# Lenco

DC-521 Manual

For information and support, www.lenco.eu

1. Get to know your camera

3M waterproof design
5.0 Mega pixels resolution sensor
Digital still camera
Digital video camcorder
Built-in flash Light
8x digital zoom
2.4" TFT color display
Micro SD card support
2x AAA alkaline batteries
Smile detection
Anti-shaking still capture

Important note:
-always wash you camera with clear water when coming out of the sea or pool water.
-only open the camera (battery or card compartment) when the camera is dry

2. Functional parts
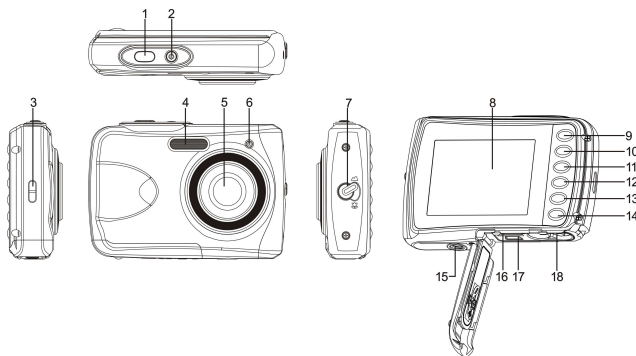
1	Shutter	Press this button to take photographs or to start /stop recording a video clip, or to confirm changes in menu mode.
2	Power on/off button	Press this button to turn on, press again to turn off.
3	Strap hook	Hook for attaching the wrist strap to the camera.
4	Flash light	Use the built-in flash to give the subject extra lighting if it is in dark surrounding（the best flash distance is recommended within 1.5m).
5	Lens	**Note:** Keep the lens clean. Dirt and fingerprints will affect the quality of the picture.
6	Busy indicator	When the indicator is blinking, the camera is busy.
7	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.
8	LCD screen	
9	Up	Menu-mode: Up, Photo/Video/Preview-mode: Digital zoom in.
10	Down	Menu-mode: Down, Photo/Video/Preview-mode: Digital zoom out
11	Left / Flash light	For LEFT selection in menu mode. For flash light functions selection in photo mode.
12	Right / Playback	For RIGHT selection in menu mode.
13	Mode	Press it to enter playback mode. Press it to select PHOTO/VIDEO mode.
14	Menu / Delete	Press it to enter camera setting mode. Press it to delete the photos/videos in playback mode.
15	Tripod connector	To fix the camera on tripod (Not included).
16	Micro SD card slot	SD card storage location.
17	USB interface	Via this connection, you can connect to a computer.
18	Battery compartment	Compartment for 2 x AAA batteries.

3. Explanation of the status icons
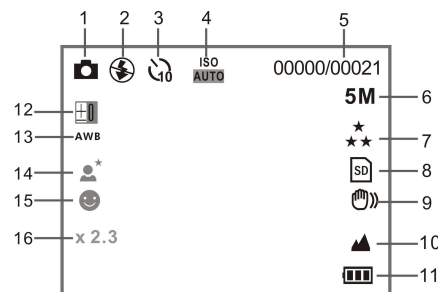
Item	Function	Description
1	Mode selected	📷 Photographs mode. 🎥 Videos capture mode. ▶ Playback VIDEO mode. 🖼 Playback PICTURE mode
2	Flash indicator	⚡ **Force flash:** The flash is on in any environment. ⚡A **Auto flash:** The camera determines if the flash should be used or not. 🚫 **No flash:** The flash is turned off.
3	Self-timer	Shows selected Self-timer setting
4	ISO	Light Sensitivity setting
5	Photo/Video counter	**Photo mode:** No. of pictures had been taken. **Video mode:** Recording time in second. **Playback mode:** No. of pictures or video file.
6	Selected resolution	12M = 4032x3024; 8M = 3264X2448 5M = 2560x1920; 3M = 2048x1536; 1.3M = 1280x960; VGA = 640x480
7	Picture quality	★★ Super fine. ★★ Fine. ★ Normal.
8	The micro SD card indication	[SD] The micro SD card is inserted and will be used as storage for PHOTO and VIDEO
9	Anti-Shaking	🖐 Shows Anti-Shaking ON/Off
10	Normal/Macro mode indicator	▲ Mode (0.5m – infinity). 🌷 Macro mode (11cm – 18cm).
11	Battery indicator	▥ The batteries are full. ▭ The batteries are empty.
12	Exposure value	Shows selected EV± value.
13	White Balance	Shows selected White-balance mode
14	Scene mode	Shows selected Scene mode (Landscape/Backlight/Night scene/Portrait/Sports)
15	Smile detection	😊 Shows Smile detection On/Off
16	Zoom indicator	Shows Zoom ratio.

4. Details for camera setting

		capture Mode	Single / 10s Timer	Single or 10s timer selection
SET	Still	Resolution	12M pixel resolution	4032 x 3024
			8.0M pixel resolution	3264 x 2448
			5.0M pixel resolution	2560 x 1920
			3.0M pixel resolution	2048 x 1536
			1.3M pixel resolution	1280 x 960
			VGA resolution	640 x 480
		Quality	Super Fine/Fine/Normal	Picture quality setting
		Sharpness	Strong/Normal/Soft	Sharpness setting
		Exposure	±2.0, ±5/3, ±4/3, ±1.0, ±2/3, ±1/3, 0	Exposure setting
		White balance	Auto	Automatic white balance
			Daylight	White balance selected for daylight surrounding
			Cloudy	White balance selected for cloudy surrounding
			Tungsten	White balance selected for tungsten lighting
			Fluorescent	White balance selected for fluorescent surrounding
		Scene	Auto/Landscape/ Backlight/Night scene/Portrait/Sports	Scene setting
		ISO	Auto/50/100/200	Sensitivity select
		Smile detection	On / Off	Smile detection setting
		Anti-shaking	On / Off	Anti-shaking setting
	Video	Resolution	VGA 640 x 480 QVGA 320 x 240	Video resolution set up
	Setup	Date/Time	YY/MM/DD	Date or time setting
		Auto power off	Off / 1Minute / 3 Minutes	Auto power off selection
		Beep sound	Off/On	Beep sound setting
		Language	German/English/Spanish /Italian/French/ Portuguese/Dutch/Greek /Turkish/Hungarian/ Polish/Russian/Danish/ Swedish/Norwegian/ Finnish	Select display language
		Date stamp	Date &Time /Date /Off	Date stamp
		Frequency	50Hz / 60Hz	Select power frequency in your location
		Format	Micro SD card	Format the memory location selection (All data will be lost!).
		Default setting	Cancel / OK	Default setting
		Version		See the firmware version

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

5. Using the camera
5.1 Installing the batteries

1. Open the battery door.
2. Insert 2x AAA alkaline batteries into the camera.
3. Close the battery door.
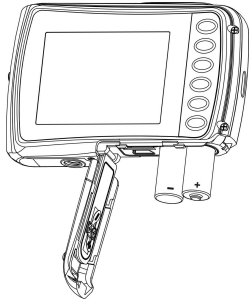
5.2 Inserting a memory card (not included)

This memory can be extended with a micro SD memory card (not included).
Follow the instructions below to insert the optional micro SD memory card into the camera.
1. Turn off the camera first.
2. Open the battery door.
3. Insert the micro SD card into the camera.

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

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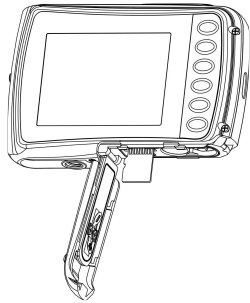
5.3 Formatting the micro SD card

1. Press the menu button (▤) in PHOTO or VIDEO mode.
2. Select the setup mode by press the right button.
3. Select the format icon by press the **W**(⌄) button and press the SHUTTER button to confirm.
4. Select SD card and confirm with the SHUTTER button.

5.4 Setting the resolution

The camera can be set to different resolutions.
1. Press the menu button (▤) in PHOTO mode, select the resolutions icon by **W** (⌄) key and press the SHUTTER to confirm.
   Resolutions: VGA (640 x 480), 1.3M (1280 x 960), 3M (2048 x 1536), 5M (2560 x 1920), 8M (3264 x 2448), 12M (4032 x 3024)
2. Six different resolutions will be displayed. Select the desired resolution by using the up or down buttons and press the SHUTTER button to confirm the selection.

5.5 Taking photographs

1. Turn on the camera.
2. Depending on the distance to the object being photographed, use macro switch to adjust the distance. Select the flower symbol (🌷) if you wish to take a close-up photograph (11cm –18 cm).
   If you wish to take a video or a photograph of surroundings or people (0.5m – infinity), set the macro switch to normal mode (⛰).
3. If you are not sure if there is enough lighting, turn on the automatic flash(⚡A) by pressing the flash button. (If the battery power is too low, the flash won't be activated).
4. Use the LCD screen to aim the object you wish to take photograph.
   Face detection function will be activated automatically if you take pictures of persons.
5. Press SHUTTER button and wait until the LCD display turn on again.
6. If 'SMILE' detection is ON, shutter will be activate automatically once a smile face is detected

Caution: 1) Taking picture for fast-moving object is not recommended.
2) Image may be distorted when taking picture in a moving vehicle.

5.6 Zoom in and out

The camera can zoom in up to 8 times.
Zoom in or out by pressing the up or down button, a number will appear on the display, 8.x is the maximum zoom ratio.

5.7 Self-timer setting

You can use the self-timer function when you take a photograph of yourself or when you take a photograph without flash of an object. To avoid shaking of the camera a tripod is recommended.
1. Set the camera to photo mode.
2. Press the MENU button (▤). The menu will appear.
3. Press the **W** (⌄) button to select Capture Mode and confirm by pressing the SHUTTER button.
4. Press the **W** (⌄) button to set the delay time: 10S Timer.
5. Press the SHUTTER button to confirm. The self-timer function is now ready for use.
6. Aim at the object you wish to take photo.
7. Press the SHUTTER button to take a photograph.
8. The photo will be taken after the timer reaches the delay time of 10 seconds. The camera will beep during the delay time.

5.8 Recording video clips

1. Press the MODE button to select the video clip mode (🎬).
2. For setting the resolution, Press MENU (▤) button and select Resolution, then press the SHUTTER button to confirm. Two resolutions will be displayed. VGA (640 x 480), QVGA (320 x 240).
3. Press the SHUTTER button to start recording video, press the SHUTTER button again to stop recording. The video clip will now be saved as an AVI file in the camera memory.

5.9 Playback photographs

1. Press the(▶) button to get into playback mode.
2. The last picture or video clip taken will be displayed. Use the left or right buttons to flip through the pictures or videos
3. In full screen display, press the **T**(⌃) button to zoom in the photo.
4. To view images in thumbnail, press the **W**(⌄) button.
5. To shift the image in zoom-in mode, press the SHUTTER button then use the up/down/left/right buttons.
6. Press the MENU (▤) button in Playback mode, press again and hold MENU button until the menu options displayed. Select SLIDE SHOW and select the desired slide show time. Press the SHUTTER button to confirm. The pictures saved in your camera or your micro SD card will be displayed in sequence automatically. To stop slide show, press SHUTTER button again.

5.10 Playback video clips

1. When video clips are displayed, press the SHUTTER button to start playing the video and press the SHUTTER button again to pause the playback.
2. Press right button to fast forward or press left button to rewind.
3. Press the down button to stop.
4. Press the mode button to exit.

5.11 Delete photographs and video clips

You can delete a single photograph / video clip, or delete all the photographs / video clips in the memory.
Follow the instructions below to delete photograph.
1. Press the (▶) button to enter the playback mode.
2. Press left or right button to select photograph/video clip to be delete.
3. Press the MENU/delete button (🗑) and select "Delete This Image(Video)" or "All" .
4. Press the SHUTTER button, then select OK to confirm.
5. Press the mode button to exit.
NOTE: Select "All" and Press the SHUTTER button to confirm, all the pictures and videos will be deleted.

6. Connecting to a PC

The unit can be connected to the computer as mass storage device and transfer photo/video files for storage.

7. Specifications

Sensor	5.0 Mega pixel CMOS sensor
Image resolution	12.0 Mega pixels: (4032x3024)
	8.0 Mega pixels: (3264x2448)
	5.0 Mega pixels: (2560x1920)
	3.0 Mega pixels: (2048x1536)
	1.3 Mega pixels: (1280x960)
	VGA: (640x480)
Lens	F/2.8 f = 8.5mm
Focus range	0.5m. ~ Infinity
Macro mode	11cm – 18cm
Digital zoom	8x
Flash strobe	Built-in (Auto / force / off)
LCD display	2.4" TFT color display
White balance	Auto / Daylight / Cloudy / Fluorescent / Tungsten
Video mode	30fps@VGA / 30fps@QVGA with micro SD card
External memory card	Supports SD cards up to 8GB
File format	Picture: JPEG, Video: AVI
Self timer	10 seconds
PC interface	USB 2.0
Power source	2xAAA alkaline batteries

8. System requirement

Operating system	Windows XP / Vista or above Mac 9.x or X.x
CPU	Pentium III or above
RAM	At least 64MB
Interface	USB port
CD	4x speed CD ROM or above

9. Troubleshooting

Problem	Cause	Solution
Cannot turn on the camera	Low battery power. Battery placed at wrong polarities.	Replace or install the battery correctly.
Photos can not be saved when taking pictures.	The memory built-in memory hasn't been formatted properly.	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.
Flash does not work.	Battery power is too low.	Replace with new 2xAAA alkaline batteries.
The batteries used up very fast.	Incorrect or old, used up, battery	Replace with new 2xAAA alkaline batteries.
The photos are blurry	1. The camera is not held steadily 2. The lens of camera is dirty.	1. Hold the camera steadily until it beeps when taking video photo. 2. Clean the lens with soft dry cloth.

List of accessories:
Camera 1x   User manual 1x   Handstrap 1x   USB cable 1x   Pouch 1x