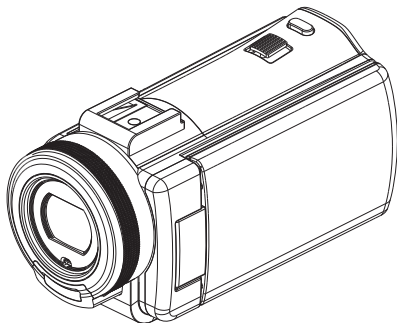# DIGITAL VIDEO CAMERA

多功能数码摄像机

用户手册

User's Manual

Please read the manual carefully before use

使用前请仔细阅读本手册

Content

Hazard, safety and warning notices

Incorrect use of the camera and accessories may damage, destroy the camera or cause serious accident .

Please be sure to read and observe the following notices.

Children and incapacitated person are forbidden to touch this camera or accessories, they are not child's toys which would cause dangers of electrocutions, poisoning and suffocation.

Power supply and electrical hazard

◇Power off the camera and remove the batteries if a foreign body or liquid has entered the camera. Otherwise there is a risk of fire or explode.

◇Power off the camera and remove the batteries once camera has been dropped down and housing broken. Otherwise there is a risk of fire or explode.

◇External power supply can be used to supply power to the camera, please keep ventilation, do not cover any articles, otherwise there is a risk of fire or electrocution.

◇The power supply can't be used during thunder or lightning, otherwise there is a risk of electric shock or fire.

LCD screen

◇LCD screen is glass product, easy to break, please protect it carefully.

◇If LCD screen is broken, do not touch the glass debris or outflow liquid. If skin is exposed to the liquid, rinse immediately with lots of clean water.

◇If the liquid gets into eyes , rinse immediately with lots of clean water and go to see doctor immediately.

◇If the liquid is accidentally swallowed, rinse the mouth with clean waters, drink lots of clear water and go to see doctor immediately.

Safety use warnings

◇Do not fall, hit or puncture the camera, otherwise the camera can be damaged.

◇Do not use any corrosive cleaners to clean the camera, otherwise the camera can be damaged.

◇Avoid direct LED light into eyes, strong light can impair eyesight.

◇None of camera's components can be repaired by users themselves. Do not open the housing or repair by themselves. If any failures occur, please look for professional person or contact dealer to deal with.

Use and storage environment

◇This camera is suitable to work in the environment of temperature between $0°C~45°C$ ⟨$32°F~113°F$⟩ and humidity under $≤70\%$.

◇Do not use or store in below environments :
A place of moisture or dust

A place of high temperature or sun exposure
A place of low temperature
A place with strong vibration

Proper disposal of waste
◇Do not fling camera, accessory and packaging casually.
◇Electronic waste can't be disposed like domestic waste. Please comply to the local laws and environmental requirements, dispose different wastes separately.
◇For further information, please contact the respective government of local community.

Pre-use inspection
In order to ensure your benefit, please full charge the battery and make test shot with SD card before use.
We will not be responsible for any accidents that caused by incorrect use.

About this manual
◇This manual only serves as a general guide to the use of products. The picture is for reference only; specifications are subject to actual products.
◇The content of this manual might be inconsistent with the camera due to product update or software upgrade; Please refer to the camera object, no further notice.

Trademark information and Copyright statement
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Pentium is a registered trademark of Inter Corporation.
Macintosh is a trademark of Apple Computer Inc.
Other names and products can be trademarks or registered trademarks of the respective owners.

Welcome to choose this product, we will service you zealously!
Please read this manual carefully before use. Please keep it properly for further check.

This is a 2.7K HD video camera . It has below main features:
◇2.7K HD imaging   ◇8MP CMOS sensor
◇3 inch IPS Screen   ◇IR remote control
◇Infrared night vision light   ◇Support external microphone
◇Max support 128GB SD card
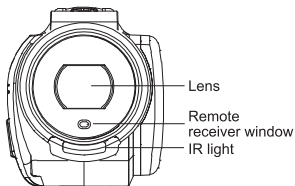
1.1 Computer system requirement

The camera can be connected to computer to copy files, playback and used as U disk. If the camera is connected to computer, the following specifications are required at least:

The Pentium2.0 GHZ or upper processor / Windows XP or upper system / 4GB RAM/80G or more ROM / Standard USB2.0 port or upper port / 1GB and more display card/1024x768 or higher screen definition.
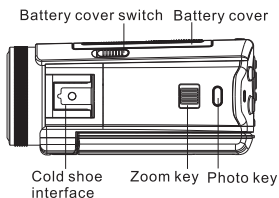
If the configuration of computer is quite low, camera may not work properly or get stuck when connecting to computer.
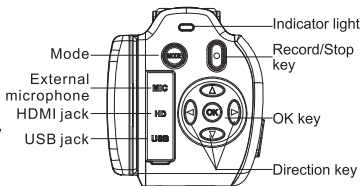
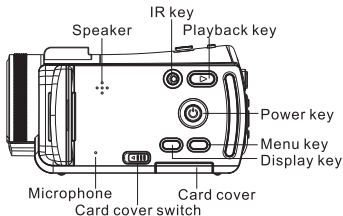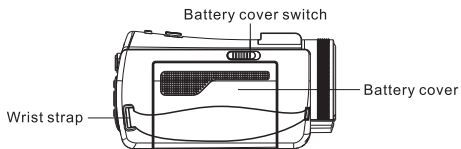## 1.2 Picture Presentations

【Front view】　　　　　　　　　　　　　　　　　　　　　【Back view】

Lens
Remote receiver window
IR light

Indicator light
Mode
Record/Stop key
External microphone
HDMI jack
USB jack
OK key
Direction key

【Top view】　　　　　　　　　　　　　　　　　　　　　　【Left view 】

Battery cover switch　Battery cover

Cold shoe interface
Zoom key　Photo key

Speaker
IR key
Playback key
Power key
Menu key
Display key
Microphone
Card cover
Card cover switch

【Right view】

Battery cover switch

Battery cover

Wrist strap

1.3 Functions of keys

Icon	Key name	Functions
	Power key	Short press to power on/Long press 3s to power off
MENU	Menu key	Press it to call out the control menu.
DISP	Display key	In video/photo mode: press it to hide / close the screen menu, turn on/off the screen display.
IR	IR key	Press it to turn on / turn off the IR light.
	Playback Key	Press it to enter into photo / video playback mode.
MODE	Mode key	Press it to switch working modes: Video mode/Photo mode.
	Photo Key	In photo mode: press it heavily to take photos, slightly to focus.
	Record Key	In video mode: press it to record /stop recording videos. In playback mode: press it to play/stop playing the video file.
	Direction key/OK key	Press direction key to move upward, downward, leftward and rightward. Press ok key to confirm operation.
	Zoom Key	In photo /video mode：toggle it leftward or rightward to achieve zoom. In photo playback mode: toggle it leftward to enter into the grid view, toggle rightward zoom in/out the photos, videos cannot be zoomed in or out. In video playback mode: toggle it to adjust the volume.

2 Start to use

2.1Installation of the memory card

This camera can install a memory card to store more photos, videos or other files. When the battery power is low or the battery is replaced, the media files in memory card will not be lost. Please install the memory card according to the below steps.
1. Open the screen panel and open the card compartment door as shown in the picture shown.
2. Make sure the metal contacts of the memory card are inserted upward and pushed until the "click" sound is heard, then the memory card is installed correctly.

1.Push the card cover switch in the direction of arrow, the door will be bounced open.

3.Close the card cover as this direction

2.Insert the memory card as this direction
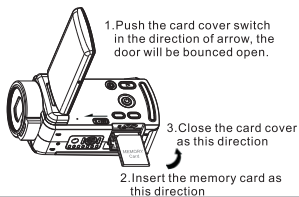
1. Flip the switch of SD card slot according to the direction of arrow.
2. Insert the SD card according to the direction of arrow.
3. Close the SD card cover according to this direction of arrow.

Notice :

Please use qualified memory card and the transfer speed should be CLASS 10(included) or above.
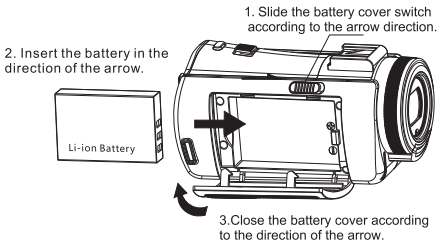Before use a new memory card, please format it by camera.
Do not take out the memory card when the camera is working, otherwise the memory card might be damaged or lose data.
Some of the memory card might cause camera halted or work abnormally, please try it out to ensure it is compatible with the camera.

2.2 Installation of battery

Install the standard lithium battery into the battery compartment according to the direction shown in the picture.
1. Pull out and open the battery compartment door as shown in the picture and install the battery.

1. Slide the battery cover switch according to the arrow direction.

2. Insert the battery in the direction of the arrow.

Li-ion Battery

3.Close the battery cover according to the direction of the arrow.

Notice :

Please install battery correctly, incorrect installation may damage the camera or can't power on it and cause accidents.
Do not use substandard lithium battery and adaptor.
Adaptor specification: Input AC 100~240V/50~60HZ, output DC 5V/1.5A.

2.3 Charge the battery

Install the battery correctly, connect camera with adaptor via USB cable.
Battery can also be charged by connecting the camera with computer, please charge the battery for 6 hours before first using the camera.

Notice :

Before use electric supply must ensure the specifications of local power supply meet requirements!
Please ensure that the charging process is ventilated and can't be covered with any object. After charging, remove the power supply as soon as possible!
When shooting during charging, it is forbidden to use the computer to power the camera, otherwise it may damage the computer!

2.4 Power on and power off the camera
1.Install the battery, short press【Power】key to power on the camera;
2. In the state of boot, long press【Power】key to power off the camera;
3. The camera support the function of power off automatically. When the camera is not in use for long time, camera will be powered off automatically to save battery.
4. When the battery is low, the screen will shown "Low battery" and shut down automatically later.

2.5 Switch working modes
Press【Mode】key can switch between photo mode and video mode, related icon of each mode will show on top left corner of the screen.
In photo or video mode, press【Playback】key to switch to playback mode to view videos or photos.

2.6 Instructions of remote control
Camera also can be operated by remote control; key functions of remote control are as below:

Icon	Key name	Functions
	Video key	In video mode: start / stop recording
	Photo key	In Photo mode: take photo
	Pause key	Press it to pause /continue recording while recording videos,pause /resume playing while playing back a video
	IR light key	In photo/video mode: turn on /turn off IR light;
	Zoom In key	In photo/video mode: zoom in frame;
	Zoom Out key	In photo/video mode: zoom out frame;
	Mode key	Switch between photo mode/video mode
	Delete key	In playback mode: delete files quickly
	Volume Up key	Turn the volume up when playing back the video
	Volume Down	Turn the volume down when playing back the video
	Up key	In playback mode: page up.
	Down key	In playback mode: page down.
	Play/Stop key	In playback mode, press it to start / stop playing during playing back videos
	Fast forward key	Fast forward during playing back videos
	Fast backward key	Fast backward during playing back videos

Notice:

Before using remote control please take off the battery protective slice.

When use remote control, please aim at the remote receive window of camera, objects can not be shielded in the middle.

Picture of remote control receiving window

Receive window diagram of the remote controller

Receive window of remote controller

Launch window

Stop key
Zoom in key
Zoom out key
Mode key
Page up key
Fast backward key
Volume down key

Rec. key
LED Light Key
Photo key
Volume up key
Delete key
Page down key
Stop key
Fast forward key
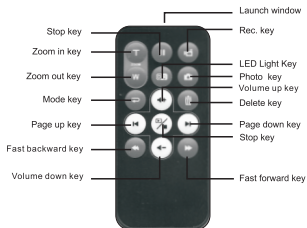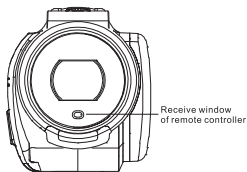
2.7 Connect to PC

The camera can be connected to PC to transfer files, view and edit photos and videos.

1. Connect one end of the USB cable to the machine, and other end to the USB interface of the computer.

2. After connecting, the machine will be powered on automatically. Press direction key to choose: "MSDC / PC Camera", when choosing "MSDC", the machine can be used as U-disk; when choosing "PC Camera", the machine can be used as a camera. If there is no operation, the machine will be used as U-disk automatically after 5s.

Screen displays after correct connection.

USB
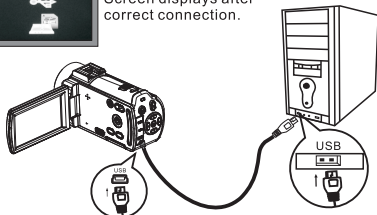
This terminal connects to the native USB port

Connect the camcorder to the computer with USB cable.

2.8 Connect to TV

The camera also can be connected to TV to display the videos or photos.

It can be connected to TV by HDMI cable.

Connect the other terminal to the HDMI interface of the TV.

Connect this terminal to the HDMI interface of the machine.
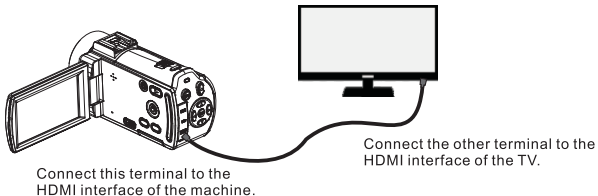
2.9 Use external microphone (optional accessory, not supplied)

This camera supports to use external microphone. Use external microphone can reduce the surrounding noise, improve the voice quality of video and provide users better experience of tone quality.

1. In order to avoid damage, please read product features, technical parameters, functional operation, operation instruction and notice of external microphone carefully before use;

2. Install the external microphone according to the picture's direction and lock the fixed nut, as shown in the picture;

3. Insert the external microphone 3.5mm connection plug into the MIC port and turn on the microphone switch.
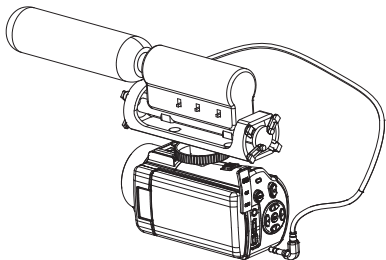
2.10 Use zoom function

The camera has a digital zoom function to zoom in and zoom out. In photo/video mode, moving the zoom button to the right can bring the object closer (magnifying the object), and the zoom key to the left can pull away from the object (shrink the object).

2.11 Use infrared night vision function
The camera support infrared night vision, can take photos or record videos in a dark environment.
In photo or video mode, short press【IR】key to open the IR light and enter the night vision mode, the night vision icon will be displayed on the top left of the screen. In night vision mode, users can only shoot black and white photos or videos, and the screen is also displayed black and white, press【IR】key again to return to normal mode.

Notice:
Night vision mode can be turned on or off in the photo/video mode; In night vision mode, users can only take black and white photos or videos, not color files.
Zoom function can be used in both photo and video modes.

3 Use the camera
This chapter helps you understand how to use the various advanced features of the camera.

3.1 Video Mode
After the camera is turned on, it will enter the video mode automatically, all operations in this chapter is conducted in video mode.
The video mode screen is shown as follows:

1 Video mode indicator icon	2 Time-lapse indicator icon	3 Movie size indicator icon	4 Mode set indicator icon
5 IR light indicator icon	6 Remaining video time indicator icon	7 SD card indicator icon	8 Zoom indicator icon
9 Battery capacity indicator icon	10 Effect indicator icon	11 Sharpness indicator icon	12 ISO indicator icon
13 Exposure indicator icon	14 White balance indicator icon	15 Looping video indicator icon	

3.1.1 Video Recording

In video mode, users can shoot videos and can also set various menu features and parameters to get better images. The operations are as below:

1. Insert SD card , short press【Power】key to power on the camera;

2. The camera automatically enters the video mode after the camera is turned on, or press 【Mode】key to switch to the video mode.

3. Press【Record】key to start recording video, and press【Record】key again to stop recording.

4. During recording, press【OK】key to pause recording, and press【OK】key again to continue recording videos.

5. If the memory card is full, "Memory card is full" will be shown on the screen and the camera will stop recording automatically. At this time, please replace a new memory card, or delete the files in this memory card to continue recording.

3.1.2 Mode Set

This function enables users to set the best scene mode for shooting according to the actual environment.

1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Mode Set" icon, press【Up】/【Down】key to select the required option: Auto/Night/Portrait/Landscape/Backlight/Sport/Party/Beach/High sensitivity/Cancel;

2. Press【OK】key to save and back to video mode.

3.1.3 Movie Size

This function can select the different resolution: 2.7K/FHD/HD/VGS/Cancel, and the higher the resolution you chose, the clearer the videos becomes, the bigger the video file is and the more storage space it takes up.

1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Mode Set" icon.

2. Press【Up】/【Down】key to select desired option: 2.7K(2688*1520) /FHD(1920*1080) /HD(1280*720) / VGA(640*480)/Cancel, press【OK】key to save and back to video mode.

3.1.4 Time Lapse

Time lapse is a kind of filming technique which can compress time, it works by setting a certain time interval, automatic continuous shooting a same scene or object at a certain frequency for a long time, getting a continuous frame made up by tens of thousands photos, and then automatically process it into an animation video. This function can condense some time-consuming processes into a few minutes footage, eliminating the inconvenience of long hours of photography. Users can choose different time interval according the demand.

1. In video mode, press【Menu】key to call out the menu, press 【Left】/【Right】key to select "Time-Lapse" icon.

2. Press【Up】/【Down】key to select desired option: Off/1 Sec/2 Sec /5 Sec /10 Sec/30 Sec/60 Sec/Cancel, press【OK】key to save and back to video mode.

3.1.5 Looping Video

This function support loop recording function, users can choose the length of recording time according to the demand. The cycle recording will not stop automatically and will be recorded until the machine runs out of power or fails.

1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "LoopingVideo" icon.

2. Press【Up】/【Down】key to select desired option: Off/1 Min./3 Min. /5 Min. /10 Min. /

Cancel, press【OK】key to save and back to video mode.

3.1.6 Beauty Face

This function is to turn on or turn off the beauty face function. After turning on the function, the skin of the portrait will be smooth , white and ruddy.

1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Beauty Face" icon.

2. Press【Up】/【Down】key to select desired option: On/Off /Cancel, press【OK】key to save and back to video mode.

3.1.7 Exposure (EV Value)

This function can adjust the brightness of video recorded according to the ambient brightness.

1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Exposure" icon.

2. Press【Up】/【Down】key to select desired option: +3 / +2 / +1 / 0 / -1 / -2 / -3 / Cancel, press【OK】key to save and back to video mode.

3.1.8 White Balance

This function is to adjust the color deviation of video recorded according to the different light source environment. Auto mode is recommended.

1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "White Balance" icon.

2. Press【Up】/【Down】key to select desired option: Auto / Daylight / Cloudy / Fluorescent / Tungsten / Cancel, press【OK】key to save and back to video mode.

3.1. 9 Sharpness

This function is to adjust the sharpness of the videos to make the edge of the video sharper or softer.

1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Sharpness" icon.

2. Press【Up】/【Down】key to select desired option: Sharp / Normal / Soft / Cancel, press【OK】key to save and back to video mode.

3.1.10 Effect
This function can set the special effect of recording video files.
1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Effect" icon.
2. Press【Up】/【Down】key to select desired option: Normal / B&W / Sepia / Red / Green / Blue / Sunset / Warm / Cool / Over Exposure / IR / Binary / Vivid / Undertone / Dog Eye / Aibao / Gothic / Japan Style / LOMO / Negative / Cancel, press【OK】key to save and back to video mode.

3.1.11 ISO (Sensitivity)
This function is to adjust the sensitivity(ISO) of video. Auto mode is recommended.
1. In video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "ISO" icon.
2. Press【Up】/【Down】key to select desired option: AUTO/100/ 200/ 400 / Cancel, press【OK】key to save and back to video mode.

3.2 Photo Mode
The machine has a powerful camera function. In camera mode, users can take a very beautiful picture by setting relevant parameters reasonably.
After turning on the machine, press【Mode】key to switch to camera mode, all operations in this chapter is conducted in camera mode.
Entering into the photo mode, the screen will be shown as follows:

1 Photo mode indicator icon	2 Resolution indicator icon	3 Mode set indicator icon	4 Anti-shake indicator icon
5 Face detect indicator icon	6 Smile capture indicator icon	7 IR light indicator icon	8 Remaining number indicator icon
9 SD card indicator icon	10 Zoom indicator icon	11 Battery capacity indicator icon	12 Effect indicator icon
13 Sharpness indicator icon	14 ISO indicator icon	15 Exposure indicator icon	16 Quality indicator icon
17 White balance indicator icon	18 Self-timer indicator icon		

3.2.1 Take Photo

This capture describes the use of machine to take photos. Turn on the machine, press 【Mode】key to switch to photo mode.

1. Select and adjust the target to be photographed according to the scene displayed on the screen, hold the camera firmly and press【Photo】key to take photos.

2. The number of photos that can be taken at each resolution is displayed in the upper right corner of the screen.

3. When the SD card is not inserted, press【Photo】key, " Memory full " will be shown on the screen. When the SD card is full, "Memory card is full" will be shown on the screen. Please insert another SD card to continue shooting.

The number of photos you can take depends on the memory card capacity and the resolution you set. The higher the resolution you chose, the more storage space it takes up.

Before starting to take photos, users can set the corresponding parameters in the photo mode, the operations is as below:

3.2.2 Mode Set

This function enables users to set the best scene mode for shooting according to the actual environment.

1. In photo mode, press【Menu】key to call out the menu, press【Left】／【Right】key to select "Mode Set" icon.

2. Press【Up】／【Down】key to select desired option: Auto/Night/Portrait/Landscape/Backlight/

Sport/Party/Beach/High sensitivity/Cancel;

3. Press【OK】key to save and back to photo mode.

3.2.3 Resolution

This function can set the resolution for shooting the photo, and the higher the resolution you chose, the bigger the photo file is and the more storage space it takes up.

1. In photo mode, press【Menu】key to call out the menu, press【Left】／【Right】key to select "Resolution" icon.

2. Press【Up】／【Down】key to select desired option: 48M / 30M / 24M / 20M / 16M / 12M / 10M / 8M / 7MHD / 5M / 3M / Cancel.

3. Press【OK】key to save and back to photo mode.

3.2.4 Beauty Face

This function is to turn on or turn off the beauty face function. After turning on the function, the skin of the portrait will be smooth , white and ruddy.

1. In photo mode, press【Menu】key to call out the menu, press【Left】／【Right】key to select "Beauty Face" icon.

2. Press【Up】／【Down】key to select desired option: On/Off /Cancel.

3. Press【OK】key to save and back to photo mode.

3.2.5 Shooting

This function is to set the continuous shooting function. After turning on this function, the machine will automatically continue to take three photos every time when pressing【Photo】key.

1. In photo mode, press【Menu】key to call out the menu, press【Left】／【Right】key to select "Shooting" icon.

2. Press【Up】／【Down】key to select desired option: Single/Continuous /Cancel.

3. Press【OK】key to save and back to photo mode.

3.2.6 Self Timer

Turning on or turning off this function to set the selfie time.

1. In photo mode, press【Menu】key to call out the menu, press【Left】／【Right】key to select "Self Timer" icon.

2. Press【Up】／【Down】key to select desired option: Off/2Sec. /5Sec. /10Sec./ Cancel.

3. Press【OK】key to save and back to photo mode.

3.2.7 Exposure

This function can adjust the brightness of the photo. The larger the EV is, the brighter the photo file becomes. When ambient brightness is low, the adjustment of this function is invalid.

1. In photo mode, press【Menu】key to call out the menu, press 【Left】／【Right】key to select "Exposure" icon.

2. Press【Up】／【Down】key to select desired option: +3 / +2 / +1 / 0 / -1 / -2 / -3 / Cancel.

3. Press【OK】key to save and back to photo mode.

3.2.8 White Balance

This function is to adjust the color deviation of the photo according to the different light source environment. Auto mode is recommended.

1. In photo mode, press【Menu】key to call out the menu, press【Left】／【Right】key to select "White Balance" icon.

2. Press【Up】／【Down】key to select desired option: Auto / Daylight / Cloudy / Fluorescent / Tungsten / Cancel.

3. Press【OK】key to save and back to photo mode.

3.2.9 Quality

This function can set the quality of the photo, and the higher the quality you choose, the clearer the photo is and the more storage space it takes up.

1. In photo mode, press【Menu】key to call out the menu, press【Left】／【Right】key to select "Quality" icon.

2. Press【Up】／【Down】key to select desired option: Super Fine / Fine / Normal / Cancel.

3. Press【OK】key to save and back to photo mode.

3.2.10 Sharpness

This function is to adjust the sharpness of photos to make the edge of the picture sharper or softer.

1. In photo mode, press 【Menu】key to call out the menu, press 【Left】/【Right】key to select "Sharpness" icon.

2. Press 【Up】/【Down】key to select desired option: Sharp / Normal / Soft / Cancel.

3. Press 【OK】key to save and back to photo mode.

3.2. 11 Effect

This function can set the special effect of the photo files, users can set different effect according to their needs.

1. In photo mode, press 【Menu】key to call out the menu, press 【Left】/【Right】key to select "Effect" icon.

2. Press 【Up】/【Down】key to select desired option: Normal / B&W / Sepia / Red / Green / Blue / Sunset / Warm / Cool / Over Exposure / IR / Binary / Vivid / Undertone / Dog Eye / Aibao / Gothic / Japan Style /LOMO / Negative / Cancel.

3. Press 【OK】key to save and back to photo mode.

3.2.12 ISO (Sensitivity)

This function is to adjust the sensitivity(ISO) of photos. Auto mode is recommended.

1. In photo mode, press 【Menu】key to call out the menu, press 【Left】/【Right】key to select "ISO" icon.

2. Press 【Up】/【Down】key to select desired option: AUTO/100/ 200/ 400 / Cancel.

3. Press 【OK】key to save and back to photo mode.

3.2.13 Anti-Shake

This feature is to turn on or turn off the anti-shake function. This machine support electronic anti-shake, turning on this function to reduce the photo blur caused by shaking.

1. In photo mode, press 【Menu】key to call out the menu, press 【Left】/【Right】key to select "Anti-Shake" icon.

2. Press 【Up】/【Down】key to select desired option: On / Off / Cancel.

3. Press 【OK】key to save and back to photo mode.

3.2.14 Face Detect

This feature is to turn on or turn off the face detect function. Turning on this function to automatically recognize face.

1. In photo mode, press 【Menu】key to call out the menu, press 【Left】/【Right】key to select "Face Detect" icon.

2. Press 【Up】/【Down】key to select desired option: On / Off / Cancel.

3. Press 【OK】key to save and back to photo mode.

3.2.15 Smile Capture

This feature is to turn on or turn off the smile capture function. After turning on this function, the machine will automatically take photos while recognizing a smile face.

1. In photo mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Smile Capture" icon.

2. Press【Up】/【Down】key to select desired option: On / Off / Cancel.

3. Press【OK】key to save and back to photo mode.

3.2.16 Date Stamp

This function is to set whether the time and date will be displayed on the photos.

1. In photo mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Date Stamp" icon.

2. Press【Up】/【Down】key to select desired option: Off / Date / Date & Time / Cancel, press【OK】key to save and back to photo mode.

3.3 Playback

All photos taken by the camera can be viewed in the playback mode. Users also can delete, rotate, protect and slide the photos. All videos recorded by the camera can also be viewed in the playback mode, users can protect and delete the video files.

3.3.1 Playback Photos

Take photos in the photo mode or record videos in the video mode, press【Playback】key to enter into playback mode. In playback mode, photos can be zoomed in/out, turn paged forward or backward, thumbnail displayed and so on.

1. Zoom in/out photos: In playback mode, toggle【Zoom】key right forward to zoom in photos, toggle 【Zoom】key left forward to zoom out photos.

2. Turn paged forward or backward: In playback mode, press【Left】/【Right】key to page forward or backward.

3. Move the enlarged photo: After enlarging the photo, press【Left】/【Right】key to move the photo leftward or rightward, press【Up】/【Down】key to move the photo upward or downward. Toggle【Zoom】key to zoom in / out the photo, press【OK】key to stop enlarging moving the photos.

4. Enter/Exit the thumbnail display: In playback mode, keep toggling【Zoom】key leftward to enter into the thumbnail display, in this mode, press direction key to select photos or videos. Press【OK】key to exit the thumbnail display. In playback mode, user can do the operations as below:

3.3.2 Delete (Users can delete one photo or all photos at once)

1. In playback mode, press【Menu】key to call out the menu, press 【Left】/【Right】key to select "Delete" icon.

2. Press【Up】/【Down】key to select desired option: This Image / All / Cancel, press

【OK】key to confirm operation.

3.3.3 Protect (Protect photos from accidental deletion, after the photo is locked, it must be unlocked before deleting it.)

1. In playback mode, press【Menu】key to call out the menu, press 【Left】/【Right】key to select "Protect" icon.

2. Press【Up】/【Down】key to select desired option: Lock This / Unlock This / Lock All / Unlock All / Cancel, press【OK】key to confirm operation and back to playback mode.

3.3.4 Rotate(This function can rotate the selected photo.)

1. In playback mode, press【Menu】key to call out the menu, press 【Left】/【Right】key to select "Rotate" icon.

2. Press【Up】/【Down】key to select desired option: 90°/180°/270°/ Cancel, press【OK】key to confirm operation.

3.3.5 Slide

Photos taken by this camera can be played in slide shows. This function only works with photos, not videos.

1. In playback mode, press【Menu】key to call out the menu, press 【Left】/【Right】key to select "Slide" icon.

2. Press【Up】/【Down】key to select desired option: 3Sec./5Sec. /10Sec./ Cancel.

3. Press【OK】key to confirm the start of playback, press【OK】key again to stop playing and back to playback mode.

3.3.6 Playback videos

All videos recorded by the camera can also be viewed in the playback mode, users can protect and delete the video files.

1. In playback mode, press 【Left】/【Right】key to select the video file which need to be played.

2. Press【Record】key to start playing the video.

3. Press【OK】key to pause/continue playing, press【Record】key again to stopping playing.

3.3.7 Delete (Users can delete one video or all videos at once)

In playback mode, press【Menu】key to call out the menu, other operations are same as in the photo .

3.3.8 Protect (This function is to protect videos from accidental deletion.)

In playback mode, select the video file, press【Menu】key to call out the menu, other operations are same as in the photo .

Notice:

1. Lock This: Locks the video/photo file you are currently viewing.

2. Unlock This: Unlocks the video/photo file you are currently viewing.

3. Lock All: Locks all video/photo files.

4. Unlock All: Unlocks all video/photo files.

3.4 Setup Mode

This function is to set the system parameters, such as time, language and so on. It can be operated in both video mode and photo mode with same method.

3.4.1 Language

This machine supports multiple languages, please choose the language according to your usage habits.

1. In photo/video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Setup" icon.

2. Press【Up】/【Down】key to select "Language" option, press【OK】key to enter into the sub-menu of "Language", press 【Up】/【Down】keyto select desired option: English/Deutsch/ Francais/ Espanol/ Italiano/Turkce/Pyccknn/ Portugues / Nederlands / 简体中文/繁體中文/日本语/Poiski.

3. Press【OK】key to save.

3.4.2 Set Date

The function is to set the system date and time of the camera.

1. In photo/video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Setup" icon.

2. Press【Up】/【Down】key to select "Set Date" option, press【OK】key to enter into the sub-menu of "Set Date", press【Left】/【Right】key to select desired option: YY / MM /DD / hr / min / sec, press【Up】/【Down】key to set date, time.

3. After setting, press【OK】key to save.

3.4.3 Power save

This function allows the camera can be automatically shut down to save power, when users do not operation it within a certain time.

1. In photo/video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Setup" icon.

2. Press【Up】/【Down】key to select "Power save" option, press 【OK】key to enter into the sub-menu of "Power save", press【Up】/【Down】key to select desired option: Off /1Min. /3Min. / 5Min. / Cancel.

3. Press【OK】key to save and back to photo/video mode.

3.4.4 Beep

This function is to set whether the key sound is on.

1. In photo/video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Setup" icon.

2. Press【Up】/【Down】key to select "Beep" option, press【OK】key to enter into the sub-menu of "Beep", press【Up】/【Down】key to select desired option: On / Off / Cancel.

3. Press【OK】key to save and back to photo/video mode.

3.4.5 Frequency

This function is to prevent the image from flickering when shooting in light. Please refer to local power standards for details.

1. In photo/video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Setup" icon.

2. Press【Up】/【Down】key to select "Frequency" option, press 【OK】key to enter into the sub-menu of "Frequency", press【Up】/【Down】key to select desired option: 60HZ / 50HZ / Cancel.

3. Press【OK】key to save and back to photo/video mode.

3.4.6 Format

This function is to format the camera and SD card. Once formatted, all files stored in SD card can't be found again. Be cautious with this function.

1. In photo/video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Setup" icon.

2. Press【Up】/【Down】key to select "Format" option, press【OK】key to enter into the sub-menu of "Format", press【Up】/【Down】key to select desired option: Yes / No, and then press【OK】key to confirm operation.

3. Reconfirm whether you need to perform formatting: Yes / No, press【OK】key again to confirm the selection and back to photo/video mode when the operation is completed.

3.4.7 Default

If the camera can't work normally due to wrong settings, user can reset it to factory default setting. This function will not delete the data stored in the camera and SD card.

1. In photo/video mode, press【Menu】key to call out the menu, press【Left】/【Right】key to select "Setup" icon.

2. Press【Up】/【Down】key to select "Default" option, press 【OK】key to enter into the sub-menu of "Default", press【Up】/【Down】key to select desired option: Yes / No, and

4.Appendix

4.1 Specification

Image sensor	CMOS 8MP CMOS sensor,Max. 48MP（Software Interpolation）
Memory medium	SD card, support SD /HCSD card up to 128GB
ISO	Auto,　ISO100，ISO200，ISO400
Lens	F/3.2，f=7.5mm
Focal distance	1.0m ~ infinite
Photo	Format :JPEG　Resolution:48M/30M/24M/20M/16M/12M/10M/8M/7MHD /5M/3M
Video	Format:AVI Resolution:2.7K(2688x1520,30fps)/FHD(1920x1080,30fps) HD(1280x720,30fps)/VGA(640x480,30fps)
Zoom	16X digital zoom
DIS	Yes　, EIS anti-shake
Infrared night visionlight	Support, <3m range
White balance	Auto/Daylight/Cloudy/Fluorescent /Tungsten
EV	–3.0EV ~ +3.0EV
Self Timer	Off/2S /5S /10S
PC interface	USB2.0（high speed）
LED screen	3.0" HD Screen
Microphone	Built-in
External Microphone	Yes，3.5mm coaxial，output impedance：0.2KΩ~2.2KΩ
Speaker	Built-in
HD output	Yes
Remote control	Support，approx 6M
Battery	Li-ion NP-120
Adopter	Output DC 5V/1.5A
Language	English/Deutsch/ Francais/ Espanol/ Italiano/Turkce/Pyccknn/ Portugues / Nederlands / 简体中文/繁體中文/日本语/Poiski
Dimension	120(L)×56(W)×64(G)mm
Weight	Approx 280±5g(battery exclude）

4.2 Common problems and solutions

Problem	Potential cause	Solution
Can't be powered up	Incorrect battery installation/low power	Install the battery according to the manual/get the battery fully charged
Black screen of death	Under Power-saving mode/low power	Reboot the camcorder /get battery recharged
Can't take pictures or videos	Memory card isn't formatted before use	Format the memory card
	Memory card speed is too low	Use class10 or faster memory card
	Memory card with protection	Cancel the protection of memory card
Picture/video is ambiguous	Lens is dirty foreign body on it	Clean the lens with a special soft cloth and keep it clean
Prompt memory card error	Memory card with protection	Cancel the protection of memory card
Suddenly shut down	File format is wrong/memory card is damaged	Format the memory card /use qualified card
	The memory card is not qualified	Use qualified memory card
Picture/video color derangement	Settings of White Balance/Effect/ Exposure are wrong	Set correct parameter. If user doesn't know how to set, just reset and back to factory default settings
The remote control doesn't work	The camera's receive window is blocked.	Remove the cover
	The remote control battery dead	Use sufficient power battery
	Too far away	Use the remote in specified range
External MIC works abnormally	No battery in External MIC /no power	Install the battery full of electricity
	Eternal MIC connect incorrectly	Connect correctly
	External MIC parameter is wrong	Set correct parameters
Abnormal connection to PC	Wrong connection/USB cable is damaged	Reconnect/use a qualified USB cable
Videos doesn't play fluently	Computer configuration is low	Use a qualified computer

目 录

危害、安全和警告

错误的使用本机及配件可能损坏本机，并可能造成事故。

请您务必阅读并且遵守以下注意事项。

本机不是儿童玩具，禁止儿童和无行为能力的人接触本机及附件。这些有可能造成触电，中毒以及窒息的危险。

电源及触电危险

◇若有液体或异物侵入本机，请立即关机并取出电池，否则有起火或爆炸的危险。

◇若本机被摔坏或外壳破损，请关机并取出电池，否则有起火或爆炸的危险。

◇使用电源适配器可以持续给本机供电，但也可能造成触电或火灾。使用电源适配器时，请保持通风，禁止任何物品覆盖。

◇打雷或闪电期间禁止使用外接电源，否则可能造成触电或发生火灾。

关于液晶屏幕

◇液晶屏是玻璃制品，容易破碎，请小心保护。

◇若液晶屏破裂，禁止接触琉璃碎片和液体。若皮肤接触到液体，立即使用清水冲洗。

◇若液体入眼，请立即用大量清水冲洗，到医院处理。

◇若不小心吞食液体，请以清水漱口并喝下大量清水，立即就医。

使用安全警告

◇禁止摔落、撞击或穿刺本机。

◇禁止使用腐蚀性物品清洁本机，可使用微湿软布清洁本机。

◇禁止让红外灯直射人眼，强光可能损害视力。

◇本机没有用户可自己维修的部件，禁止自行拆解或维修。如遇故障，请找专业人士或经销商处理。

使用和储存环境

◇本产品适应于温度0℃-45℃（32℉至113℉），湿度≦70%环境使用。

◇禁止在以下环境下使用或存放本机：

◇潮湿或灰尘较多的地方

◇高温或阳光暴晒的地方

◇低温的地方

◇强烈震动的地方

废弃物处理

◇禁止随意丢弃本机及附件。

◇本机、电池及附件不能按家庭垃圾处理，请按照当地法律要求分类处理。

◇更详细的信息请联系所在地的市政单位。

使用前检查

◇为确保您的利益，在使用本机之前，请先为电池充满电，装上存储卡进行试拍。

◇我们不承担由于使用不当或本机故障造成的额外损失。

关于本说明书

◇本说明书作为产品的使用指南，图片仅供参考，请以产品实物为准。

◇我们努力确保内容更新，若因产品升级导致本说明书与本机有不符之处，请以实物为准，恕不另行通知。

版权与商标信息

我们保留本说明书的版权及最终解释权。任何单位或个人未获书面同意，不得以任何形式复制、传播和发布。

Microsoft和 windows是Microsoft公司注册的商标。

Pentium是Intel公司注册的商标。

Macintosh是Apple公司注册的商标。

其他专有名词可能是商标或者是相关所有者注册的商标。

欢迎选用本产品，我们将热忱为您服务!

在使用前，请仔细阅读说明书。请妥善保管说明书，以备查阅。

这是一台2.7K高清摄像机，具有以下特点：

◇2.7K高清影像　　　　　◇800万像素CMOS传感器

◇3.0英寸高清屏　　　　　◇红外遥控操作

◇红外夜视　　　　　　　◇支持外置麦克风

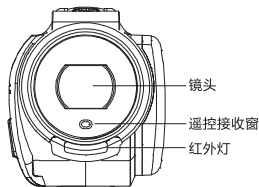◇最大128GB存储卡

1.关于本机

1.1 系统要求

本机可以连接计算机使用。连接时，计算机至少满足以下规格：

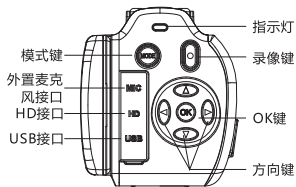奔腾2.0GHZ或以上处理器/Windows XP或以上系统/4GB内存/80GB以上磁盘空间/USB2.0或以上接口/1GB或以上的显示卡/1024x768像素或更高屏幕分辨率。

若计算机配置较低，连接本机时可能不能正常使用。
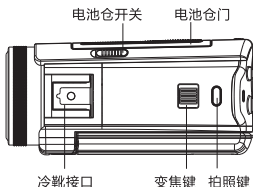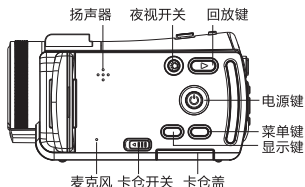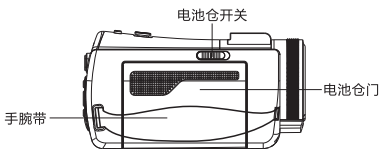
1.2 本机图示

【本机前视图】

【本机后视图】

- 镜头
- 遥控接收窗
- 红外灯

- 指示灯
- 模式键
- 录像键
- 外置麦克风接口
- HD接口
- USB接口
- OK键
- 方向键

【本机顶视图】

- 电池仓开关
- 电池仓门
- 冷靴接口
- 变焦键
- 拍照键

【本机左视图】

- 扬声器
- 夜视开关
- 回放键
- 电源键
- 菜单键 显示键
- 麦克风 卡仓开关 卡仓盖

【本机右视图】

- 电池仓开关
- 电池仓门
- 手腕带

1.3 按键功能说明

图标	按键名称	功能说明
◉	电源	短按开启电源/长按3秒关闭电源
MENU	菜单键	调出控制菜单
DISP	显示键	在录影/拍照模式：隐藏/关闭屏幕菜单，开启/关闭屏幕显示
◉	红外灯键	开启/关闭红外夜视
⊡	回放键	进入照片/视频回放模式
◉	模式键	切换工作模式：摄像模式/拍照模式
◎	拍照键	拍照模式：轻按对焦，重按拍照
◉	录影键	摄像模式：录影/停止录影 视频回放模式：播放/停止播放
❀	四向键 OK键	四向键向上、下或向左、右移动方向 OK键确认操作
▤	变焦键	在拍照与摄像模式：左右拨动实现变焦 在回放模式：向左拨动进入九宫格，向右拨动缩小/放大照片， 视频不可放大缩小 在视频播放模式：调节音量大小

2 开始使用

2.1 装入存储卡

本机可装入存储卡以储存更多照片、视频或其它文件。

当电池电量低或者更换电池时，存储卡内的媒体文件不会丢失。请按以下步骤装入存储卡

1.打开屏幕面板，如图所示打开卡仓门。

2.确定存储卡的金属触点朝上插入并推进，直至听到"咔嗒"声，存储卡被正确装入。

1、向此方向拨动卡仓门
开关，仓门弹开

3、向此方向关闭卡仓门

2、按此方向插入存储卡
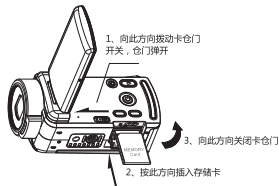
注意：

必须使用正规品牌存储卡，卡速不低于Class 10（含）。
使用新的存储卡时，请先用本机格式化存储卡。
工作中禁止插拔存储卡，这样会损坏存储卡或丢失数据。
某些存储卡可能导致本机死机或工作不正常，请装机适配，注
意是否兼容。

2.2 装入电池

将本机标配的锂电池按图示方向装入电池仓。

1.如图所示推出弹开电池仓门，装入电池。

1、向此方向拨动电池
　仓开关打开仓门

2、将电池按此方
　向装入电池仓

Li-ion Battery

3、按此方向关闭电池仓门

注意：

请正确安装电池，错误安装将不能开机或损坏本机，并可能造成意外事件!

禁止使用非本机标配的锂电池和电源适配器。

电源适配器规格：输入 AC 100~240V/50~60HZ，输出DC 5V/1.5A。

2.3 为电池充电

请将电池正确装入机内，使用标配的USB线连接本机与充电器。

也可以将本机连接到电脑上为电池充电，初次使用本机前，请为电池充电6小时。

注意：

使用市电充电前，必须确认当地电源规格符合要求！

充电时确保通风，禁止任何物体覆盖本机，充电完成后，尽快取下电源！

边充电边拍摄时，禁止使用计算机供电，否则可能损坏计算机！

2.4 开启和关闭本机

1.装入电池，短按【电源键】可以开机。

2.在开机状态，长按【电源键】可以关闭电源。

3.本机支持自动关机，较长时间不使用时，将会自动关机以节省电量。

4.当电量不足时，屏幕会显示"电量不足"并在稍后自动关机。

2.6 遥控器的使用说明

本机可以使用遥控器操作，遥控器按键功能如下：

图示	按键名称	功能说明
	录影键	在摄像模式录影/停止录影
	拍照键	在拍照模式拍照
	暂停键	录影时：暂停/继续录影 回放视频时：暂停/播放视频
	红外灯键	在录影/拍照模式，打开/关闭夜视灯
	放大变焦键	在摄像模式/拍照模式，放大功能
	缩小变焦键	在摄像模式/拍照模式，缩小功能
	模式键	切换摄像模式/拍照模式
	删除键	在回放模式快速删除文件
	音量加键	回放视频时加大音量
	音量减键	回放视频时减小音量
	上翻键	在回放模式，向上翻文件
	下翻键	在回放模式，向下翻文件
	播放/停止键	进入回放模式，回放视频时播放/停止播放
	快进键	回放视频时快进
	快退键	回放视频时快退

注意：

在使用遥控器前，请先取下遥控器电池保护片。

使用遥控器时，请将遥控器对准本机遥控接收窗，

中间不可以有物体遮挡。

遥控器按键示意图

遥控器接收窗示意图

遥控器接收窗

发射窗

暂停键 ———— 录像键

放大键 —— 夜视开关

缩小键 —— 拍照键

模式键 —— 音量加键

上选项键 —— 删除键

快退键 —— 下选项键

音量减键 —— 停止键

—— 快进键
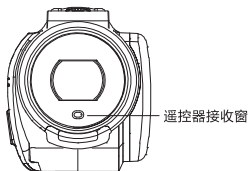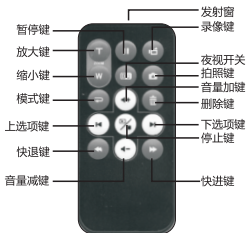
2.7 连接计算机

如图所示，本机可以连接计算机传输文件，观看和编辑视频及照片。

1.用USB线一端连接本机，一端连接计算机的USB接口。

2.连接后，按住电源键开启相机。四向键选择：移动硬盘/摄像头，当选择移动硬盘时，可以将本机当U盘使用，当选择摄像头时，可以将本机当摄像头使用。若无操作则5秒钟后自动进入移动硬盘模式。

正确连接并开机后屏幕显示

USB

此端子连接本机USB接口

此端子连接计算机
标准USB接口
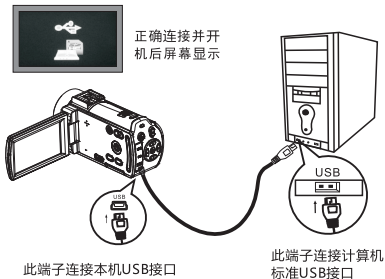
2.8 连接至标准电视

如图所示，本机可连接至电视机，以显示视频或照片。

本机可选择使用HDMI高清线连接电视。

此端子连接本机
HDMI接口

此端子连接电视
HDMI接口
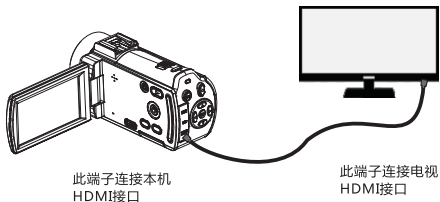
2.9 使用外置麦克风（麦克风为可选配件）

本机支持外置麦克风，能有效的降低周围环境噪音被拾取,提升录影质量给予用户更好的音质体验.

1.使用前请仔细阅读外置麦克风的产品特点,技术参数,功能操作,使用说明和注意事项,避免损坏.

2.按此方向装外置麦克风于摄像机上,并锁紧卡片螺母.

3.将外置麦克风3.5mm连接插头插入摄像机MIC孔内,并打开麦克风开关。
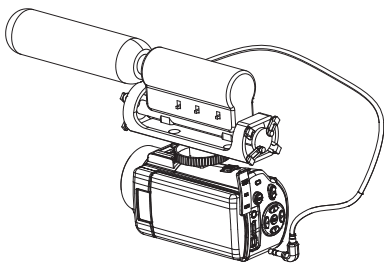
2.10 使用变焦功能
本机具备变焦功能。在录影/拍照模式，向右拨动变焦键拉近物体（放大景物），向左拨动变焦键推远物体（缩小景物）。

2.11 使用红外夜视模式
本机具有红外夜视功能，可以在黑暗环境下进行摄像或拍照。在摄像或拍照模式下,按一下夜视灯键,红外夜视灯打开,夜视灯图标显示在屏幕上方,机器进入夜视模式,此时画面为黑白显示,所拍摄的图片或视频也是黑白的,再次按一下,恢复至正常模式。

注意!
红外夜视模式在拍照/录像模式下均可打开/关闭；在夜视模式下,只能拍摄黑白照片或视频，不能拍摄彩色文件。
变焦功能在拍照及摄影模式下均可使用。

3 使用本机

本章帮助您了解和使用本机的各种高级功能。

3.1 摄像模式

摄像模式屏幕显示如下:

1 摄像模式指示器	2 缩时录影指示器	3 视频分辨率指示器	4 场景模式指示器
5 夜视灯指示器	6 可录制时间指示器	7 SD卡指示器	8 变焦指示器
9 电池电量指示器	10 摄影效果指示器	11 锐度指示器	12 感光度指示器
13 曝光指示器	14 白平衡指示器	15 循环录影指示器	

3.1.1 录制视频

在摄像模式下,用户可以拍摄视频。也可以设置各项菜单,帮助拍出更好的影像,操作如下。

1.插入存储卡,短按【电源键】开机。

2.本机开机后自动进入摄像模式,也可以按【模式键】切换到摄像模式。

3.按【录影键】开始录制视频,录制中再次按【录影键】停止录制视频。

4.在录影中,按【OK键】暂停录影,再按【OK键】继续录影。

5.如果存储卡装满,屏幕显示"内存卡已满",同时自动结束摄影。此时请更换新的存储卡,或者删除此存储卡内的文件才能继续录影。

3.1.2 模式设置

用户可根据实际环境,选择最佳场景模式。

1.在录影模式下,按【菜单键】弹出菜单,按向左/向右键来选择"模式设置"菜单,按向上/向下键来选择需要的场景模式:自动/夜景/人物/风景/背光/运动/派对/海滩/高感光度/取消。

2.按【OK键】保存并返回。

3.1.3 摄像格式设置

本机可以选择不同的视频分辨率: 2.7K/FHD/HD/VGA/取消.所选的分辨率越高,视频越清晰,
文件尺寸越大,所占用的存储空间也越多.

1.在录影模式下,按【菜单键】调出摄像菜单,按向左/向右键来选择"摄像格式"菜单

2.按向上/向下键选择影像尺寸:2.7K/FHD/HD/VGA/取消,按【OK键】确认保存并返回.

3.1.4 缩时录影设置

缩时录影：通过设置一定的拍摄时间间隔,对同一场景或同一物体以一定拍摄频率自动进行长时
间连续拍摄,形成一帧帧由成千上万张照片组合而成的连续画面,并自动将其加工为动画视频,
将一些需要长时间才能完成的过程浓缩为几分钟的影像,免去长时间摄影的不便。用户可根据需
求、选择不同的缩时录影时间间隔。

1.在摄像模式下，按【菜单键】调出菜单选项.按向左/向右键来选择"缩时录影"菜单.

2.按向上/向下键选择所需的时间间隔："关/1秒/2秒/5秒/10秒/30秒/60秒/取消"。按【OK键】
确认保存并返回。

3.1.5 循环录像设置

本机支持循环录像功能，用户可根据需求来选择录像时间的长度，循环录像不会自动停止，会一
直录到机器没电。

1.在摄像模式下，按【菜单键】调出菜单选项.按向左/向右键来选择"循环录像"菜单.

2.按向上/向下键选择所需的录像时长：关/1分钟/3分钟/5分钟/10分钟/取消。按【OK键】确认
保存并返回。

3.1.6 美颜设置

本机支持美颜功能，开启此功能，可使肌肤光滑，人脸美白、红润.

1.在摄像模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "美颜" 菜单.

2.按向上/向下键选择美颜功能是否打开:"开/关/取消".按【OK键】确认保存并返回.

3.1.7 设置曝光(调整EV值)

此项设置允许用户依据环境的亮度来调节所拍摄画面的亮度.。

1.在录影模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "曝光" 菜单;

2.按向上/向下键选择所需的曝光值:EV值（从+3到-3)/取消,按【OK键】确认保存并返回.。

3.1.8 设置白平衡

此功能可根据不同的光源环境来调整拍摄画面的颜色偏差。

1.在录影模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "白平衡" 菜单；

2.按向上/向下键选择所需的白平衡项:自动/太阳光/阴天/日光灯/灯泡/取消。按【OK键】确认保
存并返回。

3.1.9 设置锐度

此功能允许用户调节拍摄画面的锐度,使拍摄画面边缘更加清晰或柔和。

1.在录影模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "锐度" 菜单；

2.按向上/向下键选择所需的锐利度: 锐利/普通/柔和/取消。按【OK键】确认保存并返回。

3.1.10 摄影效果设置

此功能允许用户设置视频的各种特殊效果。

1.在录影模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "摄影效果" 菜单；

2.按向上/向下键选择所需要的特殊效果: 普通/黑白/老照片/红色/绿色/蓝色/日落/暖色/冷色/过曝/红外线/二值/高饱和/低饱和/狗眼/阿宝色/哥德风/日本风/LOMO/底片/取消。按【OK键】确认保存并返回。

3.1.11 感光度设置

使用此功能可调节感光度,推荐使用自动模式.

1.在录影模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "感光度" 菜单;

2.按向上/向下键选择所需的感光度值: 自动/100/200/400/取消, 按【OK键】确认保存并返回。

3.2 拍照模式

本机有强大的拍照功能。用户可合理设置相关参数, 拍出非常优美的照片。

开机后, 按【模式键】切换到拍照模式, 本章所有操作均在拍照模式下进行。

1拍照模式指示器	2照片分辨率指示器	3场景模式指示器	4防抖动指示器
5人脸侦测指示器	6笑脸拍摄指示器	7 夜视指示器	8可拍照数量指示器
9 SD卡指示器	10变焦指示器	11电池电量指示器	12摄影效果指示器
13锐度指示器	14感光度指示器	15曝光指示器	16画质指示器
17 白平衡指示器	18 自拍时间指示器		

3.2.1 拍摄照片
本章节介绍使用本机拍摄照片.开启本机,按模式切换键切换到 "拍照模式"
1.根据屏幕上显示的景物来选择和调整所要拍摄的目标, 握稳本机,并按下【拍照键】拍摄照片.
2.每种分辨率下可拍摄的照片数量会显示在屏幕右上角.
3.未插SD卡时,按拍照键屏幕会提示 "记忆体已满",当SD卡存储满时,屏幕会显示"内存卡已满",
此时请插入另一张SD卡,以继续拍摄.
4.可拍照片数量取决于存储卡容量和所选择的分辨率,分辨率越高,占用的内存也越多.
在开始拍摄照片前, 可以从拍照模式下设置相应参数,见以下详细介绍.

3.2.2 模式设置
用户可根据实际环境, 选择最佳场景模式.
1.在拍照模式下, 按【菜单键】弹出菜单, 按向左/向右键来选择 "模式设置"菜单 ,
2.按向上/下键来选择需要的场景模式 : 自动/夜景/人物/风景/背光/运动/派对/海滩/高感光度/取消.
3.按【OK】保存并返回.

3.2.3 照像尺寸设置
设置照片的分辨率. 分辨率越高, 照片文件越大, 占用的存储空间越多.
1.在拍照模式下, 按【菜单键】弹出菜单, 按向左/向右键来选择 "照像尺寸" 菜单 ,
2.按向上/向下键来选择需要的照片尺寸 : 48M/30M/24M/20M/16M/12M/10M/8M/7MHD/5M/3M/取消.
3.按【OK键】保存并返回.

3.2.4 美颜设置
本机支持美颜功能, 开启此功能, 可使肌肤光滑, 人脸美白、红润.
1.在拍照模式下,按【菜单键】调出菜单选项, 按向左/向右键来选择"美颜"菜单.
2.按向上/向下键选择美颜功能是否打开: "开/关/取消" ,
3.按【OK键】确认保存并返回.

3.2.5 拍摄模式设置
设置本机的连拍与单拍功能. 开启连拍功能后, 每按一次【拍照键】, 本机自动连拍三张照片.
1.在拍照模式下, 按【菜单键】弹出菜单, 按向左/向右键来选择 "拍摄模式" 菜单 ,
2.按向上/向下键来选择需要的拍摄模式 : 单张/连拍/取消.
3.按【OK键】保存并返回.

注意： 连拍开启后, 本机默认为3连拍.

3.2.6 自拍设置
打开或关闭自拍功能, 设置自拍时间.
1.在拍照模式下, 按【菜单键】弹出菜单, 按向左/向右键来选择 "自拍" 菜单 ,
2.按向上/向下键来选择需要的自拍时间 : 关/2秒/5秒/10秒/取消.
3.按【OK键】保存并返回.

3.2.7 曝光设置

调节照片的暴光参数。EV值越大，照片的亮度越高。在环境亮度较低时，调节此功能无效。

1.在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "曝光" 菜单，

2.按向上/向下键来选择需要的曝光值：+3 EV/+2 EV/+1 EV/0 EV/-1 EV/-2 EV/-3 EV/取消。

3.按【OK键】保存并返回。

3.2.8 白平衡设置

设置照片白平衡，根据光源环境调整照片的颜色偏差。推荐使用自动模式。

1.在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "白平衡" 菜单，

2.按向上/向下键来选择需要的白平衡效果：自动/太阳光/阴天/日光灯/灯泡/取消。

3.按【OK键】保存并返回。

3.2.9 画质设置

设置照片的质量，所选照片质量越高，照片越清晰，占用的存储空间越大。

1.在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "画质" 菜单，

2.按向上/向下键来选择需要的照片画质：超高画质/高画质/普通/取消。

3.按【OK键】保存并返回。

3.2.10 锐度设置

设置照片的锐利度，使所拍照片边缘更加清晰或柔和。

1. 在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "锐度" 菜单，

2. 按向上/向下键来选择需要的锐度：锐利/普通/柔和/取消。

3.按【OK键】保存并返回。

3.2.11 摄影效果设置

设置照片的各种特殊效果，用户可以根据需要选择不同的特效。

1.在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "摄影效果" 菜单，

2.按向上/向下键来选择需要的特殊效果：普通/黑白/老照片/红色/绿色/蓝色/日落/暖色/冷色/过曝/红外线/二值/高饱和/低饱和/狗眼/阿宝色/哥德风/日本风/LOMO/底片/取消

3.按【OK键】保存并返回。

3.2.12 感光度设置

设置照片的感光度（ISO），推荐使用自动模式。

1. 在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "感光度" 菜单，

2. 按向上/向下键来选择需要的ISO选项：自动/100/200/400/取消。

3.按【OK键】保存并返回。

3.2.13 防抖动设置

开启或关闭防抖功能。本机支持电子防抖，开启本功能可以减少因抖动而造成的照片模糊。

1.在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "防抖动" 菜单，

2.按向上/向下键来选择需要的防抖动功能：开/关/取消。

3.按【OK键】保存并返回。

3.2.14 人脸侦测设置

开启或关闭人脸识别。开启本功能可自动识别人脸。

1.在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "人脸侦测" 菜单 ，

2.按向上/向下键来选择人脸侦测：开/关/取消。

3.按【OK键】保存并返回。

3.2.15 笑脸拍摄设置

开启或关闭笑脸自动拍照功能。开启本功能后，本机识别到笑脸时会自动拍照。

1.在拍照模式下，按【菜单键】弹出菜单，按向左/向右键来选择 "笑脸拍摄" 菜单 ，

2.按向上/向下键来选择笑脸拍摄：开/关/取消。

3.按【OK键】保存并返回

3.2.16 日期标记设置

此功能可在被拍摄的照片上记录日期和时间.

1.在拍照模式下，按【菜单键】调出菜单选项,按向左/向右键来选择 "日期标记" 菜单 ，

2.按向上/向下键选择日期标记: 关/日期/日期和时间/取消，按【OK键】确认保存并返回。

3.3 回放模式

本机所拍照片,可以回放观看.并可对照片进行删除、旋转、保护和幻灯片回放

等操作.所录的视频,可以回放观看, 也可以对视频文件保护和删除操作。

3.3.1 回放照片及相关操作

在拍摄模式或录影模式下拍好的照片或视频,按【回放键】进入回放模式,在回放模式下

可对照片进行: 放大/缩小、前后翻页、缩图显示等操作.

1.放大/缩小照片: 在回放模式下按【变焦键】向右拨动进入放大/缩小模式，向右按放大,向左按缩小.

2.翻看照片或视频文件: 在回放模式下按向左/向右键,分别是向前/向后翻页.

3.移动放大的照片: 照片放大后,按向左/向右键可对照片进行向左/向右移动按向上/向下键，可对照片

进行向上/向下移动,按【变焦键】向右可对照片进行放大/缩小;按【OK键】可停止照片放大或移动功能

4.进入/退出缩图显示: 在回放模式下持续向左按【变焦键】,可进入缩图显示,在此模式下，按【四向

键】可上/下/左/右移动选择图片或录影文件.按【Ok键】可退出缩图显示. 在回放模式下,可选择以下

选项来对照片进行操作：

3.3.2 删除(可以一次删除一张照片或一次全部删除照片)

1.在回放模式中,按【菜单键】调出照片操作菜单.按向左/向右键来选择"删除"菜单；

2.按向上/向下键选择所需的删除选项:这张照片/全部/取消,按【OK键】确认执行操作.

3.3.3 保护(保护照片不被意外删除.照片被锁定后,必须解锁后方可执行删除功能)

1.在回放模式中,按【菜单键】调出照片操作菜单.按向左/向右键来选择 "保护" 菜单;

2.按向上/向下键选择所需的操作选项: 锁定/解锁/锁定全部/解锁全部/取消, 按【OK键】确认并执行

操作,并返回回放模式.

3.3.4 旋转(此功能可以旋转选中的照片)

1.在回放模式中, 按【菜单键】调出照片操作菜单, 按向左/向右键来选择"旋转"菜单,

2.按向上/向下键选择所需的旋转角度: 90°/180°/270°/取消, 按【OK键】确认执行操作。

3.3.5 幻灯片回放设置

所拍的照片, 可以进行幻灯片播放。此功能只对照片操作, 对视频文件无效。

1.在回放模式, 按【菜单键】弹出菜单, 按向左/向右键来选择 "幻灯片回放" 菜单。

2.按向上/向下键选择所需的幻灯片回放时间：3秒/5秒/10秒/取消。

3.按【OK键】确认, 开始播放, 按【OK键】停止播放, 并返回回放模式。

3.3.6 播放视频及相关操作

所录的视频,可以在本机进行回放观看、删除和保护等操作.

1.在回放模式下,按向左/向右键,选择需要播放的视频文件.

2.按【录像键】开始播放文件

3.按下【OK键】可以暂停/继续播放.再次按下【录像键】停止播放视频.

3.3.7 删除视频操作(此功能可以一次删除一段视频或一次删除全部视频文件)

在回放模式中,按【菜单键】调出操作菜单.其它操作与照片相同.

3.3.8 保护视频文件(此功能可以保护视频文件不被意外删除)

在回放模式下选择视频文件,按【菜单键】调出视频操作菜单,其它操作与照片相同.

注意：

1.锁定：是指加锁当前所浏览的视频/照片文件。

2.解锁：是指解锁当前所浏览的视频/照片文件。

3.锁定全部：是指加锁本机的全部视频/照片文件。

4.解锁全部：是指解锁本机的全部视频/照片文件。

3.4 设置模式的操作

此菜单可以进行基本设定,如时间、语言等.在录影模式和拍照模式下均可操作,方法相同.

3.4.1 语言设置

本机支持多种语言,请跟据使用习惯自行选择.

1.在拍照/摄像模式下,按【菜单键】调出菜单选项,按向左/向右键来选择 "设置" 菜单。

2.按向上/下键选择"语言"子菜单,按【OK键】进入"语言"子菜单, 按向上/向下键选择所需语言：英语/德语/法语/西班牙语/意大利语/土耳其语/俄语/葡萄牙语/荷兰语/简体中文/繁体中文/日本语/波兰语

3.按【OK键】确认保存.

3.4.2 日期和时间设置

此功能可以设置本机日期和时间.

1.在拍照/摄像模式下,按【菜单键】调出菜单选项,按向左/向右键来选择 "设置" 菜单, 按向上/向下键选择 "日期和时间" 子菜单, 按【OK键】进入子菜单, 按向左/向右键滚动 "年/月/日/时/分/秒" 选项.按

向上/向下键设置日期、时间。
2. 设置完成后,按【OK键】确认保存并返回.。

3.4.3 自动关闭设置
此功能允许用户在一定时间未使用本机时自动关机以节省电源。
1.在拍照/摄像模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "设置" 菜单,按向上/向下键选择 "自动关闭" 子菜单 , 按【OK键】进入子菜单 , 按向上/向下键选择时间: 关/1分钟/3分钟/5分钟/取消。
2.按【OK键】确认保存并返回。

3.4.4 动作音设置
此功能可以打开或关闭本机的操作提示音.
1.在拍照/摄像模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "设置" 菜单, 按向上/向下键选择 "动作音" 子菜单 , 按【OK键】进入子菜单 , 按向上/向下键选择是否开启操作提示音: 开/关/取消
2.按【OK键】确认保存并返回.。

3.4.5 光频设置
此设置可以避免在灯光环境下拍摄时的画面闪烁.具体请参见当地电源标准.
1.在拍照/摄像模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "设置" 菜单,按向上/下键选择 "光频" 子菜单 , 按【OK键】进入子菜单 , 按向上/向下键选择适合的光源频率: 60HZ/50HZ/取消
2.按【OK键】确认保存并返回。

3.4.6 格式化设置
此功能可格式化本机及存储卡,删除所有文件,且不可恢复,请谨慎使用此功能.
1.在拍照/摄像模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "设置" 菜单, 按【OK键】进入子菜单, 按向上/下翻键选择 "格式化" 子菜单,按【OK键】进入子菜单.。
2.按向上/向下键选择是否执行格式化操作:是/否
3.再次确认是否需执行格式化:是/否,按【OK键】确认所选,操作完成后返回。

3.4.7 出厂设置
若用户因错误设置造成本机不能正常工作,可通过此功能将本机设置恢复到出厂时设置.
此功能不会删本机及存储卡内数据.
1.在拍照模式下,按【菜单键】调出菜单选项.按向左/向右键来选择 "设置" 菜单,
按【OK键】进入子菜单.
2.按向上/下翻键选择 "出厂设置" 子菜单,按【OK键】进入子菜单
3.按向上/下翻键选择是否恢复默认设置: 是/否,按【OK键】确认,返回到拍照模式.

4.附录

4.1技术规格

影像感应器	CMOS 800 万像素感应器，最高 4800 万像素（插值）
存储媒体	SD 卡，最大支持 SD 卡/HCSD 卡至 128GB
感光度	自动，ISO100，ISO200，ISO400
镜头	F/3.2，f=7.5mm
对焦范围	1.0m～无限远
照片	格式 :JPG　分辨率 :48M/30M/24M/20M/16M/12M/10M/8M/7MHD /5M/3M
视频片段	格式：AVI　分辨率:2.7K(2688x1520,30fps)/FHD(1920x1080,30fps) HD(1280x720,30fps)/VGA(640x480,30fps)
变焦	16X 数码变焦
防抖功能	支持，电子防抖
红外夜视	支持，<3m 范围
白平衡	自动/太阳光/阴天/日光灯/灯泡
曝光补偿	−3.0EV～+3.0EV
自拍	关/2 秒/5 秒/10 秒
计算机接口	USB2.0
液晶屏幕	3.0 英寸高清屏
麦克风	内置
外置麦克风	支持，3.5mm 同轴，输出阻抗：0.2KΩ~2.2KΩ
扬声器	内置
高清输出	支持
红外遥控	支持，约 6 米
电池	锂电池 NP-120
电源适配器	输出 DC 5V/1.5A
语言	英语/德语/法语/西班牙语/意大利语/土耳其语/俄语/葡萄牙语/荷兰语/简体中文/繁 体中文/日本语/波兰语
尺寸	120(长)×56(宽)×64(高)mm
重量	约 280±5g(不含电池）

4.附录

4.2常见故障与解决

出现问题	可能原因	解决办法
无法开机	未正确安装电池/电池电量不足	按本手册正确装入电池/为电池充电
突然黑屏	已启用省电功能/电池电量不足	重新开机/为电池充电
无法摄像或拍照	存储卡未格式化	将存储卡格式化
	存储卡速度太低	更换 Class 10 或以上速度的存储卡
	存储卡写保护	解除存储卡写保护
正常拍照不清晰	镜片脏污或有异物	用专用软布清理镜头并保持清洁
提示存储卡错误	存储卡保护	解除存储卡保护
工作中死机	存储卡格式不对/存储卡损坏	格式化存储卡或更换合格的存储卡
	存储卡不合格	更换合格的存储卡
照片/影像颜色错乱	本机白平衡/特效/曝光等参数设置错误	正确设置参数。如果不知道设置，请恢复出厂设置
遥控器不能操作	相机接收窗口被遮挡	解除遮挡物
	遥控器电池无电	更换电池
	距离太远	靠近使用
外置麦克风工作异常	外置麦克风未装电池或电池无电	装入电量充足的电池
	外置麦克风未正确连接	正确连接
	外置麦克风参数不正确	选用正确参数的麦克风
连接计算机异常	错误连接或 USB 线缆损坏	重新连接或更换 USB 线缆
计算机播放卡顿	计算机配置太低	使用符合要求的计算机

DIGITAL VIDEO CAMERA

All photos in this manual are only for reference. Please refer to the actual product.
We reserved the finally explanation right.In case of all data and parameters are modified,the real object
shall prevail in case the product disaccords with the manual.No further information about the changed.
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