



[Quickly deploy the ball]

User Manual **V2.0** ħ Please
read this manual carefully before using itħ

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1. Safety Instructions



Personnel responsible for the installation and routine maintenance of this equipment must possess basic skills in safe operation. In operation

Before using the device, be sure to carefully read and implement the safety regulations specified in the product manual.

y This is a Class A product, which may cause radio interference in a living environment. In this kind of

In such cases, the user may be required to take practical measures for its interference.

y Make the equipment work within the allowable temperature and humidity range, and avoid being exposed to extrusion, vibration, humidity, etc.

Dusty, extremely hot, extremely cold, strong electromagnetic radiation and other places.

y Under normal circumstances, the device is installed outdoors, and the device connection should be effectively waterproof and moisture-proof.

Air, sand and dust prevention measures (especially the screws at the connection of the equipment must be tightened to ensure the overall tightness).

To prevent lightning strikes, please install lightning arresters.

y Do not aim the lens at a strong light object for a long time, especially do not aim it at the sun or other strong objects.

light source, otherwise it may cause permanent damage to the imaging device of the device.

y Please use the power adapter provided by our company. It is possible to use a power adapter that does not meet the requirements.

can cause damage to the device.

y If the power cable between the power adapter and the device is too long, the voltage reaching the device will be low.

It is easy to cause the equipment to work abnormally. If you need to extend the power cord, please refer to "Power Cord Requirements".

y Disconnect the power supply before moving the device. Be careful when moving it. Once the power cord is plugged into the power supply,

The device will power up. When moving the equipment, do not carry the weight by the tail wire, so as to avoid the equipment cable

The interface is loose.

y Do not cut the pigtails for connection. The exposed pigtails may cause a short circuit and cause abnormal damage to the device.

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9 For external connection ports, please use existing cable terminals to connect. When connecting, confirm the cable terminal (lock

buckle/snap) good and fastened in place;

9 Do not pull the cable excessively during the installation process, and keep a certain margin to prevent vibration and shaking.

Causes poor or loose port contact.

9 The tail wire should not be exposed, and the area where the tail wire is located must be completely waterproof (waterproof junction box or seal).

cavity); the tail wire needs to be waterproofed (see "Waterproof treatment of tail wire") to avoid tail wire

Soak in standing water.

9 In the process of turnover and transportation, the front face needs special protection to avoid friction, scratches, pollution, etc.

In order to keep the front face clean, please do not remove the transparent protective film of the front face during the installation process.

After the installation is complete, remove the transparent protective film before starting the device.

9 For product maintenance issues, please consult professionals, and do not open the cover for maintenance without authorization.

9 It is strictly forbidden to use or place the product in high temperature (in the hot sun or in a very hot car), it may cause damage to the product.

Cause the battery to overheat, catch fire or malfunction, and shorten its life.

9 It is strictly forbidden to disassemble, change, directly weld the battery and pierce the battery with nails or other sharp objects.

9 It is strictly forbidden to use it in places with strong static electricity and strong magnetic fields, otherwise it will easily damage the battery safety protection device and bring about

unsafe hazard.

9 It is strictly forbidden to cut the casing and remove the outer casing of the battery.

9 The battery cannot be used under extreme conditions, such as: extreme temperature, deep cycle, extreme overcharge and

Overdischarge.

9 Please store the battery in a cool and dry place. If a large number of batteries are stored or shipped, the battery must be put

Out of power.

9 If the internal battery emits odor, heat, discoloration, deformation, noise, leakage or use, storage,

If any abnormality occurs during the charging process, it should be stopped immediately and safety measures should be taken.

9 Under normal circumstances, the allowable range of battery charging ambient temperature is 0 to 45°C, and the discharge ambient temperature is allowable.

The allowable range is -20 to 60 °C.

storage

9 The storage environment should be in a clean, dry and ventilated room. Contact with corrosive substances should be avoided.

Keep away from fire and heat sources. Under normal circumstances, the allowable range of storage ambient temperature does not exceed 3 months

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It is -20y40y, and the allowable range of storage ambient temperature for not more than 6 months is the allowable range of ambient temperature.

The temperature is -20y35y, and the allowable range stated in the product specification shall prevail for special products. Ben Gong

The best storage environment temperature recommended by the company is 20 to 25 y.

y Under normal circumstances, the allowable range of relative humidity in the storage environment is 65±20%. Best recommended by our company

The relative humidity of the storage environment is 50-70%.

y The product should not be stored at high temperature or high humidity, otherwise it will cause battery leakage, rust, etc.

and reduced capacity.

y Long-term storage may cause the capacity of the battery pack to decrease, and it will take 1-3 charge/discharge cycles

The highest discharge capacity can be achieved. After the battery has been placed for three months, it needs to be recharged or cycled to charge and discharge once.

If the storage period exceeds 6 months, charge-discharge activation should be performed to reduce performance loss.

Disclaimer of liability

The company is not responsible for any accident caused by the pool.

y The company has the right to revise the product specifications and other documents provided by the company.

The company will notify the customer after the revision.

Sincerely hope that users can strictly follow the product specifications and other documents provided by the company and the attached documents.

Pay attention to the terms of use, storage, and transportation of batteries. Improper use, storage and transportation of batteries, such as

Accident or fire may cause the battery to heat up, catch fire or rupture.

2. Product parameters

WiFi wireless	
Protocol standard	IEEE 802.11b/IEEE 802.11g/IEEE 802.11n
Wireless rate	300Mbps
Channel selection	1~11 frequency band
Band bandwidth	20/40MHz optional
wireless security	64/128-bit WEP encryption; WPA-PSK/WPA2-PSK, WPA-PSK, WPA2-PSK security mechanism.
4G wireless transmission (optional)	
frequency band	LTE-TDD/LTE-FDD/WCDMA/TD-SCDMA/EVDO/CDMA/GSM seven-mode full Netcom frequency band
SIM card type	Micro SIM card
Positioning (optional)	
Positioning system	GPS/Beidou
lithium battery	
Battery type	Large capacity polymer lithium battery
Battery capacity	11.1V 8000mAh
10 hours of battery life	(infrared light off, in low power mode)
camera	
Image sensor	1/2.8 inch CMOS

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sensor total pixels	Approx. 2.42 million pixels
Horizontal resolution	1000TVL
maximum image size	1920×1080
Minimum illumination	Color: 0.001Lux@(F1.5,AGC) B&W: 0.0005Lux@(F1.5,AGC)
Gain control	auto/manual
3D noise reduction support	
2D noise reduction support	
signal to noise ratio	55dB
white balance	automatic / manual
Electronic shutter	1/25~1/100,000 seconds; supports slow shutter
Electronic image stabilization support	
Fog function support	
Backlight Compensation Support	
wide dynamic	support
Strong light suppression support	
Digital zoom	16 times
Day and night mode	automatic ICR filter color to black
Focus Mode	Auto/Semi-Auto/Manual
focal length	5.5~180mm
The zoom speed is about	3.5 seconds (optical, wide-angle-telephoto)

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field of view	60.5°~2.3 degrees (Wide-Telephoto)
close-up	100~1000mm (Wide-Telephoto)
Optical zoom 33 times	
Aperture value	F1.5~F4.0
Function	
Main stream resolution and frame rate	50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720); 60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720)
Resolution and frame rate of the third stream	Independent of the main stream setting, maximum support: 50Hz: 25fps (1920 × 1080); 60Hz: 30fps (1920 × 1080)
video compression	H.265 / Main Profile / H.264 / BaseLine Profile / Main Profile / High Profile / MJPEG
Audio compression	G.711a/G.711u/G.722.1/G.726/MP2L2/AAC/PCM
Network protocol	IPv4/IPv6,HTTP,HTTPS,802.1x,Qos,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTP,TCP,UDP,IGMP,ICMP,DHCP,PPPoE
ROI	support
SVC	support
Area Exposure/ Focus	support
Time display support	such as: week, date

application programming	ONVIF(PROFILE S,PROFILE G) ,GB28181-2016, a private agreement
mouth	
browser	Support IE7 and above (including IE7) Google, Firefox, Apple and other non-IE browsers
Simultaneous	
preview users	Up to 6 way
safe mode	Authorized username and password, and MAC address binding; HTTPS encryption; IEEE 802.1x network access control (whitelisting)
User management	Multi-level user rights management
storage	
	Support Micro SD/SDHC/SDXC card (128G) off-network local storage, NAS
storage card	(NFS, SMB/CIFS are supported)
PTZ	
	Horizontal range 360°
	Horizontal speed 0.05~80°/s
	Vertical range -25~90°
	Vertical speed 0.05~60°/s
Preset	255
cruise	6 bars, each bar up to 18 points
Pattern scan	4 strips
	Power-down recovery support
Infrared function	
	Infrared distance 50 meters

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conventional	
powered by	DC 9~24V, wide voltage input
Power consumption	MAX 48W
Working temperature	-20~60°C
weight	3Kg
Protection class	IP66

3. Factory default parameters

1. Camera

Camera IP address: 192.168.1.68

Camera username: admin

Camera password: system123

2. Router

Router IP address: 192.168.1.1

Camera username: admin

Camera password: admin

3. WIFI

The WiFi wireless name (SSID) is: Wifi-7628-XXXX

Password: 12345678

4. Description of buttons and display

1. Buttons:

γ Power on: When the device is powered on, it is in the off state. In the off state, press and hold the button (more than 3 seconds and less than 10 seconds), when the green indicator light of the button is on, the button can be released and the device is turned on.

γ Power off: When the device is on, long press the button (more than 3 seconds and less than 10 seconds), press
When the green indicator light of the button is off, you can release the button and the device will shut down.

γ Router reset: When the device is powered on, long press the button (more than 10 seconds), the green button
When the color indicator turns off and then lights up, release the button to reset the built-in router.
The device is still powered on.

2. Display description:



γ Network type:

There are five network type statuses: 2G, 3G, 4G and not acquired

Among them, 2G, 3G, and 4G are displayed in characters, and the unobtained icons are ?

Note: Even if no SIM card is inserted, the wireless router should indicate 2G or 3G after 30s of power on.

γ Signal strength:

There are six signal strength status indications:

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Note: No valid SIM card is inserted and the router has not been started and completed, and the display has not been obtained.

y GPS indication:

The GPS indication has three states: no display (no GPS function or GPS abnormality), display but flashing (no GPS function or GPS abnormality)

Positioning is successful), displayed without flashing (positioning is successful)

y 4G acquisition time:

There are two states for 4G acquisition time: NOTGET (not acquired), time indication (successfully acquired 4G time)

Note: The time can only be obtained after inserting a valid SIM card and successfully connecting to the Internet

y Battery level indicator:

The battery level indicator has two states: battery power and charging state.

Indication on battery power:



When the battery power is too low

icon toggle) as an alarm.

Indication while the battery is charging:

When the device is connected to a power supply with a voltage of DC9~24V and a power of not less than 48W, and the ambient temperature is lower than

At 60°C, the device will enter the charging state. In the power-on state, the battery indicator on the display will be displayed at a frequency of 1Hz.



Switch back and forth between the icon of <20% and the next state icon of the current state, if the current power is less than 60%, the power

The battery level indicator area will switch in sequence among the following 4 icons



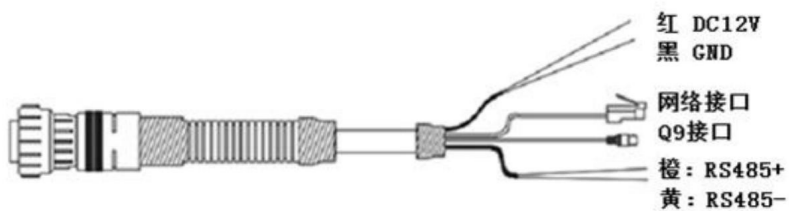
As shown in the figure: P: represents the horizontal angle, the range is 0°~360°; T: represents the vertical angle, the range is -25°~90°; Z: represents the zoom value, the range is 1~33.

5. Special preset function

action	Preset No	Function
set up	76	High-precision self-test mode
transfer	76	Low-precision self-test mode (factory default)
transfer	78	Low power consumption mode, the motor stops and the locking torque is small
transfer	79	Medium power consumption mode, the motor stops and locks the torque
transfer	80	High power consumption mode, the motor stops rotating and the locking torque is large
 Auxiliary switch	3	Turn on the defogging fan on or Turn off the defogging fan (heating is off if heating is on)
 Auxiliary switch	4	Turn on the heating (if the fan is not turned on, it is turned on) or Turn off the heating (the fan remains in the state it was before the heating was turned on)

6. Installation Instructions

1. Definition of power line interface



γPower cord: The car ball needs to provide DC12V, 5A power input.

γ RS485 control line: 485 control line.

γNetwork interface: network signal output, RJ45 crystal head. γ Q9

interface: analog video signal output.

2. Aviation plug connection



Schematic diagram of aviation plug



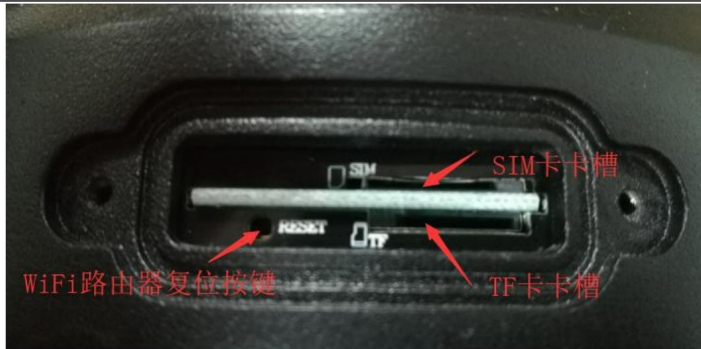
Schematic diagram of aviation plug connection

As shown in the picture, the large depression of the cable is aligned with the large protrusion of the aviation socket, then insert it, and then tighten the turnbuckle.

3. Rear panel interface definition



The rear panel interface includes SIM card interface, TF card interface, and router reset button.



Notice:

- The inserting positions of the SIM card and the TF card are as shown in the figure: the SIM card and the TF card must be powered off.

It is strictly forbidden to insert or unplug it in the working state. SIM card chip facing down, notch facing out

Insert it into the card slot; the gold finger side of the TF card is facing up, and the notch is facing inward to insert the card slot.

- When the router configuration problem prevents you from entering IE to access the router, you can

Press and hold the router reset button for 10 seconds in the machine state to restore the router to default.

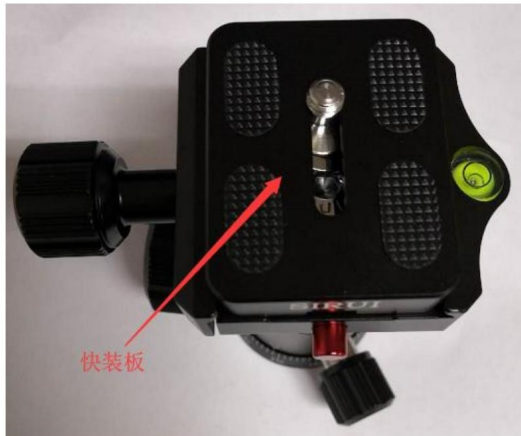


- When the interface cover is opened and then installed, care must be taken that the sealing ring is installed in place, and the fixing screws need to be tightened.

tight to prevent water leakage.

4. Tripod installation method (tripod is optional)

γFor detailed instructions on using the tripod, please refer to the manual of the tripod;



γRemove the tripod quick release plate TY-50E;



γRemove the original camera screws of the quick release plate;

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Use 2 M4*8 stainless steel screws and M4 flat washer to fix the quick release plate to the support on the back of the quick release plate.

on the tray;



Reinstall the quick release plate on the tripod, and then attach the control ball to the support plate.

7. WiFi Instructions

The product has a built-in WiFi hotspot, which can be directly connected to the dome through a mobile phone (tablet or computer).

WiFi hotspot to preview images and gimbal control.

The mobile phone or tablet needs to download the APP client to use, enter the application store to search

"iVMS-4500", download and install. The computer can be operated directly through the WEB.

After the dome camera is powered on and turned on, the mobile phone (tablet or computer) needs to be turned on to search for WiFi. By default

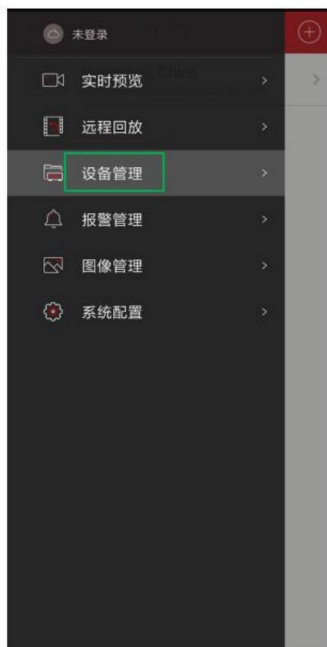
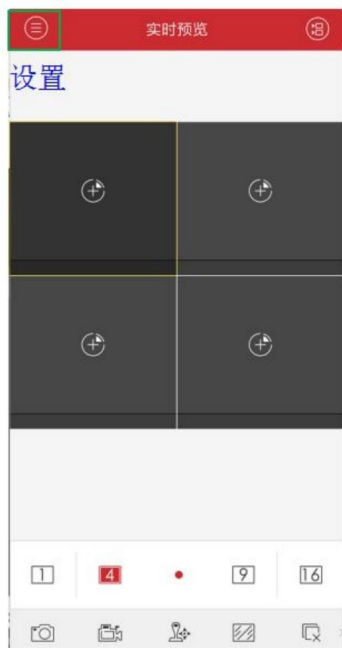
Wireless signal name (SSID) "Wifi-7628-XXXX", password "12345678", connect to the WiFi

hot spot.

The following introduces the quick use method of iVMS-4500 for Android mobile phone:

1. After entering the app, it is located in the "Live Preview" item,
2. Then enter the "Device Management" menu

Enter the "Settings" menu



3. Enter "+" to add device, select "Online"
equipment"



4. Automatically retrieve online devices in the LAN, click
Select the device to be added



5. Select "Add"



6. Enter username, password and "Save"



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7. Return to the real-time preview and select the real-time preview channel 8. PTZ control

