

Chameye

HDMI/NDI/SDI/USB
AI Tracking PTZ CAMERA
>> 30x Optical Zoom <<
(User Manual V1.1)



Technical Support:

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- **Please Note:** Only NDI version cameras have NDI function.

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Notice

Product specifications and information which were referred to in this document are for reference only. We may change, delete, or update any content at any time and without prior notice.

FCC NOTICE (Class A)



This product complies with Part 15 of the FCC Rules. The 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 product has been tested and found to comply with the limits for a Class A 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/television technician for help.

Class A ITE

Class A ITE is a category of all other ITE which satisfies the class A ITE limits but not the class B ITE limits. Such equipment should not be restricted in its sale but the following warning shall be included in the instructions for use:



Operating this equipment in a residential environment may cause radio interference.

European Community Compliance Statement (Class A)



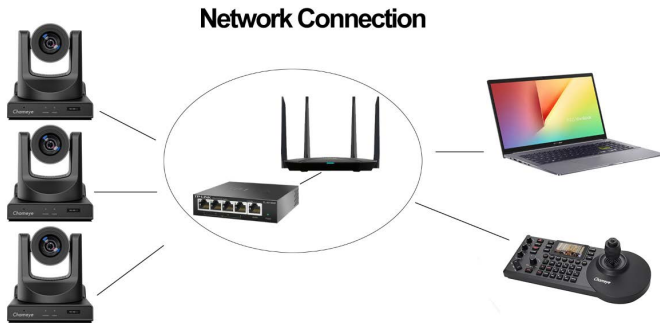
This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive

2014/30/EU.

Quick Start

◆ Add Cameras to Your Network

Please do the connections as the following. You must have a router in your network, then router will assign IP address for the cameras automatic. If you don't have router in your network, cameras can't get IP address from your network.



Camera's screen will show its IP address , you can visit camera's webpage by camera's IP address.

Tips: When you login the camera's webpage, you'd better change the IP from "Dynamic IP Address" to "Fixed IP Address", then camera will keep currently IP or when camera rebooted , router rebooted, router will assign a new IP address for the camera.

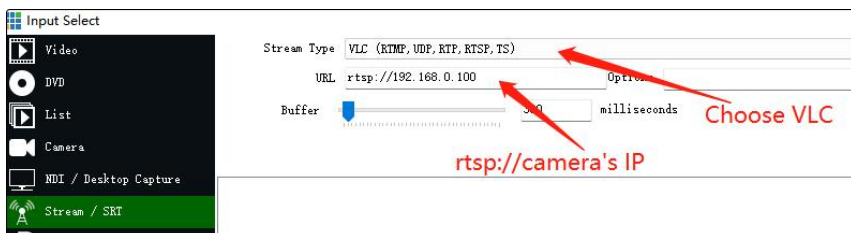
◆ Visit Camera's Webpage

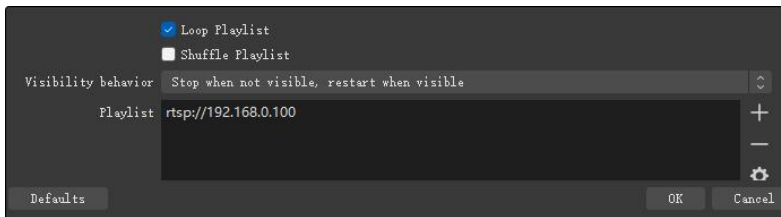
Please use web browser such as: Google Chrome, Firefox or Safari to Visit camera's IP address

User name: admin **Password:** admin

◆ IP Streaming to Vmix or OBS

Tips: recommend to use VLC streaming in Vmix and OBS, it has lower latency.





If you want to use normal RTSP stream:

RTSP UDP Stream URL: `rtsp://192.168.0.100:554/1`

Please note, you need change the IP address to your camera's IP address.

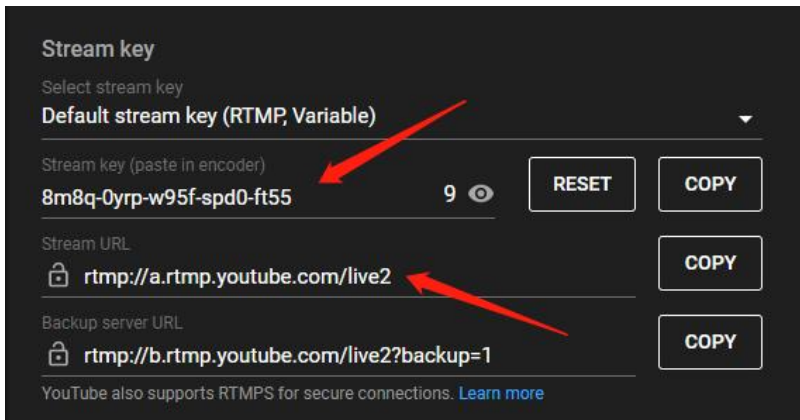
◆ IP Steam to Youtube or Facebook

Youtube , Facebook or other live broadcast platforms will supply Stream URL(server URL) and stream key for you.

Example for Youtube:

Stream URL: `rtmp://a.rtmp.youtube.com/live2/`

Stream Key: `8m8q-0yrp-w95f-spd0-ft55`



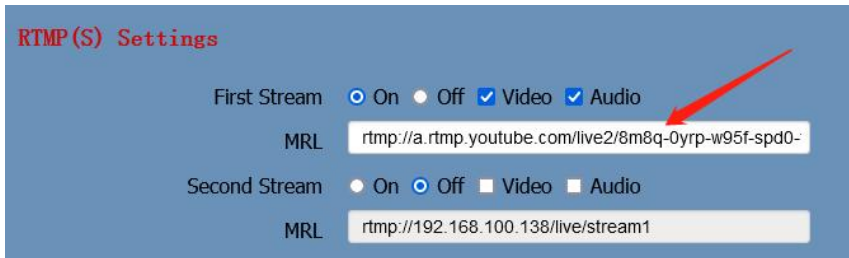
Now go to camera's webpage ->network->RTMP Settings.

input the RTMP stream URL :

`rtmp://a.rtmp.youtube.com/live2/8m8q-0yrp-w95f-spd0-ft55`

(Format: Stream URL/Stream Key)

Save and reboot the camera, camera will stream to Youtube.



RTMP(S) Settings

First Stream ☒ On ☐ Off ☒ Video ☒ Audio

MRL

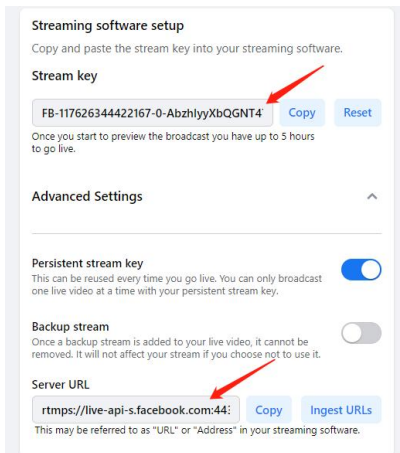
Second Stream ☐ On ☒ Off ☐ Video ☐ Audio

MRL

Example for Facebook:

Server URL: `rtmps://live-api-s.facebook.com:443/rtmp/`

Stream Key: `FB-117626344422167-0-AbzhlyyXbQGNT47w`



Streaming software setup

Copy and paste the stream key into your streaming software.

Stream key

Once you start to preview the broadcast you have up to 5 hours to go live.

Advanced Settings

Persistent stream key ☒
This can be reused every time you go live. You can only broadcast one live video at a time with your persistent stream key.

Backup stream ☐
Once a backup stream is added to your live video, it cannot be removed. It will not affect your stream if you choose not to use it.

Server URL

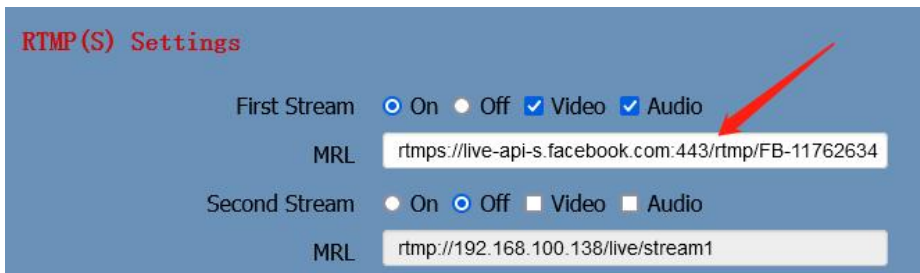
This may be referred to as "URL" or "Address" in your streaming software.

Now go to camera's webpage ->network->RTMP Settings.

input the RTMP stream URL:

`rtmps://live-api-s.facebook.com:443/rtmp/FB-117626344422167-0-AbzhlyyXbQGNT47w`

(Format: Stream URL/Stream Key)



RTMP(S) Settings

First Stream ☒ On ☐ Off ☒ Video ☒ Audio

MRL

Second Stream ☐ On ☒ Off ☐ Video ☐ Audio

MRL

Save and reboot the camera, it will stream to Facebook.

◆ **Connect Camera to Controller Keyboard**

◆ Some information you need:

User Name: admin **Password:** admin

Sony Visca port: 52381 **IP Visca UDP port:** 1259

IP Visca TCP port: 5678 **Onvif Port:** 2000

We recommend to use Sony Visca or IP Visca control protocols, the two protocols are more steady and work better.

Let's use Chameye IP controller for example:

(1)Connection: Camera and the IP controller must be in the same LAN(connect to the same router/switch by network cable)

(2) Enable controller's DHCP, then reboot the controller

Then, router will assign an IP address for the controller

(3)Press "Setup" ->Add:Sony Visca (or IP Visca) -> input your camera's IP ->input port:52381 (IP Visca UDP:1259) ->input camera control ID(1-255 numbers)

(4) Press "enter" to add the camera to controller

(5) If you have more than one cameras need to add to the controller, please press "IP" button to add the camera's IP address to controller one by one.

◆ **Simultaneous Video Out**

- Simultaneous HDMI 3G-SDI IP three channels Video Outputs

- Simultaneous HDMI 3G-SDI USB3.0 three channels Video Outputs

-Simultaneous HDMI 3G-SDI IP and USB3.0 four channels Video Outputs

For four channels video outs at the same time, please use professional multimedia player such as "PotPlayer" to preview USB video, and use H.264 format video out. Otherwise ,it will affect IP streaming video out.

If you need more supports, please contact us at: Sandy@chameye.net, normally, we can reply you within 12hours.

Chameye Supports Team

Catalogue

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1 Safety Precautions

- During the installation and use of the equipment, all electrical safety regulations of the country and region of use must be strictly observed.
- Please use the power adapter that comes standard with this product.
- Please do not connect multiple devices to the same power adapter (exceeding the capacity of the adapter may generate excessive heat or cause a fire).
- Do not rotate head of the camera by hand, otherwise it may cause mechanical failure.
- When installing this product on a wall or ceiling, secure the device securely. When installing, make sure that there are no obstacles within the rotation range of the gimbal; do not turn on the power until all installations are completed.
- To avoid heat build-up, keep ventilation around the device smooth.

- If the device emits smoke, smells, or makes noises, please turn off the power immediately and unplug the power cord, and contact the dealer in time.
- This device is not waterproof, please keep the device dry.
- This product has no user serviceable parts, damage caused by disassembly by the user is not covered by the warranty.



Notice

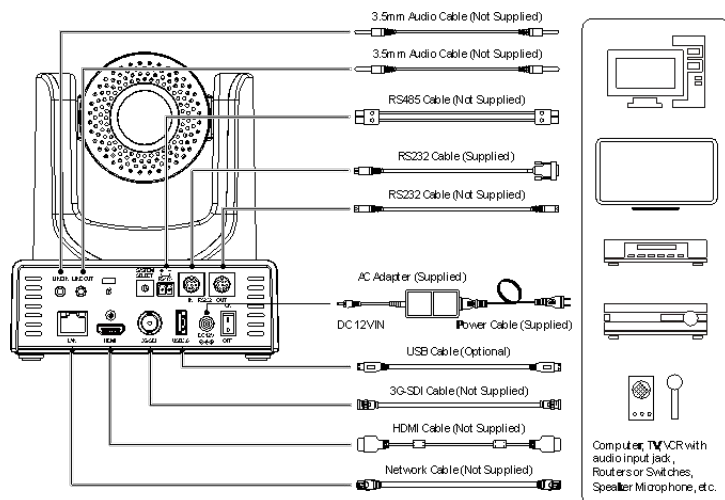
Specific frequencies of electromagnetic field may affect the image of the camera!

2 Packing List

| Name | Quantity |
|----------------------|----------|
| Camera | 1 |
| Power Adapter | 1 |
| Power Cable | 1 |
| RS232 Cable | 1 |
| USB Cable (Optional) | 1 |
| Remote Control | 1 |
| User Manual | 1 |

3 Quick Start

- 1) Please check connections are correct before starting.



- 2) Connect the power adapter to the power connector on the rear panel of the camera. The power indicator on the front panel of the camera is on.
- 3) After the camera is powered on, it starts to initialize, right up to the limit position, and then both horizontal and vertical go to the middle position, the motor stops running, and the initialization is completed.
- 4) (Note: If preset 0 is saved, PTZ will be move to preset 0)

4 Video Format

| Video Format | | | |
|--------------|---------|---|------------|
| 0 | 1080P60 | 8 | - |
| 1 | 1080P50 | 9 | - |
| 2 | 1080I60 | A | 1080P59.94 |
| 3 | 1080I50 | B | 1080I59.94 |
| 4 | 720P60 | C | 1080P29.97 |
| 5 | 720P50 | D | - |
| 6 | 1080P30 | E | - |
| 7 | 1080P25 | F | 720P59.94 |

5 About Product

5.1 Features

● 60.7° Wide-angle Lens + 30x Optical Zoom

60.7° high-quality ultra-wide-angle lens, optical zoom up to 30x, support 8x digital zoom.

● 1080P Full HD

Using 1/2.8-inch high-quality HD CMOS sensor with effective 2.07 million pixels, it can achieve high-quality images with a maximum resolution of 1920x1080.

● New ISP Image Processing Algorithm

The new generation of ISP image processing algorithm provides more

complete white balance and automatic exposure functions, which significantly improves the image output performance of the camera, and the imaging effect is also better. Widely used in education recording and broadcasting, distance education, video conferencing, live broadcasting, broadcasting and other industries.

● Upgraded AI Technology

Using upgraded AI technology, through face recognition, it can accurately determine the location of people, realize automatic tracking and automatic frame selection.

● 1080P60 NDI®|HB(Optional)

It supports 1080P60 NDI®|HB technology, ultra-low latency high-quality audio and video signal transmission, and can achieve unparalleled ultra-high-resolution image quality and lossless effects that are closer to vision.

● Leading Auto Focus Technology

Using advanced focusing algorithm, the lens can focus quickly, accurately and stably.

● Audio Processing Algorithm

The exclusive audio processing algorithm can eliminate reverberation, effectively reduce environmental noise, and support EQ adjustment to optimize sound effects; the device supports dual mic pickup, and can also be connected to external microphones, wireless bees, etc., to meet the pickup needs of most scenarios.

● Multiple Interfaces

Support HDMI and 3G-SDI interface, effective transmission distance of 3G-SDI is up to 150 meters (1080P30). HDMI, 3G-SDI, LAN can output three HD digital signals at the same time.

● Remote Control

Through the RS232 and RS485 serial ports, the camera can be controlled remotely.

5.2 Specifications

| Camera | |
|-------------------------|---|
| Signal System | 1080P60, 1080P59.94, 1080P50, 1080I60, 1080I59.94, 1080I50, 1080P30, 1080P29.97, 1080P25, 720P60, 720P59.94, 720P50 |
| Sensor | 1/2.8 inch, CMOS, Effective pixels: 2.07M |
| Scanning Mode | Progressive |
| Lens | 30x, f=4.42mm ~ 132.6mm, F1.8 ~ F2.8 |
| Digital Zoom | 8x |
| Minimum Illumination | 0.5 Lux @ (F1.8, AGC ON) |
| Shutter | 1/30s ~ 1/10000s |
| White Balance | Auto, VAR, Manual, One Push, Indoor, Outdoor |
| Backlight Compensation | Support |
| Digital Noise Reduction | 2D & 3D Digital Noise Reduction |
| SNR | ≥55dB |
| Horizontal FOV | 60.7° ~ 2.28° |
| Vertical FOV | 34.1° ~ 1.28° |
| Pan Angle | ±170° |
| Tilt Angle | -30° ~ +90° |
| Pan Speed | 1.7° ~ 100°/s |
| Tilt Speed | 1.7° ~ 69.9°/s |
| Image Flip | Support |
| Image Freeze | Support |

| | |
|-----------------|------|
| Preset Position | 255 |
| Preset Accuracy | 0.1° |

| Audio Features | |
|------------------|--|
| Microphone Array | Built-in dual microphones, 100Hz to 16KHz frequency response |
| Audio Input | Support LINE IN audio input |
| Audio Output | Support LINE OUT, HDMI, USB and other audio output |

| USB Features | |
|----------------------------|--|
| Operate System | Windows 7/8/10, Mac OS X, Linux, Android |
| Color System / Compression | YUY2/MJPEG/H.264 |
| USB Audio | Support |
| USB Video Protocol | UVC 1.1/UVC 1.5 |
| UVC PTZ Control | Support |

| Network Features | |
|--------------------------|---|
| Video Compression | H.264/H.265 |
| Video Stream | First Stream, Second Stream |
| First Stream Resolution | 1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360 |
| Second Stream Resolution | 1280x720, 1024x576, 720x480, 640x360, 480x272, 320x240, 320x180 |
| Video Bit Rate | 32Kbps ~ 20480Kbps |
| Bit Rate Control | CBR, VBR |
| Frame Rate | 1fps ~ 60fps |
| Audio Compression | AAC |
| Audio Bit Rate | 96Kbps, 128Kbps, 256Kbps |
| Protocols | NDI(optional), TCP/IP, HTTP, RTSP, RTMP/RTMPS, ONVIF, |

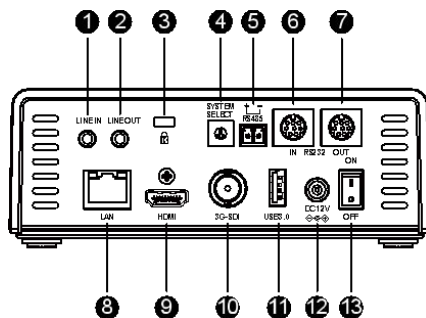
| | |
|-------------------------|--|
| | DHCP, SRT, Multicast |
| Interfaces | |
| LINE IN Interface | 1 x LINE IN: 3.5mm Audio Interface |
| LINE OUT Interface | 1 x LINE OUT: 3.5mm Audio Interface |
| Communication Interface | 1 x RS485: 2pin phoenix port, Max Distance: 1200m, Protocol: VISCA/Pelco-D/Pelco-P |
| | 1 x RS232 IN: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA/Pelco-D/Pelco-P |
| | 1 x RS232 OUT: 8pin Min DIN, Max Distance: 30m, Protocol: VISCA network use only |
| Network Interface | 1 x LAN: 10M/100M Adaptive Ethernet Port |
| HDMI Interface | 1 x HDMI: Version 1.3 |
| 3G-SDI Interface | 1 x 3G-SDI: BNC type, 800mVp-p, 75Ω. Along to SMPTE 424M standard |
| USB Interface | 1 x USB 3.0: Type A |
| Power Jack | JEITA type (DC IN 12V) |

General Specifications

| | |
|-----------------------|-----------------------|
| Input Voltage | DC 12V |
| Input Current | Max. 1.2A |
| Operating Temperature | 0°C ~ 40°C |
| Storage Temperature | -40°C ~ 60°C |
| Power Consumption | Max. 15W |
| Dimension | 146mm x 169mm x 168mm |
| Net Weight | About 1.5Kg |

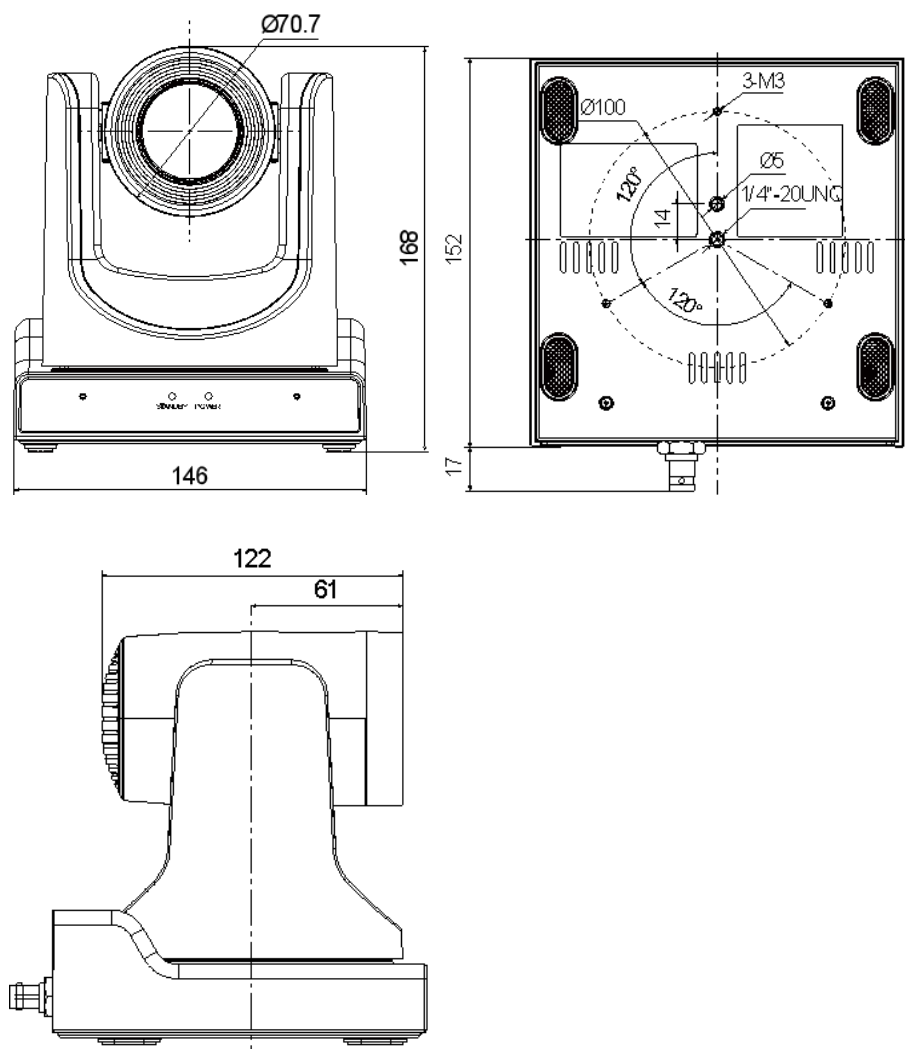


Product specifications and parameters are subject to change without notice.

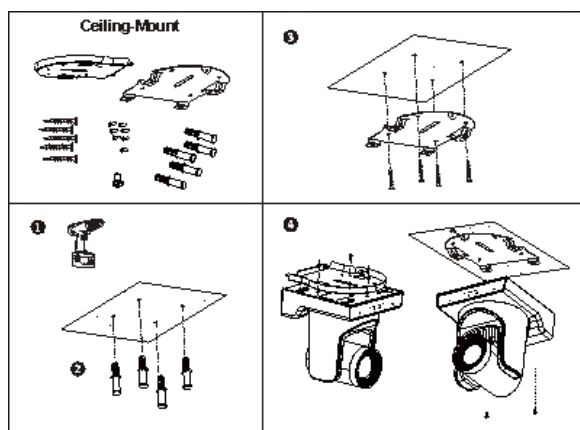
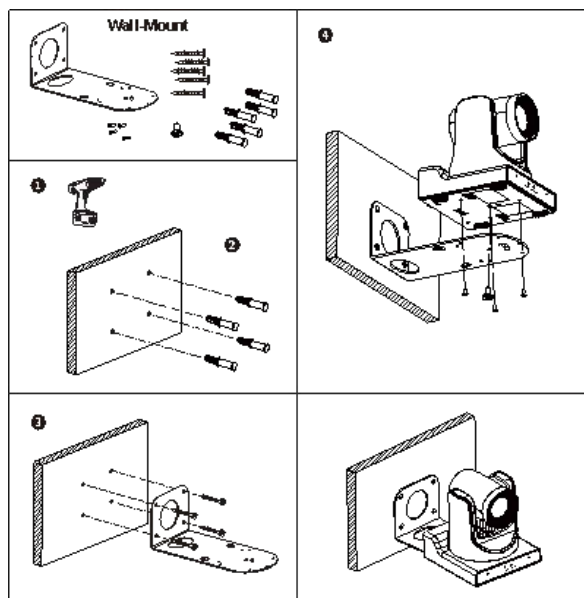
5.3 Interface and Switch

| Item | Description |
|------|----------------------|
| 1 | LINE IN Interface |
| 2 | LINE OUT Interface |
| 3 | Security Slot |
| 4 | System Select Switch |
| 5 | RS485 Interface |
| 6 | RS232 IN Interface |
| 7 | RS232 OUT Interface |
| 8 | LAN Interface |
| 9 | HDMI Interface |
| 10 | 3G-SDI Interface |
| 11 | USB 3.0 Interface |
| 12 | DC 12V Interface |
| 13 | Power Switch |

5.4 Dimension



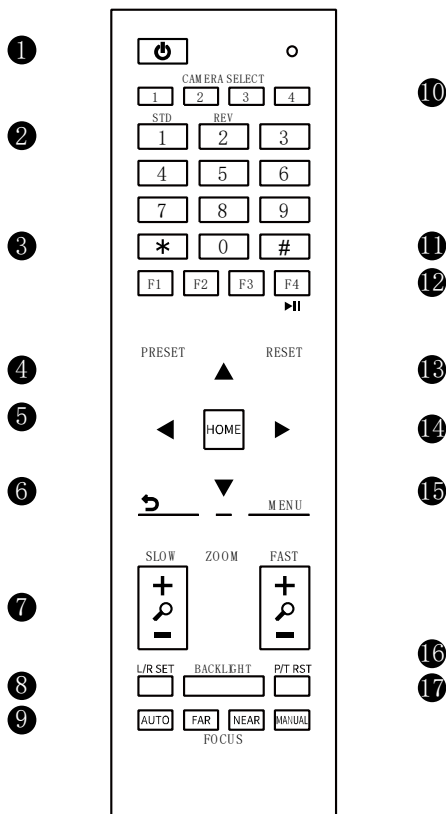
5.5 Installation



The installation diagram is for reference only. The brackets and screws are not standard.

For packing accessories, please refer to the actual product.

5.6 Remote Control



Key Description

1. Standby Key

Press to enter standby mode

2. Number Key

Press to set preset or call preset

3. *Key

Use with other keys

4. PRESET Key

Set preset: [PRESET] + Number key (0-9)

5. HOME Key

Confirm selection or press to turn PTZ back to the middle position

6. Return Key

Press to return to the previous menu

7. ZOOM Key

- SLOW: Zoom In [+] or Zoom Out [-] slowly
- FAST: Zoom In [+] or Zoom Out [-] fast

8. L/R SET Key

- Standard: Simultaneously press L/R SET + 1
- Reverse: Simultaneously press L/R SET + 2

9. FOCUS Key

Auto/Manual/Far/Near focus

10. CAMERA SELECT Key

Press to select and control the camera

11. # Key

Use with other keys

12. IR Remote Control Key

[*]+[#]+[F1]: Address 1

[*]+[#]+[F2]: Address 2

[*]+[#]+[F3]: Address 3

[*]+[#]+[F4]: Address 4

13. RESET Key

Clear preset position: [RESET] + Number key (0-9)

14. PTZ Control Key

PTZ moved according to the arrow indicates

15. MENU Key

Press to enter or exit OSD Menu

16. BACKLIGHT Key

Backlight ON/OFF: Press repeatedly to enable or disable the backlight compensation.

NOTE:

- Effective only in auto exposure mode.
- If there is a light behind the subject, the subject will become dark, press the backlight key to enable the backlight compensation. Press again to disable this function.

17. P/T RST (PTZ Reset) Key

PTZ starts to self-test after pressed it

Shortcut Set

[*]+[#]+[1]: OSD menu default English

[*]+[#]+[3]: OSD menu default Chinese

[*]+[#]+[4]: Display current IP address

[*]+[#]+[6]: Quickly recover the default

[*]+[#]+[8]: View the camera version

[*]+[#]+[9]: Quickly set up inversion
 [*]+[#]+[MANUAL]: Restore default IP
 address

6 GUI Settings

6.1 Menu

Press [MENU] key to display the main menu on the normal screen, using arrow key to move the cursor to the item to be set. Press the [HOME] key to enter the corresponding sub-menu.

| Menu | |
|---------------------------------|---------|
| ENG/中文 | ENG |
| AI MODE | Off |
| Video Format | 1080P60 |
| Style | Default |
| Exposure | -> |
| Color | -> |
| Image | -> |
| Display | -> |
| PTZ Setting | -> |
| Setting | -> |
| Version | -> |
| Default | -> |
| [MENU] Return / [HOME] Enter | |

ENG/中文: ENG, 中文.

AI MODE: Off, Single Track, Frame Track, Demo Mode.

Video Format: 1080P60, 1080P50, 1080I60, 1080I50, 1080P30, 1080P25, 720P60, 720P50.

Style: Default, Cold, Warm, Clear, Soft, User1, User2, User3.

6.2 Exposure

Move the main menu cursor to [Exposure],

and press [HOME] key enter the exposure

page, as shown in the following figure.

| Exposure | | |
|----------|---------|------|
| > | AE | Auto |
| | Flicker | 50Hz |
| | Expcomp | On |

| Exposure | |
|------------------------|-----|
| Mode | |
| Expmode | 2 |
| Backlight | Off |
| Gain Limit | 15 |
| DRC Mode | Off |
| [MENU] Return / [HOME] | |
| Enter | |

AE: Auto, Manual, Iris Priority, Shutter Priority, Bright Priority.

Flicker: Off, 50Hz, 60Hz (Effective only in Auto, Iris Priority, Bright Priority mode).

Expcomp Mode: On, Off (Effective only in Auto, Iris Priority mode).

Expmode: -7~7 (Effective only in Expcomp Mode to On).

Backlight: On, Off (Effective only in Auto, Iris Priority mode).

Bright: 0~99 (Effective only in Bright Priority mode).

Gain Limit: 0~32 (Effective only in Auto, Iris Priority, Bright Priority mode).

Iris: F1.8, F2.0, F2.4, F2.8, F3.4, F4.0, F4.8, F5.6, F6.8, F8.0, F9.6, F11, Off (Effective only in Manual, Iris Priority mode).

Shutter: 1/30, 1/50, 1/60, 1/90, 1/100, 1/125, 1/180, 1/250, 1/350, 1/500, 1/725, 1/1000, 1/1500, 1/2000, 1/3000, 1/4000, 1/6000, 1/10000 (Effective only in Manual, Shutter Priority mode).

Gain: 0~31 (Effective only in Manual, Shutter Priority mode).

DRC Mode: Manual, Auto, Off.

DRC: 0~14 (Effective only in DRC Mode to Manual).

6.3 Color

Move the main menu cursor to [Color], and press [HOME] key enter the color page, as shown in the following figure.

| |
|-------|
| Color |
|-------|

| Color | |
|------------------------|---------------------|
| > | AWB Auto |
| | Sens Low |
| | R-Tuning 0 |
| | B-Tuning 0 |
| | Hue 50 |
| | Saturation 100 |
| [MENU] Return / [HOME] | |
| Enter | |

AWB: Auto, VAR, Manual, One Push, Indoor, Outdoor.

Sens: Low, Middle, High.

R-Gain: 0~1023 (Effective only in Manual, One Push mode).

B-Gain: 0~1023 (Effective only in Manual, One Push mode).

R-Tuning: -128~128 (Effective only in Auto, Temp, One Push mode).

B-Tuning: -128~128 (Effective only in Auto, Temp, One Push mode).

Hue: 0~99.

Saturation: 0~200.

Temp: 2000 ~ 8500 (Effective only in Temp mode).

6.4 Image

Move the main menu cursor to [Image], and press [HOME] key enter the image page, as shown in the following figure.

| Image | |
|------------------------|------------------------|
| > | Brightness 50 |
| | Contrast 50 |
| | Sharpness Auto |
| | Mode |
| | Gamma Mode Manual |
| | Gamma Ext |
| | NR-2D Mode Auto |
| | NR-3D Mode Auto |
| [MENU] Return / [HOME] | |
| Enter | |

Brightness: 0~99.

Contrast: 0~99.

Sharpness Mode: Manual, Auto.

Sharpness: 0~25 (Effective only in Sharpness Mode to Manual).

Gamma Mode: Manual, Auto.

Gamma: Ext, 0.45, 0.5, 0.54, 0.56, 0.63 (Effective only in Gamma Mode to Manual).

NR-2D Mode: Manual, Auto.

NR-2D: 0~99 (Effective only in NR-2D Mode to Manual).

NR-3D Mode: Manual, Auto.

NR-3D: 0~15 (Effective only in NR-3D Mode to Manual).

6.5 Display

Move the main menu cursor to [Display], and press [HOME] key enter the display page, as shown in the following figure.

| Display | | |
|---------------------------------|-----------|---------|
| > | OSD-Dir | 0 |
| | Frac Rate | Off |
| | HDMI Mode | HDMI |
| | SDI Mode | Level A |
| | Flip-H | Off |
| | Flip-V | Off |
| | Freeze | Off |
| [MENU] Return / [HOME] Enter | | |

OSD-Dir: 0, 90, 180, 270.

Frac Rate: On, Off.

HDMI Mode: HDMI, DVI.

SDI Mode: Level A, Level B.

Flip-H: On, Off.

Flip-V: On, Off.

Freeze: On, Off.

6.6 P/T/Z Setting

Move the main menu cursor to [P/T/Z Setting], and press [HOME] key enter the P/T/Z setting page, as shown in the following figure.

| P/T/Z Setting | | |
|---------------------------------|----------------|-------|
| > | AF-Sense | High |
| | AF-Zone | Front |
| | Focus Limit | Off |
| | LR Mode | STD |
| | Motion Sync | Off |
| | Horizontal | 23 |
| | Speed | |
| | Vertical Speed | 19 |
| | Zoom Speed | 7 |
| | PTbyZoom | On |
| [MENU] Return / [HOME] Enter | | |

AF-Sense: High, Normal, Low.

AF-Zone: Front, Top, Center, Bottom.

Focus Limit: On, Off.

Near Focus Limit: 1M, 1.5M, 2M, 3M,

4M, 5M, 6M, 8M, 10M, 15M, 20M

(Effective only in Focus Limit to On).

Far Focus Limit: 15M, 20M, Infinity

(Effective only in Focus Limit to On).

LR Mode: STD, REV.

Motion Sync: On, Off.

Horizontal Speed: 0~23.

Vertical Speed: 0~19.

Zoom Speed: 0~7.

PTbyZoom: On, Off.

6.7 Setting

Move the main menu cursor to [Setting],
and press [HOME] key enter the setting
page,

as shown in the following figure.

| Setting | |
|------------------------|-------------------|
| > | Visca 1 |
| | Addr |
| | Visca Series |
| | Mode |
| | Baud 9600 |
| | Rate |
| | DHCP Off |
| | IP 192.168.100.88 |
| | Addr |
| | MAC d4e08e548d13 |
| [MENU] Return / [HOME] | |
| Enter | |

Visca Addr: 1~7 (Effective only in VISCA
protocol).

Visca Mode: Serial, Paral.

Baud Rate: 2400, 4800, 9600, 19200,
38400,
57600, 115200.

DHCP: On, Off.

IP Addr: 192.168.100.88.

MAC: d4e08e548d13.

6.8 Version

Move the main menu cursor to [Version],
and press [HOME] key enter the version
page, as shown in the following figure.

| Version |
|---------|
|---------|

Version

| | |
|---------|------------|
| Main | X8.02.15 |
| AF | 14.04.04 |
| Date | 2022-08-18 |
| Code | VF1 |
| NDI | Okay |
| License | |

[MENU] Return / [HOME]
Enter

Main: Display the version number of the
main program of the camera.

AF: Display the camera autofocus version number.

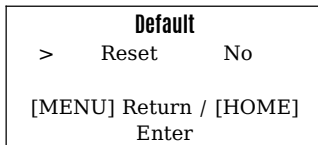
Date: Display the burning date of the main program version of the camera.

Code: Display the camera code.

NDI License: Display NDI license verification results.(optional)

6.9 Default

Move the main menu cursor to [Default], press [HOME] key enter default page, as shown in the following figure.



Reset: Yes, No.



GUI menu and parameters are subject to change without notice.

7 WEB Settings

7.1 Access Camera

Access <http://192.168.100.88> to pop up the login window, then input username (default: admin) and password (default: admin). After login, it will show as below:



7.2 Control Camera

All pages include two menu bars:

Real time monitoring: displaying video image Parameter setup: with function buttons.

A. Video Viewing Window

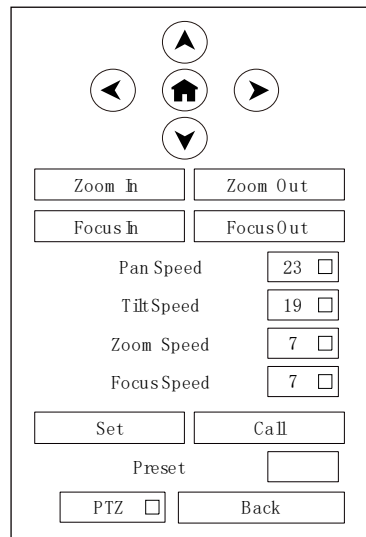
Video viewing window must be same as video resolution, the bigger the resolution is, the bigger the playing area is. Double click viewing window, will show full-screen, double click again, will return to initialized size.

Status bar in viewing window shown as below:



- 1) Video playback pause button: control real-time video pause, stop the last picture, click recoverable video again.
- 2) Audio control buttons: can adjust the volume or set silent mode.
- 3) Full screen switch button.

B. PTZ Setup



1) Pan and Tilt Control

Up, Down, Left and Right arrows and the home button allow you to manually drive the camera to the desired position.

2) Zoom

Zoom In and Zoom Out buttons allow for wide or narrow view of the space.

3) Focus

Focus In and Focus Out buttons allow for fine manual focus adjustment if the camera has any problems auto focusing on the difficult object.

4) PTZ Speeds

Pan speed can be set at any rate between 1 ~ 24, Tilt speed can be set at any rate between 1 ~ 20. Zoom and Focus speeds can be set at any rate between 1 ~ 7.

5) PTZ Presets

After manually setting up a shot that you would like to return to later, you can save presets for quick recall of these positions. Type a number between 0 and 254 into the Preset box. Click the "Set" button to save the current location with that preset number. Click the "Call" button to cause the camera to return to that position. This enables smooth, quick and convenient control without the need to manually drive the camera.

You can set up preset that user want as below.

Method: Type preset number into the Preset box.

| | |
|----------------------|------|
| Set | Call |
| Preset | |
| <input type="text"/> | |

Preset: Optional items: 0 ~ 254.

6) PTZ/OSD Dropdown

From the dropdown menu, clicking the OSD option will open the on-screen display menu of the camera giving you control from within the IP interface.

C. Language Selection

| | |
|----------|---------|
| Language | English |
| | 中文(简) |
| | Русский |

Click either "Chinese", "English" or "Russian" to change the language of the webpage.

7.3 Video Settings

Video Settings

Frac Rate

☐ On
 ☒ Off

First stream

Encode Level

mainprofile

Encode Protocol

H264

Resolution

1920x1080

Bit Rate

8192

Frame Rate

60

IKey Frame Interval

50

BitRate Control

CBR

Slice Split Enable

off

Slice Size

23

Second stream

Encode Level

mainprofile

Encode Protocol

H264

Resolution

640x360

Bit Rate

1024

Frame Rate

30

IKey Frame Interval

30

BitRate Control

CBR

Slice Split Enable

off

Slice Size

23

Submit

Cancel

1) Frac Rate

Turn On/Off Frac Rate.

2) Encode Level

Support baseline, mainprofile, highprofile and svc-t four levels.

3) Encode Protocol

Support H.264 and H.265 protocols.

4) Resolution

First stream support 1920x1080, 1280x720, 1024x576, 960x540, 640x480, 640x360. Second stream support 1280x720, 1024x576, 720x480, 640x360, 480x272, 320x240, 320x180; The bigger resolution is, the clearer the image will be, more network bandwidth will be taken.

5) Bit Rate

The user can specify the bit rate.

Generally speaking, the larger of the bit rate, the clearer of the image. However, the configuration of the bit rate needs to be combined with the network bandwidth. When the network bandwidth is narrow and the bit rate is configured larger, the video stream cannot be transmitted normally, and the visual effect is worse.

6) Frame Rate

User can specify the size of the frame rate, generally, the frame rate greater, the image more smooth; Frame rate is smaller, the more sense of beating.

7) I Key Frame Interval

Set interval between 2 I frame, the bigger interval is the response will be lower from viewing window.

8) Bit Rate Control

Code stream control way:

CBR (Constant Bit Rate): Video coder will be coding according to preset speed. VBR (Variable Bit Rate): Video coder will adjust the speed based on preset speed to gain the best image quality.

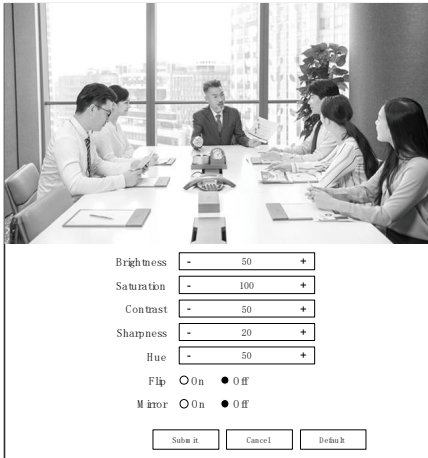
9) Slice Split Enable

Enable or disable slice split function.

10) Slice Size

Set the size of slice.

7.4 Image Settings



1) Brightness

Brightness of image: 0~99 (Default value is 50).

2) Saturation

Saturation of image: 0~200 (Default value is 100).

3) Contrast

Contrast of image: 0~99 (Default value is 50).

4) Sharpness

Sharpness of image: 0~99 (Default value is 20).

5) Hue

Hue of image: 0~99 (Default value is 50).

6) Flip

Turn On/Off the Flip function.

7) Mirror

Turn On/Off the Mirror function.

7.5 Audio Settings

Audio Settings

| | | |
|--------------|---------|--------------------------|
| Audio Switch | On | <input type="checkbox"/> |
| Audio Type | AAC | <input type="checkbox"/> |
| Sample Rate | 48K | <input type="checkbox"/> |
| Bit Rate | 96K | <input type="checkbox"/> |
| InputType | LINE IN | <input type="checkbox"/> |
| InputVolL | 2 | <input type="checkbox"/> |
| InputVolR | 14 | <input type="checkbox"/> |

1) Audio Switch

Turn On/Off audio switch.

2) Audio Type

Optional items: AAC.

3) Sample Rate

Optional items: 32K, 48K.

4) Bit Rate

Optional items: 96K, 128K, 256K.

5) Input Type

Optional items: LINE IN, MIC.

6) Input Vol L

The volume of the left channel.

7) Input Vol R

The volume of the right channel.

7.6 System Settings

Initialize

Reboot

User

UserName

Password

Guest

Password

1) Reboot

Click the “Reboot” button, system restart.

2) Username and Password

The user can modify the password (letters and Numbers only).

7.7 Network Settings

Lan Settings

IP Configuration Type ☐

IP Address

Subnet Mask

Gateway

DNS Address

MAC Address

NTP Settings

Time Zone ☐

Server Address

Time Show ☐ On ☒ Off

Position

Subtitle Display ☐ On ☒ Off

Subtitle Content

Port Settings

HTTP Port

RTSP Port

TCP Port

UDP Port

Sony Visca

RTMP Settings

First Stream ☐ On ☒ Off

MRL

Second Stream ☐ On ☒ Off

MRL

SRT Settings

SRT ☒ On ☐ Off

SRT Port

SRT Encryption ☐

SRT Password

RTSP Settings

RTSP Auth ☐ On ☒ Off

ONVIF Settings

ONVIF ☐ On ☒ Off

ONVIF Auth ☐ On ☒ Off

1) Lan Settings

Default the IP address is 192.168.100.88, the MAC address cannot be modified.

2) NTP Settings

Setting NTP Time Zone and Server Address. Turn On/Off Time Show, set the position of the Time Show. Turn On/Off Subtitle Display, set the Subtitle Content of the camera screen.

3) Port Settings

A. HTTP Port

IP address identifies network device, the device can run multiple web applications, each network program using network port to transmit data, so data transmission to be carried out between the port and port. Port setting is to set up web server program using which port to transmit. When port mapping, need to be consistent with the port number (default port: 80).

B. RTSP Port

The camera support RTSP protocol, use the VLC tools broadcast, default port: 554.

C. TCP Port

Support TCP connection then control camera, default port: 5678.

D. UDP Port

Support UDP protocol, default port: 1259.

E. Sony Visca

Support Sony Visca, default value: 52381.

4) RTMP(S) Settings

Turn On/Off first stream or second stream, setting the MRL of RTMP.

5) SRT Settings

Turn On/Off SRT, Setting the SRT Port, SRT Encry and SRT Password.

6) RTSP Settings

Turn On/Off RTSP Auth.

7) ONVIF Settings

Turn On/Off ONVIF and ONVIF Auth.

7.8 NDI® Settings (Optional)

NDI® Settings

NDI®|HB ☐ On ☒ Off

NDI License

Server IP

Group Name

Key

NDI® Firmware Version

1) NDI®|HB

Turn On/Off NDI®|HB.

2) NDI License

Display NDI License verification results.

3) Server IP

Setting NDI® Server IP address.

4) Group Name

Setting NDI® Group Name.

5) Key

Setting NDI® Key.

6) NDI® Firmware Version

Display NDI® Firmware Version.

7.9 Device Information

| Information | |
|---|--------------|
| Device ID | HD Camera |
| Device Type | V.F1 |
| Software Version | X8.02.15 |
| Webware Version | v1.5.5 |
| Device Serial Number | X6v19260fbc9 |
| <input type="button" value="Submit"/> <input type="button" value="Cancel"/> | |

7.10 Download Upgrade Program

If you need the camera upgrade program, please contact the manufacturer.



WEB interface and parameters are subject to change without notice.

8 Troubleshooting

Image

- The monitor shows no image
 - 1) Check that the camera power supply is connected, the voltage is normal, and the power indicator light is always on.
 - 2) Turn off the power switch to check whether the camera is self-testing.
 - 3) Check the cable of video platform and TV whether correct connection.
- The video image displayed by the camera lens is jittery
 - 1) Check whether the camera installed position be stabled.
 - 2) Check whether have vibrating machinery or object near the camera.
- There is no video image in Browser

IE browser does not support H5, you need to use VLC plug-in to view videos. Please access VLC website (<http://www.videolan.org/vlc>) download and install the 32-bit VLC media player, after it installed, access camera will have normal image display. Other mainstream

browsers already support H5 and do not need to install the VLC plug-in.

- Unable to access camera through Browser
 - 1) Using PC to access the network to test whether the network access can work properly, first of all, the network fault caused by the PC virus can be eliminated, until the PC and camera can communicate with each other Ping.
 - 2) Disconnect the network, connect camera and PC separately, and reset the IP address of PC.
 - 3) Check IP address, subnet mask, and gateway settings for camera.
 - 4) Check whether the MAC address is conflicts.
 - 5) Check whether the web port is modified.
 - 6) The default web port is 80.
- Forget the IP address or login password

Please remember (The default IP address: 192.168.100.88; default user name: admin; default password: admin).

Control

- Remote control cannot control
 - 1) Check and replace the new battery for the remote controller.
 - 2) Check whether the camera working mode is correct.
 - 3) Check whether the address of remote control can match the camera.
- Serial port cannot control
 - 1) Check whether the camera protocol, address and baud rate such is the same.
 - 2) Check whether the control line is connected well.

