	Counter indicator	Shows available time for recording VIDEO Shows active recording VIDEO time Shows picture stored / left in PHOTO mode	
3	Digital zoom	Shows digital zoom range	
4	Battery indicator	Battery is full Empty battery	
5	Flash indicator (PHOTO mode only)	Fill in flash: Flash will be always active regardless of scene brightness Auto Flash: The camera determines when the flash should be activated or not. No Flash: The flash is turned off.	
6	White balance	te balance selection.	
7	Self timer	On / Off	
8	Selected resolution	Photo-3 Mpix, 5Mpix, 8Mpix Video-QVGA,WVGA,720P30,	
9	Normal / Macro mode indicator	Normal mode (0.5m – infinity). Macro mode (11cm –18cm).	
10	SD card indication	The SD card is inserted and will be used as storage for PHOTO and VIDEO	
11	Date and Time Setting	This data will not be printed on taken pictures or video, but it may be read as the reference data	

4. Details for camera setting

Quality	Super Fine(default) / Fine /Normal	Picture quality setting	
	3.0M pixel resolution	2048 x 1536 pixels	
Size	5.0M pixel resolution	2592 x 1944 pixels	
	8.0M pixel resolution	3200 x 2400 pixels	
Self-timer	On	Self-timer selected, 10 sec delay	
Sell-ulliel	Off	Turn off the self-timer, disable	
VIDEO setting In video mode, press the MENU button to enter video set up mode.			
	720P30	HD (1280x720), up to 30fps	
Resolution	WVGA	WVGA (848x480), up to 60fps	
	QVGA	QVGA (320x240), up to 30fps	
Quality Super Fine(default) / Fine / Normal		VIDEO quality setting	
Available scene In photo/video se options		button to enter effect / scene adjustmen Set for American electricity frequency	
Flicker	50Hz	Set for European electricity frequency	
White Balance	Auto (Default)	Automatic white balance	
	Sunny	White balance selected for Sunny sky	

	Fluorescent	White balance selected for fluorescent	
	Tidorescent	indoor light	
	Incandescent	White balance selected for tungsten indoor lighting	
Contrast	Standard / Hard / Soft	Scene contrast setting options	
Sharpness	Standard / Hard / Soft	Sharpness setting	
AE meter	Center / Average / Spot	AE meter setting	
AE ISO	Auto/100/200/400	ISO setting, Auto as default	
Setup In photo/video setup mode: press RIGHT or LEFT button to enter camera basic setup options			
Language	English / Deutsch / French / Italian/ Spanish / Nederlands / Portuguese/ CHS / CHT/Thai	Select display language	
T) / h	NTSC	American and Japanese TV format	
TV type	PAL	European TV format	
Date / Time	Year / Month / Day / Hour / Minute	This data will not be printed on taken pictures or video, but it may be read as the reference data	
Display	Off / Date/ Time / Date & Time	Show the Date, Time or the date and time on the LCD screen	
Format	Yes / No	Format the SD card	
Default	Yes / No	Refresh the default setting	
	Off	Auto Power-Off off	
Auto Power-Off	3 min (default)	Auto power off in 3 min if no operation	
	5 min	Auto power off in 5 min if no operation	
Version			

Note: The camera will remain in the last setting when it is turned OFF and ON again

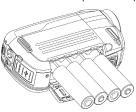
5. Using the camera

5.1 Installing the battery

- Open the battery door.
 Insert 4x AA alkaline batteries into the camera.
 Turn on the DV (camera).

Turn on the DV (camera).

Press the POWER button or open the LCD panel to turn on it.



5.2 Inserting a memory card (not included)

You must insert SD Card (not supplied) to record and store your VIDEO and PICTURES. Inserting the SD Memory card:

- 1. Turn OFF the camera.
- 2. Insert the SD card into the SD card slot, gently press it down until card is latched. Make sure that the SD card is not in LOCK position (see tiny slider on card's side).

Note: Do not force the card into the slot; forcing may damage camera and the SD memory card. Align SD card position (as marked) and try again.

Note: The SD memory card must be formatted before taking photographs. See the following instruction.



5.3 Formatting the SD memory card

If your SD card is new, or it was used with other cameras or devices, you need to FORMAT the card, see simple steps below. If card was previously used, save all needed images & video first.

- In photo/video setup mode, Press LEFT or RIGHT button to enter basic set up mode.
- Select FORMAT icon by pressing the DOWN button ▼ and press Shutter / OK button to confirm, select YES by pressing the LEFT button
- 3. Press Shutter / OK button to confirm formatting the SD card.

Note: During formatting of the SD card ALL data, pictures & video (if present) will be erased; make sure you save your valuable records before formatting the memory.

Remember, all your records will be erased during formatting!

5.4 Setting the resolution

VIDEO recording mode

- 1. Press the MENU button in video mode to enter options.
- Select the RESOLUTION by pressing the UP ▲ or DOWN ▼ buttons, then press Shutter / OK button ♠ to enter resolution selection.
- Select desired resolution using the UP ▲ or DOWN ▼ buttons;
 720P30 (1280 x 720), WVGA (848 x 480) or QVGA (320 x 240), then press Shutter / OK button to confirm setting.

PICTURE taking mode

- 1. Press the MENU button in photo mode entering options.
- 2. Select the SIZE icon using the DOWN ▼ button, press Shutter / OK button to confirm.
- Select desired resolution using UP ▲ or DOWN ▼ buttons;
 3.0M (2048 x 1536), 5.0M (2592 x 1944), 8.0M (3200 x 2400),
 then press shutter / OK button to confirm the setting.

5.5 Taking video or pictures

- 1. Open screen / turn on your camera.
- 2. Press the MODE button to select PICTURES for VIDEO recording mode
- Depending on the distance to the object being photographed, use the Macro / Normal Lens switch to adjust the focus.

Use NORMAL when taking a typical video or photograph of surroundings, people (1.6ft / 0.5m to infinity), or set Lens to Macro (flower symbol) if you wish to take a close-up photograph (4 to 7 inches / 11cm –18cm).

- 4. Use the LCD screen as a viewfinder composing the scene.
- Press the Shutter / OK button for taking a PICTURE, or press this button to start / stop VIDEO recording.

Note: 1. Keep camera and the object steady when making records to avoid blurry images.

2. Max video file size is 4GB. The unit will stop recording automatically.

5.6 Zoom IN and OUT

Your camera has 1:3 zooming range.

Push UP ▲, DOWN ▼ button to select desired scene / view.

Note the Zoom bar (on top of the LCD screen to control zooming range).

5.7 Playback PICTURES and VIDEO clips

- Press the PLAYBACK button once to enter PICTURES Playback mode, press it again to enter VIDEO Playback mode (note Playback camera / video icons on top of LCD screen).
- 2. Use UP / DOWN / LEFT / RIGHT buttons to select desired PICTURE or VIDEO.
- 3. Press OK to playback selected VIDEO or see full size PICTURE.
- When viewing a photo, you may push the ▲ or ▼ buttons to zoom in or out.
- When viewing video clips, Press the Shutter / OK button to start playing the video and press again to pause.
- 6. When playing the video, press RIGHT / LEFT button to fast forward or rewind the VIDEO,

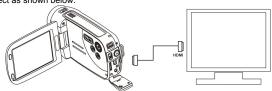
5.8 Delete photographs and video clips

- Press the PLAYBACK button once to enter the PHOTO playback mode, or press again to enter VIDEO clip playback mode.
 Select the photo or video to delete.
- Select the photo of video to delete.
- 2. Press the MENU button to enter the delete mode.
- Press the ▲ or ▼ button to select delete one or delete all and press the Shutter / OK button to confirm.
- 4. If you select File protection, your current file or images can not be deleted.
- 5. Press the MODE button to exit.

6. Connecting the HD DV camera

6.1 Connect to TV

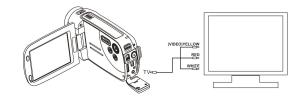
When you wish to view on **High Definition (HD) TV**, please use supplied HDMI cable and connect as shown below:



Set your HDTV to corresponding HDMI INPUT (review TV Manual if needed) and use camera buttons in the same way as you use camera during PLAYBACK mode.

Enjoy watching pictures and HD VIDEO on large HDTV screen!

You may also view PICTURES and recorded VIDEO clips on typical **standard TV set**. Make connection as shown below:



6.2 Connect to Personal computer

You may also connect your HD camcorder to PC and view PICTURES and VIDEOS on the computer monitor as well as expanding your system to enjoy a wide range of functions. You may edit your videos and images and send them to friends over the Internet or even post your own VIDEOS on YouTube! Millions of people may view them!

Upload to YouTube

Please install MEDIAIMPRESSION. This software enables upload to YouTube. This will take you directly to YouTube website for easy upload of videos.

Installing DirectX and ArcSoft MediaImpression

- Please insert provided CD into computer's CD ROM and follow screen prompts to install DirectX and MediaImpression in your computer
- 2. Use USB cable to connect HD camcorder to computer
- 3. Open My Computer> Removable Disk and select image or video file
- 4. Click to open and watch High definition video played back.

You may also install QuickTime (not bundled on supplied CD) or other suitable programs for best video playback.

HD Video data is very complex; use Win XP, Vista, Mac9.x and newest computers – older and slower computers may not play your HD Video clips so well.

7. Specification

Image Sensor	5.0 Mega pixel CMOS sensor		
	VIDEO	HD 1280x720pixels, up to 30fps	
		WVGA 848x480pixels, up to 60fps	
lancara accelettara		QVGA 320x240pixels, up to 30fps	
Image resolution	PICTURE	8.0 Mega pixel (3200x2400)	
		5.0 Mega pixel (2592x1944)	
		3.0 Mega pixel (2048x1536)	
Lens	F/2.8 f=8.5mm		
Focus range	2 feet (0.6m) to Infinity		
Macro mode	4 to 7 inches (11cm – 18cm)		
Digital zoom	3x range		
LCD display	3.0" fine grad	e LTPS color LCD display	
White balance	Auto / Sunny / Cloudy / Fluorescent / Incandescent		
VIDEO format	MOV		
Built-in memory	For camera function only		
External memory card	, , , , ,		
File format	VIDEO: MOV; PICTURE: JPEG		
Self timer	10 second options		

PC interface	USB 2.0 port
Power source	4x AA alkaline batteries
TV-out	High Definition VIDEO: HDMI Standard TV (NTSC or PAL) output: AV standard port

8. PC system min requirement

Operating System	Windows XP(SP2), Vista or above Mac 10.4.9 or above
CPU	Pentium III/ 1GHz (minimum) Pentium 4 / 3.0GHz or above processor (recommended)
RAM	At least 256MB (minimum) 1GB (recommended)
Interface	USB available port
Display Card	nVidia Geforce 7600 or ATI X 1600 or above

9. Troubleshooting

Problem	Cause	Solution
Cannot turn ON the camcorder	Low battery power. Battery not inserted properly.	Replace with new 4x AA alkaline batteries. Check that battery correctly aligned when installed
VIDEO or PICTURES cannot be saved when you are taking them.	SD card has not been installed The SD card has not been formatted properly. Memory is full. Display shows 'MEMORY FULL'.	Install SD card SETUP mode of the camera. Please refer to section 5.3. Download the pictures and videos from the camera to the computer to create storage space.
Computer does not recognize your camcorder when connected. (You cannot find removable disk)	Connection failure.	Make sure all cable connections are secured. Restart the computer if necessary.
The battery life is very short.	Incorrect or old, used up, battery	Replace with new 4x AA alkaline batteries
Blurry images	The HD camera is not held steady during recording The lens of HD DV camera is dirty. Incorrect Lens focus setting	1. Hold the HD DV camera steady when taking pictures, wait to hear the beep sound 2. Clean the lens with soft dry cloth. 3. Set the Macro / Normal lens focus according to the proper camera to subject distance. Use "Normal" setting as appropriate for typical situations.

