User’s Manual

Foreword

Thank you for purchasing this digital video camera. Before using it, please read the manual carefully and keep it in a safe place for future reference.

The latest information is used for compiling the contents covered in the user's manual. Screen display and pictures used in the manual are for the purpose of explaining the operations of the video camera in a more detailed and visual manner. Due to difference of technological development and production lots, they may be slightly different from the digital video camera you are actually using.

System requirements

Please refer to minimum system requirements for the computer used for the video camera in operation and use. We strongly recommend that you use better computer equipment for operating the video camera so as to show its best efficiency. Minimum system requirements are as follows:

System Requirements		
Operating System	PCCAM	Microsoft Window XP(SP3), Vista, 7，8 Mac OS X ver: 10.8.0 or above version
	MSDC	Microsoft Window 2000，XP, Vista, 7，8 Mac OS X ver: 10.0.0 or above version
CPU		Intel Pentium of more than 1GB Hz or other CPU with equivalent performance
Internal Memory		Larger than 1GB
Sound Card and Display Card		The sound card and video card shall support DirectX8 or higher version.
CD Driver		Speed of 4 times or faster
Hard Disk		Free space of more than 2GB
Others		One standard USB1.1 or USB2.0 port

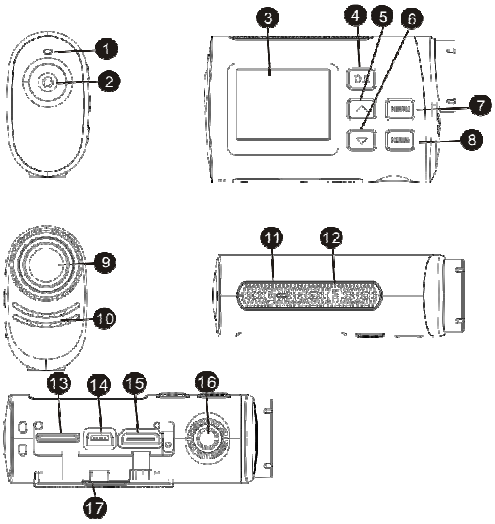
Functions and features:

The video camera has many features and functions:

- Video recording mode, movement mode, car-carrying mode, shooting mode and playback mode
- 5M effective pixels
- 1.5"HD panel
- PC camera

- Built-in 550mAh lithium battery
- Mini USB port + TF card seat + tripod nut +HDMI port
- 120º wide-angle lens
- Movable detection function (movement mode and car-carrying mode)

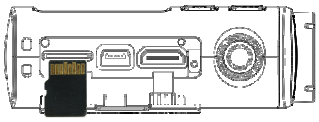
Overview of appearance



1.Indicator light
2. Power/Shutter key
3. 1. 5" HD panel
4.Ok key
5.Up key
6.Down key
7.Menu key
8.Mode key
9.Lens
10. Speaker
11. Reset port
12.Microphone
13.Micro SD card
14.Mini USB port
15.HDMI port
16.Tripod nut
17.Dust cover

Start using

1. Prior to using the video camera for the first time, insert a micro SD or a micro SDHC card as shown in the following figure:



A high-speed card above Class 4(included) is recommended, and a card of Class 10 is required when a professional mode is used for video recording. Turn off the camera before the card is inserted or pulled off.

2. **Power on/off**

2.1 Power on: Press Power key to start the screen and enter power-on state.
2.2 Power off: Press on Power key to turn it off when the camera is in the idle state.
2.3 Automatic power off: When idle time reaches the time for automatic power off, the camera will turn off automatically to save power. The default time for automatic power off is 3 minutes.
2.4 Power off when electricity is insufficient: When electrical quantity is very low, an icon "Low battery" will be displayed on the LCD screen, reminding you to charge it in time, and when the icon turns red and flickers, the camera will be powered off automatically.

3. Shift between functional modes

The video camera has 5 modes, namely video recording mode, movement mode, car-carrying mode, shooting mode and playback mode. They can be shifted through Menu key after power is on.

Video recording mode: record video clips
Movement mode: record video clips
Car-carrying mode: record video when the car is driving
Shooting mode: shoot photos
Playback mode: play back the last photo or video clip.

4. Indicator

4.1 Busy indication: When the video camera is busy (recording video clips or shooting photos), the indicator will

turn yellow.

4.2 Charging indication: In power-off state, when it is connected to a computer, the indicator is in red, prompting the user that the camera is being charged.

5. Video recording mode

5.1 After power is on, it enters video recording mode automatically.

5.2 Press Shutter key to record video directly, and press it again to stop recording video. Video recording will be stopped automatically if the memory card is full or electrical quantity is low during video recording, and the file will be saved automatically.

5.3 Press Up key or Down key for digital zoom; press Menu key to open the menu, press Up key or Down key to select on the menu, and the items selected on the menu will be highlighted. Press OK key to confirm and exit from the menu.

Video recording mode | Menu of video recording mode | System menu

1 indicates that the current is video recording mode

2 indicates that the current is video recording pixel

3 indicates that the current is recordable time

4 indicates that an SD card has been inserted

5 indicates that the current is digital zoom

6 indicates that the current is electrical quantity of battery

7 indicates that a special video recording effect can be set

8 indicates that EV value for video recording can be set

9 indicates that video recording quality can be set

10 indicates that video recording white balance can be set

11 indicates video recording starting/end icon

6. Movement mode

6.1 After power is on, press Mode key to shift to movement mode.

6.2 Movement mode has movable detection function. If you need to stop shooting, press Shutter key for once, and shooting will also be stopped if the camera does not move and the screen stands still for 5 seconds. During video recording, if the memory card is full or the camera is in low electrical quantity, it will stop shooting automatically and the file will be saved automatically.

6.3 Press Up key or Down key for digital zoom. Press Menu key to open the menu, press Up key or Down key to select on the menu, and the items selected on the menu will be highlighted. Press OK key to confirm and exit from the menu.

Movement mode

Movement mode menu

1 indicates that the current is movement mode

2 indicates that the current is video recording pixel

3 indicates that the current is recordable time

4 indicates that an SD card has been inserted

5 indicates that the current is digital zoom

6 indicates that the current is electrical quantity of battery

7 indicates that a special video recording effect can be set

8 indicates that EV value for video recording can be set

9 indicates that video recording quality can be set

10 indicates that video recording white balance can be set

11 indicates video recording starting / ending icon

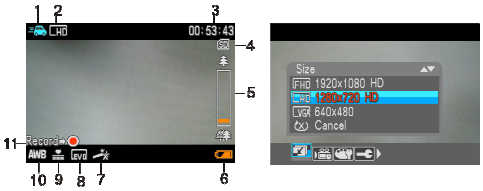
7. Car-carrying mode

7.1 After power is on, press Mode key to shift to car-carrying mode, and it also enters car-carrying mode automatically by inserting an USB to power it on, UI of car-carrying mode is inverted by default;

7.2 Car-carrying mode has movable detection function. If you need to stop shooting, press Shutter key for once,

and shooting will also be stopped if the camera does not move and the screen stands still for 5 seconds. During video recording, if the memory card is full or the camera is in low electrical quantity, it will stop shooting automatically and the file will be saved automatically.

7.3 Press Up key or Down key for digital zoom. Press Menu key to open the menu, press Up key or Down key to select on the menu, and the items selected on the menu will be highlighted. Press OK key to confirm and exit from the menu.



Car-carrying mode

Car-carry mode menu

1 indicates that the current is car-carrying mode

2 indicates that the current is video recording pixel

3 indicates that the current is recordable time

4 indicates that an SD card has been inserted

5 indicates that the current is digital zoom

6 indicates that the current is electrical quantity of battery

7 indicates that a special video recording effect can be set

8 indicates that EV value for video recording can be set

9 indicates that video recording quality can be set

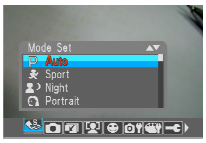
10 indicates that video recording white balance can be set

11 indicates video recording starting / ending icon

8. Shooting mode

8.1 After power is on, press Mode key to shift to shooting mode, and press Shutter key in preview state to shoot a photo

8.2 Press Up key or Down key for digital zoom. Press Menu key to open the menu, press Up key or Down key to select on the menu, and the items selected on the menu will be highlighted. Press OK key to confirm and exit from the menu.



1 indicates that the current is shooting mode

2 indicates size resolution of current image

3 indicates that scenario selection is automatic

4 indicates number of photos that can be shot currently

5 indicates that an SD card has been inserted

6 indicates that the current is digital zoom

7 indicates current electrical quantity

8 indicates smile-face capture has been disabled

9 indicates that face detection has been disabled

10 indicates that anti-shake function for shooting has been enabled

11 indicates that current special effect is normal

12 indicates EV value for shooting can be set

13 indicates that current ISO is automatic

14 indicates that shooting quality can be set

15 indicates that white balance for video recording can be set

16 indicates date printing

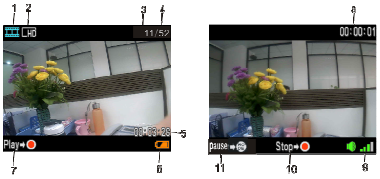
9. Playback mode

9.1 After power is on, press Mode key to shift to playback mode, and press Up key or Down key to browse pictures and videos leftwards or rightwards

9.2 Video playback

In playback mode, after video is selected, press Shutter key to play it. In the course of playing, press Mode key to pause playing, press Shutter key to stop playing, press Up key or Down key to increase or decrease volume. Press Menu key to open the menu, press Up key or Down key to select on the menu, and the items selected on the menu will be highlighted. Press OK key to confirm and exit from the menu. After entering the menu, if you do not want to set on the menu, select “Cancel” on the menu, then press OK key to exit from it;

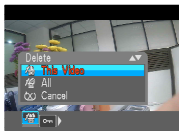
9.2.1 Screen display information for video file playback

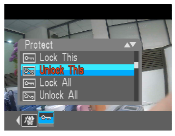


SN	Name of icon	Description
1	Video recording file	Indicate that current mode is to playback video files
2	Resolution of video file	Indicate resolution of video playback file
3	Serial number of current file	Indicate serial number of current file
4	Total number of files	Indicate total number of file shot in the SD card
5	Time for video file	Indicate total time for current video file
6	Sign of battery	Indicate current electrical quantity in the battery of camera
7	Icon of play	Press shutter key to play video as per prompt of icon
8	Time for playing	Indicate play progress of current video
9	Icon of volume	Press Up key or Down key to adjust volume as per prompt of icon
10	Icon of stop	Press shutter key to stop recording video as per prompt of icon
11	Icon of pause	Press Mode key to pause playing video as per prompt of icon

9.2.2 Video playback menu setting

In playback mode, press Menu key to open selection menu, then press Up/down key selection menu, press OK key to enter sub-menu option, press Up/down key selection sub-menu. After selection, press OK key to confirm and exit from the menu, the selected menu item will be highlighted.





▲The menu for video playback file

Main menu	Sub-menu	Description
Delete	This video	Delete current video
	All	Delete all files
Protect	Lock	Lock current files
	Unlock	Unlock current files
	Lock all	Lock all files
	Unlock all	Unlock all files

9.3 Photo playback

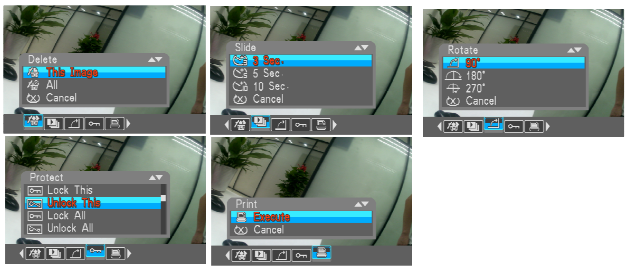
In playback mode, after a photo file is selected, press Up/down key to browse pictures leftwards or rightwards. Press Menu key to open the menu, press Up/down key to select on the menu, press OK key to confirm and exit from the menu, and the selected menu item will be highlighted;

9.3.1 Screen display information for photo playback file

SN	Name of icon	Description
1	Playback mode	Indicate that current mode is to play back photo files
2	Image resolution	Indicate that the current is resolution of playback image
3	SN of current file	Indicate serial number of current file
4	Total number of files	Indicate total number of photo files in the SD card
5	Sign of battery	Indicate current electrical quantity of the battery in the camera
6	Date stamp	Indicate date stamp

9.3.2 Photo playback menu setting

In playback mode, press Menu key to open selection menu, then press Up/down key to select on the menu, press OK key to enter sub-menu option, press Up/down key selection sub-menu. After selection, press OK key to confirm and exit from the menu, the selected menu item will be highlighted.



Menu items for photo playback

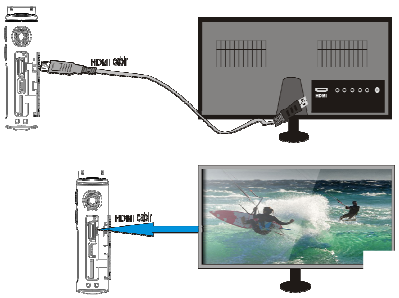
Main menu	Sub-menu	Description
Delete	This photo	Delete current photos
	All	Delete all files
Play slide	3s	Shift to next slide per 3 seconds when slides are being played
	5s	Shift to next slide per 5 seconds when slides are being played
	10s	Shift to next slide per 10 seconds when slides are being played
Rotate	90°	Rotate the photo for 90°
	180°	Rotate the photo for 180°
	270°	Rotate the photo for 270°
Protect	Lock	Lock current files
	Unlock	Unlock current files
	Lock all	Lock all files
	Unlock all	Unlock all files
Print	Execute	Print photos

Note: After files are set for protection on the menu, the protected files won't be deleted.

10. Connect to HDTV

10.1. Connect this device to an HDTV with a HDMI connecting cable

When images and sound in the video camera is to be output to the HDTV, insert the public terminal of HDMI cable into HDMI port of the video camera, and connect the other terminal of HDMI (output terminal) to HD input port of the HDTV as shown in the following figure:



10.2. After connecting to HDTV, enter video recording mode, press Mode key to shift between modes and screen display information is as follows:

Video recording mode Shooting mode Playback mode

Note: After connecting to HDTV, video cannot be recorded by entering video recording mode.

Using function of camera

After the video camera is connected to the computer, press Shooting key and Power key to start the camera and enter camera mode.

After the video camera is connected to the computer, enter camera mode and open My Computer, find “USB video device” in the list, and double click it to enter camera mode.

Note: In case of PCCAM, generally XP SP3 version or above shall be used.

Technical parameters

Image sensor	5.0M CMOS Sensor
Photo resolution	12M（4000x3000）， 8M (3264 x 2448), 5M (2592 x 1944), 3M (2048 x 1536) ,1.3M(1280x1024）
File format	JPEG, AVI
Video resolution	FHD 1920x1080，HD 1280X720，VGA 640×480
Self-shoot delay	2s / 5s / 10s
Digital zoom	8x
White balance	Auto/sunny/cloudy/ fluorescent lamp/ tungsten filament lamp
Exposure compensation	-3.0 ~ +3.0
USB port	USB 2.0
LCD display	1.5”HD panel
Menu language	English/French/ Spanish
Power supply	Built-in 550mah lithium battery
Lens	F 2.9 f =3.1mm
Auto power-off	1min. / 3min./5min./10min./OFF
Requirement for OS	Microsoft Windows XP/ Vista, Win7, Win8.
Dimension	76.2 mm × 47.2mm × 26.5 mm

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. 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 off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

——Reorient or relocate the receiving antenna.

——Increase the separation between the equipment and receiver

——Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

——Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

标准包装

camera

user manual

USB cable

The installation CD