

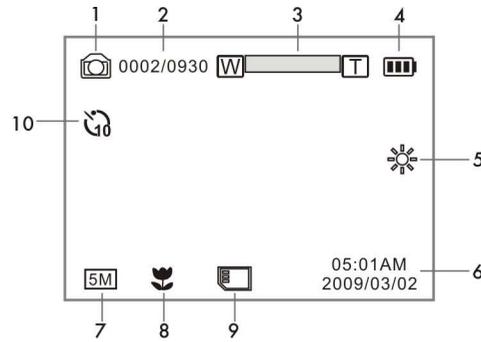
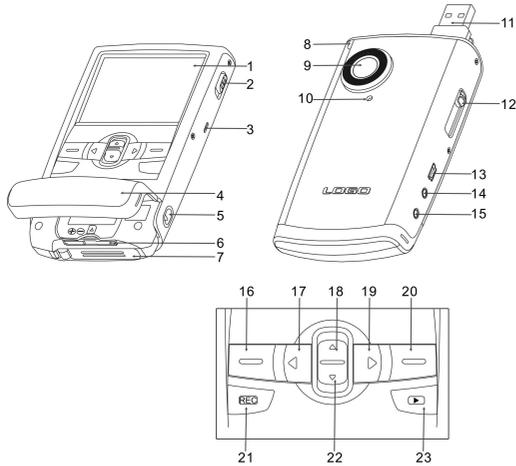
DVC-200 Manual

For information and support, www.lenco.eu

1. Get to know your camera

5.0 Mega pixels resolution sensor
 HD digital video camcorder - 1280x720 16:9 ratio@30fps
 Digital still camera
 HDTV component output
 2.4" LTPS real color display
 SD card support
 Driver free for Windows XP/Vista/and MAC 10.4.9 or above Win7
 Macro mode

2. Functional parts



Item	Function	Description
1	Recording mode	Photograph mode. Video mode.
2	Counting indicator	Show time left in DV mode Show picture left in DC mode Show recording time during recording
3	Digital zoom	Show digital zoom value.
4	Battery indicator	Battery at full charge. No charge left in battery.
5	White balance	White balance selection.
6	Date stamp	Date/ Time/ Date and Time / Off
7	Selected resolution	Photo-3M,5M,8M Video-QVGA,WVGA,720P30
8	Normal / Macro mode indicator	Normal mode (0.5m – infinity). Macro mode (11cm –18cm).
9	SD card indication	The SD card is inserted and will be used as storage for PHOTO and VIDEO
10	Self-timer	On/Off

4. Details for camera setting

Photo setting		
In photo mode, press the (MODE/MENU) button and hold for 2 to 3 sec to enter photo set up mode.		
Quality	Super Fine (Default)/ Fine /Normal	Picture quality setting
Size	3.0M pixel resolution	2048 x 1536
	5.0M pixel resolution	2592 x 1944
	8.0M pixel resolution	3200 x 2400
Self-timer	On	Self-timer selected, 10 sec delay
	Off	Turn off the self-timer, disable
Video setting		
In video mode, press the MODE/MENU button and hold for 2 to 3 sec to enter video set up mode.		
Resolution	720P30	HD (1280x720), up to 30fps
	WVGA	WVGA (848x480), up to 60fps
	QVGA	QVGA (320x240), up to 30fps
Quality	Super Fine(Default)/Fine /Normal	quality setting
	60Hz	Main American electricity frequency
Flicker	50Hz	Main European electricity frequency
	White Balance	Auto (Default)
Sunny		White balance selected for Sunny surrounding
Cloudy		White balance selected for cloudy surrounding
Fluorescent		White balance selected for fluorescent surrounding
Contrast	Standard / Hard / Soft	Contrast setting
	Standard / Hard / Soft	Sharpness setting
sharpness	Center / Average / Spot	AE meter setting
	AE ISO	Auto/100/200/400
Setup		
In photo/video set up mode, select SETUP icon by pressing () button to enter basic set up mode.		

1	LCD screen	Display photographs, video clips, camera settings and menu.
2	Macro switch	Macro mode: Select this mode to take close-up photographs (distance 11cm - 18cm). Normal mode: Select this mode to take photographs from 0.5m - infinity.
3	Speaker	Speaker hole.
4	Battery door	Door for battery & SD card.
5	Strap hook	Hook for attaching the wrist strap to the camera.
6	SD card slot	SD card storage location.
7	Battery	3.7V Li-ion battery.
8	LED indicator	Illuminates while recharging battery.
9	Lens	Records the image to be taken. Note: Keep the lens clean. Dirt and fingerprints will affect the quality of the picture.
10	Microphone	For voice input.
11	USB interface	Download photographs and video clips to a computer.
12	USB switch	Slide it to pop-up the USB interface.
13	DC in only	Recharge the battery via transformer provided.
14	Video out	Connecting the video cable to TV.
15	Audio out	Connecting the audio cable to TV.
16	Mode / Menu	Press it to select PHOTO or VIDEO mode. For PHOTO or VIDEO setting, press and hold it for 2~3 seconds.
17	Left	For LEFT selection in menu mode
18	UP	For UP selection in menu mode. Digital zoom in.
19	Right	For RIGHT selection in menu mode. / For exposure value set up in photo or video mode.
20	DELETE / Power on or off button	Press and hold it for 2 seconds to turn ON/OFF the unit. Press it to delete file in PLAYBACK mode.
21	REC	Press this button to take photographs / to start or stop recording a video clip to confirm changes in menu mode.
22	Down	For DOWN selection in menu mode. Digital zoom out.
23	Playback	Press it to enter PLAYBACK mode.

3. Explanation of the status icons

Language	English/T-Chinese/ S-Chinese/French/ German/Italian/ Spanish/Portuguese/ Nederlands	Select display language
TV standard	NTSC	American and Japanese video format
	PAL	European video format
Date / Time	Year/Month/Day/ Hour/Minute	Date and Time setting
Display	Off	No display
	Date	Display the Date
	Time	Display the time
	Date/Time	Display the Date and Time
Format	Yes / No	Format the SD card
Default	Yes / No	Refresh the default setting
	Off	Auto Power-Off off
Auto Power-Off	3 min	Auto power off in 3 mins if no operation
	5 mins	Auto power off in 5 mins if no operation
	version	

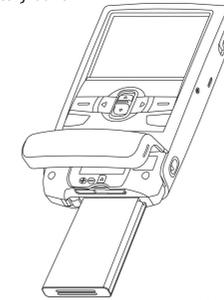
Note: The camera will remain the last setting when it is turned off.

5. Using the camera

5.1 Installing the battery

The battery is not fully charged at shipment and must be fully charged before being used.

1. Open the battery cover .
2. Insert the 3.7V Li-ion rechargeable battery into the camera.
3. Replace the battery cover.



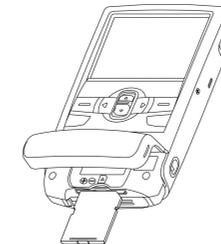
5.2 Inserting a memory card (not included)

Follow the instructions given below to insert the optional SD memory card into the camera.

1. Turn off the camera .
2. Open the battery door.
3. Insert the SD card into the camera by clicking it in.

Note: There is only one right direction to insert the SD memory card into the slot. Do not force the card into the slot, or else it may damage both the camera and the SD memory card.

Note: The SD memory card must be formatted before taking photographs. See the following sections for more information.



5.3 Formatting the memory or SD card

1. In photo/video set up mode, select SETUP icon by pressing () button to enter basic set up mode.
2. Select FORMAT icon by pressing the () button and press (REC) button to confirm, select YES by pressing the () button.
3. Press the (REC) button to confirm formatting the SD card.

5.4 Setting the resolution

The HD DV camera can be set to different resolutions.

VIDEO

1. Press and hold the (MODE/MENU) button in video mode to enter the video set up menu.
2. Select the RESOLUTION by pressing the (▼) button and press the (REC) button to enter the resolution selection.
3. Different resolutions will be displayed. Select the desired resolution by using the (▲) or (▼) button and press the REC button to confirm the selection.
720P30 (1280 x 720), WVGA (848 x 480), QVGA (320 x 240).

PHOTO

1. Press and hold the (MODE/MENU) button in photo mode to enter the photo set up menu.
2. Select the SIZE icon by pressing the (▼) button and press the (REC) button to confirm.
3. Different resolutions will be displayed. Select the desired resolution by using the (▲) or (▼) buttons and press the REC button to confirm the selection.
3.0M (2048 x 1536), 5M (2592 x 1944), 8M (3200 x 2400).

5.5 Taking video or photographs

1. Turn on the HD DV camera.
2. Press the (MODE/MENU) button to select the photo mode (📷) or video mode (📹).
3. Depending on the distance to the object being photographed, use the Macro switch to adjust the distance. Select the flower symbol (🌸) if you wish to take a close-up photograph (11cm – 18cm).
If you wish to take a video or photograph of surroundings or people (0.5m - infinity), set the Macro switch to the Normal mode (▲).
4. Use the LCD screen as a viewfinder to take videos or photos.
5. Press the (REC) button once for photo taking, or press the (REC) button to start / stop video recording.
6. The HD DV camera can zoom in up to 3 times.
Zoom in or out by pushing the (▲ or ▼) button up or down

Caution: 1) Taking picture for fast-moving objects is not recommended.
2) Image may be distorted when taking pictures in a moving vehicle.
3) Max video file size is 4G. The unit will stop recording automatically.

5.6 Zoom in and out

The HD DV camera can zoom in up to 3 time.
Zoom in or out by pushing the (▲ or ▼) button up or down.

5.7 Playback photographs / Videos clips

1. Press the PLAYBACK (▶) button once to enter the photo / video playback mode, press (▶) again to select either PHOTO / VIDEO
2. Thumbnail views will be displayed. Use(▲, ▼, ◀ or ▶) to select photo/ video
3. Press REC button to confirm selection.
4. In viewing a photo, push the (▲ or ▼) buttons to zoom in or out .
5. In viewing different parts of enlarged photo, press MODE/MENU or REC button to move up or down, press (◀ or ▶) buttons to move left or right.
6. In viewing photo in full screen , press (◀ or ▶) to view previous or next photo.
7. In viewing a video clips, Press the REC button to start playing the video and press again to pause.
8. In playing the video, press the (▶) button to fast forward or press the (◀) button to rewind .

5.8 Delete photographs / video clips

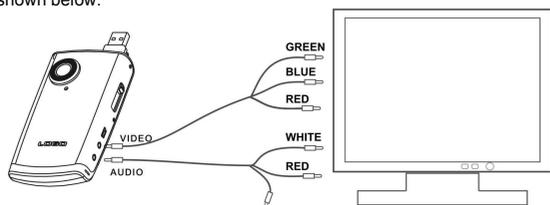
Follow the instructions given below to delete a photograph / video clip

1. Press the PLAYBACK (▶) button to enter the photo / video clip playback mode.
2. Press the PLAYBACK (▶) button once to enter the photo / video playback mode, press (▶) again to select either PHOTO / VIDEO
3. Press the DELETE button to enter the delete mode.
4. Press the (◀ or ▶) button to select if delete this file or delete all then press the (REC) button to confirm.
5. Press the (MODE/MENU) button to exit.

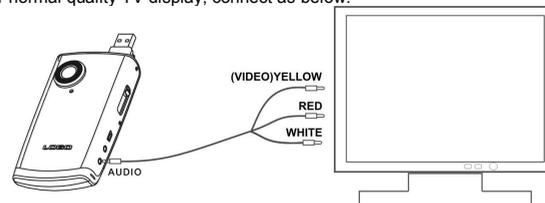
6. Connecting the HD DV camera

6.1 Connect to TV

For high definition TV display, please connect with the component output as shown below:



For normal quality TV display, connect as below:



If at any time in the future you should need to dispose of this product please note that: Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. (Waste Electrical and Electronic Equipment Directive)

6.2 Connect to computer

The camera can be connected to the computer as a Mass Storage Device and can download the videos and photos to PC.

7. Specifications

Sensor	5.0 Mega pixel CMOS sensor	
Image resolution	DV	720P30 (1280x720), up to 30fps
		WVGA (848x480), up to 60fps
		QVGA (320x240), up to 30fps
Image resolution	DC	8.0 Mega pixels: (3200x2400) (Hardware Interpolation)
		5.0 Mega pixels: (2592x1944)
		3.0 Mega pixels: (2048x1536)
Lens	F/2.8 f=8.5mm	
Focus range	0.5m. ~ Infinity	
Macro mode	11cm – 18cm	
Digital zoom	3x	
LCD display	2.4" true color LTPS TFT LCD	
White balance	Auto / Sunny / Cloudy / Fluorescent / Incandescent	
DV mode	Up to 30fps@HD (1280x720)	
External memory card	SD card supports up to 32G	
File format	Picture: JPEG, Video: MOV,	
PC interface	USB 2.0	
TV-out	Component output / TV output	
Power source	3.7V Li-ion rechargeable battery.	

8. System requirement

Operating System	Windows XP/Vista or above Win 7 Mac 10.4.9 or above
CPU	Pentium 4 / 3.0Ghz or above
RAM	At least 1G
Interface	USB port
Display Card	nVidia Geforce 7600 or ATI X 1600 or above

9. Troubleshooting

Problem	Cause	Solution
Cannot turn on the unit	Low battery power. Battery not inserted properly.	Fully charge or install the battery correctly.
Photos cannot be saved when taking pictures.	The memory card hasn't been formatted properly or memory is full.	Format the memory in SETUP mode of the camera. Please refer to section 5.3.
Cannot find removable disk after connecting the camera to the computer.	Connection failure.	Make sure all cable connections are secured and restart the computer if necessary.
The battery life is very short.	Use of wrong type of battery.	Replace with new 3.7V Li-ion rechargeable battery.
The photos are blurry	1. The HD DV camera is not held steadily 2. The lens of HD DV camera is dirty. 3. The HD DV camera is set to the wrong focus mode.	1. Hold the HD DV camera steadily until it beeps when taking video/photo. 2. Clean the lens with soft dry cloth. 3. Set the macro/normal mode according to the distances of subject.