Digital Video Camcorder
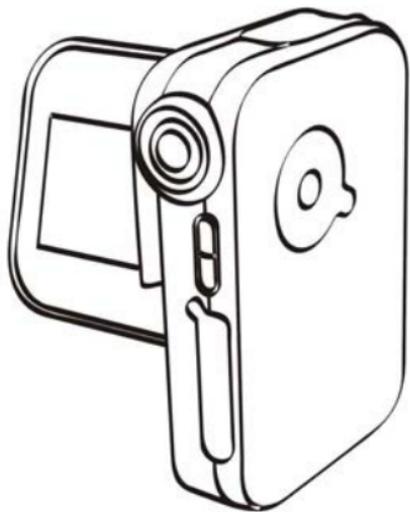
USER MANUAL

Table of Contents

1

Table of Contents

Table of Contents

Welcome

Thank you for choosing the Camera to pursue your DV adventures. Whether you are creating memories of your friends and family or exploring the great outdoors to get the utmost satisfaction from your DV, please take a moment to read through this manual. Its contents will send you on an educational journey into your camera's multiple capabilities.

1. Camera Precaution

Before using the camera, please ensure that you read and understand the safety precautions described below. Always ensure that the camera is operated correctly.

- Never operate the camera inside of an aircraft or anywhere else where operation of such devices is restricted. Improper use creates the risk of serious accident.
- Do not aim the camera directly into the sun or other intense light sources which could damage your eyesight.
- Do not try to open the case of the camera or attempt to modify this camera in any way. High-voltage internal components create the risk of electric shock when exposed. Maintenance and repairs should be carried out only by authorized service providers.
- Do not fire the flash too close to the eyes of animals or people, especially for young children. Eye damage may result. In particular, remain at least one meter away from infants when using flash.

- Keep the camera away from water and other liquids. Do not use the camera with wet hands. Never use the camera in the rain or snow. Moisture creates the danger of fire and electric shock.
- Keep the camera and its accessories out of the reach of children and animals to prevent accidents or damage to the camera.
- If you notice smoke or a strange odor coming from the camera, turn the power off immediately. Take the camera to the nearest authorized service center for repair. Never attempt to repair the camera on your own.
- Use only the recommended power accessories. Use of power sources not expressly recommended for this equipment may lead to overheating, distortion of the equipment, fire, electrical shock or other hazards.
- Never apply too much force when cleaning the surface of the lens. Doing so can scratch the lens surface and cause malfunction?
- The camera may become slightly warm during use. This does not indicate malfunction.
- If the exterior of the camera needs cleaning, wipe it with a soft, dry cloth.

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential I installation. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instruction, it may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment on the off, the user is encouraged to try to correct the interference by one or more the following suggestion.

- Reorient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to a different power outlet other than the one where the receiver is connected.
- Consult an experienced television or radio technician for help.

CAUTION

To comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules, this device must only be installed on computer equipment certified to comply with the Class B limits.

2. Preparation

Standard Accessories
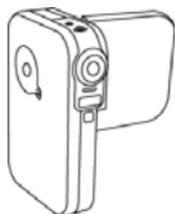
DV

Manual
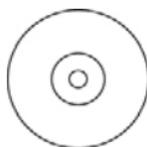
CD

Carry Bag

Lithium Battery

Strap

USB cable
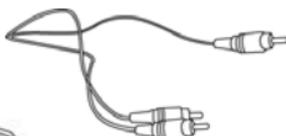
TV cable
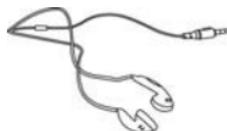
Earphone
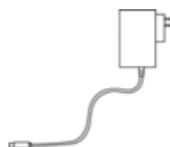
AC Adaptor

Part Names

Front View

Microphone

Macro Mode

Power Button

Lens

Speaker

Self-timer LED

Flash Strobe

Shutter Release Button

Back View

Multi Function Button

Green/Red LED

OK Button

2.0" LTPS Color Monitor

Menu

Mode

Earphone Port

Av Output Port

SD Card Slot and Battery Compartment

USB Port
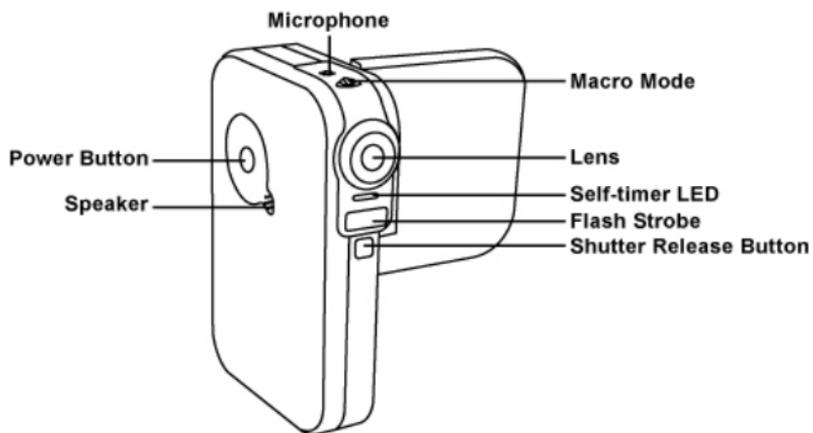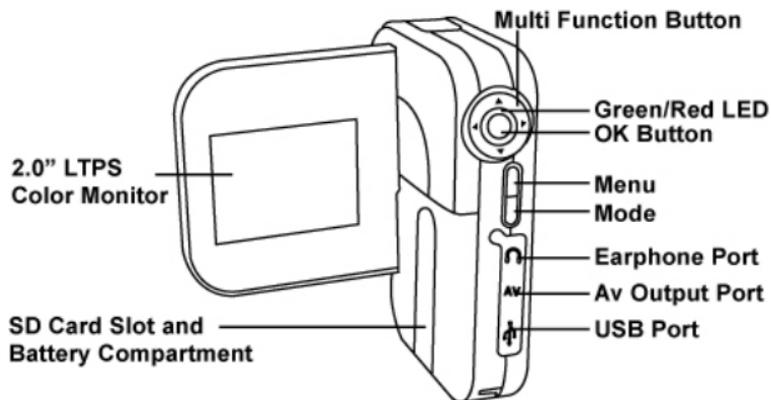
Installing the Battery Pack

1. Open the LCD monitor up.
2. Open the battery cover by lightly pressing and sliding it.
3. Fit in the battery with its label facing upward and pay attention to the indicated polarity (+ and -).
4. After the battery is set, close the battery cover.
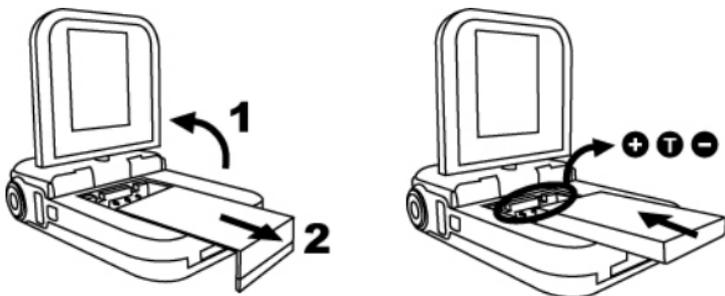
Battery power status

Charging the Battery Pack

The battery pack is not charged at the time of purchase and therefore need to be charged before use. If the battery charge becomes low while you are using the camera, it is recommended to recharge it as soon as possible.

1. Insert the battery pack into the battery compartment of camera, pay attention to the indicated polarity (+ and -).
2. To connect the AC adaptor to a power outlet.
3. When the battery pack is fully charged, the LED light is red become to green, remove it from the AC adaptor.
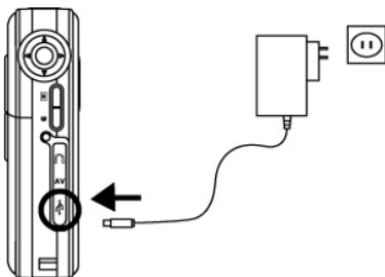
CAUTION

* If there is leaking, discoloration, change of shape, rise in temperature, damaged exterior, strange odor or any other abnormal condition, immediately discontinue use and remove the battery pack from the camera, taking care to keep it well away from fire.
* To conserve the environment and for efficient use of natural resources, please discharge the used battery pack, cover the (+) and (-) terminals with tape and recycle the insulated battery pack.
* If disposing the battery pack as unburnable trash, please follow all applicable regulation of your area.

Inserting the SD/MMC Card

1. Open the LCD monitor up.
2. Open the battery cover by lightly pressing and sliding it.
3. Insert SD/MMC cart into memory card slot and push it all the way in.
4. Close the battery cover.
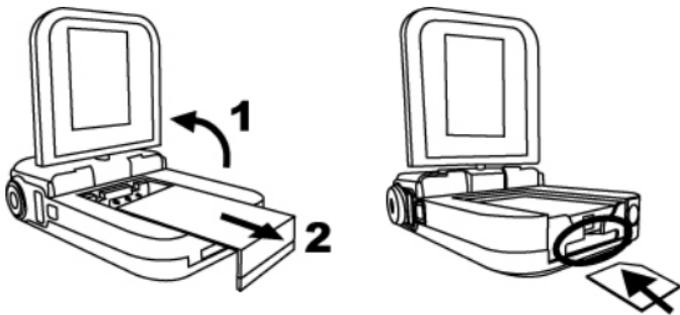
When the optional SD card is installed:

* All images by default will be automatically stored in SD/MMC card
* With SD/MMC card installed, the video clips/ images/ audio clips in built-in memory cannot be played back. To playback the video clips/ images/ audio clips in built-in memory, remove SD/MMC card first.
* When you format camera, it would format the video clips/ images/ audio clips on SD card only. To format the video clips/ images/ audio clips which on built-in memory, remove SD card.

3. Quick Start

Using the LCD Monitor

1. Open the LCD Monitor as shown and the same time the turn the camera power on.
2. Adjust the LCD Monitor angle according to the desired recording/ playing angle. The LCD Monitor can rotate up to angle 270° maximum.
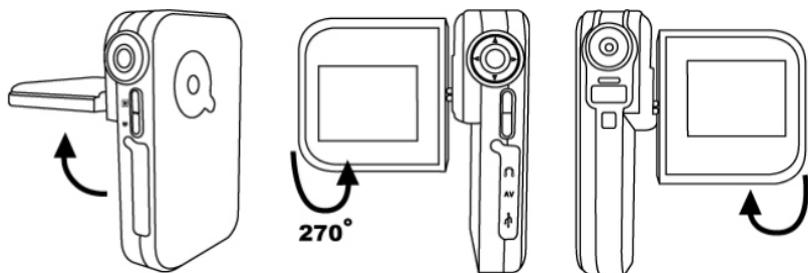
Powering the camera ON/ OFF

Power ON
1. Press the Power Button to turn on or open the LCD Monitor to turn on. The green LED light up indicate power is on.
2. When the LCD Monitor has been activated, the camera is ready to use.
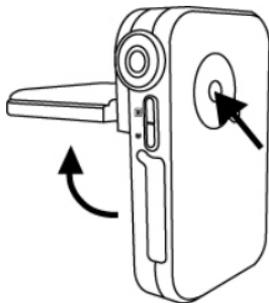
Power OFF
1. Press the Power Button to turn the camera off or close the LCD Monitor to turn off.
2. The camera also turns off automatically for power save reason. To set the Auto Power Off, please refer to page 16.

Setting

Press Mode Button to select Setting Mode and then press OK button to enter Setting Mode.

Startup Screen

1. Under Setting Mode.
2. Select Startup Screen Mode and press OK button.
3. Select "S" icon, you can choose one of your still images to be startup screen.
4. Select "D" icon, it is default startup screen.
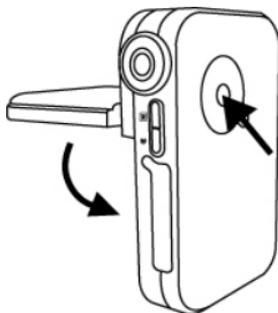
Date & Time

1. Under Setting Mode.
2. Press ▶ to select Date & Time Mode and press OK button to change the Year/ Month/ Day/ Hour/ Minute.
3. Press the ▲ and ▼ to adjust, and press OK button to set.

Sound

1. Under Setting Mode.
2. Press ▶ to select Sound Mode and press OK button to adjust the volume.
3. Press ▶ to adjust the volume you want to change, and press OK button to set.
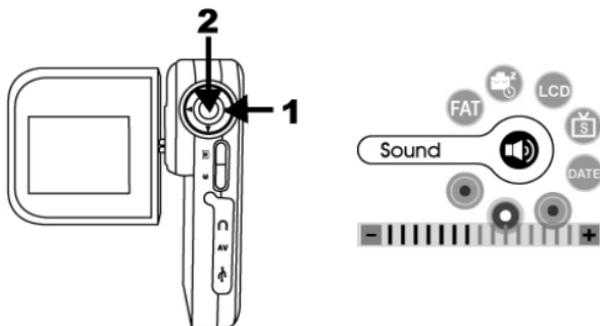
Format
1. Under Setting Mode.
2. Press ▶ to select Format Mode and press OK button
3. Select Yes and Press OK button to confirm.

Auto Power Off
1. Under Setting Mode.
2. Press ▶ to select Auto Power Off Mode and press OK button.
3. Press ▶ to select the 1min/ 3min/ 5min you want to change, and press OK button to set.
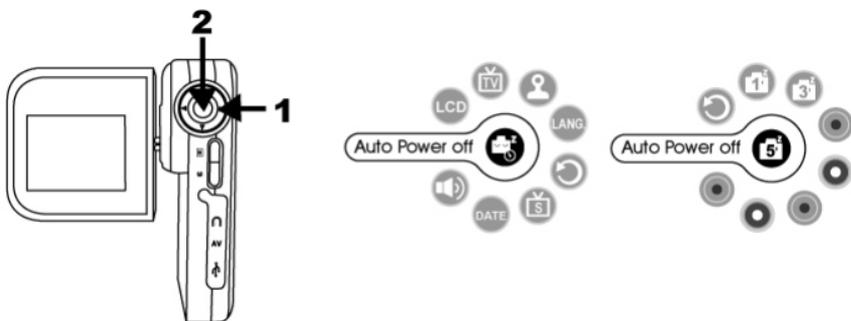
LCD Brightness
1.   Under Setting Mode.
2.   Press ▶ to select LCD Brightness Mode and press OK button.
3.   Press ▶ to adjust the brightness you want to change, and press OK button to set.
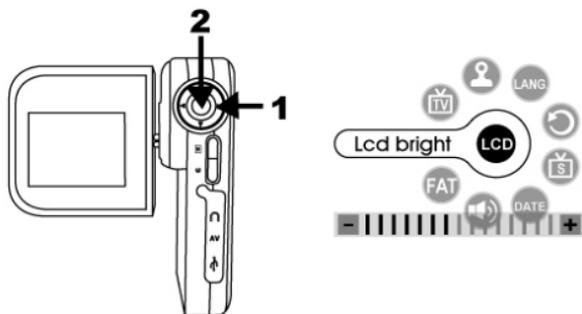
TV system
1.   Under Setting Mode.
2.   Press ▶ to select TV system Mode and press OK button
3.   Press ▶ to select NTSC/ PAL you want to change, and press OK button to set.
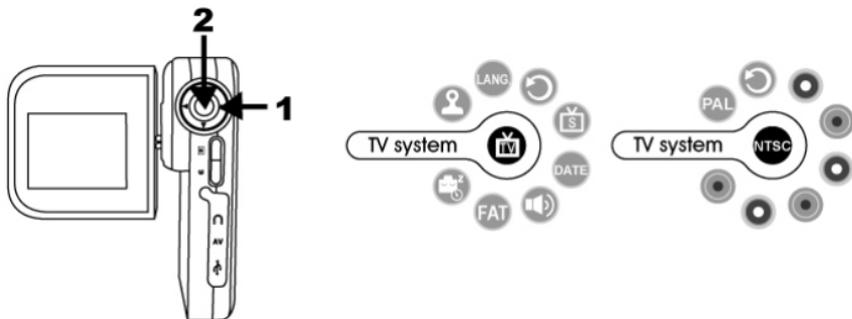
Date Stamp
1. Under Setting Mode.
2. Press ▶ to select Date Stamp Mode and press OK button.
3. Press ▶ to select YMD/ MDY/ DMY/ Off you want to change, and press OK button to set.
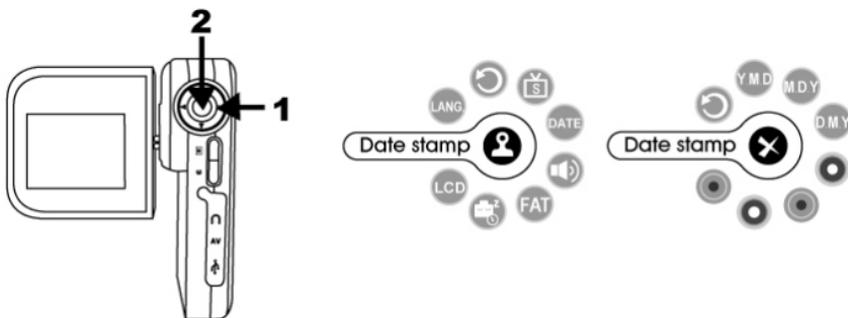
Language
1. Under Setting Mode.
2. Press ▶ to select Language Mode and press OK button.
3. Press ▶ to select languages you want to change, and press OK button to set.
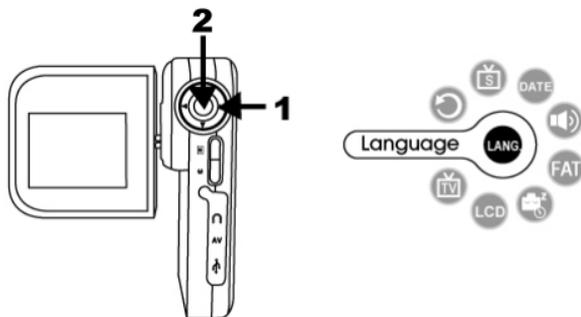
4. Language reference table

EG	English	TC	Traditional Chinese
DE	German	SC	Simplified Chinese
FR	French	JP	Japanese
ES	Spanish	KR	Korea
IT	Italian	TH	Thailand
PT	Portuguese	RU	Russia
NL	Dutch	AB	Arabian
PL	Polish		

Taking Picture

Recording Video Clips
1. Power on the camera or flip out the LCD monitor.
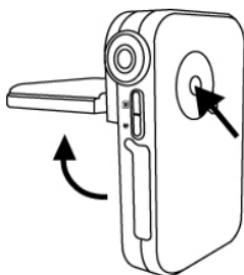

2. Press the Shutter Release Button to start recording.
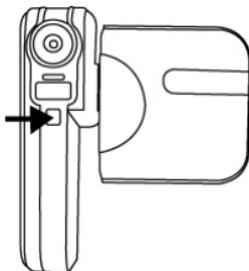
3. Press the Shutter Release Button again to stop recording.

Capturing Still Images
1. Power on the camera or flip out the LCD monitor.
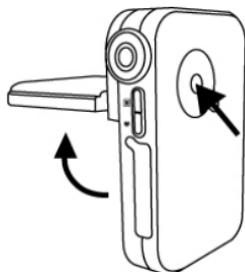
2. Press the Mode Button and the ▶ to switch to Still
   Mode. Press OK Button for confirmation.
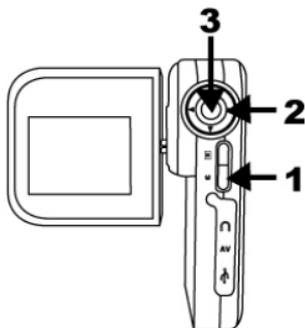
3. Press the Shutter Release Button to take a picture.
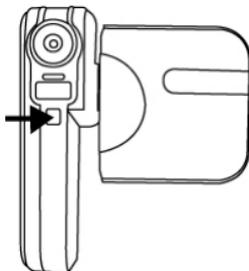
Basic Shooting Functions

Using the Zoom
1. Under Video mode and Still mode.
2. Use the LCD monitor to frame your subject.
3. Press the ▶ zoom in and ◀ zoom out to record a video clip or take a picture.
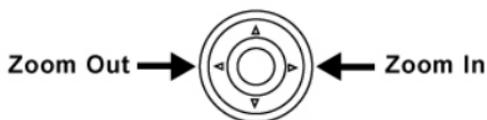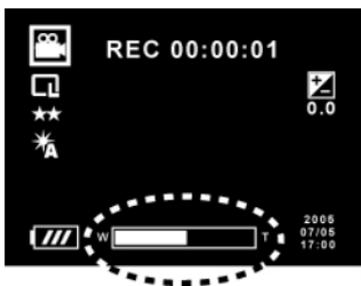
Adjust Exposure Compensation
1. Under Video Mode and Still mode.
2. Press the ▲ and ▼ to adjust the exposure compensation.
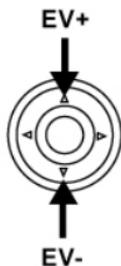
Flash Setting
1. Under Still mode.
2. Press OK button to change the flash mode- auto/
   red-eye reduction/ off/ force on.

$\huge ⚡_A$ auto

$\huge ⚙_A$ red-eye reduction

$\huge ⊘$ off

$\huge ⚡$ force on
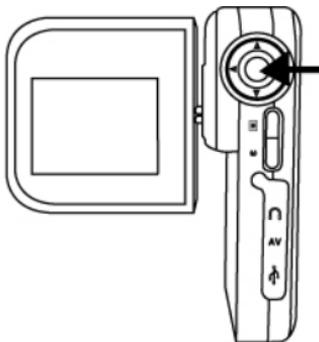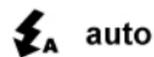
Using Macro Function
1. Under Still mode.
2. Switch the macro mode, you can select one of three
   difference modes: Macro ❀ , Portrait ❧ and
   Infinity ⛰ .

❀ Macro: 23cm

❧ Portrait: 1~ 4M

⛰ Infinity: 4M ~ ∞

23
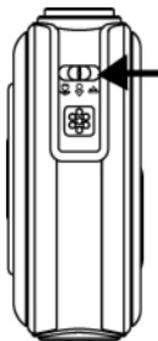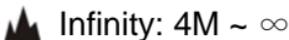
4. Advance Mode

Video Mode

The Camera is default on Video Mode.

Resolution

1. Under Video Mode
2. Press Menu mode and select Resolution, press OK button to confirm.
3. Press ▶ to select 640 (640x480) or 320 (320x240) you want to change, and press OK button to set.
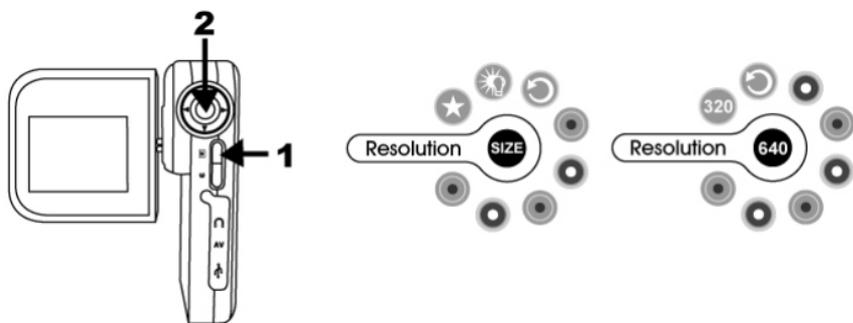
Video Quality
1. Under Video Mode
2. Press Menu mode and select Quality, press OK button to confirm.
3. Press ▶ to select Super high/ High/ Normal you want to change, and press OK button to set.
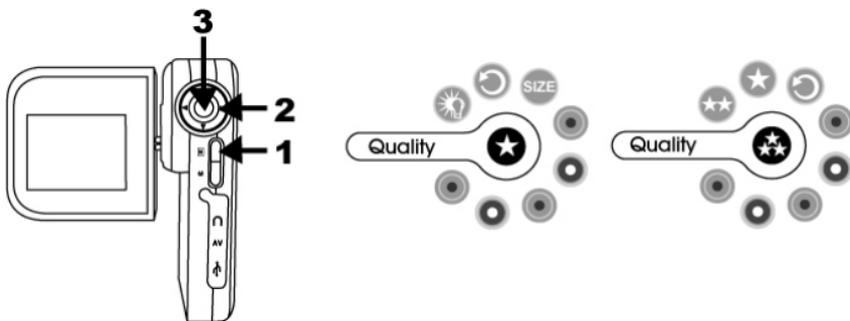
White Balance
1. Under Video Mode.
2. Press Menu mode and select White Balance, press OK button to confirm.
3. Press ▶ to select Auto/ Daylight/ Shade/ Fluoresce/ Tungsten you want to change, and press OK button to set.
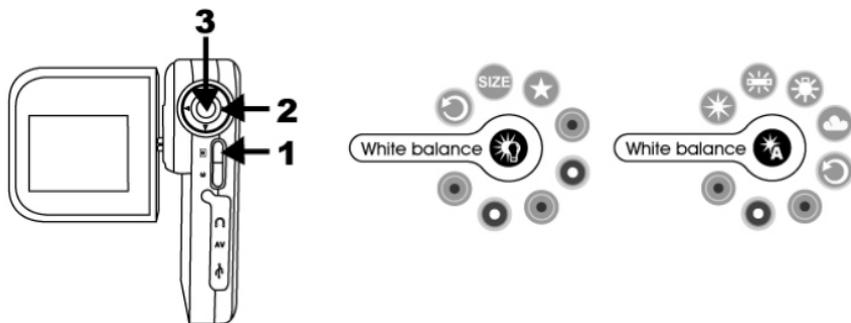
Still Mode

Press Mode Button to select Still Mode and then press OK button to enter Still Mode.
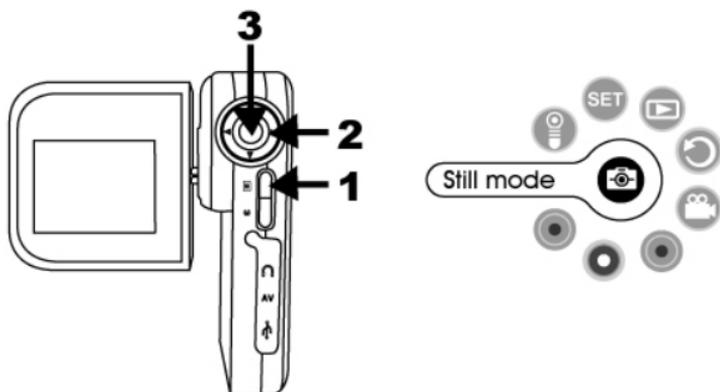
Resolution

1. Under Still Mode
2. Press Menu mode and select Resolution, press OK button to confirm.
3. Press ▶ to select XL (4000x3000)/ L(2048x1536)/ M(1600x1200)/ S(1280x960) you want to change, and press OK button to set.
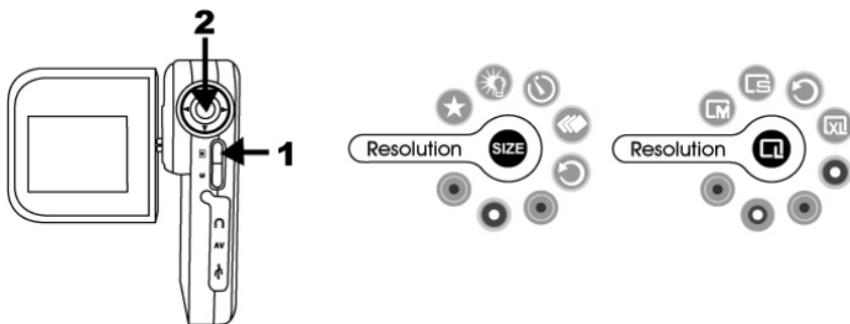
Image Quality

1. Under Still Mode
2. Press Menu mode and select Quality, press OK button to confirm.
3. Press ▶ to select Super high/ High/ Normal you want to change, and press OK button to set.

White Balance

1. Under Still Mode.
2. Press Menu mode and select White Balance, press OK button to confirm.
3. Press ▶ to select Auto/ Daylight/ Shade/ Fluoresce/ Tungsten you want to change, and press OK button to set.

Self-timer
1. Under Still Mode.
2. Press Menu mode and select Self-timer, press OK button to confirm.
3. Press ▶ to select 10sec./ 30sec./ Off you want to change, and press OK button to set.
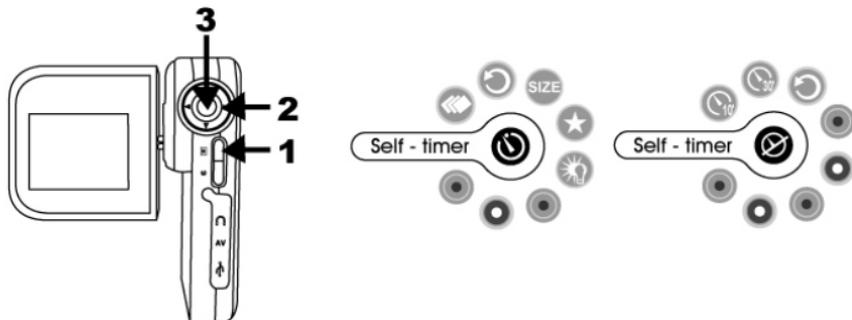
Burst
1. Under Still Mode.
2. Press Menu mode and select Burst, press OK button to confirm.
3. Press Shutter Release button to capture 3 images continuously.
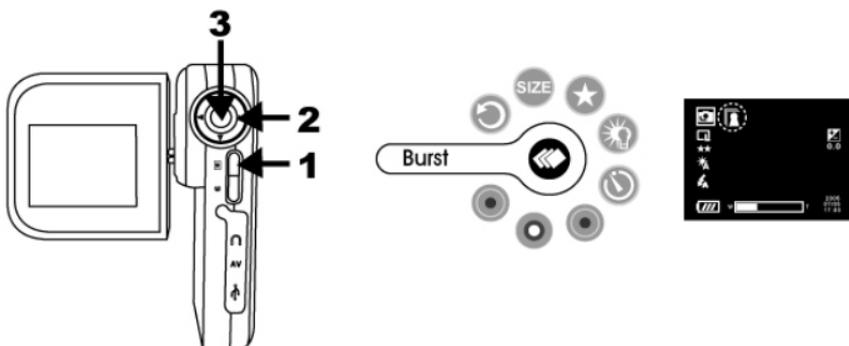
Voice Mode

1. Press Mode Button and the ▶ to switch Voice Mode, press OK button to enter Voice Mode.
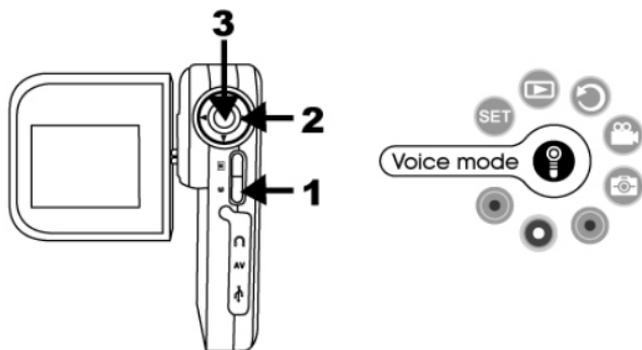
2. Press the Shutter Release Button to start recording
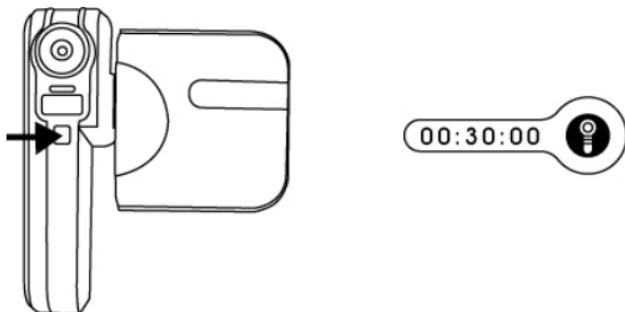
3. Press the Shutter Release again to stop recording.
4. The DV will keeping recording voice message when close the LCD monitor.
   To press the Shutter button or turn off the Power button to stop recording.

Playback Mode

Press Mode Button and the ▶ to switch Playback Mode, press OK button to enter Playback Mode

Movie Playback

1. Under Playback mode.
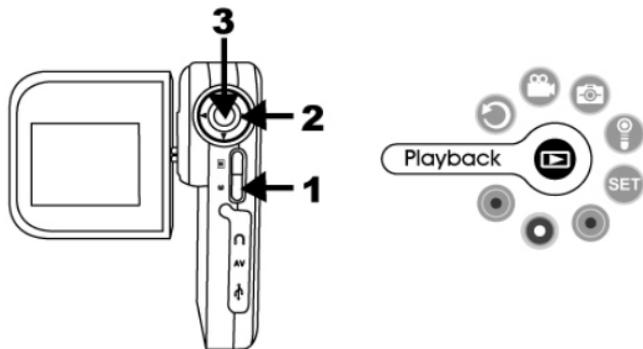
2. Select Movie and press OK button to enter Movie playback mode.
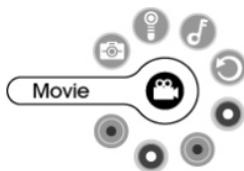
3. Press ▶ or ◀ to select your video and press OK button to play video.
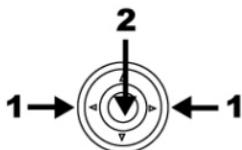
4. Press OK button can pause, press OK button again can release.
5. Press Menu Mode, you can select **Thumbnail, Protect, Delete, Play single or Play all** functions by pressing ▶ or ◀ and OK button.
6. Press Mode button to return Playback Mode menu.

Delete Movie
1. Under Movie Playback Mode.
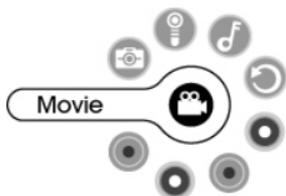
2. Press Menu Mode, press ▶ to select Delete mode and press OK button.
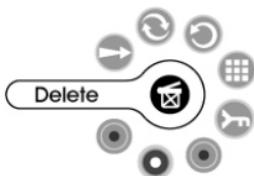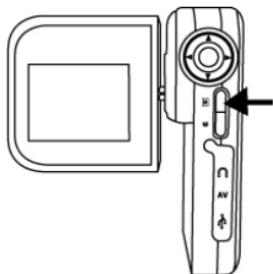
3. You can select to delete all movies or single movie.

Picture Playback

1. Under Playback mode.
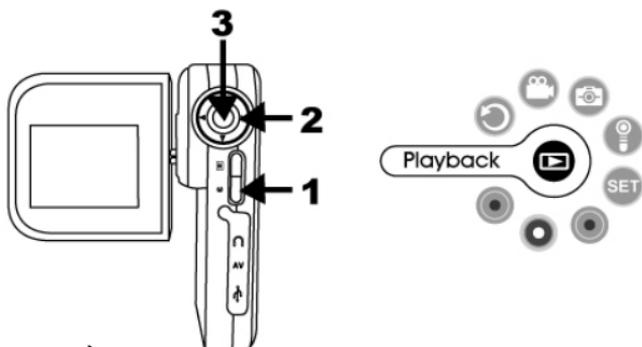
2. Press ▶ to enter to Picture Playback Mode and press OK Button.
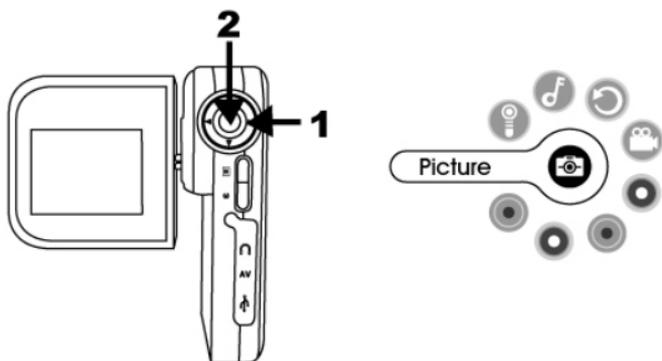
3. Press ▶ or ◀ to select your picture and press OK button to view picture.
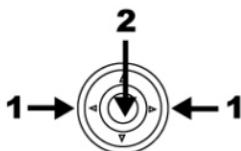
4. Press ▲ to pan to a specific area to view.

x1 zoom   x2 zoom   x4 zoom
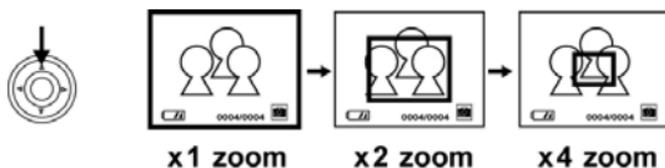
5. Press OK button to fix the zoom frame from green to red. Press ▶ and ◀ (right/ left) or ▲ and ▼ (up/down) to move to a specific area you want to zooming inward.
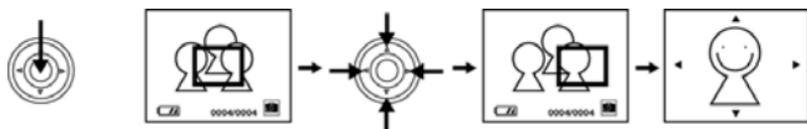

6. Press OK button again to return the original picture playback status.
7. Press Menu Mode, you can select **Thumbnail, Protect, Delete, DPOF or Slides show** functions by pressing ▶ or ◀ and OK button.
8. Press Mode button to return Playback Mode menu.

Delete Picture
1. Under Picture Playback Mode.
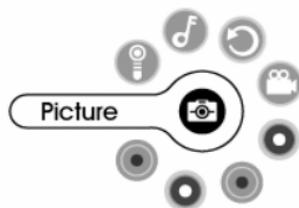

2. Press Menu Mode, press ▶ to select Delete mode and press OK button.
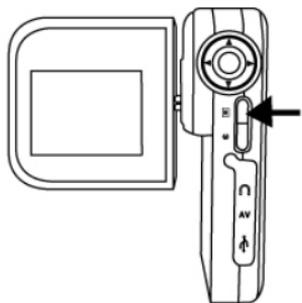
3. You can select to delete all pictures or single picture.

Voice Playback
1. Under Playback mode.
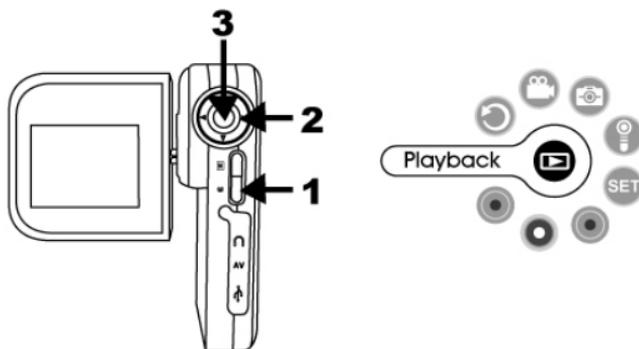
2. Press ▶ to enter to Voice Playback Mode and press OK Button.
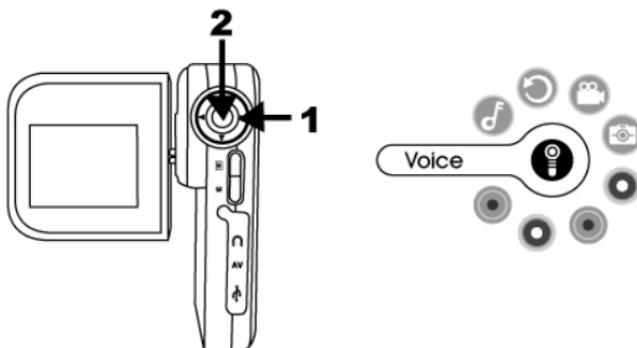
3. Press ▲ or ▼ to select your voice message and press OK Button to play.
   Press OK Button again to stop.
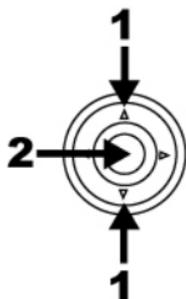
4. Press ▶ or ◀ to adjust the volume.
5. Press Menu Mode, you can select **Delete, Play single, Play all** functions by pressing ▶ or ◀ and OK button.
6. Press Mode button to return Playback Mode menu.

**Delete Voice Message**

1. Under Voice Playback Mode.

2. Press Menu Mode, press ▶ to select Delete mode and press OK button.
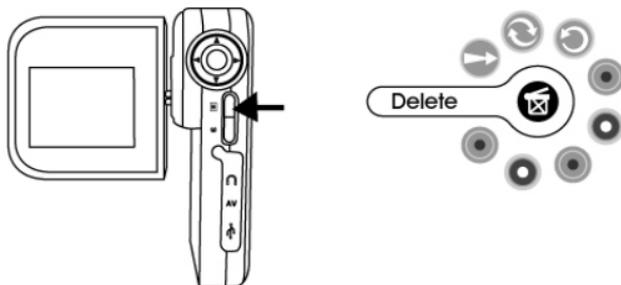
3. You can select to delete all voice messages or single voice message.

MP3 Playback

1. Under Playback mode.
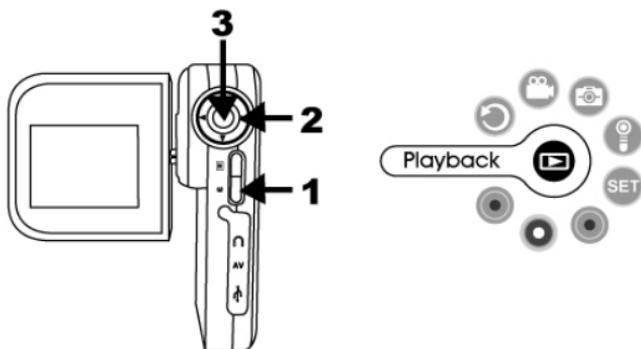
2. Press ▶ to enter to MP3 Playback Mode and press OK Button. This MP3 Playback Mode is default on play all.
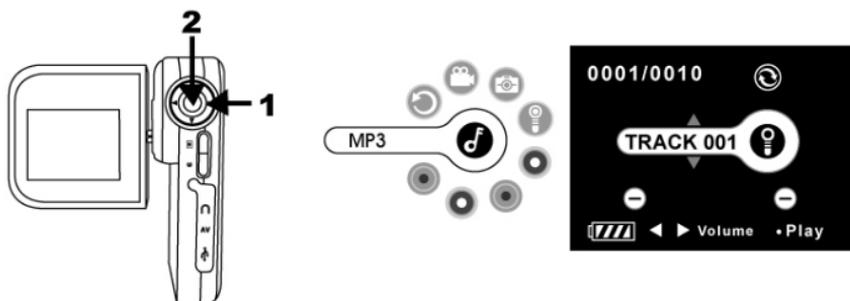

3. Press OK Button again to stop playing.
4. Press ▶ or ◀ to adjust the volume.
5. Press Menu Mode, you can select **Play All, Play single or Delete** functions by pressing ▶ and OK button.

Delete MP3

1. Under MP3 Playback Mode.
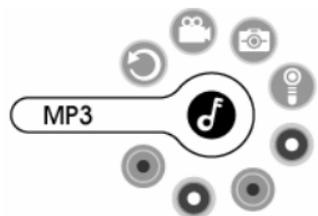
2. Press Menu Mode, press ▶ to select Delete mode and press OK button.
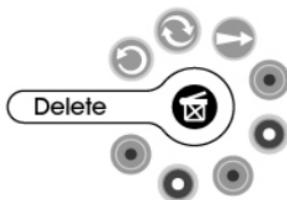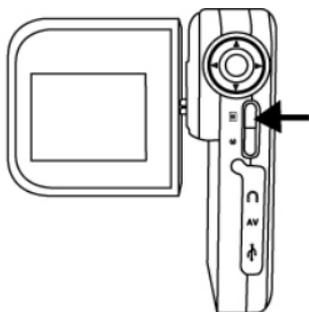
3. You can select to delete all MP3 or single MP3.

Transferring MP3

Copy MP3 files from your PC to your camera.
1. Power on the camera and then plug in USB cable
2. Locate the desired MP3 files on your PC and copy to
   MP3 folder of camera.

5. Making Connection

Install TotalMedia

1. Insert the installation CD into your PC's CD-ROM drive.
2. The introduction screen will appear automatically.
3. Click " ArcSoft TotalMedia"



4. Choose setup language

5. Click "NEXT"
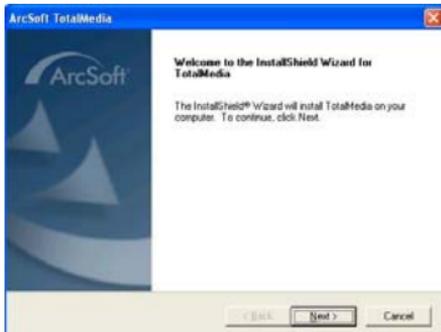
6. Click "YES"
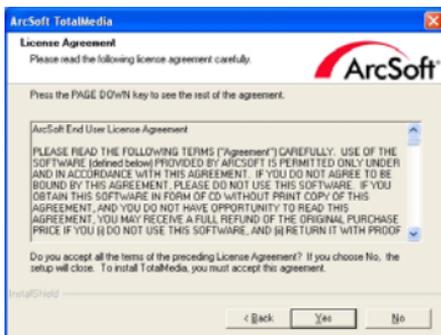

7. Click "NEXT"
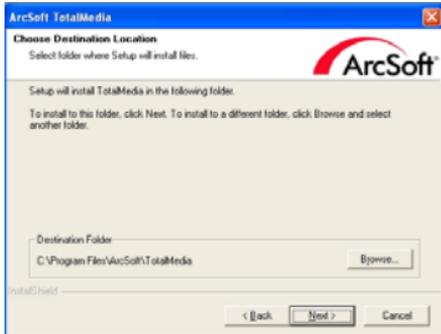
8. Click "NEXT"
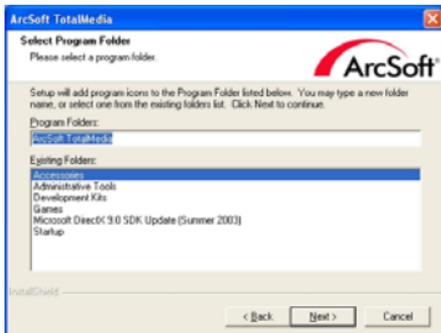
9. Click "Finish"

10. Setup Direct X 9.0, click "Next"
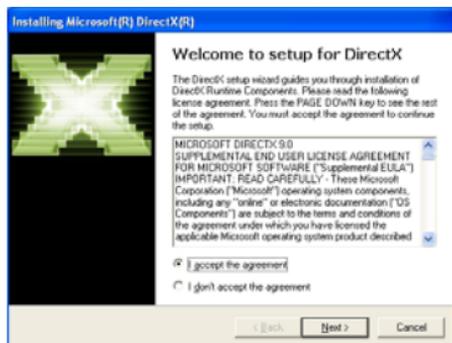
11. Click "Next"
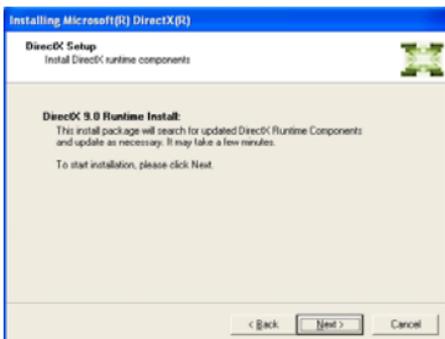
12. Click "Finish"
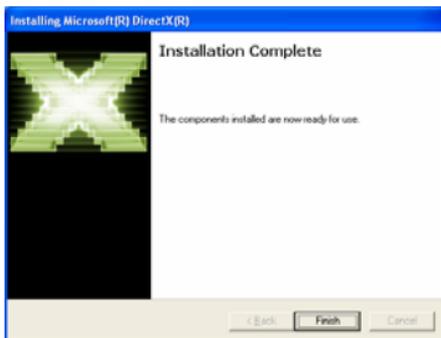
Note: To find out more about TotalMedia or how to use it, consult online help by clicking " **?** " icon on the top menu bar or website www.acrosoft.com

Connecting to PC

Window ME/ 2000/ XP- No Driver Required:
1. Power on the camera first.
2. Plug the USB cable to the camera and computer properly.
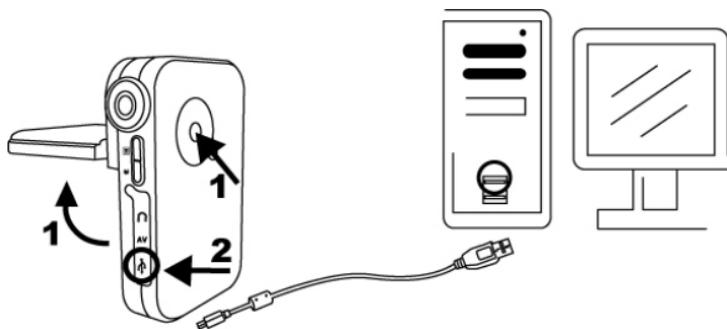
Window 98SE- Driver Required:
1. Put the installation CD in your CD-Rom driver
2. Follow the On-screen instructions for installation.
3. Reboot the PC.
4. Power on the camera.
5. Plug the USB cable to the camera and computer properly.

Download Videos, Pictures, Voice messages

1. Power on the camera first and plug in USB cable
2. For Windows 98SE/ ME/ 2000:
   Double click "My Computer" icon on the Windows
   Desktop.
   For Windows XP:
   Select "Open Folder view files using Windows Explorer"
   and click "OK"
3. Double click on the Removable Disk folder to open.
4. Double click on the DCIM folder to open.
5. Double click on the
   100MOVIE folder for videos
   200PHOTO folder for pictures
   300VOICE folder for voice messages to open.
6. You can copy the videos, pictures and voice messages
   to your designated folder or album

Connecting to TV

1. Before you connect to TV, please make sure the correct video signal standard (NTSC or PAL) first.
2. Plug TV cable (the black end) into the AV port of DV. Connect TV cable to your TV.
   Red to red (audio-in), yellow to yellow (video-in).
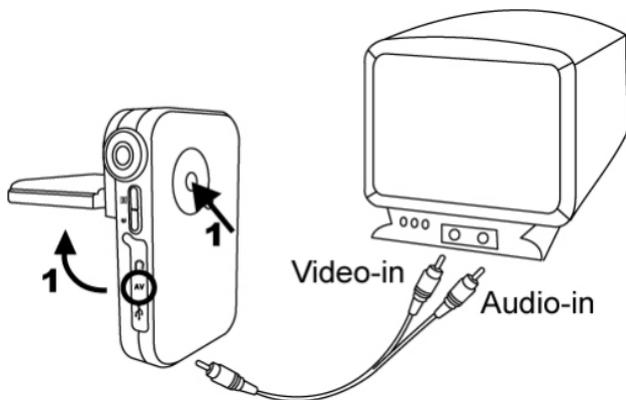
3. Turn on DV and TV.

6. Appendix

Specifications	
Image Sensor	CMOS 2048x1536
Built-in Memory	16MB Flash memory
External Memory	SD/ MMC card memory slot
Lens Specification	F3.0, f=8.66mm
Flash Strobe	Auto, Force on, Flash off, Red-eye reduction
White Balance	Auto, Day light, Shade, Tungsten, Fluorescent
Exposure	Auto, ±2.0 EV, 0.5 EV steps
Video Mode	640x480@ 25~30fps, 320x240@30fps with audio
Still Image Res.	4000x3000, 2048x1536, 1600x1200, 1280x960
Compression	JPEG, MPEG 4, WAV, MP3
Zoom	4X digital zoom for movie 640x480 8X digital zoom for still 12mega 16X digital zoom for still 3mega
Lens Focus	Fixed, Macro mode
Display	2.0" LTPS , rotate to 270° maximum
PC Interface	USB 2.0
Microphone/ Speaker	Built-in
Video Output	NTSC or PAL
O/S	Window 98SE/ 2000/ ME/ XP
Power	Rechargeable Li-ion battery, built-in charger

Specifications	
Dimension	105 x 69 x 26 mm
Weight	155g
Bundled software	ArcSoft TotalMedia
Specifications are subject to change without prior notice.	

Computer System Requirement

- Windows 98SE, 2000, ME or XP
- Pentium mmx, Celeron or AMD Athlon CPU
- 500MB free HDD space
- 128MB RAM
- VGA video card
- CD ROM driver
- Color monitor
- USB port