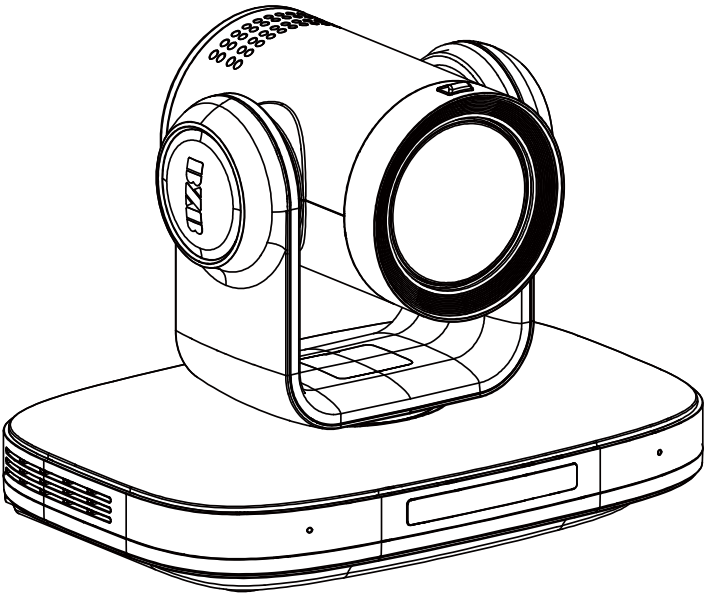
4K AI Camera



User Manual

English (V2.0)

Copyright

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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.

Note

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:

Warning

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.

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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

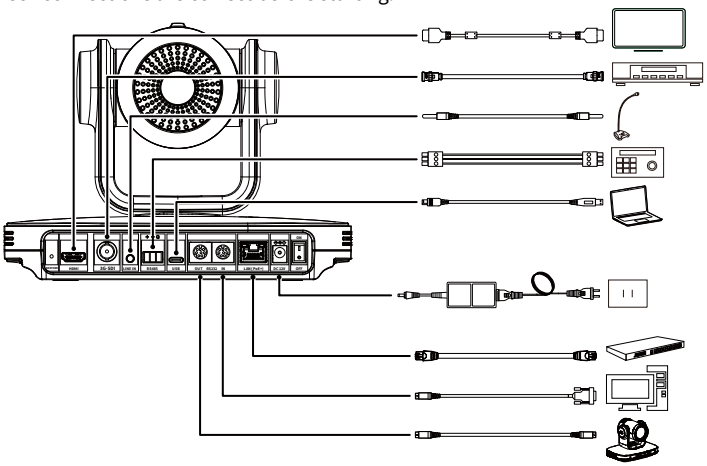
Specific frequencies of electromagnetic field may affect the image of the camera!

2 Pack List

Name	Quantity
Camera	1
Power Adapter	1
Power Cable	1
RS232 Cable	1
USB Cable	1
Remote Control	1
User Manual	1

3 Product Connection

1) Please check connections are correct before starting.



Note The schematic diagram is for reference only. Please refer to the actual application scenario for product connection.

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.
(Note: If preset 0 is saved, PTZ will be move to preset 0)

4 About Product

4.1 Feature

- **AI Tracking**

With the help of the AI computing power of the chip, the camera is equipped with advanced AI algorithms to realize monocular humanoid tracking, which can realize automatic tracking of scenes such as education, conferences and live broadcasts.

- **NDI|HX2 (Optional)**

NDI|HX2 has the characteristics of low delay and plug and play, which is convenient for project implementation and deployment. It has good ecology and supports the simultaneous transmission of audio, video and control commands. It is a new generation of network video transmission mode.

- **4K UHD**

Use 1/2.8-inch high-quality UHD CMOS sensor with a maximum of 8.40 million pixels can realize 4K (3840x2160) ultra-high-resolution high-quality images. And downward compatible with 1080p, 720p and other resolutions.

- **12x Optical Zoom**

It adopts 4K ultra long focal lens with high quality and 8 million ultra-high resolution, 12x optical zoom, and the maximum field angle is 80.8°.

- **HDMI 2. 0**

Support HDMI 2.0 interface, which can directly output 4KP60 uncompressed digital video.

- **Low Light**

The application of 3D noise reduction algorithm greatly reduces image noise. Even under the condition of ultra-low illumination, it still keep the picture clean and clear, and the SNR of image is as high as 55dB.

- **Multiple Interfaces**

Support HDMI and 3G-SDI interface, effective transmission distance of 3G-SDI is up to 150 meters (1080P30). HDMI or 3G-SDI, USB, 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.

- **Gravity Sensor**

It supports automatic image flipping function, which is convenient for engineering installation and use.

4.2 Specification

Camera	
Signal System	**HDMI:** 4KP25, 4KP30, 4KP50, 4KP60, 4KP59.94, 4KP29.97, 1080P25, 1080P30, 1080P50, 1080P60, 1080P59.94, 1080P29.97, 1080I50, 1080I60, 1080I59.94, 720P50, 720P59.94, 720P60 **3G-SDI:** 1080P25, 1080P30, 1080P50, 1080P60, 1080P59.94, 1080P29.97, 1080I50, 1080I60, 1080I59.94, 720P50, 720P59.94, 720P60
Sensor	1/2.8 inch, CMOS, Effective pixels: 8.40M
Scanning Mode	Progressive
Lens	12x, f = 3.4mm ~ 41.6mm, F1.8 ~ F3.7
Digital Zoom	16x
Minimum Illumination	0.5 Lux @ (F1.8, AGC ON)
Shutter	1/30s ~ 1/10000s

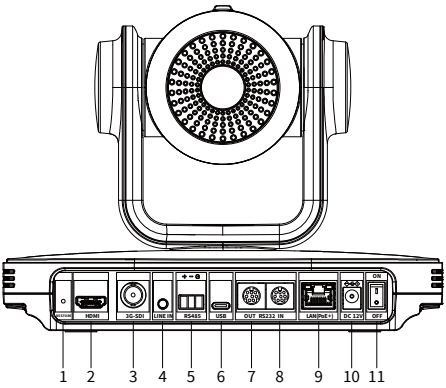
White Balance	Auto, Indoor, Outdoor, One Push, Manual, VAR
Backlight Compensation	Support
Digital Noise Reduction	3D Digital Noise Reduction
Signal Noise Ratio	≥55dB
Horizontal Angle of View	80.8° ~ 7.5°
Vertical Angle of View	49.9° ~ 4.3°
Horizontal Rotation Range	±170°
Vertical Rotation Range	-30° ~ +90°
Pan Speed Range	1.8°/s ~ 80°/s
Tilt Speed Range	1.5°/s ~ 49°/s
H & V Flip	Support
Image Freeze	Support
PoE+	Support
Number of Preset	255
Preset Accuracy	0.1°
USB Features	
Operate System	Windows 7/8/10, Mac OS X, Linux, Android
Color System/ Compression	● USB 3.0 (Optional): YUY2/H.264/H.265/MJPEG ● USB 2.0: H.264/H.265/MJPEG
Video Format	● YUY2: (USB 3.0 support) max to 1080P@30fps USB 3.0/2.0 support: ● H.264 AVC: max to 2160P@30fps ● H.265 HEVC: max to 2160P@30fps ● MJPEG: max to 2160P@30fps
USB Audio	Support
USB Video Protocol	UVC 1.1 ~ 1.5
UVC PTZ	Support

Network Features	
Video Compression	H.264/H.265/MJPEG
Video Stream	First Stream, Second Stream
First Stream Resolution	3840x2160, 1920x1080, 1280x720, 1024x576, 720x480, 720x408, 640x480, 640x360
Second Stream Resolution	720x480, 720x408, 640x480, 640x360, 480x320, 320x240
Bit Rate Control	CBR, VBR
Frame Rate	50Hz: 1fps ~ 50fps 60Hz: 1fps ~ 60fps
Audio Compression	AAC
Audio Bit Rate	96Kbps, 128Kbps
Protocols	NDI®|HX2, TCP/IP, HTTP, RTSP, RTMP/RTMPS, ONVIF, DHCP, SRT, Multicast
Input/Output Interface	
HDMI Interface	1 x HDMI: Version 2.0
3G-SDI Interface	1 x 3G-SDI: BNC type, 800mVp-p, 75Ω. Along to SMPTE 424M standard
LINE IN Interface	1 x LINE IN: 3.5mm Audio Interface
Communication Interface	1 x RS485: 3pin 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
USB Interface	1 x USB: Type-C
LAN(PoE+) Interface	1 x LAN: 10M/100M/1000M Adaptive Ethernet Port, support PoE+
Power Jack	JEITA type (DC IN 12V)
Physical Parameter	
Tally Indicator	1

Power Indicator	1
Status Indicator	1
Restore Key	1
Power Switch	1
Input Voltage	DC 12V/PoE+(802.3at)
Input Current	Max. 2A
Operating Temperature	0°C ~ 40°C
Storage Temperature	-40°C ~ 60°C
Power Consumption	Max. 18W
Dimension	223mm x 163mm x 166mm
Net Weight	About 1.8Kg

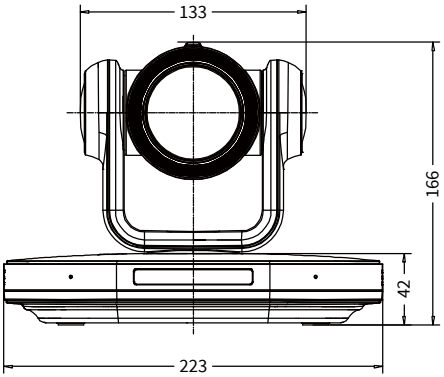
Note Product specifications and parameters are subject to change without notice.

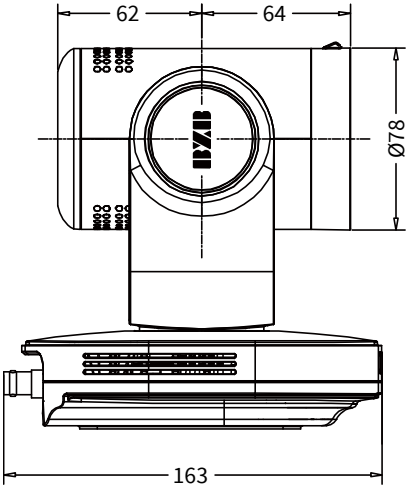
4.3 Interface and Switch

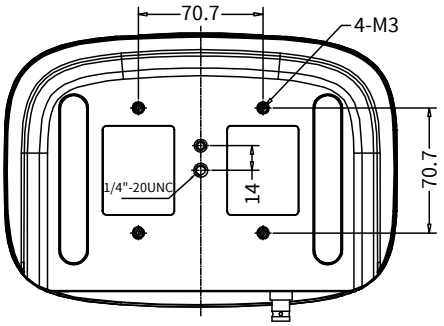


Item	Name
1	RESTORE Key
2	HDMI Interface
3	3G-SDI Interface
4	LINE IN Interface
5	RS485 Interface
6	USB Interface
7	RS232 OUT Interface
8	RS232 IN Interface
9	LAN(PoE+) Interface
10	DC 12V Interface
11	Power Switch

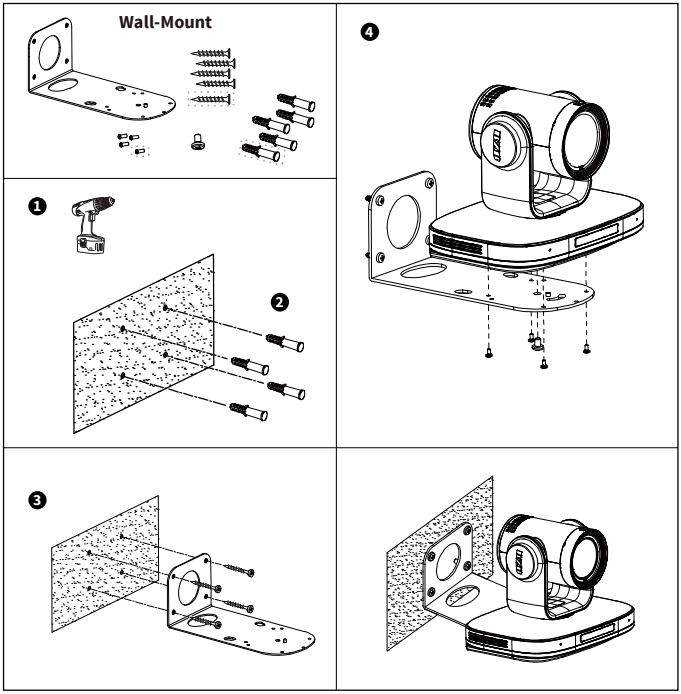
4.4 Dimension

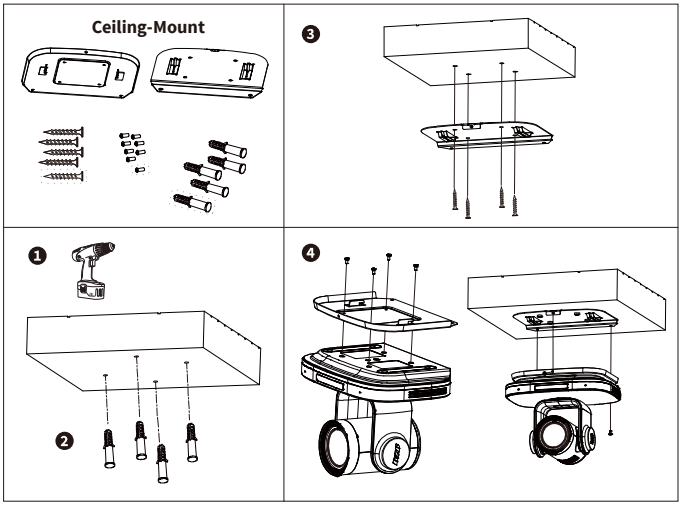






4.5 Installation

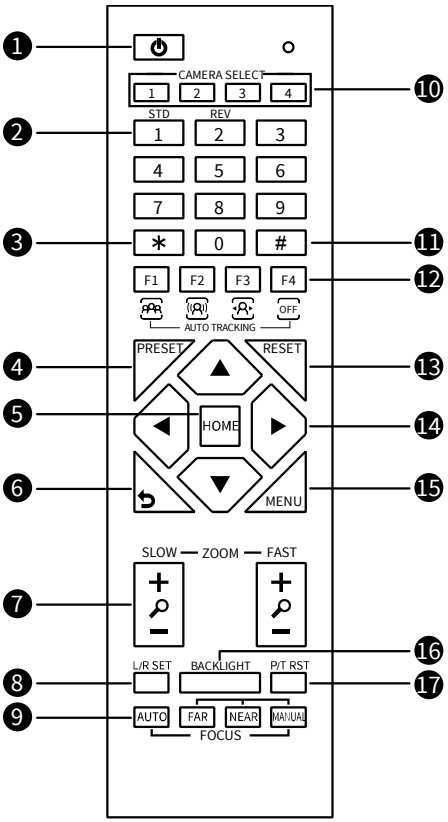




Note

The installation diagram is for reference only. The brackets and screws are not standard. For packing accessories, please refer to the actual product.

4.6 Remote Control



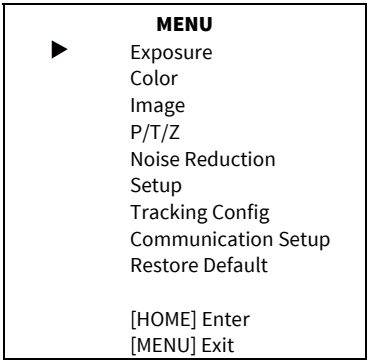
Key Description
1. ⏻ (Standby) Key
Press to enter standby mode
2. Number Keys
To set preset or call preset
3. * Key
Use with other keys
4. PRESET Key
Set preset: Successively press [PRESET] + Number key (0-9)
5. HOME Key
Confirm selection or press to turn PTZ back to the middle position
6. ⮌ (Return) Key
Press to return to the previous menu

7. ZOOM Keys
● 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 Keys
Auto/Manual/Far-end/Near-end focus
10. CAMERA SELECT Keys
Press to select and control the camera
11. # Key
Use with other keys
12. Auto Tracking Keys
[F1]: Disable [F2]: Disable [F3]: Enable AI Tracking [F4]: Disable AI Tracking
13. RESET Key
Clear preset position: Successively press [RESET] + Number key (0-9)
14. PTZ Control Keys
PTZ moved according to the arrow indicates
15. MENU Key
Enter OSD menu or back to the previous menu
16. BACKLIGHT Key
Backlight ON/OFF: Press repeatedly to enable or disable the backlight compensation ● 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
Press to preset Pan/Tilt self-test
Shortcut Set
Successively press [#] + [*] + [F4]: Enable or disable the Image Freeze Successively press [*] + [#] + [1]: OSD menu default English Successively press [*] + [#] + [3]: OSD menu default Chinese Successively press [*] + [#] + [4]: Display current IP address Successively press [*] + [#] + [6]: Quickly recover the default Successively press [*] + [#] + [8]: Check the camera version Successively press [*] + [#] + [9]: Quickly set up inversion Successively press [*] + [#] + [MANUAL]: Restore to default IP address

5 GUI Settings

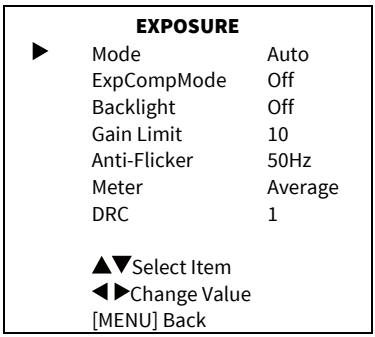
5.1 MENU

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.



5.2 EXPOSURE

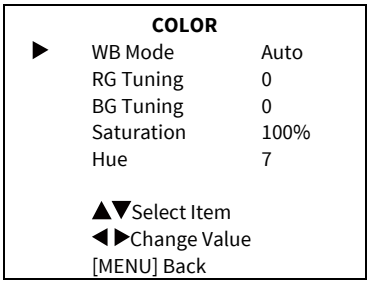
Move the main menu cursor to [Exposure], and press [HOME] key enter the exposure page, as shown in the following figure.



Mode: Auto, Manual, SAE, AAE, Bright.
ExpCompMode: On, Off (Effective only in Auto mode).
ExpComp: -7~7 (Effective only in ExpCompMode item to On).
Backlight: On, Off (Effective only in Auto mode).
Bright: 0~17 (Effective only in Bright mode).
Gain Limit: 0~15 (Effective only in Auto, SAE, AAE, Bright mode).
Anti-Flicker: Off, 50Hz, 60Hz (Effective only in Auto, AAE, Bright mode).
Meter: Average, Center, Smart, Top (Effective only in Auto, SAE, AAE, Bright mode).
Iris: F1.8, F2.0, F2.4, F2.8, F3.4, F4.0, F4.8, F5.6, F6.8, F8.0, F9.6, F11.0, Close (Effective only in Manual, AAE mode).
Shutter: 1/30, 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, SAE mode).
Gain: 0~7 (Effective only in Manual mode).
DRC: 0~8.

5.3 COLOR

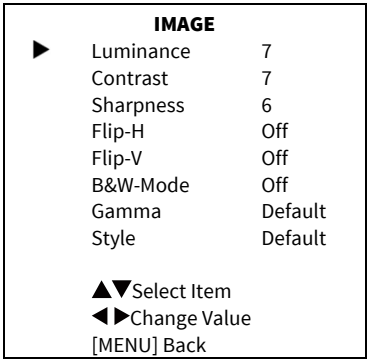
Move the main menu cursor to [Color], and press [HOME] key enter the color page, as shown in the following figure.



WB Mode: Auto, Indoor, Outdoor, One Push, Manual, VAR.
RG: 0~255 (Effective only in Manual mode).
BG: 0~255 (Effective only in Manual mode).
RG Tuning: -10~+10 (Effective only in Auto, One Push, VAR mode).
BG Tuning: -10~+10 (Effective only in Auto, One Push, VAR mode).
Saturation: 60%~200%.
Hue: 0~14.
Color Temp: 2500K~8000K (Effective only in VAR mode).

5.4 IMAGE

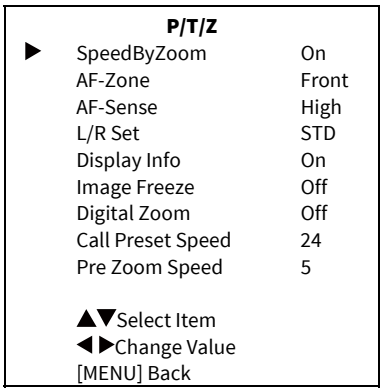
Move the main menu cursor to [Image], and press [HOME] key enter the image page, as shown in the following figure.



Luminance: 0~14.
Contrast: 0~14.
Sharpness: 0~11.
Flip-H: On, Off.
Flip-V: On, Off.
B&W-Mode: On, Off.
Gamma: 0.45, 0.48, 0.5, 0.56, PC, Default.
Style: Default, Norm, Bright, PC.

5.5 P/T/Z

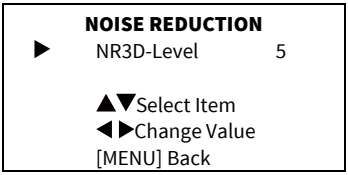
Move the main menu cursor to [P/T/Z], and press [HOME] key enter the P/T/Z page, as shown in the following figure.



SpeedByZoom: On, Off.
AF-Zone: Front, Top, Center, Bottom.
AF-Sense: High, Low, Normal.
L/R Set: STD, REV.
Display Info: On, Off.
Image Freeze: On, Off.
Digital Zoom: Off, 2x, 4x, 8x, 16x.
Call Preset Speed: 1~24.
Pre Zoom Speed: 0~7.

5.6 NOISE REDUCTION

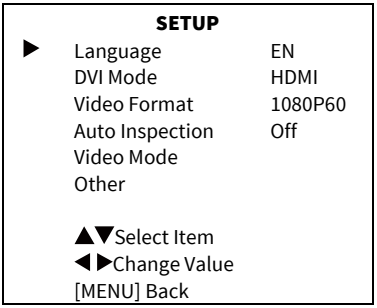
Move the main menu cursor to [Noise Reduction], and press [HOME] key enter the noise reduction page, as shown in the following figure.



NR3D Level: Off, 1~9.

5.7 SETUP

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



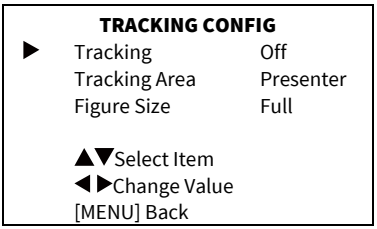
Language: EN, Simplified Chinese, Traditional Chinese.
DVI Mode: HDMI, DVI.
Video Format: 4KP25, 4KP29.97, 4KP30, 4KP50, 4KP59.94, 4KP60, 1080P30, 1080P25, 1080P50, 1080P60, 1080P59.94, 1080P29.97, 1080I50, 1080I60, 1080I59.94, 720P60, 720P59.94, 720P50.

Auto Inspection: On, Off.
Residence Time: 1~60 (Effective only in Auto Inspection item to On).
Call Preset Speed: 1~24 (Effective only in Auto Inspection item to On).
Video Mode: Press [HOME] key to confirm enter the "Video Mode" page and set SDI-3G Mode, Video Output.
SDI-3G Mode: LEVEL-A, LEVEL-B.
Video Output: HDMI, SDI.
Other: Press [HOME] key to confirm enter the "Other" page and set Auto Inversion, Tally Mode.
Auto Inversion: On, Off.
Tally Mode: On, Off.

Note
After changing the DVI mode and video format, it will take effect after press the [HOME] key to confirm to restart the device.

5.8 TRACKING CONFIG

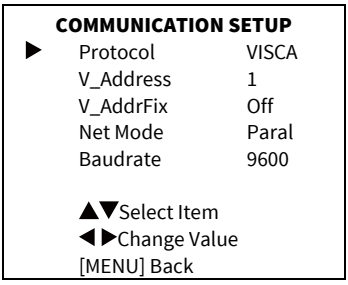
Move the main menu cursor to [Tracking Config], and press [HOME] key enter the tracking config page, as shown in the following figure.



Tracking: On, Off.
Tracking Mode: Region, Presenter.
Figure Size: Full, Half Body, Close Up, Custom.

5.9 COMMUNICATION SETUP

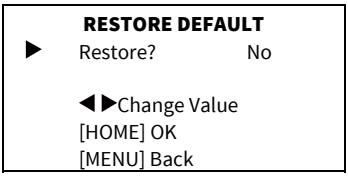
Move the main menu cursor to [Communication Setup], and press [HOME] key enter the communication setup page, as shown in the following figure.



Protocol: Auto, VISCA, PELCO-D, PELCO-P.
V_Address: 1~7 (Effective only in Auto, VISCA protocol).
V_AddrFix: On, Off (When set to On, useless in 88 30 01 FF Command).
P_D_Address: 0~254 (Effective only in Auto, PELCO-D protocol).
P_P_Address: 0~31 (Effective only in Auto, PELCO-P protocol).
Net Mode: Serial, Paral (Effective only in Auto, VISCA protocol).
Baudrate: 2400, 4800, 9600, 38400.

5.10 RESTORE DEFAULT

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



Restore: Yes, No.

Note
GUI menu and device information are subject to change without notice.

6 WEB Settings

6.1 Access Camera

Access http://192.168.168.170 to pop up the login window, then input username (default: admin) and password (default: 00000). After login, it will show as below:



6.2 Control Camera

All pages include two menu bars:

Real Time Monitoring: Video image displaying with function buttons.

Parameter Setup: Parameter configurating.

A. Video Viewing Window

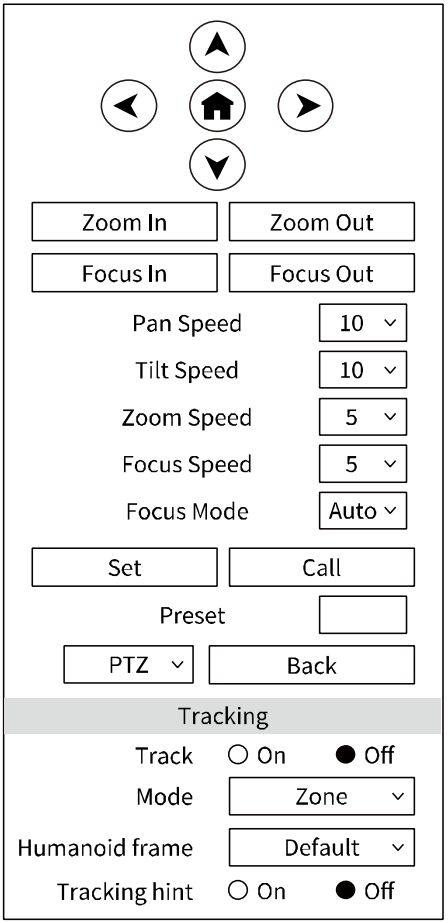
The video viewing window is same as video resolution, the bigger the resolution, the bigger the playing area. Double click the viewing window to show full screen, double click again, to return to initialized size.

Status bar in viewing window shown as below:



Full screen switch button.

B. PTZ Setup



1) Pan and Tilt Control

The direction arrows and HOME button allow you to manually drive the camera to 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 button allow for fine manual focus adjustment if the camera has any auto focusing problems on difficult object.

4) Focus Mode

Focus Mode can be selected Auto/Manual. When you select “Manual”, Focus In and Focus Out will to take effect.

5) PTZ Speeds

Pan speed rate can be set to 1~24, Tilt speed rate can be set to 1~20. Zoom and Focus speed rate can be set to 1~7.

6) PTZ Presets

When the PTZ turns to the position that you would like to return to later, you can set presets for quick recall. Type a number (0~254) into the preset box and click “Set” button to save.
When the PTZ turn to other position, input the preset number and click “Call” button to turn the PTZ back to the preset position.

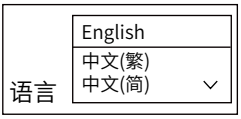
7) PTZ/OSD

Move the cursor to dropdown menu, select and click “OSD” to open the on-screen menu and do menu settings on the interface.

8) Tracking

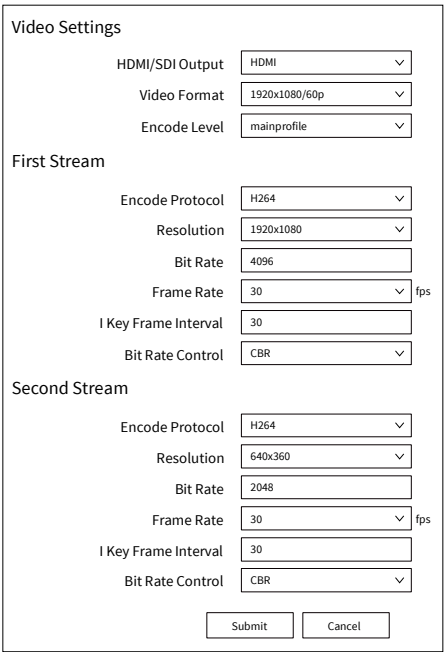
Turn On/Off the Track or Tracking hint. Set Mode (Zone, Presenter) and Humanoid frame.

C. Language Selection



Click either “English”, “Traditional Chinese” or “Simplified Chinese” to change the language of the webpage.

6.3 Video Settings



1) HDMI/SDI Output

Support HDMI and SDI output.

2) Video Format

Video Format: 3840x2160/60p, 3840x2160/59.94p, 3840x2160/50p, 3840x2160/30p, 3840x2160/29.97p, 3840x2160/25p, 1920x1080/60p, 1920x1080/59.94p, 1920x1080/50p, 1920x1080/60i, 1920x1080/59.94i, 1920x1080/50i, 1920x1080/30p, 1920x1080/29.97p, 1920x1080/25p, 1280x720/60p, 1280x720/59.94p, 1280x720/50p.

3) Encode Level

Support mainprofile and highprofile two levels.

4) Encode Protocol

Support H264, H265 and MJPEG protocols.

5) Resolution

First stream support 3840x2160, 1920x1080, 1280x720, 1024x576, 720x480, 720x408, 640x480, 640x360. Second stream support 720x480, 720x408, 640x480, 640x360, 480x320, 320x240;

The bigger resolution is, the clearer the image will be, more network bandwidth will be taken.

6) 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.

7) 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.

8) I Key Frame Interval

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

9) 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.

6.4 Tracking Settings

6.4.1 Presenter



1) Auto Zoom/Auto Tilt

When Auto Zoom or Tilt is off, camera stops zooming in/out or tilting automatically.

Determine the zoom size and tilt position based on the tracking start position you choose. When auto zoom is off, camera stops zooming In/Out automatically. When auto tilt is off, camera only move horizontally.

2) Target Retention Time

Set Target Retention Time, the time to return to the starting point after losing the target.

3) Figure Size

Figure Size: Full, Half Body, Close Up, Custom.

4) Tracking Start Position

Tracking Start Position: Current Location, Preset 1.

5) Character Position

Character Position: Left, Middle, Right.

6.4.2 Zone



1) Zone Setting

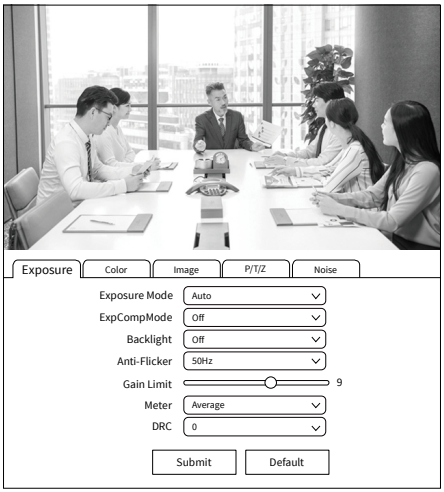
Zone Setting: Zone A, Zone B, Zone C, Zone D. Set area tracking must be set "from left to right", and each area must have overlap.

2) Tracking Start Area

Tracking Start Area: Zone A, Zone B, Zone C, Zone D.

6.5 Image Settings

6.5.1 Exposure



1) Exposure Mode

Exposure Mode: Auto, Manual, SAE, AAE, Bright.

2) ExpCompMode

ExpCompMode: On, Off.

3) Backlight

Backlight: On, Off.

4) Anti-Flicker

Anti-Flicker: Off, 50Hz, 60Hz.

5) Gain Limit

Gain Limit: 0~15.

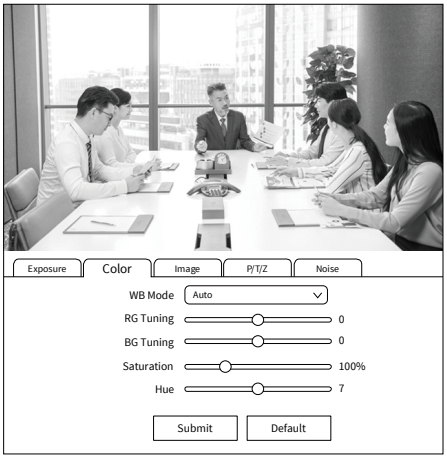
6) Meter

Meter: Average, Center, Smart, Top.

7) DRC

DRC: 0~8.

6.5.2 Color



1) WB Mode

WB Mode: Auto, Indoor, Outdoor, Manual, One Push, VAR.

2) RG Tuning

RG Tuning: -10~10.

3) BG Tuning

BG Tuning: -10~10.

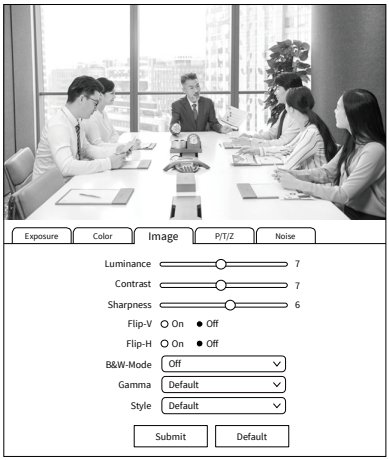
4) Saturation

Saturation: 60%~200%.

5) Hue

Hue: 0~14.

6.5.3 Image



1) Luminance

Luminance: 0~14.

2) Contrast

Contrast: 0~14.

3) Sharpness

Sharpness: 0~11.

4) Flip-V

Turn On/Off the Flip-V function.

5) Flip-H

Turn On/Off the Flip-H function.

6) B&W-Mode

B&W-Mode: On, Off.

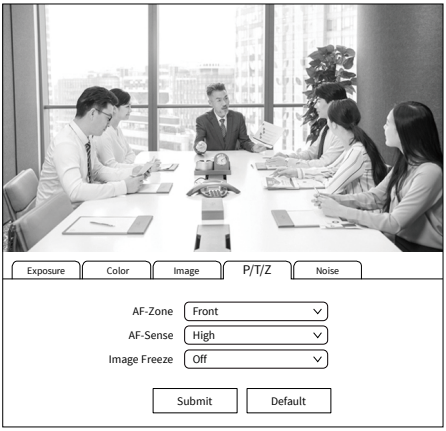
7) Gamma

Gamma: 0.45, 0.48, 0.5, 0.56, PC, Default.

8) Style

Style: Default, Norm, Bright, PC.

6.5.4 PTZ



1) AF-Zone

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

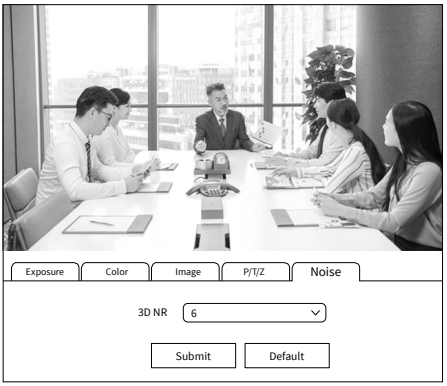
2) AF-Sense

AF-Sense: High, Normal, Low.

3) Image Freeze

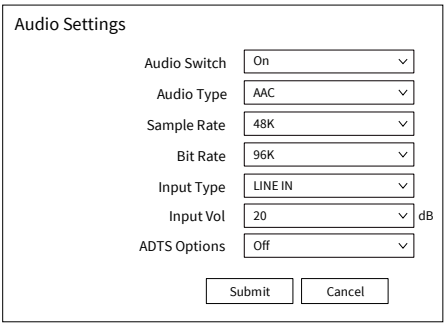
Image Freeze: On, Off.

6.5.5 Noise



3D NR: Off, 1~9.

6.6 Audio Settings



1) Audio Switch

Turn On/Off the audio switch.

2) Audio Type

Audio Type: AAC.

3) Sample Rate

Sample Rate: 44.1K, 48K.

4) Bit Rate

Bit Rate: 96K, 128K.

5) Input Type

Input Type: LINE IN, MIC.

6) Input Vol

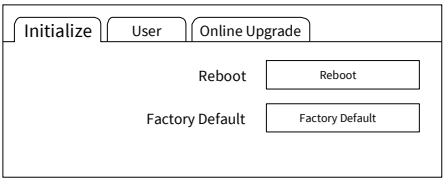
Select the volume value to control the channel volume.

7) ADTS Options

Options: On/Off.

6.7 System Settings

6.7.1 Initialize



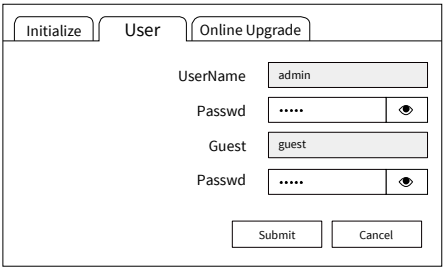
1) Reboot

Click “Reboot” to restart system.

2) Factory Default

Click the “Factory Default”, and the “Please press OK to reset the camera.” dialog box pops up. Select “OK” to restore the factory default.

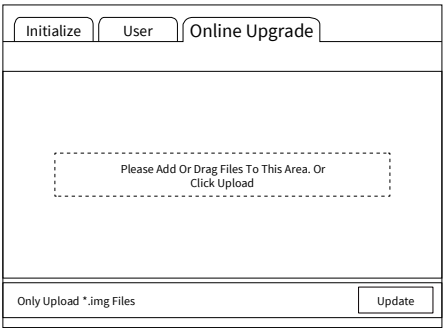
6.7.2 User



Username and Password

Modify the password of username and guest (only use letters and numbers).

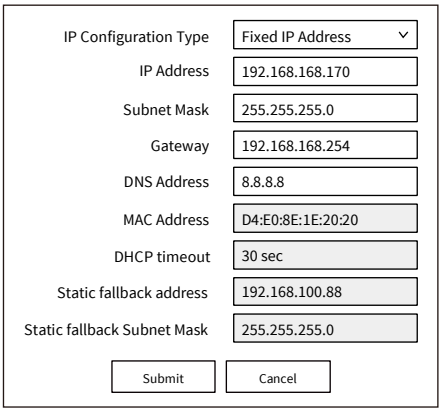
6.7.3 Online Upgrade



The device supports online upgrade. If you need to upgrade the camera program, please refer to the upgrade interface instructions (as shown in the above figure), select the upgrade file package, and click the “Update” to upgrade the program.

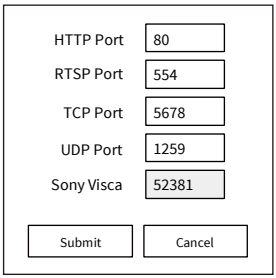
6.8 Network Settings

6.8.1 Lan



The default camera IP: 192.168.168.170.

6.8.2 Port



Set the HTTP Port, RTSP Port, TCP Port, UDP Port and Sony Visca of the camera.

A. HTTP Port

The IP address identifies a network device and multiple network programs can run on the device, each network program uses the network port for data transmission. The port setting on this page is to set up which port the WEB SERVER program uses to transmit. During port mapping, it needs to be consistent with port number (default is 80).

B. RTSP Port

Set up the RTSP Port, default is 554.

C. TCP Port

Set up the TCP Port, default is 5678.

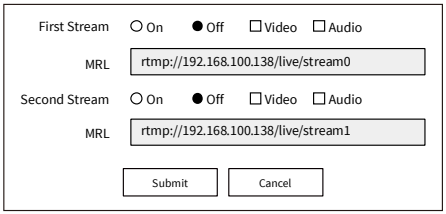
D. UDP Port

Set up the UDP Port, default is 1259.

E. Sony Visca

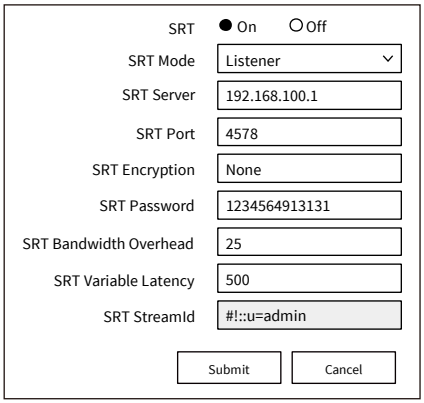
Set up the Sony Visca, default is 52381.

6.8.3 RTMP(S)



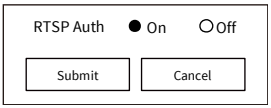
Set the MRL of RTMP(S) and select “On”, “Off”, “Video” and “Audio” functions to enable or disable video and audio in the two streams. Click “Submit” and restart to take effect.

6.8.4 SRT Settings



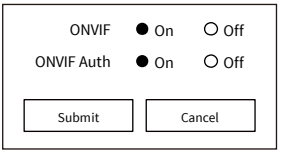
Turn On/Off SRT and set up the SRT Mode, SRT Server, SRT Port, SRT Encryption, SRT Password, SRT Bandwidth Overhead, SRT Variable Latency and SRT StreamID.

6.8.5 RTSP



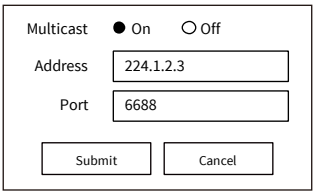
Turn On/Off the RTSP Auth.

6.8.6 ONVIF



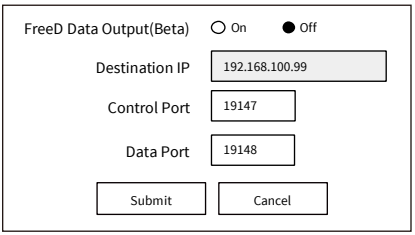
Turn On/Off the ONVIF and ONVIF Auth.

6.8.7 Multicast



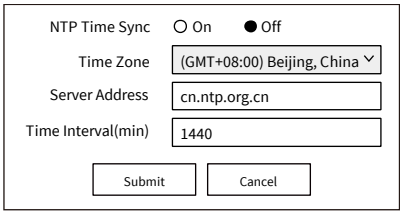
Turn On/Off Multicast, set up Multicast Address (default is 224.1.2.3) and Port (default is 6688; 6688 is the multicast port of the first stream and 6690 is the multicast port of the second stream).

6.8.8 FreeD



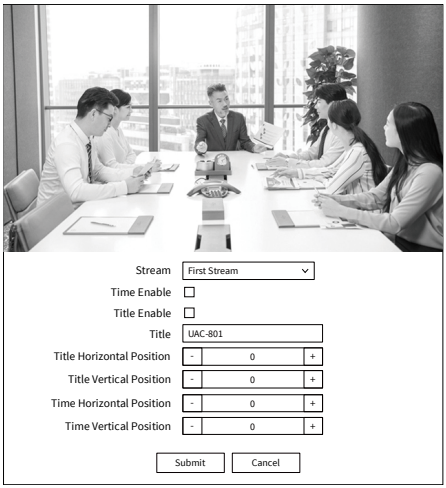
Turn On/Off FreeD Data Output, set up the Destination IP, Control Port and Data Port.

6.8.9 NTP



Turn On/Off NTP Time Sync, set up the Time Zone, Server Address (default is cn.ntp.org.cn) and Time Interval (default is 1440 min).

6.9 Overlay



1) Stream

Stream: First Stream, Second Stream.

2) Time Enable

Enable or disable the Time.

3) Title Enable

Enable or disable the Title.

4) Title

Set up the Title of the display screen.

5) Title Horizontal Position

Set up the Title Horizontal Position.

6) Title Vertical Position

Set up the Title Vertical Position.

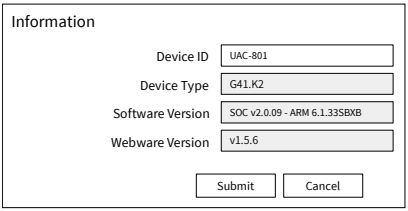
7) Time Horizontal Position

Set up the Time Horizontal Position.

8) Time Vertical Position

Set up the Time Vertical Position.

6.10 Device Information



Note

WEB interface and device information are subject to change without notice.

7 Troubleshooting

Image

- The monitor shows no image

1) Ensure that the camera power supply is connected, the voltage is normal, and the power indicator is always on.
2) Turn off the power switch to check that the camera is self-testing.
3) Ensure the cable of video platform and TV that in correct connection.

- Image jitters after the camera is properly connected

1) Ensure that the camera installation is in stable position.
2) Check that any vibrating machinery or object near the camera.

- There is no video image in browser

That do not support IE browser and IE core browser, it is recommended to use Google, Firefox and Edge browsers. The camera video image will be displayed normally.

- Unable to access camera through the browser

1) Using PC to access the network to test that the network access can work properly to eliminate the network fault caused by cable and PC virus until the PC and camera can ping each other.
2) Disconnect the network, connect camera with PC separately and reset the IP address of PC if necessary.
3) Ensure that the IP address, subnet mask and gateway settings is correct.
4) Check whether the MAC address is conflicts.
5) Check whether the web port is modified. The default web port is 80.

- Forget the IP address or login password

Please remember (The default IP address: 192.168.168.170; default user name: admin; default password: 00000).

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.



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