

Operating instructions



1080P HD 2.4GHz vehicle wireless monitoring
camera integrates battery and camera

Please read this manual thoroughly before operating the device.

V1.0

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1. Precautions

- **Storage and Keeping**

1. Do not expose the camera to overheated or overcooled environments. Storage temperature: -20~+60°C, Operating temperature: -20~+60°C, Humidity: RH95%.
2. Do not use this device in bathtubs, sinks, kitchens, damp basements, swimming pools or similar places.
3. Do not use this device in humid, dusty or foggy environments.
4. Avoid falling or striking this device.
5. Avoid using this device in confined spaces, excessively vibrating or severely impulsive places.
6. Do not puncture, scratch or use abrasive cleaning materials on this device.
7. Leave at least 2-inch space between camera and a wall, cabinet or other objects to allow for ventilation around the device.
8. This camera is rainproof.
9. To prevent battery damage, please charge the battery to 75% capacity before long-term storage, and recharge it to 75% capacity within 150 days.
10. The initial charging current may be low after long-term storage, but after a while, it will return to normal.

● **Operating Precautions**

1. The device integrates the battery with camera, powered by a built-in battery; You could use a 5V-12V power supply to charge the device. Do not use a power supply above 12V to charge the device.



Warning!

Please keep the camera's transparent glass cover clean and do not use sharp tools to scratch it.



Note

Please install and use this camera correctly, and read this instruction thoroughly for detailed installation and usage.

● **Maintenance**

1. Disconnect all cables from the camera before cleaning the device.
2. Use a mild household cleaner and wipe with a slightly damp soft cloth.
3. Never use strong solvents, such as thinner or gasoline, since they may damage the painted device.

	Warning	
	Electric Shock Hazard Do not open	

Note : To reduce the risk of electric shock, do not remove the cover (or the back) .
There are no user-serviceable internal parts.
Please contact qualified maintenance personnel for repairs.



This symbol aims to alert users to the presence of an un-insulated "hazardous voltage" in the product's housing which may be strong enough to pose a risk of electric shock to a person.



This symbol aims to remind users of important operating and maintenance (service) instructions in the file along with the device.



This symbol aims to remind users not to waste electrical and electronic device.

No

Please note that any changes or modifications not explicitly approved in this manual may void your warranty and require expensive maintenance costs.

2. Product Features

- Integrate the battery with camera, strong magnet base, easy to install
- Waterproof and dust-proof rate: IP69K; Shockproof rate: 17.3g
- With lithium battery protection function, overcharge protection when charging, limiting lithium battery voltage to exceed 4.2V; overdischarge protection when discharging, when the lithium battery voltage is lower than 2.9V, lithium battery output current is only 4.5uA.
- Support USB charging, and discharging while charging function
- LED power indication and abnormal status alarming
- After the connected monitor is turned off for 20 seconds, the camera can enter the low power consumption mode by itself, and battery output current is less than 3mA. Battery output current is less than 0.3mA after pressing the switch button for a long time.
- Viewing angle: 70°/100°/130°
- With IR-cut, completely solve the color deviation of green plants under the sunlight.

3. Specifications

Battery Capacity	3.6V/6400mAh
Charging Voltage	5V-12V
Charging Time	5V/8H , 12V/3H
Charging Current	5V/1.5A(MAX) , 12V/1.5A(MAX)
Discharging Time	12H (daytime) 5H (night)
Charging Temperature	0~+40°C
Operating Temperature	-20~+60°C
Storage Temperature	-20~+60°C
Waterproof Rating	IP69K
Size	116 x 80 x 66 (mm)
Weight	670g
Sensor	1/2.9" CMOS SENSOR
Effective Pixels	1920 x 1080 pixels
AGC	Auto
S/N Ratio	38dB

White Balance	Auto
BLC	Auto
Operation Frequency	2403-2478MHZ
Transmission Distance (barrier free)	300m(20dBm)
Receive sensitivity	-78dBm
Video coding	H.264
Transmitted Power	FCC : ≤26dBm CE : ≤20dBm MIC : ≤10dBm
Modulation System	FHSS
Delay	130ms
InfiniBand	12Mbps
Minimum Illumination	0Lux
Night Vision Distance	8-10m
Audio	<input type="checkbox"/> Yes <input type="checkbox"/> No
Viewing Angle	<input type="checkbox"/> 70° <input type="checkbox"/> 100° <input type="checkbox"/> 130°
Automatic Filter Switching Function	<input type="checkbox"/> Yes <input type="checkbox"/> No

4. Product Introduction

4.1 Brief Introduction

The 1080P vehicle digital 2.4G wireless monitoring camera uses 2.4G wireless technology, operating in collocation with our digital wireless segmentation monitor. Transmission distance up to 300 meters. FHSS could be better anti-interference, supporting automatic white balance and backlight compensation. Integrated the battery with camera, it supports automatic low power consumption and could conduct the remote wakening in collocation with low power monitor. The camera base has strong magnet for easy installation. At the same time, it has with short circuit, temperature, lithium battery protection and other functions with high reliability and wide applicability.

4.2 Product Appearance



4.3 Pairing Process

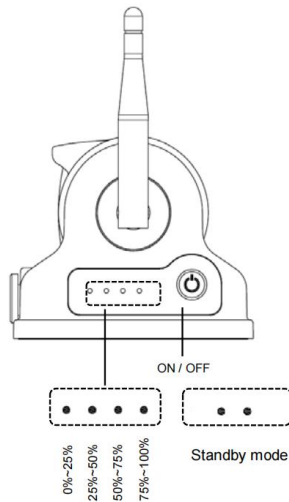
- Firstly, the monitor enters the pairing mode (Refer to monitor

operating instructions)

- The camera enters the pairing mode after 10-second power-on.
- There is picture in the monitor after completing pairing.
- The paired camera would connect paired monitor preferentially if power-on again. The system would automatically enter the pairing mode, if the connection falls in the 10s.

4.4 Base Function

- Indicator



- Power Button : Enter work or sleep mode for 3-second pressing, double-click to enter the standby mode, and click to enter

the work mode.

- When the monitor enters the standby mode over 30 seconds, camera will enter standby mode; when the monitor returns to work, the camera will be waken up and work. (When monitor and camera both have low-power consumption module.)
- Low power consumption:
 - Less than 1.5mW at sleep mode;
 - Less than 10mW at standby mode.
- Battery capacity indicator.
- Overcharging protection.
- Overdischarging protection.
- Short-circuit protection.
- Overheat and low temperature protection.
- Load detection, when over-voltage detected, automatically switch to sleep mode.

4.5 Installation Suggestions

(Please refer to monitor operating instructions)

5. FAQ

Q : Why cannot pair successfully?

A : Make sure the monitor and camera are paired at the same time.

Q : How to reset?

A: The camera does not support resetting, please reset parameters on the monitor.

6. FCC Warning

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.

NOTE 1: 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.

NOTE 2: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.