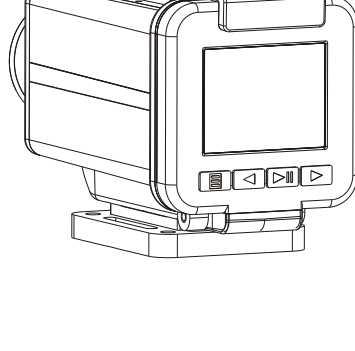


User Manual



Please read through this user manual before using the product and keep the manual for future use. This manual is for reference, any later alteration of technical specification and product appearance are without further notice.

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Technical Specification

Technical Specification

Sensor	16 Mega pixels for still picture (5 Mega CMOS)
Size	16M 4608*3456; 12M 4000*3000; 8M 3200*2400; 5 M 2592*1944; 3M 2048*1536
Resolution	FULL HD (1920*1080) 30FPS/25FPS 720P (1280*720) 60FPS/30FPS/25FPS WVGA (848*480) 60FPS/30FPS QVGA (320*240) 30FPS/120FPS
Zoom	4x digital zoom
Video output	PAL/NTSC/HDMI output
Audio	Built-in microphone/External microphone/speaker
Storage	Built-in 64M support SDHC high speed card (up to 32G)
Lens	150 degree, 5G all glass
File format	JPEG/MOV
Power	Rechargeable Lion battery 3.7V/1700mAh
Port	USB2.0 port /TV OUT/HDMI
Waterproof	Waterproof design
Screen	1.5" inch TFT Screen
Dimension	111*50*61mm

Precaution

Precaution

- Pls be well noted with the following guidelines before you use this camera.
- Pls refer to manual instruction and operate the camera correctly. Illegal operation may cause damage to camera internal components.
- Do not fall or hit the camera, it may damage the internal components.
- Do not open the battery cover when recording. Otherwise not only it is unable to save the current video recording document, also possibly damages other video recording documents which already have stored.
- Make sure install the battery correctly, the error direction of batteries may cause damage to this cam and cause the fire.
- For your safety, please keep the camera from the children and animals, in order to avoid accident
- Do not place the camera in a damp or dusty location for extended periods of time. This may cause a fire or an electrical shock.
- Do not leave the camera in places exposed to extremely high temperatures, such as under direct sunlight for extended periods of time. This may affect the camera housing and internal components.
- Do not burn the battery or drop it into the fire.
- Do not make the battery short circuit, do not make any metal touch the battery end.
- We recommend using Alkaline batteries in temperatures between 0°C to 40°C.
- Turn off the camera before removing the batteries and the memory card. The card and the data may be damaged if the memory card is inserted or removed while the camera is still on.
- Remove the batteries and memory card before storing the camera for long periods of time, to avoid power loss and camera damage.
- Clean the lens with a blower (typically a small device with a rubber bulb attached to one end that you pump to produce a stream of air out the other end), or wipe it with a soft cloth in a spiraling motion to remove fingerprints or dust.
- The temperature rise is normal when digital cameras in use for a long time
- Do not touch the lens when use the camera, so as not to influence the photography effect.
- Please use the air blower (special lens blowing equipment) to clean lens or use special lens-cleaning cloth to clean fingerprint or dust on the surface.

Accessories

Accessories

- Rubber strap
- Velcro
- USB cable
- TV cable
- HDMI cable
- Microphone
- Battery
- Charger
- Car Charger
- Charge pedestal
- User manual
- Short Velcro strap
- Long Velcro strap
- Helmet grip
- Handlebar grip
- Suction cup Bracket
- Rubber ring
- Base bracket

Troubleshooting

Troubleshooting

- There is no display?**
- Is battery properly installed.
 - Does the battery need replacing.
- After the Action Cam is connected to my PC, it cannot find the New drive in the "My computer's folder"**
- Make sure each end of the Action Cam USB cable is properly and firmly connected.
 - Make sure your USB port works. Try connecting other USB device to check if USB port has a malfunction.
- I can't capture the video footage?**
- Make sure there's enough space on the internal memory of Action cam or the SD card. The display will tell you how much time left for video recording.
 - If the SD card you inserted has capacity available, make sure it is not locked. It can't take video footage if card is locked.
- The remaining time is not accurate?**
- The remaining time is not always accurate, it's an estimate.
 - The remaining time depends not only on the time recorded, but on the color density of the video footage, under conditions with high contrast (such as outdoor), the actual time available will be less than under low-contrast conditions (such as indoors).
- I can't play the video footage on my television?**
- Make sure to turn the camera on.
 - Make sure each end of the AV cable is properly and firmly connected to Action cam and your television.
 - Please check if TV has been turned to the AV or HDMI mode.
- The image is not clear or dim?**
- Check out the lens whether there has any stain or fingerprint; use the Lens cloth to wipe up the Lens before shooting.

Operation description

Auto power off: 1 min/3 mins/5 minutes/OFF
Auto LCD off: OFF/30s/60s
Format: Yes/No
Language: English/Deutsch/Francais/Italiano/Espanol/Chs/Russian
Default setting: NO/YES
Flicker: 50HZ/60HZ
Time Stamp: OFF/DATE/TIME/DATE/TIME
Auto capture: OFF/30secs/60secs
Contrast: standard/hard /soft
Sharpness: standard/hard /soft
ISO: Auto/100/200/400
White Balance: Auto/Sunny/Cloudy/Tungsten/Fluorescent
Exposure: -2/-1.7/-1.3/-1.0/-0.7/-0.3/0.0/0.3/0.7/1/1.3/1.7/2
Firmware Version: VER: 1.0.0

Play back video footage on TV

- TV OUT mode**
Connect camera to TV video input port and audio input port of with the TV OUT cable provided. Choose AV mode on TV, the LCD screen of camera will be off automatically, all operation functions can be shown on TV, and you can operate camera on TV accordingly.
- HDMI mode**
Turn the camera on, connect camera to HD TV video input port and audio input port of with the HDMI cable provided. Choose HDMI mode on TV, the LCD screen of camera will be off automatically, all operation functions can be shown on TV, and you can operate camera on TV accordingly.

PC Mode

Turn the camera on, connect camera to computer with USB cable. Open "My computer", appears a removable Disk, open the Disk, DCIM file, 100MEDIA file in turn, and you can play back your videos or pictures, also can download your pictures and your videos in MOV/JPEG format.

Interface introduction

Interface Introduction

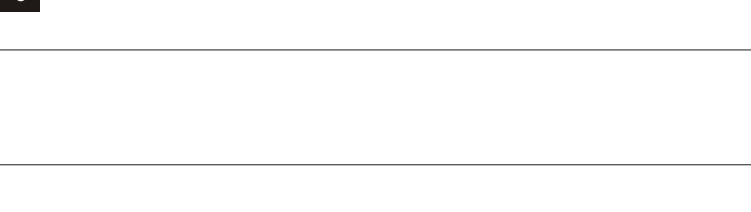
- Lens
- Record key
- Power key
- Camera key
- LCD screen
- Menu key
- Left key
- Confirm key
- Right key
- Working indicator
- Speaker
- Radiating screw
- Microphone
- TV port
- Charge indicator
- MIC IN port
- Battery cover knob
- Battery cover
- SD slot
- HDMI port
- Switch trigger
- USB port

Mounting Description

Mounting Description

The camera can be mounted in a number of ways. Please follow the methods of mounting as suggested below:

- Mount the helmet grip**
Mount the helmet grip into the hole in the bottom of the camera, and slide to back to make sure it is tight. (picture 1, 2)
- Mount the camera to the helmet using the helmet grip**
Follow the above methods to mount the helmet grip to the camera, and thread the Velcro strap through the mounting grip. (Picture 1)
- Thread the Velcro strap through the helmet twice** (picture 1, 2), then thread into the buckle to fasten it. (picture 3, 4)



Operation description

- Under standby, video or playback mode, press "Power key" to clear all characters appears on screen.**
- Browse mode**
 - Check movies
 - Turn on the camera, press once "Menu key" to enter movie mode, press "Left/Right" key to select the preview videos, press "Confirm key" to play. Press "Confirm key" to pause, press again to continue.
 - When playing, press "Right key" to turn up the volume (0-64); Press "Left key" to turn down the volume (64-0).
 - When playing, press once "Video key" to enter each frame playback mode, press "Confirm key" to quit.
 - Press "Menu key" to quit the camera mode.
- Check photos**
 - Turn on the camera, press twice "Menu key" to enter camera mode, press "Left/Right" key to select the preview pictures, press "confirm key" to check photos.
 - When check photos, press once "Confirm key" to enter Slide mode, press again "Confirm key" to quit.
 - Press "Menu key" to quit camera mode.
- Setting mode**
Turn the camera on, press "Menu key" three times to enter setting mode, press "Left/Right" key to select, and press "Confirm key" to confirm, press "Menu key" reverse to setting mode.
Resolution: FULL HD/1080P/25/720P 60/720P 30/720P 25/WVGA 60 /WVGA 30/QVGA/QVGA P20
Record overwrite: NO/2mins/5 mins/15 mins (Note: Under Detection mode, loop recording is invalid)
Time setup: YY/MM/DD/HH/MM
Motion Detection: NO/1 min/3 mins/5 mins
Size: 3M/5M/8M/12M/16M
Quality: H/M/L
TV style: NTSC/PAL
Internal mic Volume: 1/2/3/4/5/6/7/OFF
Beep Sound: On/Off

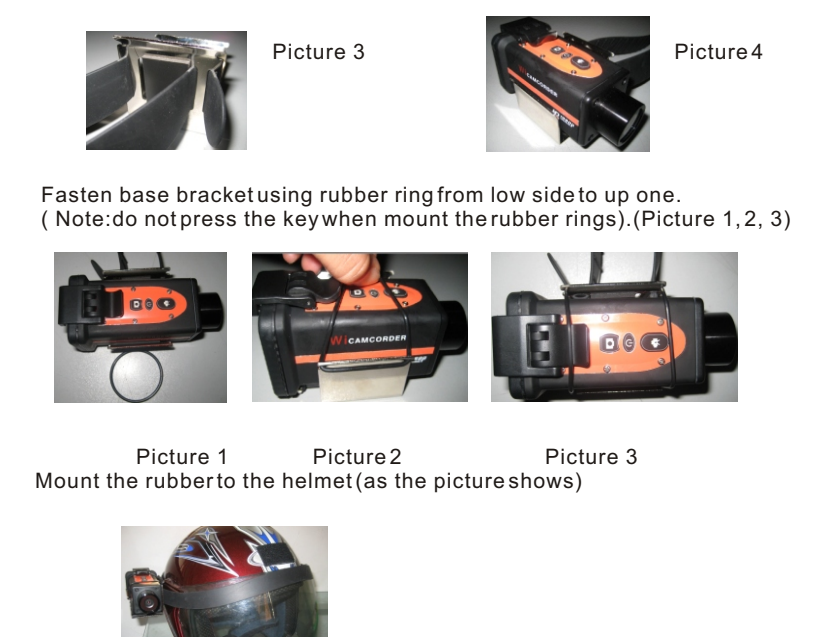
Operation description

Basic operation

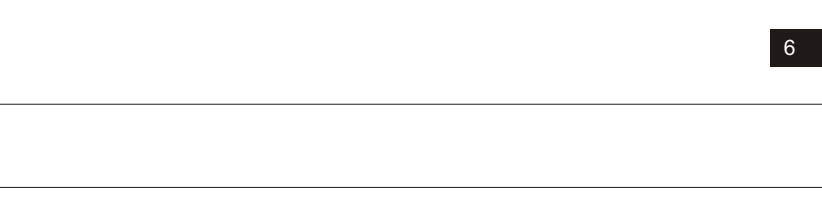
- Turn on/off the camera**
 - Turn on the camera
Press once power key, the red indicator under the LCD screen light up, you will hear beeping sounds, it enters into video mode; the resolution displayed on up left corner of LCD screen, the time displayed on LCD screen is remaining time, on the up right corner shows the battery icon.
 - Turn off the camera
- Taking video footages**
 - Normal Recording**
1) Turn on the camera, press once "Record key" to take video, the recorded time and video icon displayed on LCD screen, press "Record key" again to stop and save the video files, the remaining time displayed on LCD screen.
b. It can record the audio by camera microphone head, also can input the microphone to record nearby or within one meter.
 - Loop recording**
a. Set the record overwrite time say for 2 mins for example (pls refer to menu setting), the DVR enters loop recording mode, press "Record key" to start recording, when records to 2 mins (according to the time you set), DVR will stop recording automatically and save the video, then continue recording; When SD card is full, DVR will delete the first video footage automatically and continue recording.
b. When recording, press "Record key" to stop recording and save the video, the remaining time displayed in the LCD screen.
 - Motion Detection**
Set Detection time say for 1 min for example (pls refer to menu setting), the DVR enters Motion Detection monitoring mode. Under video mode, Once DVR detects moving objects, DVR will start to record automatically, it will stop recording automatically after 1 min (according to the time you set), then continue monitoring.
- Capture/snap shot**
During video recording, press "Camera key" to capture image. (Note: When capturing the image, the video recording is continuous processing, you can check the capture images only under browse mode)
- Take photo**
Under video mode, aim at the object you want to shoot and press "Camera key", it will save the photo automatically.
- Zoom in/out**
Under standby or video mode, press "Left/Right key" to zoom in/out the image.

Mounting Description

- Mount the camera to the helmet using base bracket**
Thread the rubber strap through base bracket (picture 1, 2, 3), and put the camera into the base bracket. (Picture 4)



(Note: do not bracket using rubber ring from low rigids) up one. (Fasten base bracket the key when mount the rubber strap.) (Picture 1, 2, 3)



Install and take out battery

Install and take out battery

Please use the appropriate lithium-ion battery (above 3.7V 1700mAh), any inferior batteries will severely damage the camera.

- Open the back cover.
- Open the battery slot door according to the direction of arrow.
- Insert the battery into the battery slot according to the polarity direction as shown on the battery cover.
- Close the battery slot door and twist the clasp.
- Unscrew the cover at the end of the unit and open the battery slot door, according to the direction of arrow (to the right), turn the battery slot door, the battery cover, and take out the battery

Important: When the battery is low, the low battery icon will appear on the LCD display. Always upload video footage to your PC prior to replacing batteries to avoid files loss.

Insert and take out storage card

- Insert storage card**
 - Open the camera back cover
 - Insert the card according to the direction as show
 - Close the cover
- Take out the storage card**
 - Turn off the camera and open the back cover.
 - Press the end of the storage card slightly, it will automatically eject.
 - Close the cover

Notice:
a) Before using the SD card, please check whether the key lock on it is locked;
b) Please confirm the inserting direction of the SD card because reversed inserting may cause damage to the camera and the SD card;

Battery charging

- Install the battery into the battery slot according to the above methods and close the cover, then connect the charger to the USB port and plug in the power. When charging, the red light on, full it off.
- Take out the battery, put it into the charger pedestal according to "+", "-", "+" signs, connect the charger pedestal to the charger, and then connect the charger to the power socket.

When the battery is being charged, the light on the charger pedestal is red. When the battery is fully charged, the indicator turns green.

Notice: a) In order to improve the charging efficiency, please charge the camera under the shutdown status
b) Please charge under the shutdown status. Please make sure the AC power is turned on when the charger is plugged.

Function description

Button Function Description

- Record key:** Taking video or stop; under playback mode to enter each frame playback; under browse mode to enter delete menu.
- Power key:** Turn on and off the camera; under standby, video or playback mode to clear screen character mode.
- Camera key:** to take photos under video mode; during video recording and playback to take snap shot.
- Menu key:** Under standby mode to switch to movie mode, photo mode and setting mode; under playback movie mode to quit playing; under photo mode to quit browsing.
- Left key:** Under video camera to zoom in the image; under photo browse mode to select the last file; under setting mode to select the last option.
- Confirm key:** Under video browse mode to check file and confirm playback; During playback press to pause; under setting mode to enter and confirm setting; under delete mode to confirm delete.
- Right key:** In the zoom in status to zoom out; under browse mode to select the next file; under setting mode to select the next menu.

