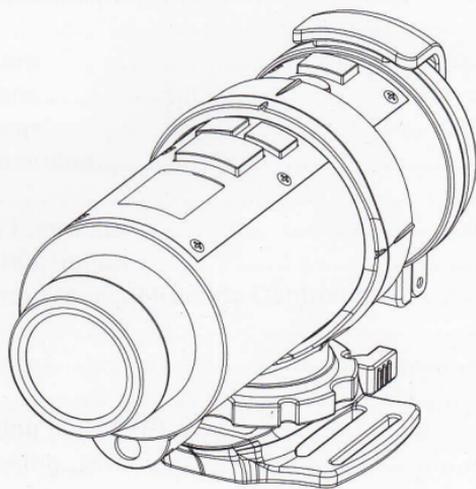


HD Vehicle DVD Camera

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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Camera Precaution

Camera 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.
- * We recommend using Alkaline batteries in temperatures between 0 °C and 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 to avoid the poor 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

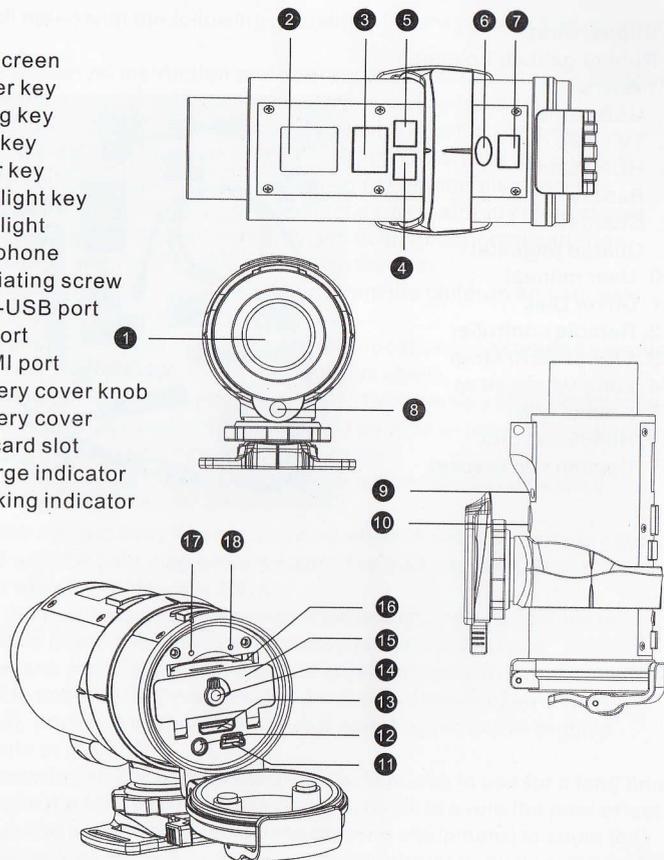
1. Rubber strap
2. Rubber gasket(3 pieces)
3. Velcro
4. USB cable
5. TV cable
6. HDMI cable
7. Battery
8. Charger
9. Charge pedestal
10. User manual
11. Driver Disk
12. Remote controller
13. Short Velcro strap
14. Long Velcro strap
15. Helmet grip
16. Handlebar grip
17. Suction cup bracket



Interface introduction

Interface introduction

1. Lens
2. LCD screen
3. Shutter key
4. Setting key
5. Mode key
6. Power key
7. Laser light key
8. Laser light
9. Microphone
10. Radiating screw
11. Mini-USB port
12. AV port
13. HDMI port
14. Battery cover knob
15. Battery cover
16. SD card slot
17. Charge indicator
18. Working indicator



Mounting Description

Camera Mounting Description

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

Fixing the position of the camera

- a) Turn it anti-clockwise to screw the camera tight and fix it into position.
- b) Turn it clockwise to unscrew the camera.

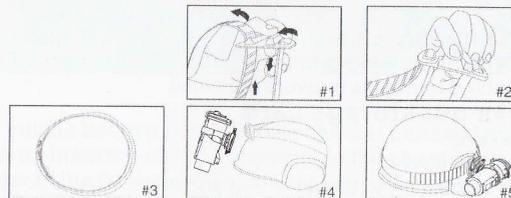
Turn it clockwise to unscrew



Turn it anti-clockwise to screw tight

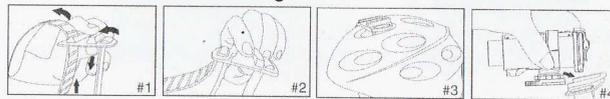
Mounting the camera onto the helmet using the silicon rubber strap

- 1+2. Thread the silicon rubber strap through the helmet grip.
 3. Mount the helmet grip to the helmet using the silicon rubber strap.
 4. Slide the camera into the helmet grip. Turn it anti-clockwise
 5. Adjust the angle of the camera making sure it's tight.
- To avoid damaging the camera, the mount lock at the base must be loosened before twisting the camera.



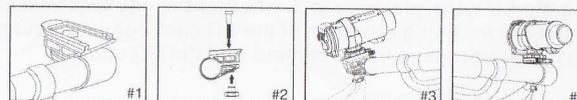
Mounting the camera using the Velcro strap:

- 1+2. Place the helmet grip on the helmet, and thread the Velcro strap through the helmet grip.
3. Secure the Velcro strap by fastening it through the helmet vents.
4. Slide the camera into the helmet grip, then adjust the angle of the camera and make sure it's tight.



Mounting the camera using the handlebar grip:

1. Place the handlebar grip on the handlebar.
2. Add the screw and nut to hold the handlebar grip securely.
- 3+4. Slide the camera into the handlebar grip and make sure the handlebar grip is locked with the camera. Adjust the angle of the camera.

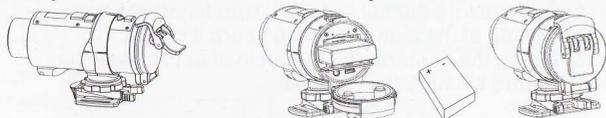


Mounting Description

Install and take out battery

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

- 1) Open camera back cover.
- 2) Open the battery slot door according to the direction of arrow.
- 3) Insert battery into the battery slot according to the polarity direction as shown on the battery cover.
- 4) Close the battery slot door and twist the clasp.
- 5) 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 knob to open the battery cover, and take out the battery.



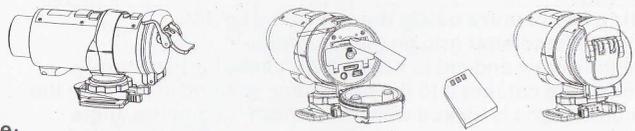
Important: When the battery is low, the low battery icon will appear on the LCD display. Always upload video footage to your PC prior to replacing batteries to avoid files loss

Insert and take out storage card

1. Insert storage card.
 - 1) Open camera back cover.
 - 2) Insert the card according to the direction as show.
 - 3) Close the cover.



2. Take out the storage card
 - 1) Turn off the camera and open the back cover.
 - 2) Press the end of the storage card slightly, it will automatically eject.
 - 3) 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;

Charging description

Battery charging

1. 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 indicator is on; when fully charged, the red indicator is off.



2. Take out the battery, put it into the charger pedestal according to "+", "-" poles, connect the charger pedestal to the charger, and then connect the charger to the power socket.

When the battery is being charged, the indicator 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 make sure the AC power is turned on when the charger is plugged.

Function description

Button functions description

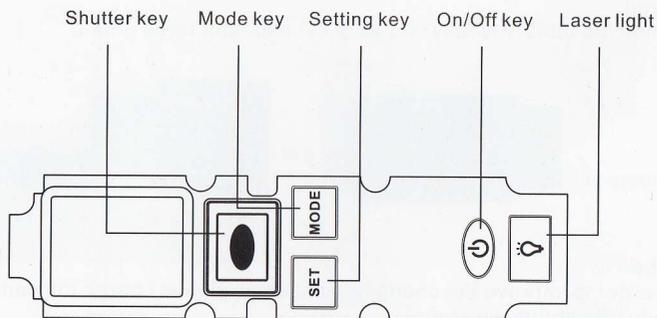
Laser light key: Position and track the object during taking the video, under the TV playback mode, applied to clear screen character and delete the current footage.

On/Off key: Power on and off.

Shutter key: Under standby status for taking video or stopping; in menu setting mode to select; Under the TV playback mode applied to play and pause; when connected to PC applied to shift PC cam and Disk.

Setting key: Under standby status to enter into menu setting; Under the TV playback mode applied to select the next file

Mode key: In menu mode, applied to confirm and exit the menu setting; Under the TV playback mode applied to stop playback, then enter into monitoring status.



Operation description

Basic Operation

Turn On the Camera

Press the power key  , LCD screen with blue backlight will light up (you will hear beeping sounds). It enters into video mode; the time displayed on screen is the remaining time for taking video, the "H" for Hour, "M" for Minute, and "S" for seconds.

Turn Off the Camera

Press the power key  once, The LCD display OFF (you will hear beeping sounds), and then the camera will turn off.

Take video footage

Cyclic (Loop) Recording

- 1). Turn the camera on,
Press the 'Shutter' key  to start recording. The blue light flickers. The LCD will display the recorded time. It will save the footage of recording every other 5 minutes. The "H" means hours, "M" means minutes; "S" means seconds.
- 2). Press again the Shutter key  to stop recording, The video remaining record time will be shown on LCD screen. The system will overwrite the first video footage automatically and continue taking new videos once the built in memory or external memory is full.
- 3). When it starts recording, the digits display on LCD are Minutes and Seconds, the second digit of Seconds flickers.
- 4). When it is saving the videos, the LCD displays "SAVE"
- 5). When stop recording, camera is saving the video footage, LCD will display "SAVE".

Remark: If inserted with a mass storage card, it may take a bit longer time waiting to get started recording or to stop recording and to delete video footage.

Operation description

Laser Light

The laser light is designed to help you to aim at the object you want to shoot.

1. Under the power-on status, press and hold the laser light key, it will light up, loosen the pressing it turns off.
2. Under the video mode, to aim at the object/direction you want to take video, press the laser light for positioning and tracking, the direction of laser light is where the camera lens shooting at.

Remote controller instruction(This function is limited to the camera with remote control ready-Option)

1. Basic Function Description

- 1) Turn Camera power on, press "  " key on the remote controller, the blue light on the remote controller and the camera laser light will light up; loose pressing the blue light indicator turns off, the laser light will turn off after 1 second.
- 2) Press "  " key, the blue light indicator on the remote controller light up (you will hear beeping sounds), the camera starts video recording and the blue light indicator flickers, press again "  " key, the blue light indicator turns off (you will hear beeping sounds), camera stops recording and the blue light indicator flickers.

2. Check the working status of remote controller

- 1) Turn Camera power on, press "  " key on the remote controller, the blue light indicator lights which means the camera is under the standby status.
 - 2) Turn Camera power on, press "  " key on the remote controller, the blue light indicator flickers which means the camera is under recording status.
- Note: 1)When the camera turns off or can not receive remote controller signal, press any key on the remote controller, the red light will light up.
- 2) It may take a bit longer time to save the large video footage, please wait a moment to press the remote controller, otherwise it will be no function.

Menu Setting

Press and hold the "SET" key for 2 seconds to enter into setting mode, press the "Shutter" key for selection, press the "SET" key to confirm and come to next menu. Or press "MODE" key to confirm and quit the setting.

1. Resolution Setting(720P /VGA Switching)

Turn on the camera, press and hold the "SET" key for 2 seconds, when the 720P icon  flickers, press "Shutter" key to select the resolution (720P/VGA) you need, press "MODE" key to confirm and quit the setting., Or press "SET" key to confirm and enter into the delete mode.

Operation description

2. Deleting Setting

Turn on the camera, press and hold the "SET" key for 2 seconds, the 720P icon  flickers, press "SET" key into the delete mode, and press the "Shutter" key to select "NO. ONE. ALL", press "MODE" key to confirm and quit the menu setting, or press "SET" key to confirm and enter Date Stamp Setting mode.

3. Date Stamp ON/OFF Setting

Turn on the camera, press and hold the "SET" key for 2 seconds, the 720P icon  flickers, press "SET" key into the delete mode, press "SET" key again into Date Stamp Setting, The "DON" flickers on the LCD screen, press "SHUTTER" key to select "DOFF"-means date stamp off or "DON"-mean date stamp on, press "MODE" key to confirm and quit the menu setting, or press "SET" key to confirm and enter TV System Switching Mode.

4. TV System switching

Turn on the camera, press and hold the "SET" key for 2 seconds, the 720P icon  flickers, press three times the "SET" key to skip the Delete Mode, Date Stamp Setting Mode, till the letter "N" displays and flickers on the LCD screen, it is TV System switching mode, press "SHUTTER" key to select "P"-PAL, "N"-NTSC, Then press "MODE" key to confirm and quit the setting, or press "SET" key to confirm and it will enter into time setting.

Memo: The default TV system is NTSC.

5. Time Setting

Turn the camera on, press and hold the "SET" key for about 2 seconds, when the 720P icon  flickers, press "SET" key four times, it will come up correspondingly the delete mode, Date Stamp Setting, TV system setting, and then to time setting mode, **Set the year:** Letter "Y" flickers, press the "Shutter" key to adjust the 3rd digit of Year number (0-9), press "SET" key confirm and set the last digit of the year, press the "Shutter" key to adjust number (0-9), press "SET" key to confirm and enter Month setting. **Set the Month:** Letter "M" flickers, press "Shutter" key to adjust first digit of the month number (0-1), press "SET" key to confirm and to set the second digit, press "Shutter" key to adjust (0-9); press "SET" key to confirm and enter the Day setting. **Set the Day:** Letter "D" flickers, press "Shutter" key to adjust first digit of day (0-3). Press "SET" key to confirm and enter the second digit of the date, press "Shutter" key to adjust number (0-9). Press "SET" key to confirm and enter Hour setting **Set the Hour:** Letter "H" flickers, press "Shutter" key adjust the first digit of hour (0-2), press "SET" key to confirm and enter the second digit of the hour, press "Shutter" key to adjust number (0-9); Press "SET" key to confirm and enter Minute setting. **Set the Minute:** Letter "M" flickers, press the "Shutter" key to adjust the first digit of minute (0-6), press "SET" key to confirm and enter second digit setting, press the "Shutter" key to adjust number (0-9), press "SET" key to confirm and quit the time setting mode, and return to video mode.

- Remark:**
1. under any mode, press "MODE" key will quit menu setting and save the current setting.
 2. If you want to skip the year, months, or other settings, press the "SET" key to skip to next option setting. E.g. when set the year, press the "SET" key once to skip from third digit to forth digit of year setting.

Operation description

Playing back video footage on TV

1. TV OUT mode

Turn on the camera, connect camera to TV video input port and audio input port of with the AV cable provided. (Remark: video plug is yellow head, audio plug is red / white head). "AV" will appear on the Cam LCD, TV is under the playback status, press "SET" key, you could select next video footage, press the "Shutter" key to begin to playback the video, press again the "Shutter" key to pause playback, to continuous video playing press the "Shutter" key again; in the playback process, press "MODE" key to stop playing. Under playback or stop status, press the laser light key to clear all the characters on TV. Press again the laser key to resume normal; Then long press the laser light key for 3 seconds, it will delete the current video footage. When there is no files in camera memory, TV will display "NO FILE".

Note: Under AV status, pull out the AV cable, camera will shut off automatically.



2. TV OUT Monitoring Mode

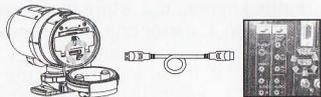
- 1) Turn on the camera, connect camera to TV video input port and audio input port of with the AV cable provided. (Remark: video plug is yellow head, audio plug is red / white head). "AV" will appear on the Cam LCD, TV is under the playback status. Under the stop playback status, press "MODE" key into TV monitoring mode, the "video remaining record time" will be shown on LCD screen. On the TV top left corner displays the recording icon and resolution, the battery icon will be shown on the bottom left, the video remaining record time will be shown on the top right corner on the TV, the date and time will be shown on the bottom right corner.
- 2) Under TV monitoring mode, press "Shutter" key once to start recording, the icon "REC" flickers on the top left corner of TV, the bottom left corner of TV and camera LCD screen display the current video recording time. the date stamp displayed on the left top. Press "Shutter" key again to stop video recording, the remaining record time will be shown on the LCD screen.
- 3) Under monitoring or recording status, press "Shutter" key once to clear all characters on the TV, press again come to be normal.
- 4) Under TV monitoring status, press "MODE" key once to back to the playback mode.

3. HDMI mode

Turn on the camera, connect camera to HD TV by using the HDMI cable provided, choose AV mode on TV. "HD" appears on LCD display, TV is under the playback the video, press "SET" key to choose next file, press "Shutter" key to playback current file, and press again "Shutter" key to pause playback, to continuous video playing press the "Shutter" key; in the playback process, press "MODE" key to stop playing. Under playback or stop status, press the laser light key to clear all the characters on TV. Press again the laser light key to resume normal; If press and hold the laser light key for 3 seconds, it will delete the current video footage. When there is no file in camera memory, TV will display "NO FILE". Pull out the AV cable, the camera will shut off automatically.

Note: TV screen clear function (live video out)

When taking videos under TV OUT Monitoring Mode, or playback on TV and stop playback, Press "Laser Light" key to clear all characters on the TV except for the date stamp.



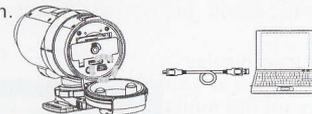
Operation description

To view the image on computer

1. Check out the video file.

- 1) Turn on the camera, connect the Action Cam to PC via the USB cable provided. "PC" appears on the Action Cam LCD screen, open "My computer" check a new disk on your computer, open the new disk you will see the video footages, (Remark: If there is no external memory card. PC will display the built in Memory disk, if there is SD card. PC will display SD card, storage disk.) Open the Disk and view the image.
- 2) Close the Disk, pull out the USB cable, the camera will shut off automatically.

Remark: 1. When the voltage below 3.4V, low battery icon will displayed in left corner of LCD screen, you should prepare to change the battery, the camera will shut off automatically when it runs out of battery.
2. When system detects that there is SD card inserted, SD icon will display on the left bottom of LCD screen.



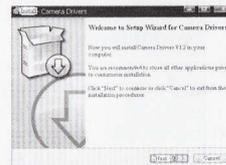
2. PC cam

a) Install the driver

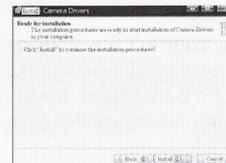
Before using the PC cam, install the driver required, put the CD ROM provided into the computer driver, open "My Computer" and double click the following icon will show on the display:



then open "Driver" icon and double click "Driver Setup & Driver", will display

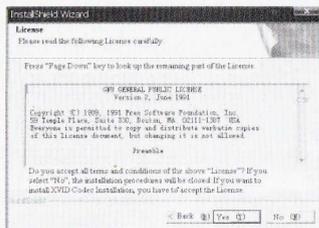


click the "next" icon, display:

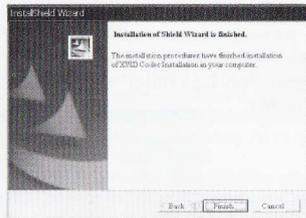


Operation description

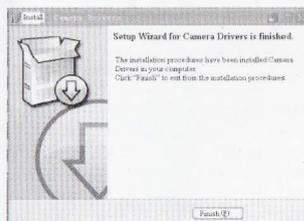
click "Install" icon; display:



click "YES" icon, display:



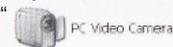
then "FINISH" icon display:



Click the "FINISH" icon.

b) Check out the camera

Turn on the camera, connect the Action Cam to PC via the USB cable provided, "PC" appears on the Action Cam LCD screen, press "Shutter" key once enter into Pc cam mode, open "My computer", click



" icon to check PC cam.

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;
- Check if it is already connected to the PC cam; (If so, press "Shutter" key switch back to hard disk mode)

I can't capture the video footage?

- Make sure there's enough space on the internal memory of Action cam of 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;
(Memo: This machine is HD camera, to guarantee to capture high-quality video image, it is recommend .)
- Using high speed SD card;
- Formatting the card before recording;

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 finger print; use the Lens cloth to wipe up the Lens before shooting;

I can't view the PC cam?

- Make sure the driver has been installed;
- Make sure it has been switched to PC cam mode;

Remote controller doesn't work?

- Please replace the inside battery (3V 300mAh) in remote controller.

Technical Specification

Technical Specification

Sensor	5.0 Mega pixels COMS sensor.
Resolution	720P(1280*720)/30FPS VGA (640*480) /60FPS
Video	PAL/NTSC/HDMI output
Audio	Built-in microphone
Remote controller	High frequency 2.4G, all direction remote control
Storage	Built-in Memory 64MB.SD memory Card slot support up to 32 G (Not included)
Lens	120 degree 5G All glass Lens
Movie format	AVI
Battery	Rechargeable lithium battery 3.7V/1700mAh
Port	USB2.0/TV OUT/HDMI
Waterproof	Waterproof design
Dimension	129*53.5*72mm