WASPcam 9905

Sports camera

User Manual

Please read through this user manual before using the product and keep the manual for future use.
Please operate the camera on basis of full understanding of the manual.
Any alteration of product appearance and specification below are without further notice.

Contents

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.
* 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
*We recommend using batteries in temperatures between 0℃ to 40℃.
Turn off the camera before removing the memory card, in case of the damage of card or storage data.
*The camera is matched with waterproof case. Pls use it when the camera needs to keep water away. We should take no responsibilities for the damage of camera or leakage because of it.
* The temperature rise is normal after using the digital cameras for a long time
*Do not touch the lens during using 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

Standard Accessories

1, USB cable
2,Handlebar mount
3, Helmet pedestal
4, Helmet activity pedestal
5, Long screw
6, User manual
7, Battery
8, Watch remote control
 9 , 3M pads
10, Nylon velcro strap
11, Waterproof USB cable

Operation Interface Introduction

1) Interface Introduction

1, Lens
2, Led night
3, Power key
4, REC key
5, LCD screen
6, Mode key
7, Menu key
8, OK key
9, LED on/off key
10, Left key
11, Right key
12, Working indicator
13, Charge indicator
14, USB port
15, HDMI port
16, Back cover
17, Locker
18, SD slot

Button function Introduction

Power key（ ⏻ ）：To turn on/off the camera; to clear screen character, to delete files under playback mode

Mode key (MODE): to switch to capture mode, video mode and   the playback mode

REC key (●): take photos and videos, and stop taking videos, return capture and video mode under menu mode.

Menu key (MENU): to enter into and exit menu setting,

OK key (   ): to browse photos and videos, to enter and confirm settings under setting mode.

Left key (◀ to choose the last menu or file, zoom out the image, and reduce voice volume under playback mode. Back to the last frame under one frame playback

Right key (▶): to choose the next menu or file, to zoom in the image, and increase sound volume under playback mode. Enter to the next frame under one frame playback.

LED light" ̤Ÿ   " :to switch strong, normal, flash and off light

Power on/off camera

    1, **Turn on**

Press "⏻" key for 3 secs, with one beeping sound, the working indicator light up, and "welcom" show on screen. Camera starts up and enter standby(default is record mode) .

  On the top of LCD screen it displays the record icon,anti-shaking icon, remaining recording time of card icon;

at the bottom of LCD screen it displays the battery icon, date and time icon.

  At the left of LCD screen it display loop-recording, white-balance and sound recording icon,

At the left of LCD screen it display resolution, SD card icon.

2, Turn off

Press " ⏻ key for 3 secs, it will turn off after one beeping sound.

Mounting Description

The camera can be mounted in many ways. The methods of mounting are suggested as below:

1, Mount to the top of helmet

 Thread the nylon strap into helmet pedestal, then thread the nylon strap into helmet and fasten it, then fix pedestal more firmly using 3M pads. (Pic. 1, 2, 3, 4)

  Pic. 1:   Pic. 2,   Pic. 3:   Pic. 4:

2, Mount handlebar grip

As shown in below pictures insert the camera to the handlebar mount then install onto the motorcycle or bike.

LED light

Press once " 💡 " to open stronger light, press again to open normal light, press the 3rd time to open flash, and press the 4th time to off light,

Battery charging

Connect camera and power supply using USB and charger. During charging, the red indicator is on. When it is fully charged, the indicator will be off.

 Notice:

    1, To improve the charging efficiency, please turn off camera during charging.

    2, Please make sure power is on during charging.

Insert and take out storage card

1, Insert the card: open the lock of back cover, press the card slot at right direction,   put the card according to the right direction, then lock the card slot.

2, Take out the storage card .

1) Turn off the camera

2) open the lock of back cover, press the card slot at right direction,   then take out the card.

Notice

Please confirm the inserting direction of the TF card. Reversed inserting may cause damage to the camera and the card.

l   **FWVer：2.0/20141031**

Menu Interface Introduction

Under standby mode, press twice "menu" key to enter system setting , press ◁ / ▷ key to choose option, press OK key to confirm, press "menu" key to quit.

System Setting

Under standby mode and playback mode, press twice "menu" key to enter system setting ,

press ◁ / ▷   key to choose option, press OK key to confirm, press "menu" key to quit.

- l   WIFI：on/off
- l   WIFI SSID：user name setting, the default is Shengon
- l   WIFI password：password setting,the default is 12345678
- l   Image rotation: on/ off
- l   Anti-shaking: on/off

LCD off: 30secs/1min/off

- l   Remote: off/on/remote match

Date/time: YYYY/MM/DD/HH/MM/SS

Date Stamp: off,Date, date/ time

Auto power off: off/1min /5 mins

- l   Language: ：ENGLISH/FRANÇAIS/ESPAÑOL/Portuguese/DEUTSCH/ ITALANO/ 简体中文/繁體中文/PYCCKЙЙ/日本语/한국어/Polski
- l   TV mode： NTSC/PAL
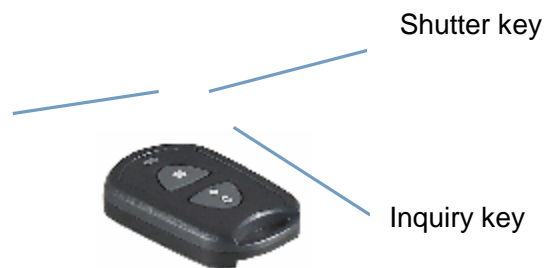- l   TV out: off/ on
- l   Frequency: 60 HZ   / 50HZ

l　　Format：　SD card

Default: Cancel / ok

l　　Version：FWVer：2.0/20141031

Under power on, press twice "menu" key to enter system setting, press $\triangleleft$ / $\triangleright$ key to choose remote: and select Remote match, LCD show" wat remote match" , and camera enter pairing status already,

At this time, press both buttons on remote controller to start pairing, Pairing success: LCD show :"Remote match OK" and auto disappear.

Remote control Description

Key description: 1. dual-color indicator

2. Inquiry key　　　3. Shutter key

Shutter key

dual-color indicator

Inquiry key

Key functions description:

1. Inquiry key: short press, you can check the present status of camera (see below remote control indicator status explanation) .

2. Shutter key: short press to take photo, long press for 3 seconds to start/stop recording.

3. Pressing the inquiry key and Shutter key simultaneously to enter Pairing operation.

The status of Remote control indicator instructions:

Status/LED		Red LED indicator	Blue LED indicator
Status inquiry	Standby	1 time/sec frequence Flickers about 5sec	off
	Recording	off	Light on 3 secs then off
	power off	Light on 3 secs then off	off
Matching operation	matching	Long light	Long light
	success	Light on 3 secs then off	Light on 3 secs then off
	failure	off	off
start recording		Flickers 5 secs at frequency of 1 time/sec	Flickers 5 secs at frequency of 1 time/s
stop recording		Flickers 5 secs at 2time/sec frequency	Flickers 5 secs at 2time/sec frequency
photo		off	off

WIFI Function

Notice: Before use this fuction, we download and install application of APP in your Apple phone(IOS system), or Google play(Android system).

Under power on, press twice "menu" key to enter system setting, press ◁ / ▷ key to choose wifi: select open: the wifi icon will show on screen, Search the Wlan using your mobile, find network name of "Shengon", connect and enter password :12345678 and confirm.

Connecting successed, the LCD will show "wifi connected", then open APP, and search camera ID, and enter password :12345678 and confirm.

Then preview the camera's imaging, take video, take photo and also make menu setting directly from mobile to your camera (such as video resolution , photo size etc)

Capture Setting

Under capture mode, press "menu" key to enter capture setting , press ◁ / ▷ key to choose option, press OK key to confirm, press "menu" key to quit.

Capture mode: signal/3s Timer/ 10s Timer/30s Timer

Auto photo：off/3seconds/5seconds/10seconds

resolution: 12M/10M/5M

Sequence: off/ on

Quality: Fine/Normal/Economy

Sharpness: Strong/ Normal/Soft

White Balance: Auto/Daylight/Cloudy/Tungsten/Fluorescent/Underwater

Color: color/B&W/ Sepia

ISO: Auto//100/200/400

Exposure: +0.0,-1/2,-1.0,-3/2,-2.0

Quick Review：Off/2seconds/5seconds

The default is recording mode after power on, press "menu" key to enter capture setting , now camera is the preview status,on the top of LCD screen display Photo, anti-shaking,and the photos amount icon, on the left display white-balance, Exposure, ISO icon, on the right will show size, memory, battery icon.

1. **Normal photo**

Under capture mode, press REC key to make photo.

2.**Capture mode: signal/3s Timer/ 10s Timer/30s Timer**

press "menu" key to enter camera setting , press ◁ / ▷ key to choose capture and select the time, press OK key to confirm, press REC key will auto photo according to the time.

Press REC key again to stop, or change the capture mode to signal.

Notice: When taking pictures. Please do not move the camera, or affect the picture effect.

3. **Auto photo：off/3seconds/5seconds/10seconds**

press "menu" key to enter camera setting , press ◁ / ▷ key to choose auto photo and select the time, press OK key to confirm, press REC key will auto photo according to the time you set. The screen will show countdown, when time is up the camera will make photo automatically and save the photo, then continue photoing according to the time you set.

To stop, Pls change the auto photo setting to Off.

3. **Sequence: off/ on**

press "menu" key to enter camera setting , press ◁ / ▷ key to choose Sequence to on, press OK key to confirm, press REC key will auto photo 3pcs and save the photo,

To stop, Pls change the Sequence setting to Off.

4. **Quick Review：Off/2seconds/5seconds**

press "menu" key to enter camera setting , press $\triangleleft$ / $\triangleright$ key to choose Quick Review and select the time, press OK key to confirm, press REC key will photo 1pcs and auto preview 2sec(according to the time you set), then back to photo standby mode;

Video setting

Under Video mode, press twice "menu" key to enter Video setting , press $\triangleleft$ / $\triangleright$ key to choose option, press OK key to confirm, press "menu" key to quit.

- l Resolution:1080P30FPS/1080P25FPS/720P60FPS/720P50FPS/720P30FPS/720P25FPS/WVGA60 FPS /WVGA50 FPS /WVGA30 FPS /WVGA25 FPS /VGA120FPS

Cyclic Record: Off/2Minutes/5Minutes/10Minutes

Exposure: +0.0,-1/2,-1.0,-3/2,-2.0

White Balance: Auto/Daylight/Cloudy/Tungsten/Fluorescent/Underwater

Motion Detection:Off/30Seconds/2Minutes/5Minutes

Record Audio: Off/ On

1, **Normal Recording**

When the camera is on, set the menu of "Cyclic Record" to "off" (Pls refer to "Video Mode" setting), press " REC " key once to take video, and the green LED will flash,the recorded time and recording icon are displayed on the top of LCD screen, .press" REC " key again to stop recording and save , the remaining recording time is displayed on the top of LCD screen.

(Remark: Camera gives out different sounds between starting recording and stopping recording)

2.**Loop recording**

a. Set "Cyclic Record" time say for 2 mins for example (pls refer to "Video Mode" setting), the camera enter(REC) op recording mode, press (REC) key to start recording , when records to 2 mins (according to the time you set), camera will stop recording automatically and save the video, then continue recording; When SD card is full, camera will delete the first video footage automatically and continue recording.

b. During recording, press key to stop and save the video, the remaining time will display on the LCD screen.

3.**Motion Detection**

Set "Cyclic Record" to "off", Set Motion Detection say for 30 SEC for example.(pls

(REC)

refer to Video setting), "Motion Detecting"and icon showed on the screen, press once   key to enter motion detection.

If Object is moving, camera will auto record 30sec(according to the time you set) and stop, If no object is moving, it will stop recording automatically., If there is always object moving, it will detect the object circularly according to the time you set.

If you need pause recording, press once   key(REC)op."Motion Detecting"showed on the screen,

If you need cancel motion detection. Pls set to Off.

Zoom in/out

Under recording or capture mode, press ▷/◁ key to zoom in/out the image.

Capture/Snap Shot

During video recording , press (MODE) key to capture image.

(Note: When capture the image, the video recording is continuous processing, you can check the capture images only under browse mode)

Clear screen

Under standby, video, capture or playback mode, press   key once to clear all characters on scree. Press   key once again, the characters will recover.

Playback mode

Under standby mode, press " mode" key to enter into playback mode, Press ◁ /

▷ key to choose the options, press" OK" key to confirm.Press again to pause, then press "OK" key again to go on play.

During Video playback, Long press ◁ / ▷ key to fast reverse or forwards playback. Long press ◁ / ▷ key to stop.

Shot press ◁ / ▷ key to adjust volume.

During picture browsing, press "menu"key to select slide show, and select time. Press "OK:key to confirm, press "OK:key to quit.

Press "MODE" key to return.

Delete and protect the file

1. **Delete File**

Under standby mode, press " mode" key to enter into playback mode, press "power"

key or "Men" key to enter delete and protect setting, Press ◁ / ▷ key to choose the options, press" OK" key to confirm.

Press ◁ / ▷ to choose "Delete all" or "Delete Current", press" OK " key to confirm,

Press ◁ / ▷ to "Cancel" or "ok" deleting the file. Press "ok" to confirm delete mode will exit.

2.Protect Files

Under standby mode, press twice" MODE " button to enter into playback mode, Press ◁

/ ▷ to choose file, Press "MENU" button to enter and Press ◁ / ▷ select "protect

"setting. press "OK" to confirm, and then press ◁ / ▷ select "Lock Current""Unlock current""lock all" "unlock all", press "OK" to confirm,Press "Menu" key to return.

3.Slide Show

Under standby mode, press twice" MODE " button to enter into playback mode,

Press ◁ / ▷ to choose file Press "MENU" button to enter and Press ◁ / ▷

select " Slide show ", press" OK " key to confirm, then press ◁ / ▷ select "2Seconds""5Seconds""8Seconds", then press" OK " key to confirm. Press "Menu" key to return.

Play back video footage on TV

Turn the camera on, connect the HDMI port of camera to TV via the HDMI cable, choose HDMI mode on TV. The LCD screen of camera will be off automatically, all operation functions can be shown on TV.

Technical specification

Sensor: 3M CMOS

Video Resolution: 1080P30FPS/1080P25FPS/720P60FPS/720P50FPS
/720P30FPS/720P25FPS/VGA120FPS

Image size: 12M/8M/5M

Storage: TF card, support up to 32G

Lens : 160°

Video format: AVI

Image format: JPG

WIFI: 802.11b/g/n

Remote: 2.4G remote control

Audio: Built in MIC, speaker

Port: USB、HDMI、TV OUT

Power: Li-ion rechargeable battery 1050mAh

Screen: 1.5 inch TFT

FCC Statement

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.

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.

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

IC Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interfe
The term "IC: " before the certification/registration number only signifies that the Industry Canada technical specifications were
met. This product meets the applicable Industry Canada technical specifications.

Le présent appareil est conforme aux CNR d'Industrie Canada applicable aux appareils radio exempts de licence.
L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage,
et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en
compromettre le fonctionnement