

# Prestel 4K-PTZ412HSUN

4K PTZ Camera



**USER MANUAL** 

# Copyright

All contents of this manual, whose copyright belongs to ourcorporation, cannot be cloned, copied or translated without the permission of our corporation.

# **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 thein structions, 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

# **Catalogue**

1	Note				
2	Packing List				
3	Quick Start				
4	Video Format				
5	About Product				
	5.1	Features	3		
	5.2	Specifications	5		
	5.3	Interface and Switch	6		
	5.4	Dimension	7		
	5.5	Installation	g		
	5.6	Remote Control	11		
6	GUIS	Settings	12		
	6.1	MENU	12		
	6.2	EXPOSURE	12		
	6.3	COLOR	13		
	6.4	IMAGE	14		
	6.5	P/T/Z	14		
	6.6	NOISE REDUCTION	15		
	6.7	SETUP	15		
	6.8	COMMUNICATION SETUP	15		
	6.9	RESTORE DEFAULT	15		
7	WEB	Settings	16		
	7.1	Access Camera	16		
	7.2	Control Camera	16		
	7.3	Video Settings	17		
	7.4	Image Settings	19		
	7.5	Audio Settings	20		
	7.6	System Settings	20		
	7.7	Network Settings	20		
	7.8	Device Information	21		
	7.9	Download Upgrade Program	21		
8	Trou	bleshooting	22		

# 1 Note

- 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.



Specific frequencies of electromagnetic field

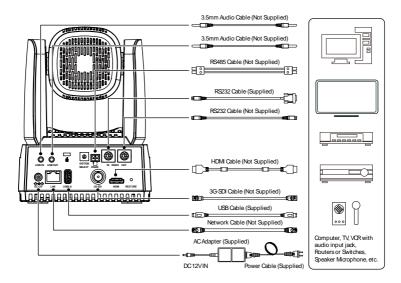
may affect the image of the camera!

# 2 Packing List

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

# 3 Quick Start

1) Please check connections are correct before starting.



- 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.
- 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)

can realize automatic tracking of scenes such as education, conferences and live broadcasts.

# **4** Video Format

HDMI SDI			
0	1080P60	0	1080P60
1	1080P50	1	1080P50
2	1080160	2	1080160
3	1080150	3	1080150
4	1080P30	4	1080P30
5	720P60	5	720P60
	1080P29.9	BOP29.9 7	1080P29.9
6	7		7
7	1080 59.94	7	1080 59.94
8	1080P59.9	8	1080P59.9
8	4	8	4
9	720P59.94	9	720P59.94
	41/200 07	_	1080P29.9
A	4KP29.97	A	7
		В	1080P59.9
В	B 4KP59.94		4
С	4KP25	C	1080P25
D	4KP30	D	1080P30
Е	4KP50	E	1080P50
F	F 4KP60		1080P60

# 5 About Product

# 5.1 Features

### Al Tracking

With the help of the Al computing power of the chip, the camera is equipped with advanced Al algorithms to realize monocular humanoid tracking, which

# • 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

Use1/2.5-inch high-quality UHD CMOS sensor with a maximum of 8.51 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 71°.

#### HDMI2.0

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

#### LowLight

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

# **5.2 Specifications**

Name	4K PTZ Camera		
Camera			
Signal System	HDMI: 4KP60, 4KP50, 4KP30, 4KP30, 4KP25, 4KP59.94, 4KP29.97, 1080P60, 1080P50, 1080P59.94, 1080P30, 1080I50, 1080I59.94, 720P60, 720P59.94 3G-SDI: 1080P60, 1080P50, 1080P30, 1080P29.97, 1080P59.94, 1080P25, 1080I60, 1080I50, 1080I59.94, 720P60, 720P59.94		
Sensor	1/2.5 inch, CMOS, Effective pixels: 8.51M		
Scanning Mode	Progressive		
Lens	12x, f = 4.4mm~52.8mm, F1.8~F2.6		
<b>Digital Zoom</b>	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 Compensatio n	Support		
Digital Noise Reduction	3D Digital Noise Reduction		
SNR	≥55dB		
Horizontal FOV	71° ~ 8.2°		
Vertical FOV	42.7° ~ 4.5°		
Pan Angle	±170°		
Tilt Angle -30° ~ +90°			
Pan Speed	1.7° ~ 100°/s		
Tilt Speed	1.7° ~ 69.9°/s		

lmage Flip	Support		
Image Freeze	Support Support 255		
PoE+			
Preset			
Position	200		
Preset Accuracy	0.1°		
USB Features			
Operate	Windows 7/8/10, Mac		
System	OS X, Linux, Android		
Color System /	YUY2/H.264/MJPEG/H.		
Compression	265		
	• YUY2:		
	max to 1080P@5fps		
	• H.264 AVC:		
	max to		
	2160P@30fps		
<b>Video Format</b>	• H.265 HEVC:		
	max to		
	2160P@30fps		
	MJPEG:		
	max to		
	2160P@30fps		
USB Audio	Support		
USB Video	UVC 1.1~1.5		
Protocol	010 1.10 1.0		
UVC PTZ	Support		
Network Feature	es		
Video	H.264/H.265/MJPEG		
Compression	11.204/11.203/NJFEG		
Video Stream	First Stream,		
	Second Stream		
	3840x2160,		
First Stream	1920x1080, 1280x720,		
Resolution	1024x576, 720x480,		
nesolutivii	720x408, 640x480,		
	640x360		
Second	720x480, 720x408,		
Stream	640x480, 640x360,		
Resolution	480x320, 320x240		
	First Stream:		
	32kbps~51200kbps		
Video Bit Rate	<ul><li>Second Stream:</li><li>32kbps~20480kbp</li><li>s</li></ul>		
Bit Rate			
Control	CBR, VBR		
	1		

Status

Indicator

1

4K PTZ Camera	User Manual
Frame Rate	50Hz: 1fps ~ 50fps,
rrame kate	60Hz: 1fps ~ 60fps
Audio Compression	AAC
Audio Bit Rate	96Kbps, 128Kbps
	NDI® HX2, TCP/IP,
	HTTP, RTSP,
Protocols	RTMP/RTMPS, ONVIF,
	DHCP, SRT, Multicast
Input/Output Int	erfaces
	1x LINE IN: 3.5mm
LINE IN	Audio
Interface	Interface
	1 x LINE OUT: 3.5mm
LINE OUT	Audio
Interface	Interface
	1 x RS485: 2pin phoenix
	port, Max Distance:
	1200m, Protocol:
	VISCA/
	Pelco-D/Pelco-P
	1xRS232 IN: 8pin Min
Communicati	DIN, Max Distance:
on Interface	30m, Protocol:
	VISCA/Pelco-D/
	Pelco-P
	1 x RS232 OUT: 8pin
	Min DIN, Max Distance:
	30m, Protocol: VISCA
	network use only
Network	1xLAN:
Network Interface	10M/100M/1000M
IIICIIACE	Adaptive Ethernet Port
USBInterface	1xUSB2.0: Type A
	1x3G-SDI: BNC type,
3G-SDIInterfa	800mVp-p, 75Ω. Along
ce	to SMPTE 424M
	standard
HDMIInterface	1 x HDMI: Version 2.0
Power Jack	JEITA type (DC IN 12V)
General Specific	ations
Tally Indicator	1
Power	1
Indicator	<u> </u>
A	

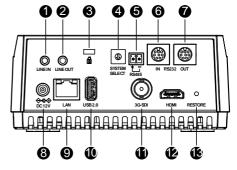
RestoreKey	1	
Input Voltage	DC 12V/PoE+(802.3at)	
Input Current	Max. 2A	
Operating Temperature	0°C ~ 40°C	
Storage Temperature	-40°C ~ 60°C	

Power Consumption	Max. 18W	
Dimension	169mm x 142mm x 188mm	
Net Weight	About 1.6Kg	



**Product specifications and** Parameters are subject to change without notice.

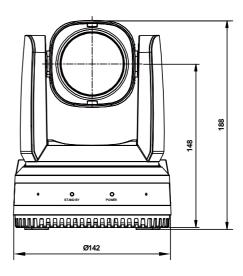
# 5.3 Interface and Switch

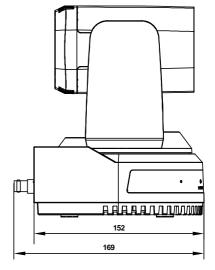


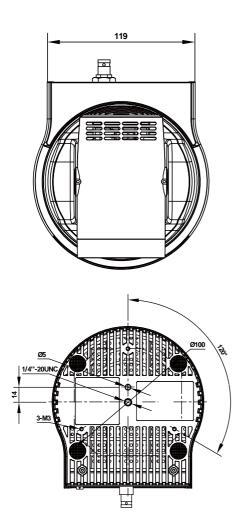
Item	Name	
1	LINE IN Interface	
2	LINE OUT Interface	
3	Security Slot	
4	System Select Switch	
5	RS485 Interface	
6	RS232 IN Interface	
7	RS232 OUT Interface	
8	DC 12V Interface	

Item	Name	
9	LAN Interface	
10	USB2.0 Interface	
11	3G-SDI Interface	
12	HDMI Interface	
13	RESTORE Key	

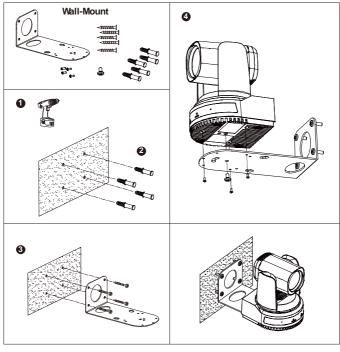
# 5.4 Dimension

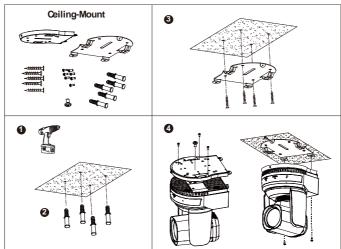






# 5.5 Installation



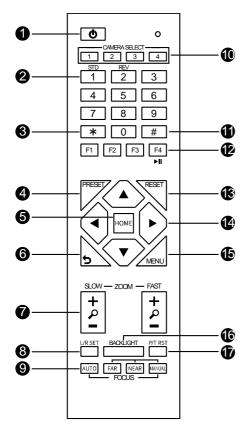


Note

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

For packing accessories, please refer to the actual product.

### **5.6 Remote Control**



	escri	

1. Standby Key

Press to enter standby mode

2. Number Key

Press to set preset or call preset

3. \*Kev

Use with other keys

4. PRESET Kev

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

5. HOME Kev

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

#### 6. Return Kev

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 Kev

**Press toenter 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+[#1+[11: OSD menu default English

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

[\*]+[#]+[4]: Display currentlP 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

Exposure
Color
Image
P/T/Z
Noise Reduction
Setup
Communication
Setup
Restore Default

[Home] Enter
[Menu] Exit

### **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				
	Mode	Auto		
	ExpCompMode	Off		
	Backlight	Off		
	<b>Gain Limit</b>	3		
	Anti-Flicker	50Hz		
	Meter	Average		
	DRC	3		
	<b>▲</b> ▼Select Item			
	<b>◀▶</b> Change Valu	е		
	[Menu] Back			

Mode:Auto,Manual, SAE, AAE, Bright. ExpCompMode:On, Off (Effective only inAutomode).

ExpComp:-7~7 (Effective only in ExpCompMode item to On).

Backlight:On, Off (Effective only in Automode).

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).

only in Auto, AAE, Bright mode).

Meter: Average, Center, Smart, Top.

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:1/30,1/60,1/90,1/100,1/125,1/18
0,1/250,1/350,1/500,1/725,1/1000,1/15
00,1/2000,1/3000,1/4000,1/6000,1/10
000 (Effective only in Manual, SAE

Gain:0 ~ 7 (Effective only in Manual mode).

DRC:0 ~ 8.

mode).

### 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		
<b>•</b>	WB Mode	Auto	
	<b>RG Tuning</b>	0	
	<b>BG Tuning</b>	+1	
	Saturation	100%	
	Hue	7	
▲▼Select Item ◀▶Change Value [Menu] Back			

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

RG: 0~255 (Effective only in Manual mode).

BG:  $0\sim255$  (Effective only in Manual mode).

RG Tuning: -10 ~ +10 (Effective only in Auto, One Push, VAR Mode).

BG Tuning:  $-10 \sim +10$  (Effective only in Auto, One Push, VAR Mode).

Saturation: 60% ~ 200%.

Hue:0 ~ 14.

Color Temp: 2500K ~ 8000K (Effective

only in VAR 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		
•	Luminance	6	
	Contrast	9	
	Sharpness	3	
	Flip-H	Off	
	Flip-V	Off	
	B&W-Mode	Off	
	Gamma	0.5	
	Style	Default	
	LDC	Off	
<b>▲▼</b> Select Item			
	◆ Change Value [Menu] Back		

Luminance: 0 ~ 14.

**Contrast: 0 ~ 14.** 

Sharpness:0 ~ 11.

Flip-H: On, Off.

Flip-V: On, Off.

B&W-Mode:On, Off.

Gamma:EXT, Default, 0.45, 0.5, 0.56,

0.63.

Style: Default, Norm, Clarity, Clarity (LED),

Bright, Soft, 5S.

LDC: On, Off.

# 6.5 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.

P/T/Z	
SpeedByZoom	On
AF-Zone	Front
AF-Sense	High
L/R Set	STD
Display Info	On
Image Freeze	Off
Digital Zoom	Off
Call Preset Speed	24
Pre Zoom Speed	5
<b>▲</b> ▼Select Item	

P/T/Z **▼** ► Change Value [Menu] Back

SpeedByZoom:On, Off.

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

AF-Sense:Low, Normal, High.

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.

### **6.6 NOISE REDUCTION**

Move the main menu cursor to [Noise Reduction], and press [HOME]

enter the noise reduction page, as shown in

the following figure.

NOISE REDUCTION

NR3D-Level 6

A▼Select Item

Change Value
[Menu] Back

NR3D Level: Off, 1 ~ 11.

#### 6.7 SETUP

Move the main menu cursor to [Setup], and press [HOME] key enter the setup page,

as shown in the following figure.

SETUP				
	Language	EN		
	DVI Mode	DVI		
	Auto Scan	Off		
	Shoot			
	SDI-3G Mode	LEVEL-A		
	<b>Video Output</b>	HDMI		
	Auto Inversion	On		
	Tally Mode	On		
	USB2.0	Host		
	Function			

#### SETUP

**▲**▼Select Item

**◆►**Change Value [Menu] Back

Language: EN, Chinese, Russian.

DVI Mode: HDMI, DVI.

Auto Scan Shoot: On, Off.

SDI-3G Mode: LEVEL-A, LEVEL-B.

Video Output: HDMI, SDI. Auto Inversion: On. Off.

Tally Mode: On, Off.

**USB2.0 Function: Host, UVC.** 

# **6.8 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.

# **COMMUNICATION SETUP**

Protocol VISCA
V\_Address 1
V\_AddrFix Off
Net Mode Serial
Baudrate 9600

▲▼Select Item

◆▶Change Value
[Menu] Back

Protocol:Auto, VISCA, PELCO-D, PELCO-P.

V\_Address:1 ~ 7(Effective only in Auto, VISCAprotocol).

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.

Baudrate: 2400, 4800, 9600, 38400.

#### **6.9 RESTORE DEFAULT**

Move the main menu cursor to [Restore

Default], press [HOME] key enter restore default page, as shown in the following figure.



**◆** Change Value [Home] OK [Menu] Back

Restore: 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 imageParameter setup: with function buttons.

# A. Video Viewing Window

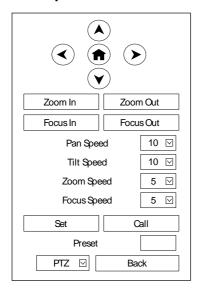
Video viewing window must be same as video resolution, the bigger the resolution is, the bigger the playing area is. Double click viewing window, will show full-screen, double click again, will return to initialized size.

Status bar in viewing window shown as below:



- Video playback pause button: control real-time video pause, stop the last picture, click recoverable video again.
- 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 andRight arrows and the home button allow you to manually drive the camera to the desired position.

#### 2) Zoom

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

### 3) Focus

Focusin and Focus Out buttons allow for fine manual focus adjustment if the camera has any problems autofocusing 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.



Preset: Optional items: 0 ~ 254.

# 6) PTZ/OSD Dropdown

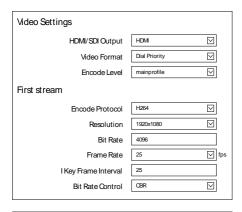
From the dropdown menu, clicking the OSD option will open the on-screen display menu of the camera giving you control from within the IP interface.

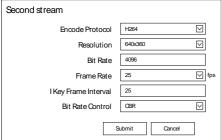
# C. Language Selection



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

# 7.3 Video Settings





# 1) HDMI/SDI Output

Support HDMI and SDI Output.

## 2) Video Format

Support 50Hz (PAL), 60Hz (NTSC) and Dial Priority three formats.

### 3) Encode Level

Support mainprofile and highprofiletwo levels.

### 4) Encode Protocol

Support H.264, H.265 and MJPEG protocols.

# 5) Resolution

First stream support 3840x2160, 1920x1080, 1280x720, 1024x576, 720x480, 720x408, 640x480, 640x360.Second stream support720x480, 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 configuredlarger, 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 rategreater, the image more smooth; Frame rate is smaller, the more sense of beating.

### 8) I Key Frame Interval

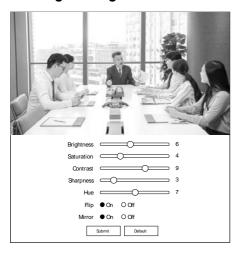
Set interval between 21 frame, the bigger interval is the response will be lower from viewing window.

# 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.

# 7.4 Image Settings



### 1) Brightness

Brightnessof image: 0~14 (Default value is 6).

### 2) Saturation

Saturation of image: 0~14 (Default value is 4).

### 3) Contrast

Contrastof image: 0~14 (Default value is 9).

### 4) Sharpness

Sharpnessof image: 0~11 (Default value is 3).

# 5) Hue

Hueof image: 0~14 (Default value is 7).

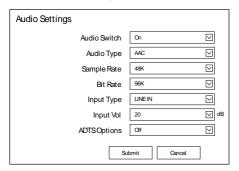
# 6) Flip

Turn On/Offthe Flip function.

# 7) Mirror

**Turn On/Offthe Mirror function.** 

# 7.5 Audio Settings



1) Audio Switch

Enable or disableaudio switch.

2) Audio Type

Optional items: AAC.
3) Sample Rate

Optional items:44.1K, 48K.

4) Bit Rate

Optional items:96K,128K.

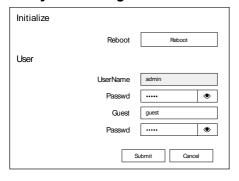
5) Input Type Input type LINEIN.

6) Input Vol

The volume of the channel.

7) ADTS Options
Optional items:On, Off.

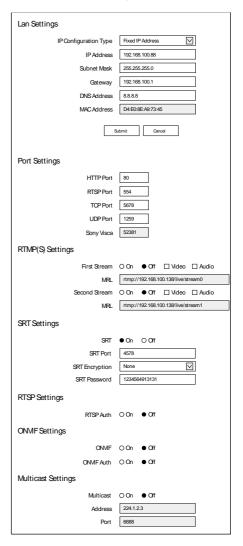
## 7.6 System Settings

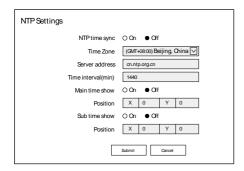


- 1) Reboot Click the "Reboot" button, system
- 2) Username and Password The user can modify the password (letters and Numbers only).

# 7.7 Network Settings

restart.





# 1) Lan Settings

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

2) Port Settings

### A. HTTP Port

IP address identifies the 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 upwebserver program using which port to transmit. Whenport mapping, need to be consistent with the port number

(default port: 80).

#### **B. RTSP Port**

The 4K PTZ 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.

# 3) RTMP(S) Settings

Setting the MRL of RTMP, select enable or disable video and audio. You can select control

code stream of "On", "Off", "Video",

"Audio" between in the two streams.

# 4) SRT Settings

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

5) RTSP Settings

Turn On/Off RTSP Auth.

# 6) ONVIF Settings

Turn On/OffONVIF and ONVIF Auth.

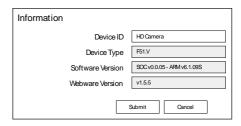
# 7) Multicast Settings

Turn On/Off multicast. Setting the multicast address (default value is 224.1.2.3) and port (default value is 6688, then 6688 is the multicast port of the first stream; 6690 is the multicast port of the second stream).

### 8) NTP Settings

Turn On/OffNTP time sync, main time show and sub time show. SettingNTP server address, time interval, main stream position and sub stream position.

# 7.8 Device Information



# 7.9 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
- Check that the camera power supply is connected, the voltage is normal, and the power indicator light is always on.
- Turn off the power switch to check whether the camera is self-testing.
- Check the cable of video platform and TV whether correct connection.
- The video image displayed by the camera lens is jittery
- Check whether the camera installed position be stabled.
- 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-bitVLC media player, after it installed, access4K PTZ 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 4K PTZ camera through Browser
- 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 4K PTZ camera can communicate with each other Ping.
- Disconnect the network, connect 4K
   PTZ camera and PC separately, and reset the IP address of PC.
- Check IP address, subnet mask, and gateway settings for 4K PTZ camera.
- Check whether the MAC address is conflicts.
- 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: 192.168.100.88; default user name: admin; default password: admin).

Control

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