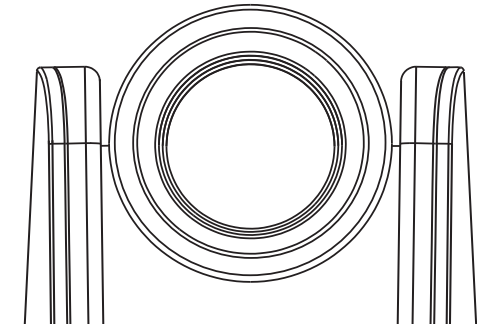


# AI Auto Tracking PTZ Camera

## User Manual



Version V1.0-05.02.0292

## Warranty Certificate

(Please keep this for warranty claims)

### User Information

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Email: \_\_\_\_\_ Postal Code: \_\_\_\_\_

Address: \_\_\_\_\_

### Product Information

Model: \_\_\_\_\_

Barcode: \_\_\_\_\_

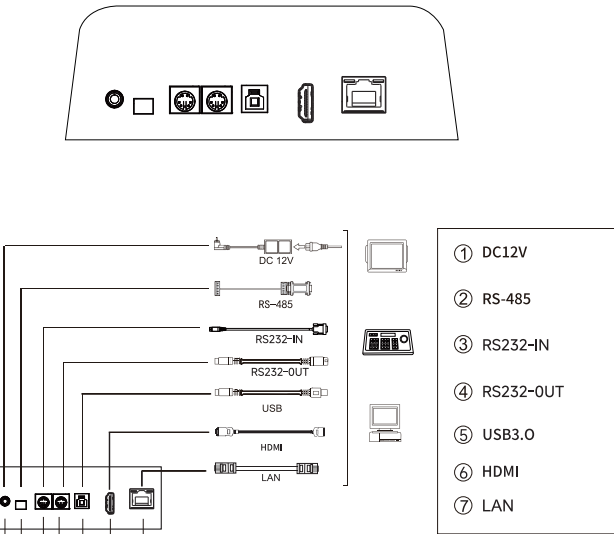
### Fault Description

### Notes

- Please fill in your user information accurately and completely to ensure the repaired device can be returned to you promptly.
- Specify the model, barcode, and provide a detailed description of the malfunction.

## 1. Product Description

### 1.1 Interfaces



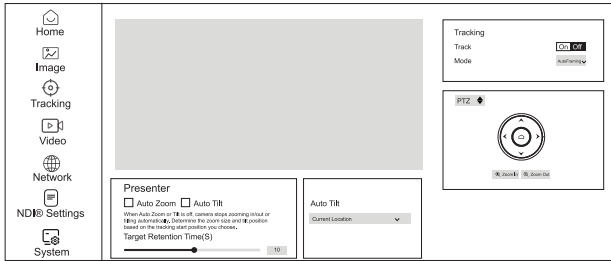
## 3. Remote Control Button Description

No.	Name	Function
1	Launch Window	Remote Control Launch Window
2	Power	Enter into Standby mode by pressing
3	PTZ Reset	Reset the PTZ
4	Camera Select Key	Select the camera needs to control Preset position setup keys include [PRESET1] and [RESET] Set the preset position Reset the preset position
5	Position	
6	UP	The camera rotates horizontally in regular installed direction
7	DOWN	The camera rotates horizontally in reversed installed direction
8	PTZ Control Key	PTZ move according to the arrow indicates. Press [ ] PTZ will back to the middle position
9	Return/Exit	Return to up level menu or exit menu
10	MENU	Enter or exit OSD Menu after pressing it
11	Enter Single-person Tracking	When entering Single-Person tracking mode, press [K] or [K] to select the person.Press [C] to confirm.
12	Exit Single-Person Tracking	Press to exit Single-Person tracking mode, and return to Multi-Person tracking mode.
13	[A]	Turn on/off Multi-Person tracking mode
14	ZOOM Slow Key	Zoom in (+) or out (-) slowly
15	ZOOM Fast Key	Zoom in (+) or out (-) quickly
16	L/R Set	Support, press this key for 10 seconds
17	Focus Key	Auto/Manual/Far/Near Focus Default: Auto Focus
18	Bright Adjustment	Adjust the brightness of the image
19	[I]	Freeze/Unfreeze the image
20	Mirror	Enable the picture left/right flip
21	Image Mode	Switch between three image modes Normal, PC, Bright

#### ★ Attentions for Remote Control

- Ensure the remote light to the selected camera is on.
- If the remote control doesn't work, please replace batteries.
- The camera number on the remote must match the camera's address.
- In the [AI] mode, manual zooming is not available. Therefore, when you need to zoom, please make sure the auto tracking is turned off.

## 4. AI Tracking Setting from WebUI



### 4.1 Tracking Settings

- Tracking: Switch to enable/disable AI tracking.
- Mode: Drop-down selection between Autoframing mode or Presenter tracking mode.

### 4.2 PTZ Control

PTZ control serves two purposes:

- Before entering a mode: Adjust the camera's orientation to align with the target.

- In Presenter tracking mode:

Use left/right clicks to switch between detectable targets.

Press the [Home] button to confirm the selected tracking target.

### 4.3 Presenter Tracking Settings

- Auto Zoom & Auto Tilt (Enabled by default, recommended):

When Auto Zoom is disabled, the camera stops automatic zooming in/out.

When Auto Tilt is disabled, the camera stops vertical movement.

- Timeout Duration:

Sets how many minutes the camera waits before exiting AI tracking after losing the target.

Default: 5 minutes.

- Tracking Starting Position:

Options: Current position /Preset position 1 /Home position.

Default: Current position.

Note: In AI tracking mode, the camera cannot be panned or tilted manually.

## 5. Common Operation Instructions

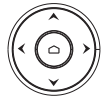
### 5.1 Camera Select

Set the IR remote control's address to control the corresponding camera, option item 1/2/3/4



### 5.2 Camera Direction Control

- Turning up
- Turning down
- Turning left
- Turning right
- Turning to default



Note: Press the direction key when you need to adjust the angle.

If you want to move the camera slowly, just click the direction key;

If you want to move the camera fast at a large scale, just long-press the button;

If you want to adjust left and right direction, just press and hold the L/R button for 10S.

### 5.3 Camera Focusing Mode Control

[AUTO FOCUS] Switch the focus mode to AUTO

[MANUAL FOCUS] Switch the focus mode to MANUAL

[FAR] Far focus manually

[NEAR] Near focus manually



### 5.4 Camera Zoom Control

Press any one of the 4 [ZOOM] to make the zoom functioning.

These 4 keys are not applicable for fixed focus cameras.



### 5.5 Preset Setup, Call, Cancel

- Reserve Preset: Press [PRESET], then press one of the numbers (0-9) to reserve a preset that corresponds to the NUMBER.

Note: You can setup 10 presets at most by the remote control.

- Call Preset: Press the NUMBER (0-9) directly to call the reserved preset.

Note: It won't work if there's no preset reserved in the corresponded number.

- Remove Preset: Press [RESET], then press one of the number (0-9) to remove a preset that corresponds to the NUMBER.



### 5.6 AI Mode

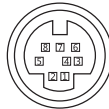
- Press [AI] button to enter Multi-Person tracking mode and start auto-tracking.

Press [AI] button again to exit Multi-Person tracking mode.

- While in Multi-Person tracking mode, press [C] button to enter Single-Person tracking mode. In Single-Person tracking mode, a green frame will appear when there are two or more people present. Use the left and right buttons to select the person you want to track, then press [C] button to confirm and begin tracking.

- Press [A] button to exit Single-Person tracking mode and return to Multi-Person tracking mode.

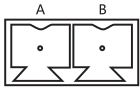
### 5.7 RS-232 Interface Distribution



No.	Function	No.	Function
1	DTX	3	RXD
2	DSR	4	GRD
3	TXD	7	RX OUT
4	GRD	8	NC

### 5.8 RS-485 Interface Distribution

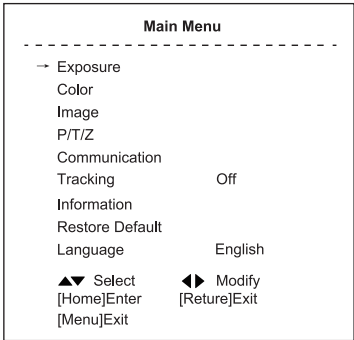
Pin/Label	FUNCTION
A	DTX (No connect to RS-485)
B	DSR (No connect to RS-485)



## 6. Camera Menu Setup

When operating remote control, press 【MENU】 to enter main menu of the video camera.

### 6.1 Level 1 Menu - Main Menu



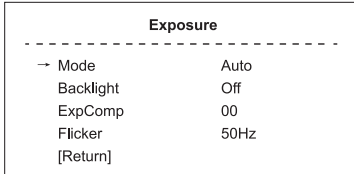
Tracking: off/Presenter/Autoframing

Language: Support Chinese/English

Press the [ ] button on the Remote to enter level 2 sub-menu

Press the [Menu] button on the Remote to exit menu

### 6.2 Level 2 Menu - Exposure



Mode: Auto/Manual/Shutter Priority/Iris Priority/Bright Priority

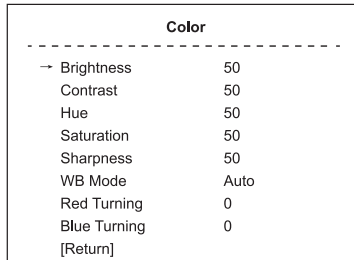
Backlight: On/Off(only effective under Auto mode)

ExpComp: Optional item is -7~+7 (only effective under Auto mode)

Flicker: Support 50HZ/60HZ/Off

When changing the exposure mode to Manual, the sub-menu is as shown below

### 6.3 Level 2 Menu - Color



Brightness: Optional item is 0-100

Contrast: Optional item is 0-100

Hue: Optional item is 0-100

Saturation: Optional item is 0-100

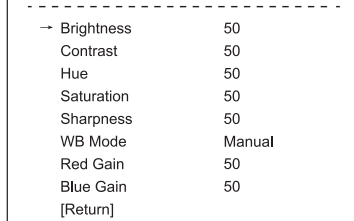
Sharpness: Optional item is 0-100

WB mode: Auto/Manual/Color Temp/Indoor/Outdoor/Onepush

When the WB mode is Auto, the Rtuning and Btuning value can be tuning.

The range is 0 to 100.

When the WB mode is Manual, the sub-menu will be as shown below:



6.4 Level 2 Menu-Image

Image

→ Mirror

Off

→ Flip

Off

Video Format

4K30

Menu Direction

0

UVC Format

YUY2

Style

Normal

HDMI Mode

Auto

[Return]

Mirror:Enable/disable the picture left/right flip  
Flip:Enable/disable the picture up/down flip  
Video Format:

Video Format

→ 4k30

1080p30

4k29.97

1080p29.97

4k25

1080p25

2k60

720p60

1080p60

720p59.94

1080p59.94

720p50

1080p50

Menu Mirror: 0°/90°/180°/270°  
UVC Format: YUY2/MJPEG  
Style: Normal/PC/Bright  
HDMI Mode: Auto/Force

6.5 Level 2 Menu- P/T/Z

P/T/Z

→ Acc Curve

Middle

L/R Set

Off

Digital Zoom

Off

Zoom Speed

7

Focus Zone

Center

Focus Sense

Normal

Focus Scene

Normal

[Return]

Acc Curve: Fast/Middle/Slow  
L/R SET: On/Off  
Digital Zoom: Off/X2/X4/X8  
Zoom Speed: Optional items are 1-8  
Focus Zone: Center/Bottom/Front/Left/Right/All/Top  
Focus Sense: Normal/Low/High  
Focus Scene: Normal/Macro

6.6 Level 2 Menu - Communication

Communication

→ Protocol

Auto

Baudrate

9600

RC Address

All

Visca Ack

On

[Return]

Protocol: Option items are Auto/Visca/PELCO-D/PELCO-P

Baudrate: Option items are 2400/4800/9600/38400

RC Address: Set the IR remote control's address to control the corresponding camera.

Option items are ALL/1/2/3/4.

Address: Set the camera's address. Option items are 1-7 in Visca, 0-255 in PELCO-D,

0-31 in PELCO-P.

Visca Ack: On/Off

6.7 Level 2 Menu -Tracking

Tracking Mode: off/Presenter/Auto Framing

1.Select "Auto Framing " under "Tracking" in the "Menu", then exit the menu to activate Auto Framing Tracking Mode.

2.Presenter Tracking Mode: Select "Presenter" under "Tracking" in the "Menu", then exit the menu to activate Presenter Tracking Mode. Use the "Left/Right buttons" to select the target person, then press the 【>】 to confirm and start tracking.

3.Disable Tracking: Select "Off" in the "Menu" to deactivate the current tracking mode.

Menu

Exposure

Color

Image

PTZ

Communication

→ Tracking

OFF

Information

Restore Default

Language

English

6.8 Level 2 Menu -Information

Information

→ Device Type

UHD Camera

PTZ Version

V1.0.2.1

HW Version

V1.0

SOC Version

V0.0.08

AF Version

V4.26

IQ Version

V1.01.003

IP Address

192.168.0.206

[Return]

Notice: The version number here is just an example. The actual parameters shall prevail.

6.9 Level 2 Menu - Restore Default

Restore Default

→ Yes

No

[Return]

6.10 Level 2 Menu -Language

English / 中文

Internet Protocol Version 4(TCP/IPv4) Properties

General

You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

☐ Obtain an IP address automatically

☒ Use the following IP address:

IP address:

192.168.0.100

Subnet mask:

255.255.255.0

Default gateway:

192.168.0.1

☐ Obtain DNS server address automatically

☒ Use the following DNS server addresses:

Preferred DNS server:

Alternate DNS server:

☐ Validate settings upon exit

Advanced

OK

Cancel

Advanced TCP/IP Settings

General

IP addresses

IP address

192.168.0.100

Subnet mask

255.255.255.0

Add...

Edit...

Remove

Default gateways

Gateway

192.168.0.1

Metric

Automatic

Add...

Edit...

Remove

☒ Automatic metric

Interface metric

OK

Cancel

Steps:

1)Access camera's web interface.

2)Enter http://192.168.0.206 in a browser.

3)Navigate to: Network > Lan Settings.

Update settings:

IP Address: 192.168.x.206 (match your subnet, e.g., 192.168.1.206)

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.x.xxx (typically your router's IP, e.g., 192.168.1.1 or 192.168.1.254 )

HOME

Language

LAN Settings

Video Settings

System Settings

Advanced Settings

IP Configuration Type

Static IP

IP Address

192.168.0.206

Subnet Mask

255.255.255.0

Gateway

192.168.0.1

MAC Address

00:14:34:92:27:08

Preferred DNS

8.8.8.8

Alternate DNS

8.8.4.4

7.4 IE Login

Input http://192.168.0.206 to IE (better with IE or Google web browser), a login window will pop up, input user name: admin, password: admin, language: English. After successfully login, you can do preview, configurations, etc.

PTZ Camera Login

Account

admin

Password

admin

Language

English

Login

7.5 Video streaming

1) Select "Video"->"System Settings" to enter the following interface:

Main Stream

Video Coding

H.264

Stream Type

Encoder

Resolution

1920x1080

Bit Rate

10M

CQP

25

Bit Rate

CBR

Frame Rate

30

Disable

☐

Save

Cancel

Sub Stream

Video Coding

H.264

Stream Type

Encoder

Resolution

640x480

Bit Rate

10M

CQP

25

Bit Rate

CBR

Frame Rate

30

Disable

☐

Save

Cancel

2) RTSP video streaming

Select "Network"->"RTSP Settings" to enter following interface:

Identity Authentication

☐ On

☒ Off

Port

8081

Main Stream

rtsp://192.168.0.206:554/live/av0

Sub Stream

rtsp://192.168.0.206:554/live/av1

Submit

Cancel

Configure parameters according to the network environment.

For example, Camera default IP Address: 192.168.0.206

Here is the way to get RTSP video streaming.

Default RTSP main streaming address: rtsp://192.168.0.206:554/live/av0(av0 Main)

Default RTSP sub streaming address: rtsp://192.168.0.206:554/live/av1(av1 Sub)

3) RTMP video streaming

Select "Network"->"RTMP Settings" to enter following interface:

Enable RTMP

☐ On

☒ Off

Main-Stream

Sub-Stream

Submit

Cancel

Enable and turn on the RTMP video stream to the server

Server URL: server address, which can be domain name or IP address

Streaming code: Persistent Stream Key/Name

4) SRT Video Streaming

Select "Network"->"SRT Settings" to enter following interface:

Enable SRT

☐ On

☒ Off

SRT Port

900

Password

8-79 digits

Length

8

Submit

Cancel

7.6 NDI Settings

NDI Settings

NDI Device Name

UHD Camera

NDI Device Channel

NDI H02

NDI Group Name

Public

NDI Discovery Services

Off

NDI Discovery Server

192.168.1.100

NDI Multicast Service

Off

NDI Multicast Address

239.255.0.0

NDI Multicast Mask

255.255.0.0

NDI Multicast TTL

1

NDI Transmission preference

TCP

NDI Firmware Version

V0.6.0

7.7 Software upgrade (upgrade if there is a new version)

Select "System"->"Online Upgrade" to enter the following interface:

Select the upgrade file

Submit

1)Open the upgrade file to Upgrade automatically if needed.

2)Restart the camera and prompts "Upgrade succeeded". Log in to the network and check whether the software version is consistent with the upgrade file to ensure that the upgrading is successful. Then click "Restore factory default" to restart and restore the parameters to the factory default setting. (IP default 192.168.0.206, User default: admin, password default: admin)

7.8 VISCA over IP

VISCA Protocol is transmitted through IP to reduce RS232/RS485

cabling(the controller must support IP communication)

Communication Port Specification:

Control Port: RJ45

IP Protocol: IPv4

Transmission Protocol: Sony VISCA;

IP address: Setting through the web

Port address: Sony VISCA(52381)

Application Range: Under the same network segment

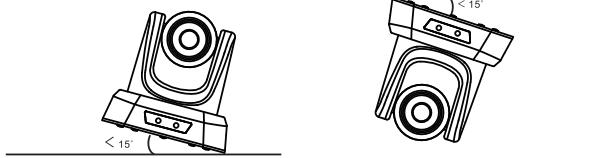
8. Installation Instructions

8.1 Surface Installation

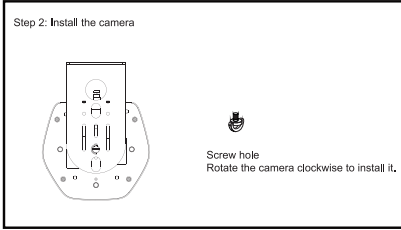
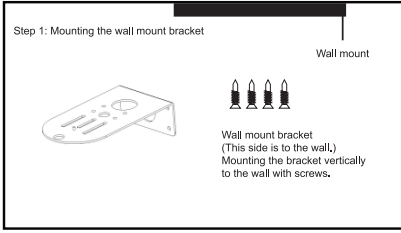
Put the camera on the desk flatly, and make sure the camera is in a horizontal position.

If you want to put the camera on an oblique surface, please make sure the angle of

inclination is less than 15 degrees to ensure the camera pan and tilt work in normal operation.



8.2 Wall Mount Installation



9. Trouble Shooting

Before requesting service from our engineers, please try the following troubleshooting methods. If the issue still cannot be resolved, please contact us for further assistance.

Q: The video of the camera cannot be displayed on the screen.

A: Please check the connections between the power cable, video cable, camera, and monitor, and make sure both ends of each connector are securely fastened.

Q: Why is there no image when connecting HDMI cable to TV?

A: Because the TV resolution does not match the camera resolution. Please connect the camera to the computer via USB to retrieve the image first, and then use the remote control to adjust the camera's resolution and frame rate to match your devices.

Q: It's unable to Pan, Tilt and Zoom camera.

A: Because the camera is in tracking mode or the menu was displayed on monitor.

Please re-operate after exiting the tracking mode and the menu.

Q: Why the camera rotates for about 10 seconds after power on?

A: This is the normal self-test of the camera.

Q: Poor Image quality while using in church or other low-light conditions.

A: Change the picture setting in the menu from automatic to manual, and set the

corresponding parameters to adjust the image quality.

Q: Remote control is not working or insensitive.

A:①Not work, please replace batteries.

②Not sensitive: Choose the correct "IR select" number to correspond to the camera. Control the camera within 10m(32.8ft). Remove the obstacles. Aim at the sensor which is in front of the camera when controlling it.

Q: USB interface is not identifiable.

A: Please check if the USB cable and extension cable are well connected or not.

If yes, change to another USB interface and try to connect again.

Q: It won't be controlled via RS-232/RS-485 when camera connect to PC.

A: Make sure it is a correct connection between the camera and PC. (Reference to RS-485 and RS-232 Pins distribution).

Q: Why no ceiling mount bracket?

A: Camera comes with wall mount bracket. Ceiling mount or tripod brackets need to buy separately.

Q: Does this camera have built-in mic?

A: No, this camera comes with no built-in mic.

Q: Can we control the camera only by the remote control?

A: You can control the camera by remote control, joystick keyboard controller, and software.

材质:100g书纸, 黑白双面印刷

尺寸: 说明书大小 495\*297(w\*h)左右4折5页再对折  
折叠后 99\*148.5mm(w\*h)