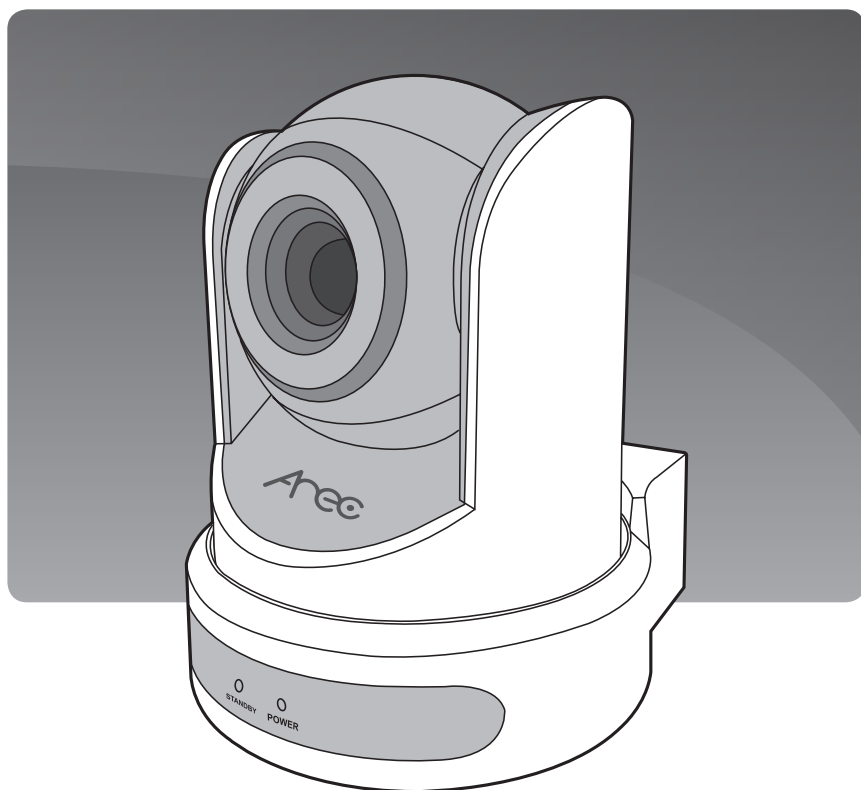




CI-T10

Auto-Tracking PTZ Conferencing Camera

User Manual | English



Preface

This manual introduces the function installation and operation of the Camera.

Prior to installation and usage, please read the manual thoroughly.

1. Warning

- (1) This product can be only used in specified range in order to avoid any damage or danger;
- (2) Don't expose the camera to rain or moisture place
- (3) Don't remove the cover to reduce the risk of electric shock. Refer servicing to qualified personnel.
- (4) Never operate the camera under unqualified temperature , humidity and power supply;
- (5) Please use the soft cloth to clean the camera. Use neuter cleanser if bad smeared .Don't use the strong or cleanser avoiding scuffing.

2. Electric Safety

Installation and operation must accord with electric safety standard.

3. Caution to transport

Avoid stress,vibration and soakage in transport,storage and installation.

4. Polarity of power supply

This product uses DC 12V power supply.

5. Careful of installation

- (1) This series item must put on the smooth desk or platform,and it can not be installed slant ways.
- (2) Don't apply in corrosive liquid,gas or solid environment to avoid the cover which is made up of organic material.
- (3) This product has a heating device inside, please keep ventilated.
- (4) Never power on before installation is completed.

6. Don't disassemble discretionarily

We are not responsible for any unauthorized modification or dismantling.

7. Attention

Electromagnetic filed under certain rate may affect camera image!

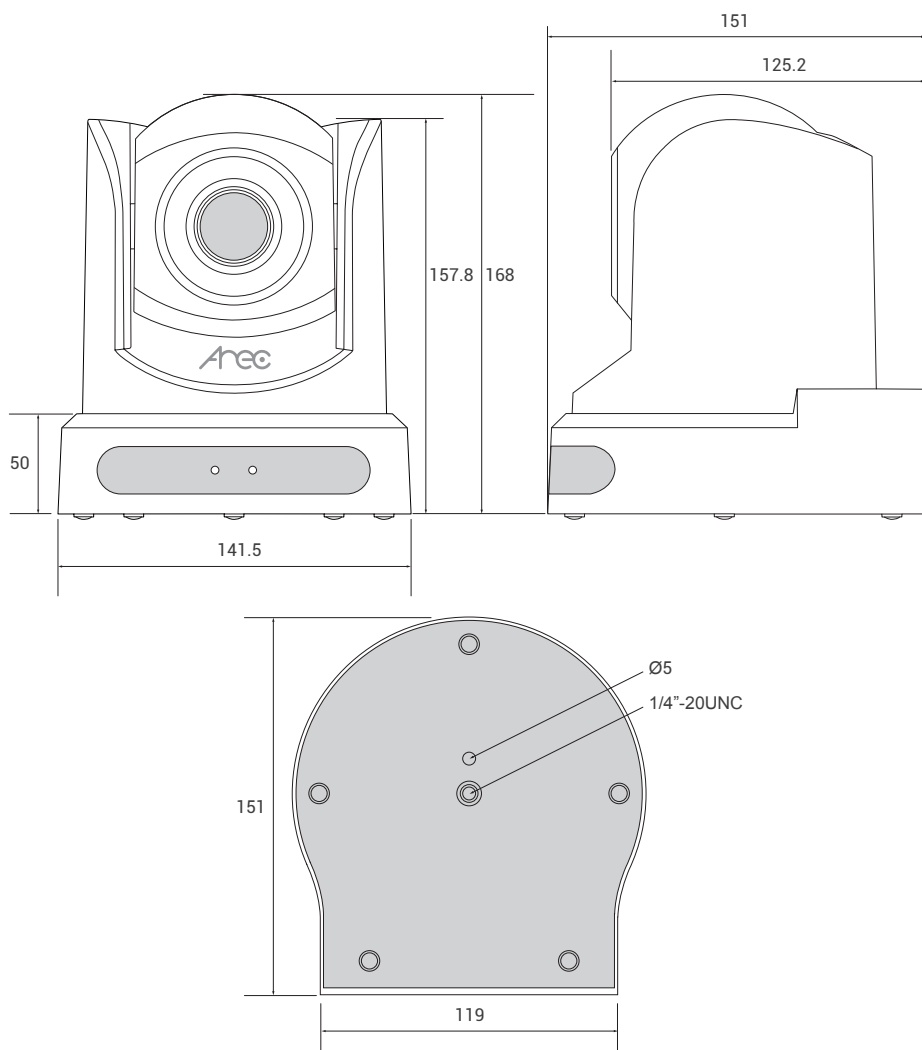
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Product Overview

CI-T10 Auto-Tracking PTZ Camera is a high quality PTZ camera that also can track a moving presenter automatically while shooting video. Combining a high-performance pan/tilt/zoom camera, compact design and excellent motion-sensitive tracking technology, CI-T10 is ideal for mid to large-size conference, huddle rooms, or lecture capture, bridging the feature and price gap between current webcam and professional PTZ cameras in the market.

1. Dimension



2. Accessory

No.	CI-T10
1	Power Adaptor
2	RS-232 Cable
3	USB2.0 Cable
4	Remote Controller
5	AM-600 (include USB Cable & QIG)
6	X type 2 in 1 Tracking Cable (RS-232 & Power)
7	3.5mm phone jack to USB Cable (PC Config Tool setting cable)
8	Quick Installation Guide

3. Camera performance

The camera offers perfect functions, superior performance and versatile interfaces. The features include advanced ISP processing algorithms to provide vivid images with a strong sense of depth, high resolution and fantastic color rendition. It supports H.264/H.265 encoding which makes motion video fluent and clear even with less than ideal bandwidth conditions. By adopting high accuracy step driving motor mechanism, it works extremely quiet and moves smoothly and very quickly to designated position. Product works stable and reliable, and it is easy to use, installation and maintenance.

4. Technical specification

Camera Parameter	
Optical Zoom	10X
Focal length	f=4.7~46.3mm
Sensor	1/2.9 inch, CMOS sensor
Effective Pixels	2.07 megapixel
Video Output Port	USB 2.0 / Ethernet
Horizontal Angle of View	55.5° ~ 6.5°
Vertical Angle of View	35.1° ~ 3.6°
Iris	F1.8--F2.8
Digital Zoom	16X

Minimum Illumination	0.5Lux @ (F1.8, AGC ON)
DNR	2D & 3D DNR
White Balance	Auto / Manual / One Push / Indoor / Outdoor / VAR
Exposure	Auto / Manual / Brightness priority / Shutter priority
Focus	Auto / Manual
Electronic Shutter	1/30s ~ 1/10000s
BLC	ON / OFF
Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve
SNR	≥55dB

Input/Output Interface

Video Interfaces	LAN, USB2.0
Image Code Stream	Dual stream output

Video Compression

USB 2.0

UVC 1.0

- MJPEG:MAX. 1080@30fps

- YUV:MAX. 1080@5fps

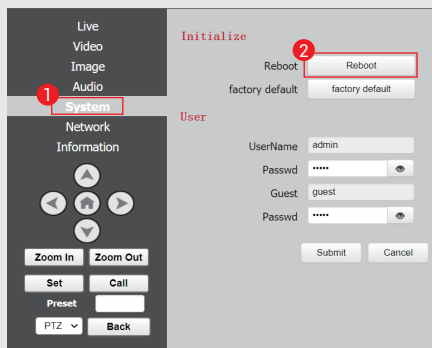
IP Stream

H.264, H.265, MJPEG

Use restriction:

When you connect CI-T10 to a PC or other UVC device using the USB 2.0 port, and at the same time connect to the AREC Media Station using the RJ45 port, it will cause the streaming video to go black.

To resolve this situation, please disconnect the UVC first, and reboot CI-T10. There are two ways to reboot the device. You can reconnect the power supply, or go to the web management interface (as shown below), click "System Settings", and click "Reboot", then the stream image will be resumed.



Audio Compression Format	AAC
HD IP Interface	100Mbps

Network Protocol	TCP/IP, HTTP, RTSP, RTMP(S), ONVIF, DHCP, Multicast
Control Interface	RS232
Control Protocol	RS-232: VISCA / Pelco-D / Pelco-P Network: VISCA over IP, Sony VISCA, ONVIF
Supply Adapter	AC100V-AC240V to DC12V/1.5A
Input Voltage	DC12V±10%
Input Current	0.5A (Max)
Consumption	6W

PTZ Parameter

Pan Rotation	±170°
Tilt Rotation	-30°~+90°
Pan Control Speed	2.7~35.7°/ sec
Tilt Control Speed	2.7~31.5°/ sec
Preset Number	255 presets (0~254)

Tracking Parameter

Tracking Distance*	3~10m
Battery life of AM-600**	Approximate continuous operating time: 4 hours

Other Parameter

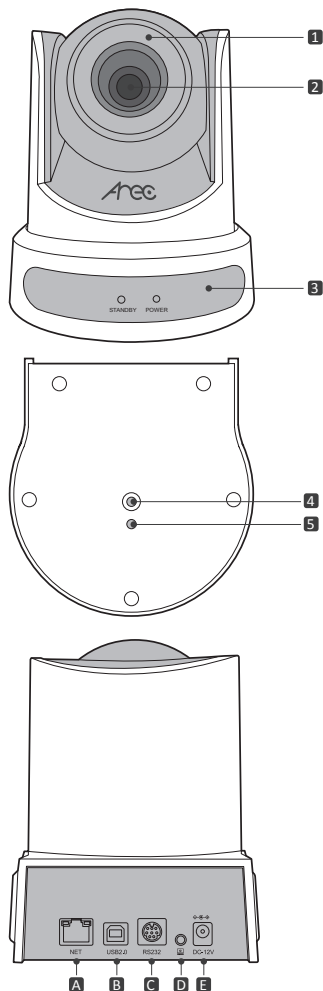
Store Temperature	-40°C~+60°C
Working Temperature	-10°C~+40°C
Dimension (L x W x H)	141.5 x 151 x 168 mm
Weight	About 1.3Kg
Using Environment	Indoor

* Without wall, human body or any large size barrier in between.

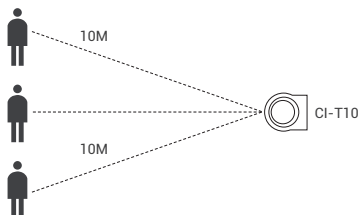
** Power saving function: The AM-600 will automatically power off, if it has been placed flat and static for more than 5 minutes.

Quick Installation Instructions

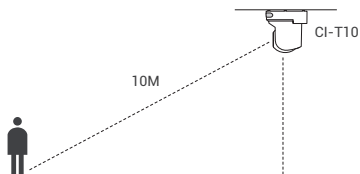
1. Camera interface and indicators description



- The maximum distance between the presenter and the camera cannot exceed 10 meters.



- Please make sure the straight distance between the camera and the presenter(positioner) is not exceed 10 meters when the camera is installed on the ceiling.



No.	CI-T10
1	Auto-Tracking Receiver
2	Camera lens
3	Remote Controller Receiver (Standby / Power Indicator)
4	Standard 1/4"20 UNC screw
5	Mounting hole
A	Ethernet RJ-45
B	USB2.0 output
C	RS-232 port
D	Tracking Module setting port *This is not an audio input. Misconnection may cause damage to the device.
E	DC12V Input Power Supply Socket

Figure 1

No.	LED lights	LED Color	Glow Rule	Operation
3	Standby Indicator	yellow-green	light turns on	Camera in standby mode
			light flashes	Receive remote control signal
	Power Indicator	blue	light turns on	Power on

1.1 Power on initial configuration

- (1) Power on: Connect DC12V power supply adapter with power supply socket.
- (2) Initial configuration: Power on with power indicator light on and remote control receiver light blinking, camera enters the initialization mode, turn to the left side, and then goes to the HOME position (intermediate position of both horizontal and vertical), while the camera module stretches. When remote control receiver light stops blinking, the setting is finished.

Note:

1. The default address of the remote controller is the 1# address.
2. If you set preset 0, when Power on the setting is completed, the camera automatically moves to the preset 0 position.

1.2 Video output

(1) Video Output from LAN

- a. Network Cable Connection Port: Connect this product and your computer through network cable, the device LAN interface refers to NO. A in Figure 1.
- b. Webpage Login: Open your browser and enter 192.168.11.202 in the address bar (factory default); press Enter to enter into the login page; click on the "player is not installed, please download and install!" and follow the installation steps for installation. Then enter the user name admin and password admin (factory default); press Enter to enter into the preview page, users can carry out PTZ control, video recording, playback, configuration and other operations.

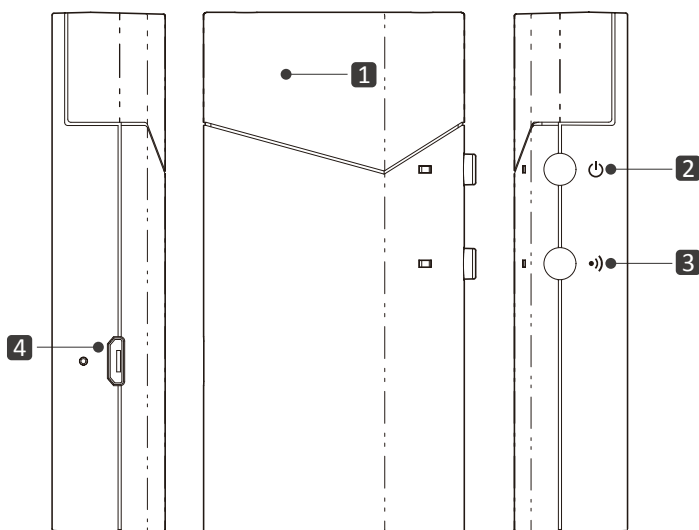
(Note: If you forget your user name, password, IP address, you can manually restore the default by the remote controller key combination * #)



(2) USB2.0 video output

- a. USB2.0 video cable connection: CI-T10 refer to No.B in Figure 1
- b. Connect the camera and the monitor via USB2.0 video cable, open video display software, select this device, and then video output will be available.

2. AM-600 interface and indicators description



No.	Interface	Light Color	Glow Rule	Operation
1	Positioner	-	-	-
2	Power ON / OFF and Tracking pause	Red / Green dual-color light	Green light turns on	Power ON
			Red light is on	When auto tracking function is Suspended Note: When the tracking function is paused, the Tracking Camera will return to the full-view position.
			Red light flashes	When power is low
			Red light flashes 1 sec	Press the button to power off
3	Microphone pairing / mute	-	-	Workable with AREC Media Station
4	Power input (USB Micro-B port)	Green	Green light is on	During power charging
			Light goes off	When the charging is complete
			Green light flashes	Charging error

Connection and Settings

Connection

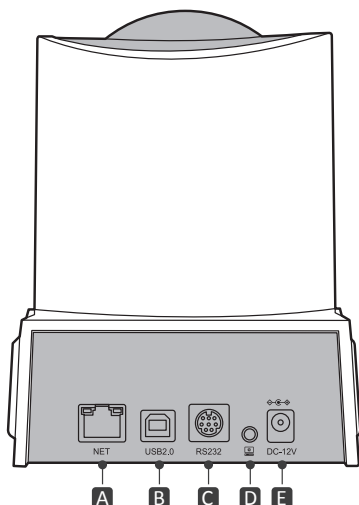
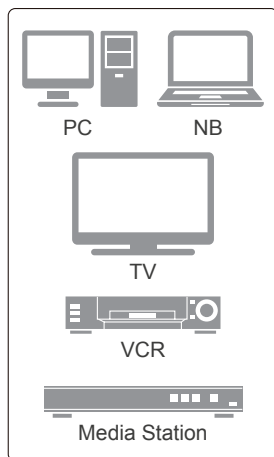
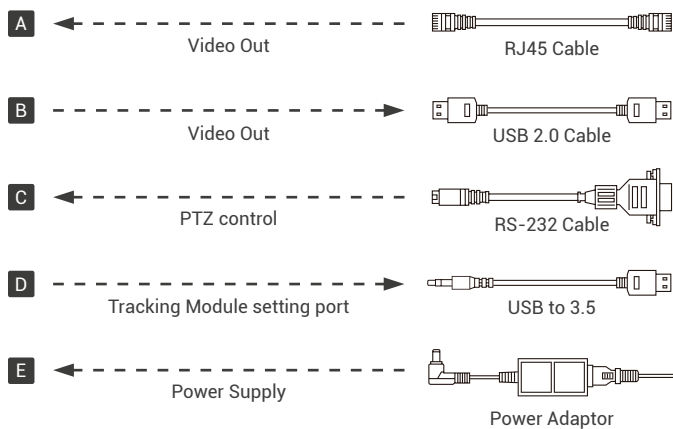


Figure 1



Wear the positioner

Fix your AM-600 to the target person or object properly. For better tracking effect, wear a positioner with the smooth and transparent side facing out. Turn on AM-600 to start auto tracking.

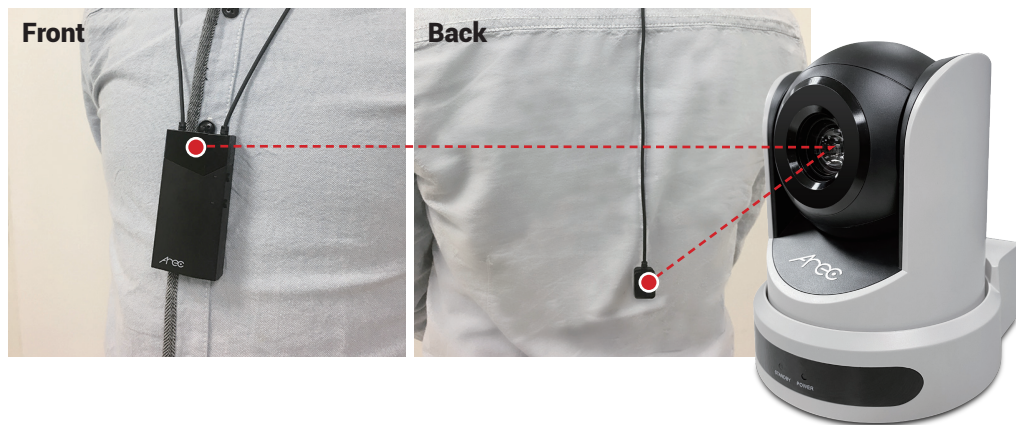
Note: Be sure to wait until the tracking camera is power on and reset to the initial position, before power on the AM-600.



Getting start

Accurate and Smooth Tracking Performance

In order to capture presenter's best performance, CI-T10 provides superior continued smooth movement even in situations where a presenter is writing on a whiteboard or close-up shots, just like a professional cameraman does.

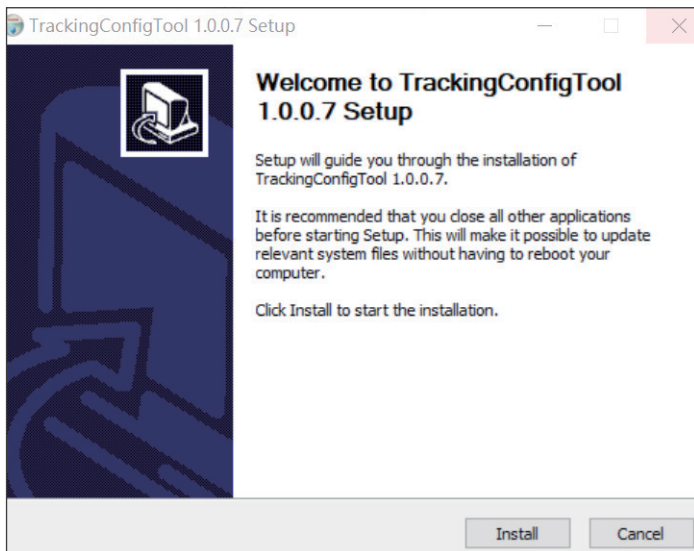


Chapter 1. Applications

1.1 Setup Tracking Parameter

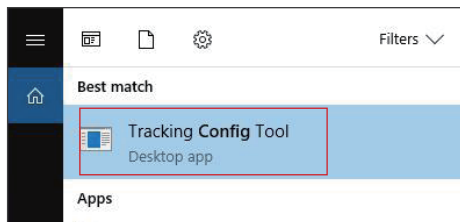
Step 1 Install config tool

The request for installing will appear if it's the first time you install the tool. In the pop-up "User Account Control" warning window, click on <Yes> to start downloading the software on the PC. Click <Next> to setup Config Tool. Before you use the tool, please ensure your antivirus software does not block the applications.



Step 2 Open tool & setting tracking parameter

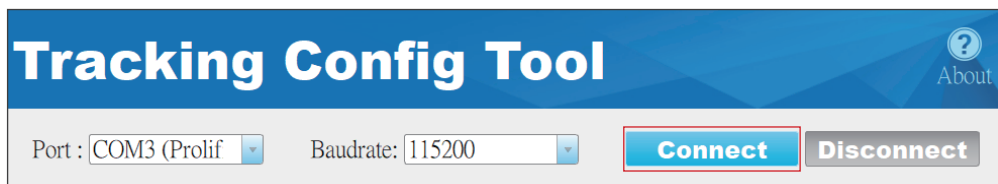
Open the Tracking Config Tool from Windows start menu



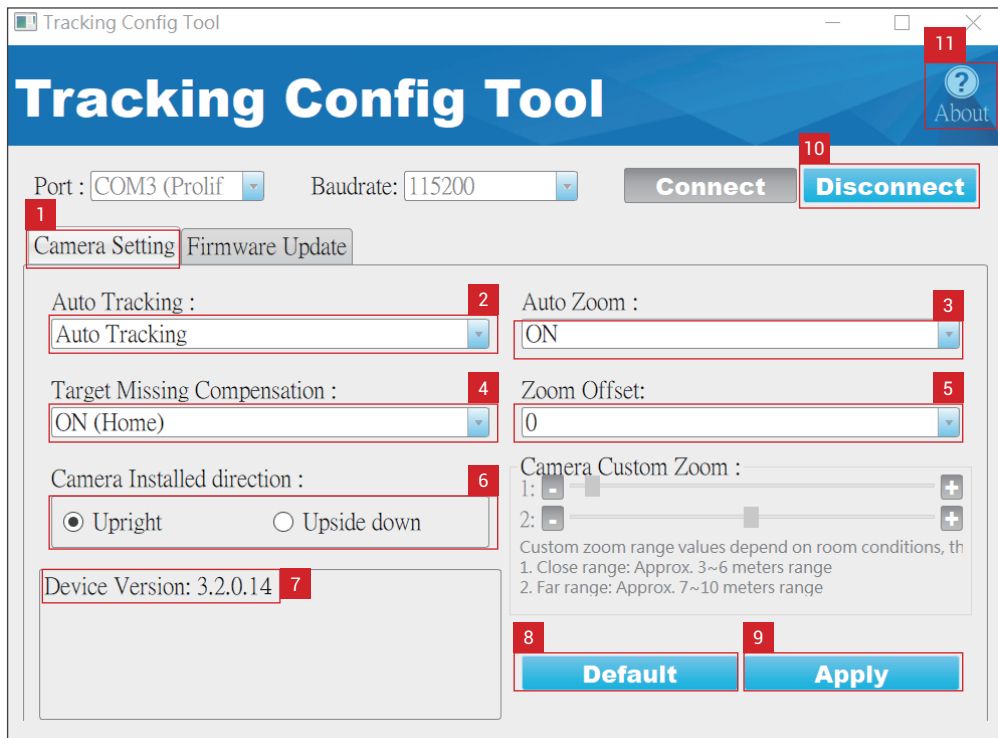
(1) Click the drop-down menu and select "COM3 (Prolific USB-to-Serial Comm Port)"



(2) Click <Connect> button



(3) Click <Camera Setting> page



2 Set up <Auto Tracking> mode

Auto Tracking :

Auto Tracking
OFF
Auto Tracking
Pan Tracking
Tilt Tracking

3 Set up <Auto Zoom> On/ Off

Auto Zoom :

ON
OFF
ON

4 Set up <Target Miss Compensation>, when auto tracking fail.

Target Missing Compensation :

ON (Home)
OFF
ON (Home)
Preset 0
Preset 1

5 Set up <Zoom Offset>

Zoom Offset:

0
0
1
2
Custom

*If you click "Custom", the bars below will turn into blue and could be adjusted.

Camera Custom Zoom :

1:

2:

Custom zoom range values depend on room conditions, th

1. Close range: Approx. 3~6 meters range

2. Far range: Approx. 7~10 meters range

6 Set up <Camera Install Direction>

Camera Installed direction :

☒ Upright ☐ Upside down

7 <Tracking module> firmware version

Device Version: 3.2.0.14

8 Restore Tracking module firmware to <Default>

Default Apply

9 <Apply> for Auto Tracking mode, Auto Zoom On/Off, Target Miss Compensation, Zoom Offset, Camera Install Direction

Default Apply

10 <Disconnect> Tracking module

Connect Disconnect

11 <About> Tool version

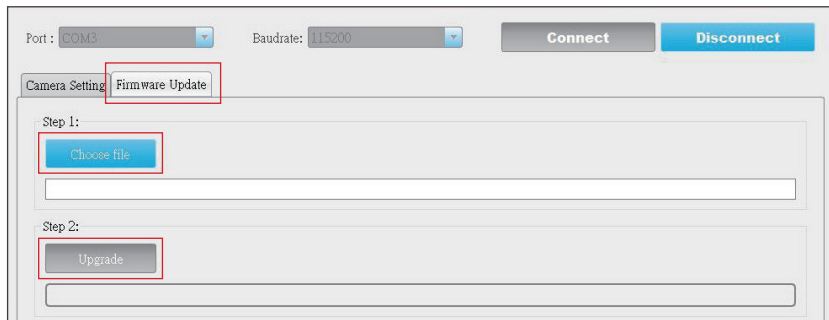


about

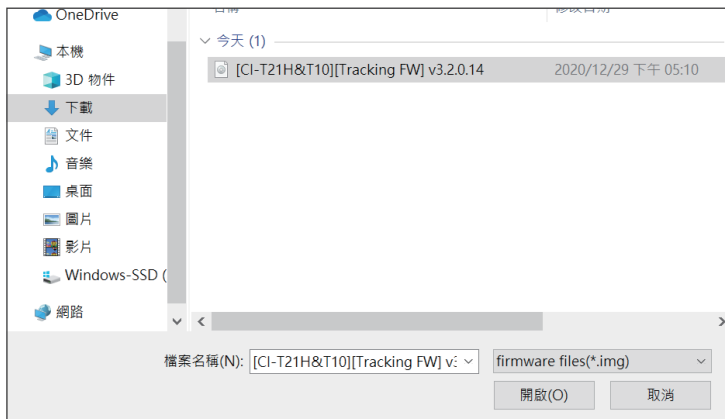
Tracking Config Tool: Version 1.0.0.7

OK

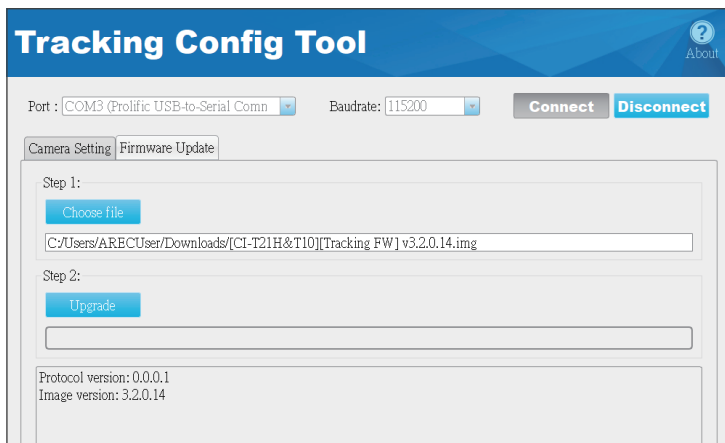
(4) Click <Firmware Update> page



Open the Firmware file : *.img



Click <Upgrade> button



Port : COM3 (Prolific USB-to-Serial Comn)
Baudrate: 115200
Connect Disconnect

Camera Setting
Firmware Update

Step 1:

Choose file

C:/Users/ARECUser/Downloads/[CI-T21H&T10][Tracking FW] v3.2.0.14.img

Step 2:

Upgrade

Protocol version: 0.0.0.1
Image version: 3.2.0.14
Current version: 3.2.0.15

Once the update is complete, it will show the message "Update is complete. Device auto-rebooting."

Port : COM3 (Prolific USB-to-Serial Comn)
Baudrate: 115200
Connect Disconnect

Camera Setting
Firmware Update

Step 1:

Choose file

C:/Users/ARECUser/Downloads/[CI-T21H&T10][Tracking FW] v3.2.0.14.img

Step 2:

Upgrade

Update is complete. Device auto-rebooting.

Note 1 : Connection fail, please Re-plug the power adapter or configuration cable .

Port : COM3
Baudrate: 115200
Connect Disconnect

Camera Setting
Firmware Update

Auto Tracking :

Auto Zoom :

Target Missing Compensation :

Camera Installed direction :

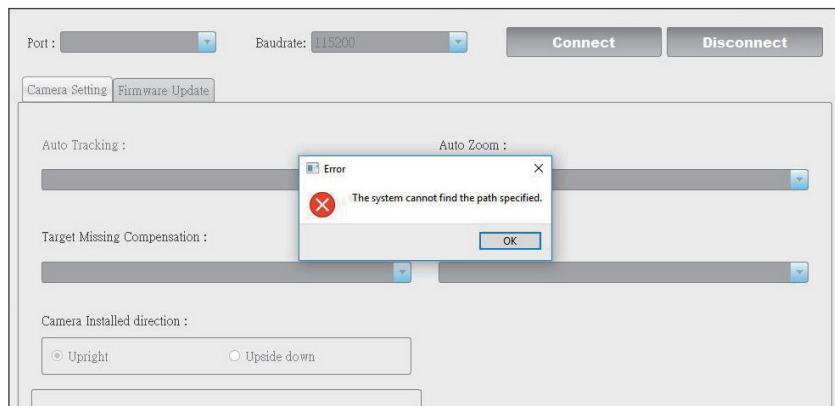
☒ Upright
☐ Upside down

Error

Connection fail!

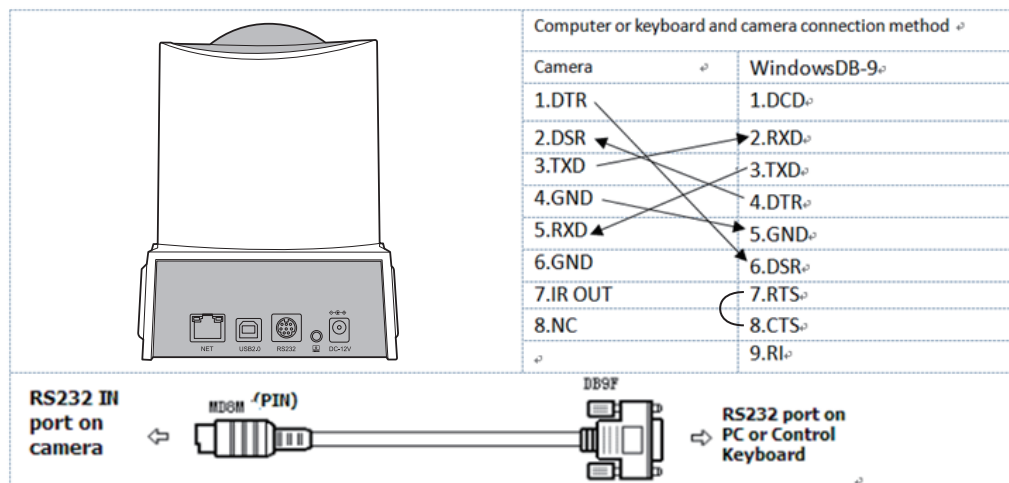
OK

Note2 : Cannot find the path, please Re-plug the USB..

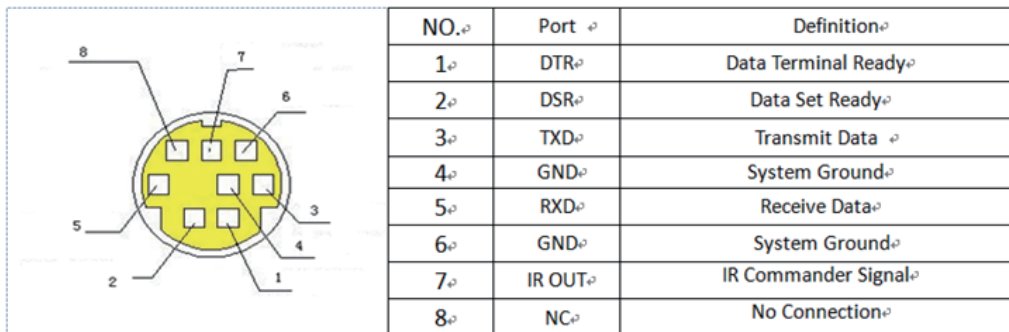


1.2 RS-232 Interface

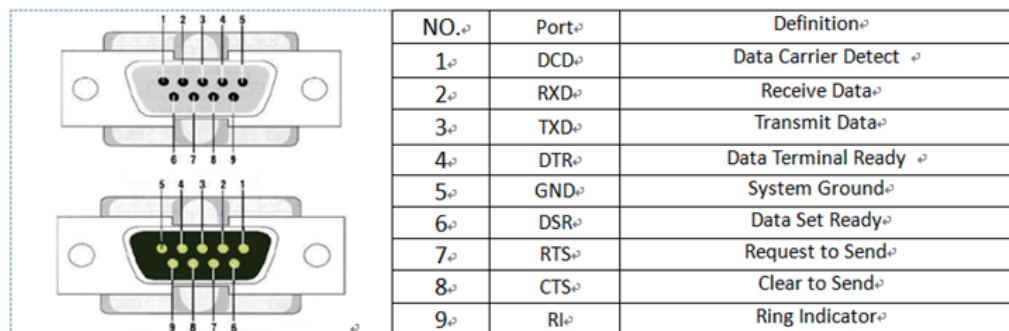
1.2.1 RS-232C interface specification as shown below



1.2.2 RS-232 Mini-DIN 8-pin Port Definition



1.2.3 RS232 (DB9) Port Definition



1.2.4 VISCA networking as shown below

Camera cascade connection method	
Camera 1	Camera 2
1.DTR	1.DTR
2.DSR	2.DSR
3.TXD	3.TXD
4.GND	4.GND
5.RXD	5.RXD
6.GND	6.GND
7.IR OUT	7.OPEN
8. NC	8.OPEN

1.3 Serial Communication Control

Under common working condition,the camera could be controlled through RS232/RS485 interface(VISCA),RS232C serial parameter are as follows:

Baud rate: 2400/4800/9600/38400 bits / sec; Start bit: 1; data bits: 8; Stop bit: 1; Parity: None.

After power on,the camera first go left,then back to the middle position.Self-test is finished after the zoom moved to the farthest and then back to the nearest position. If the camera saved 0 preset before,it will be back to that position after initialization.At this point,the user can control the camera by the serial commands.

1.3.1 VISCA protocol list

(1) Camera return command

Ack/Completion Message		
	Command packet	Note
ACK	z0 4y FF (y: Socket No.)	Returned when the command is accepted.
Completion	z0 5y FF (y: Socket No.)	Returned when the command has been executed.

z = camera address + 8

Error Messages		
	Command packet	Note
Syntax Error	z0 60 02 FF	Returned when the command format is different or when a command with illegal command parameters is accepted
Command Buffer Full	z0 60 03 FF	Indicates that two sockets are already being used(executing two commands) and the command could not be accepted when received.
Command Canceled	z0 6y 04 FF (y: Socket No.)	Returned when a command which is being executed in a socket specified by the cancel command is canceled. The completion message for the command is not returned.
No Socket	z0 6y 05 FF (y: Socket No.)	Returned when no command is executed in a socket specifild by the cancel command, or when an invalid socket number is specified.
Command Not Executable	z0 61 41 FF (y: Execution command Socket No. Inquiry command: 0)	Returned when a command cannot be executed due to current conditions. For example,when commands controlling the focus manually are received during auto focus.

(2) Camera control command

Command	Function	Command packet	Note
AddressSet	Broadcast	88 30 01 FF	Address setting
I/F_Clear	Broadcast	88 01 00 01 FF	I/F Clear
CAM_Power	On	8x 01 04 00 02 FF	Power ON/OFF
	Off	8x 01 04 00 03 FF	
CAM_Zoom	Stop	8x 01 04 07 00 FF	
	Tele(Standard)	8x 01 04 07 02 FF	
	Wide(Standard)	8x 01 04 07 03 FF	
	Tele(Variable)	8x 01 04 07 2p FF	p = 0(low) - 7(high)
	Wide(Variable)	8x 01 04 07 3p FF	
	Direct	8x 01 04 47 0p 0q 0r 0s FF	pqrs: Zoom Position
CAM_Focus	Stop	8x 01 04 08 00 FF	
	Far(Standard)	8x 01 04 08 02 FF	
	Near(Standard)	8x 01 04 08 03 FF	
	Far(Variable)	8x 01 04 08 2p FF	p = 0(low) - 7(high)
	Near (Variable)	8x 01 04 08 3p FF	
	Direct	8x 01 04 48 0p 0q 0r 0s FF	pqrs: Focus Position
	Auto Focus	8x 01 04 38 02 FF	AF On/Off
	Manual Focus	8x 01 04 38 03 FF	
CAM_Zoom Focus	Direct	8x 01 04 47 0p 0q 0r 0s	pqrs: Zoom Position tuvw: Focus Position
		0t 0u 0v 0w FF	
CAM_WB	Auto	8x 01 04 35 00 FF	Normal Auto
	Indoor mode	8x 01 04 35 01 FF	Indoor mode
	Outdoor mode	8x 01 04 35 02 FF	Outdoor mode
	One Push mode	8x 01 04 35 03 FF	One Push WB mode
	Manual	8x 01 04 35 05 FF	Manual Control mode
	One Push trigger	8x 01 04 10 05 FF	One Push WB Trigger
CAM_RGain	Reset	8x 01 04 03 00 FF	Manual Control of R Gain
	Up	8x 01 04 03 02 FF	
	Down	8x 01 04 03 03 FF	
	Direct	8x 01 04 43 00 00 0p 0q FF	pq: R Gain
CAM_Bgain	Reset	8x 01 04 04 00 FF	Manual Control of B Gain
	Up	8x 01 04 04 02 FF	
	Down	8x 01 04 04 03 FF	
	Direct	8x 01 04 44 00 00 0p 0q FF	pq: B Gain

CAM_AE	Full Auto	8x 01 04 39 00 FF	Automatic Exposure mode
	Manual	8x 01 04 39 03 FF	Manual Control mode
	Shutter priority	8x 01 04 39 0A FF	Shutter Priority Automatic Exposure mode
	Iris priority	8x 01 04 39 0B FF	Iris Priority Automatic Exposure mode
	Bright	8x 01 04 39 0D FF	Bright mode(Manual control)
CAM_Slow Shutter	Auto Slow Shutter Limit	8x 01 04 2A 0p 00 FF	Shutter Setting
CAM_Iris	Reset	8x 01 04 0B 00 FF	Iris Setting
	Up	8x 01 04 0B 02 FF	
	Down	8x 01 04 0B 03 FF	
	Direct	8x 01 04 4B 00 00 0p 0q FF	pq: Iris Position
CAM_Gain Limit	Reset	8x 01 04 0C 00 FF	Gain Setting
	Up	8x 01 04 0C 02 FF	
	Down	8x 01 04 0C 03 FF	
	Direct	8x 01 04 0C 00 00 0p 0q FF	pq: Gain Position
	Gain Limit	8x 01 04 2C 0p FF	P: Gain Position
CAM_Bright	Reset	8x 01 04 0D 00 FF	Bright Setting
	Up	8x 01 04 0D 02 FF	
	Down	8x 01 04 0D 03 FF	
	Direct	8x 01 04 0D 00 00 0p 0q FF	pq: Bright Positon
CAM_ExpComp	On	8x 01 04 3E 02 FF	Exposure Compensation ON/OFF
	Off	8x 01 04 3E 03 FF	
	Reset	8x 01 04 0E 00 FF	Exposure Compensation Amount Setting
	Up	8x 01 04 0E 02 FF	
	Down	8x 01 04 0E 03 FF	
	Direct	8x 01 04 4E 00 00 0p 0q FF	pq: ExpComp Position
CAM_Back Light	On	8x 01 04 33 02 FF	Back Light Compensation
	Off	8x 01 04 33 03 FF	
CAM_NR(2D)Mode	Auto	8x 01 04 50 02 FF	ND2D Auto/Manual
	Manual	8x 01 04 50 03 FF	
CAM_NR(2D)Level	-	8x 01 04 53 0p FF	p: NR Setting (0: Off, level 1 to 5)
CAM_NR(3D)Level	-	8x 01 04 23 0p FF	p: NR Setting (0: Off, level 1 to 8)
CAM_Flicker	-	8x 01 04 23 00 FF	p: Flicker Settings (0: Off, 1: 50Hz, 2: 60Hz)
CAM_DHotPixel	-	8x 01 04 56 0p FF	p: Dynamic Hot Pixel Setting (0: Off, level 1 to 6)
CAM_Aperture Mode(sharpness)	Auto	8x 01 04 05 02 FF	Sharpness Auto
	Manual	8x 01 04 05 02 FF	Sharpness Manual

CAM_Aperture (sharpness)	Reset	8x 01 04 02 00 FF	Aperture Control
	Up	8x 01 04 02 02 FF	
	Down	8x 01 04 02 03 FF	
	Direct	8x 01 04 42 00 00 0p 0q FF	
CAM_PictureEffect	Off	8x 01 04 63 00 FF	Picture Effect Setting
	B&W	8x 01 04 63 04 FF	
CAM_Memory	Reset	8x 01 04 3F 00 pp FF	pp: Memory Number(=0 to 127)
	Set	8x 01 04 3F 01 pp FF	
	Recall	8x 01 04 3F 02 pp FF	
CAM_LR_Reverse	On	8x 01 04 61 02 FF	Image Flip Horizontal ON/OFF
	Off	8x 01 04 61 03 FF	
CAM_PictureFlip	On	8x 01 04 66 02 FF	Image Flip Vertical ON/OFF
	Off	8x 01 04 66 03 FF	
CAM_RegisterValue	-	8x 01 04 24 mn 0p 0q FF	mm: Register No. (=00-7F) pp: Register Value (=00-7F)
CAM_ColorGain	Direct	8x 01 04 49 00 00 00 0p FF	p: Color Gain setting 0h (60%) to Eh (200%)
SYS_Menu	OFF	8x 01 04 06 06 03 FF	Turn off the menu screen
Pan_tilt Drive	Up	8x 01 06 01 VV WW 03 01 FF	VV : Pan speed 0x01 (low speed) to 0x18 (high speed) WW : Tilt speed 0x01 (low speed) to 0x14 (high speed) YYYY : Pan Position ZZZZ : Tilt Position
	Down	8x 01 06 01 VV WW 03 02 FF	
	Left	8x 01 06 01 VV WW 01 03 FF	
	Right	8x 01 06 01 VV WW 02 03 FF	
	Upleft	8x 01 06 01 VV WW 01 01 FF	
	Upright	8x 01 06 01 VV WW 02 01 FF	
	DownLeft	8x 01 06 01 VV WW 01 02 FF	
	DownRight	8x 01 06 01 VV WW 02 02 FF	
	Stop	8x 01 06 01 VV WW 03 03 FF	
	AbsolutePosition	8x 01 06 02 VV WW	
	RelativePosition	8x 01 06 03 VV WW	
	Home	8x 01 06 04 FF	
	Reset	8x 01 06 05 FF	
Pan_tiltLimitSet	LimitSet	8x 01 06 07 00 0W	W: 1 UpRight 0: DownLeft
	LimitClear	8x 01 06 07 01 0W 07 0F 0F 0F 07 0F 0F 0F 0F FF	YYYY: Pan Limit Position ZZZZ: Tilt Position
CAM_AF Sensitivity	High	8x 01 04 58 01 FF	AF Sensitivity High/Normal/Low
	Normal	8x 01 04 58 02 FF	
	Low	8x 01 04 58 03 FF	
CAM_SettingReset	Reset	8x 01 04 A0 10 FF	Reset Factory Setting
CAM_Brightness	Direct	8x 01 04 A1 00 00 0p 0q FF	pq: Brightness Position
CAM_Contrast	Direct	8x 01 04 A2 00 00 0p 0q FF	pq: Contrast Position

CAM_Flip	Off	8x 01 04 A4 00 FF	Single Command For Video Flip
	Flip-H	8x 01 04 A4 01 FF	
	Flip-V	8x 01 04 A4 02 FF	
	Flip-HV	8x 01 04 A4 03 FF	
CAM_SettingSave	Save	8x 01 04 A5 10 FF	Save Current Setting
CAM_Iridix	Direct	8x 01 04 A7 00 00 0p 0q FF	pq: Iridix Position
CAM_AWBSensitivity	High	8x 01 04 A9 00 FF	High
	Normal	8x 01 04 A9 01 FF	Normal
	Low	8x 01 04 A9 02 FF	Low
CAM_AFZone	Top	8x 01 04 AA 00 FF	AF Zone weight select
	Center	8x 01 04 AA 01 FF	
	Bottom	8x 01 04 AA 02 FF	
CAM_ColorHue	Direct	8x 01 04 4F 00 00 00 0p FF	p: Color Hue setting 0h (– 14 dgrees) to Eh (+14 degrees

(3) Inquiry command

Command	Function	Command packet	Note
CAM_PowerInq	8x 09 04 00 FF	y0 50 02 FF	On
		y0 50 03 FF	Off(Standby)
		y0 50 04 FF	Internal power circuit error
CAM_ZoomPosInq	8x 09 04 47 FF	y0 50 0p 0q 0r 0s FF	pqrs: Zoom Position
CAM_FocusAFModelInq	8x 09 04 38 FF	y0 50 02 FF	Auto Focus
		y0 50 03 FF	Manual Focus
CAM_FocusPosInq	8x 09 04 48 FF	y0 50 0p 0q 0r 0s FF	pqrs: Focus Position
CAM_WBModelInq	8x 09 04 35 FF	y0 50 00 FF	Auto
		y0 50 01 FF	Indoor mode
		y0 50 02 FF	Outdoor mode
		y0 50 03 FF	OnePush mode
		y0 50 05 FF	Manual
CAM_RGainInq	8x 09 04 43 FF	y0 50 00 00 0p 0q FF	pq: R Gain
CAM_BGainInq	8x 09 04 44 FF	y0 50 00 00 0p 0q FF	pq: B Gain
CAM_AEModelInq	8x 09 04 39 FF	y0 50 00 FF	Full Auto
		y0 50 03 FF	Manual
		y0 50 0A FF	Shutter priority
		y0 50 0B FF	Iris priority
		y0 50 0D FF	Bright
CAM_ShutterPosInq	8x 09 04 4A FF	y0 50 00 00 0p 0q FF	pq: Shutter Position
CAM_IrisPosInq	8x 09 04 4B FF	y0 50 00 00 0p 0q FF	pq: Iris Position
CAM_Gain LimitInq	8x 09 04 2C FF	y0 50 0p FF	p: Gain Positon
CAM_BrightPosInq	8x 09 04 4D FF	y0 50 00 00 0p 0q FF	pq: Bright Position
CAM_ExpCompModelInq	8x 09 04 3E FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_ExpCompPosInq	8x 09 04 4E FF	y0 50 00 00 0p 0q FF	pq: ExpComp Position
CAM_BacklightModelInq	8x 09 04 33 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_Nosise2DModelInq	8x 09 04 50 FF	y0 50 02 FF	Auto Noise 2D
		y0 50 03 FF	Manual Noise 3D
CAM_Nosise2DLevel	8x 09 04 53 FF	y0 50 0p FF	Noise Reduction (2D) p: 0 to 5
CAM_Noise3DLevel	8x 09 04 54 FF	y0 50 0p FF	Noise Reduction (3D) p: 0 to 8
CAM_FlickerModelInq	8x 09 04 55 FF	y0 50 0p FF	p: Flicker Settings(0: OFF,1: 50Hz,2:60Hz)
CAM_ApertureModelInq (Sharpness)	8x 09 04 05 FF	y0 50 02 FF	Auto Sharpness
		y0 50 03 FF	Manual Sharpness
CAM_ApertureInq (Sharpness)	8x 09 04 42 FF	y0 50 00 00 0p 0q FF	pq: Aperture Gain

CAM_PictureEffectModelInq	8x 09 04 63 FF	y0 50 00 FF	Off
		y0 50 04 FF	B&W
CAM_MemoryInq	8x 09 04 3F FF	y0 50 0p FF	p: Memory number last operated.
SYS_MenuModelInq	8x 09 06 06 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_LR_ReverseInq	8x 09 04 61 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_PictureFlipInq	8x 09 04 66 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
CAM_RegisterValueInq	8x 09 04 24 mm FF	y0 50 0p 0p ff	mm: Register No. (00 to FF) pp: Register Value (00 to FF)
CAM_ColorGainInq	8x 09 04 49 FF	y0 50 00 00 00 0p FF	p: Color Gain setting 0h (60%) to Eh (200%)
CAM_IDInq	8x 09 04 22 FF	y0 50 0p 0r 0s FF	pqrs: Gamma ID
CAM_VersionInq	8x 09 00 02 FF	y0 50 ab cd mn pq rs tu vw FF	ab: Factory Code(00: VHD, 01:MR, 08:T) cd: Hardware Version mnpq: ARM Version rstu: FPGA Version vw: Camera model 01: C Type 02: M Type 03: S Type
VideoSystemInq	8x 09 06 23 FF	y0 50 00 FF	1920x1080i60
		y0 50 01 FF	1920x1080p30
		y0 50 02 FF	1280x720p60
		y0 50 04 FF	NTSC
		y0 50 05 FF	NTSC
		y0 50 06 FF	NTSC
		y0 50 07 FF	1920x1080p60
		y0 50 08 FF	1920x1080i50
		y0 50 09 FF	1920x1080p25
		y0 50 0A FF	1280x720p50
		y0 50 0C FF	PAL
		y0 50 0D FF	PAL
		y0 50 0E FF	PAL
IR_Receive	8x 09 06 08 FF	y0 50 02 FF	On
		y0 50 03 FF	Off
Pan-tiltMaxSpeedInq	8x 09 06 11 FF	y0 50 ww zz FF	ww: Pan Max Speed zz: Tilt Max Speed
Pan-tiltPosInq	8x 09 06 12 FF	y0 50 0w 0w 0w 0w 0z 0z 0z 0z FF	www: Pan Position zzzz: Tilt Position

CAM_TypelInq	8x 09 00 03 FF	y0 50 01 FF	C Type
		y0 50 02 FF	M Type
		y0 50 03 FF	S Type
CAM_DatelInq	8x 09 00 04 FF	y0 50 0r ss uu vv ww 0D FF	Version dater: Big Version Numberss: Little Version Numberuuuu: Yearvv: Monthww: Day
CAM_ModelInq	8x 09 04 A6 FF	y0 50 00 FF	Mode0
		y0 50 02 FF	Mode2
CAM_GainLimitInq	8x 09 04 2C FF	y0 50 0q FF	p: Gain Limit
CAM_DHotPixelInq	8x 09 04 56 FF	y0 50 0q FF	p: Dynamic Hot Pixel Setting (0: Off, level 1 to 6)
CAM_AFSensitivityInq	8x 09 04 58 FF	y0 50 01 FF	High
		y0 50 02 FF	Normal
		y0 50 03 FF	Low
CAM_BrightnessInq	8x 09 04 A1 FF	y0 50 00 00 0p 0q FF	pq: Brightness Position
CAM_ContrastInq	8x 09 04 A2 FF	y0 50 00 00 0p 0q FF	pq: Contrast Position
CAM_FlipInq	8x 09 04 A4 FF	y0 50 00 FF	Off
		y0 50 01 FF	Flip-H
		y0 50 02 FF	Flip-V
		y0 50 03 FF	Flip-HV
CAM_IridixInq	8x 09 04 A7 FF	y0 50 00 00 0p 0q FF	pq: Iridix Position
CAM_AFZone	8x 09 04 AA FF	y0 50 00 FF	Top
		y0 50 01 FF	Center
		y0 50 02 FF	Bottom
CAM_ColorHuelInq	8x 09 04 4F FF	y0 50 00 00 00 0p FF	p: Color Hue setting 0h (~ 14 dgrees) to Eh (+14 degrees
CAM_AWBSensitivityInq	8x 09 04 A9 FF	y0 50 00 FF	High
		y0 50 01 FF	Normal
		y0 50 02 FF	Low
CAM_LensBlockInq	8x 09 7E 7E 00 FF	y0 50 0u 0u 0u 0u 00 00 0v 0v 0v 00 0w 00 FF	uuuu: Zoom Position vvvv: Focus Position w.bit0: Focus Mode 1: Auto 0: Manual

CAM_CameraBlockInq	8x 09 7E 7E 01 FF	y0 50 0p 0p 0q 0q 0r 0s tt 0u vv ww 00 xx 0z FF	pp: R_Gain qq: B_Gain r: WB Mode s: Aperture tt: AE Mode u.bit2: Back Light u.bit1: Exposure Comp. vv: Shutter Position ww: Iris Position xx: Bright Position z: Exposure Comp. Position
CAM_OtherBlockInq	8x 09 7E 7E 02 FF	y0 50 0p 0q 00 0r 00 00 00 00 00 00 00 00 FF	p.bit0: Power 1:On, 0:Off q.bit2: LR Reverse 1:On, 0:Off r.bit3~0: Picture Effect Mode
CAM_EnlargementBlockInq	8x 09 7E 7E 03 FF	y0 50 00 00 00 00 00 00 00 0p 0q rr 0s 0t 0u FF	p: AF sensitivity q.bit0: Picture flip(1:On, 0:Off) rr.bit6~3: Color Gain(0h(60%) to Eh(200%)) s: Flip(0: Off, 1:Flip-H, 2:Flip-V, 3:Flip-HV) t.bit2~0: NR2D Level u: Gain Limit

Note:[X] in the above table indicates the camera address to be operated,[y]=[x + 8].

1.3.2 Pelco-D protocol command list

SUM = sum of bytes, excluding the synchronization byte(The first byte 0xFF).

Function	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7
Up	0xFF	Address	0x00	0x08	Pan Speed	Tilt Speed	SUM
Down	0xFF	Address	0x00	0x10	Pan Speed	Tilt Speed	SUM
Left	0xFF	Address	0x00	0x04	Pan Speed	Tilt Speed	SUM
Right	0xFF	Address	0x00	0x02	Pan Speed	Tilt Speed	SUM
Upleft	0xFF	Address	0x00	0x0C	Pan Speed	Tilt Speed	SUM
Upright	0xFF	Address	0x00	0x0A	Pan Speed	Tilt Speed	SUM
DownLeft	0xFF	Address	0x00	0x14	Pan Speed	Tilt Speed	SUM
DownRight	0xFF	Address	0x00	0x12	Pan Speed	Tilt Speed	SUM
Zoom In	0xFF	Address	0x00	0x20	0x00	0x00	SUM
Zoom Out	0xFF	Address	0x00	0x40	0x00	0x00	SUM
Focus Far	0xFF	Address	0x00	0x80	0x00	0x00	SUM
Focus Near	0xFF	Address	0x01	0x00	0x00	0x00	SUM
Set Preset	0xFF	Address	0x00	0x03	0x00	Preset ID	SUM
Clear Preset	0xFF	Address	0x00	0x05	0x00	Preset ID	SUM
Call Preset	0xFF	Address	0x00	0x07	0x00	Preset ID	SUM
Query Pan Position	0xFF	Address	0x00	0x51	0x00	0x00	SUM
Query Pan Position Response	0xFF	Address	0x00	0x59	Value High Byte	Value Low Byte	SUM
Query Tilt Position	0xFF	Address	0x00	0x53	0x00	0x00	SUM
Query Tilt Position Response	0xFF	Address	0x00	0x5B	Value High Byte	Value Low Byte	SUM
Query Zoom Position	0xFF	Address	0x00	0x55	0x00	0x00	SUM
Query Zoom Position Response	0xFF	Address	0x00	0x5D	Value High Byte	Value Low Byte	SUM

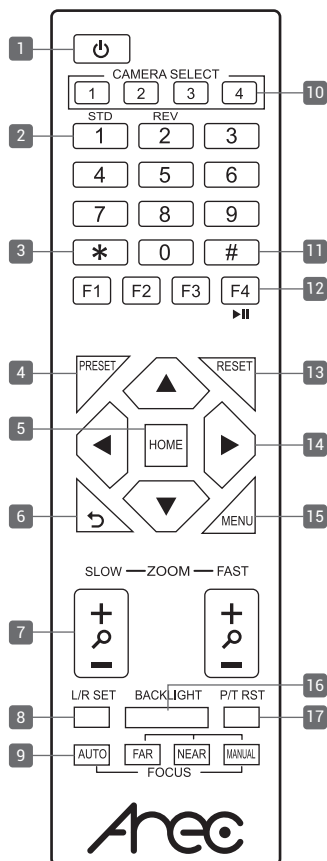
1.3.3 Pelco-P protocol command list

Function	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7	Byte8
Up	0xA0	Address	0x00	0x08	Pan Speed	Tilt Speed	0xAF	XOR
Down	0xA0	Address	0x00	0x10	Pan Speed	Tilt Speed	0xAF	XOR
Left	0xA0	Address	0x00	0x04	Pan Speed	Tilt Speed	0xAF	XOR
Right	0xA0	Address	0x00	0x02	Pan Speed	Tilt Speed	0xAF	XOR
Upleft	0xA0	Address	0x00	0x0C	Pan Speed	Tilt Speed	0xAF	XOR
Upright	0xA0	Address	0x00	0x0A	Pan Speed	Tilt Speed	0xAF	XOR
DownLeft	0xA0	Address	0x00	0x14	Pan Speed	Tilt Speed	0xAF	XOR
DownRight	0xA0	Address	0x00	0x12	Pan Speed	Tilt Speed	0xAF	XOR
Zoom In	0xA0	Address	0x00	0x20	0x00	0x00	0xAF	XOR
Zoom Out	0xA0	Address	0x00	0x40	0x00	0x00	0xAF	XOR
Focus Far	0xA0	Address	0x00	0x08	0x00	0x00	0xAF	XOR
Focus Near	0xA0	Address	0x01	0x00	0x00	0x00	0xAF	XOR
Set Preset	0xA0	Address	0x00	0x03	0x00	Preset ID	0xAF	XOR
Clear Preset	0xA0	Address	0x00	0x05	0x00	Preset ID	0xAF	XOR
Call Preset	0xA0	Address	0x00	0x07	0x00	Preset ID	0xAF	XOR
Query Pan Position	0xA0	Address	0x00	0x51	0x00	0x00	0xAF	XOR
Query Pan Position Response	0xA0	Address	0x00	0x59	Value High Byte	Value Low Byte	0xAF	XOR
Query Tilt Position	0xA0	Address	0x00	0x53	0x00	0x00	0xAF	XOR
Query Tilt Position Response	0xA0	Address	0x00	0x5B	Value High Byte	Value Low Byte	0xAF	XOR
Query Zoom Position	0xA0	Address	0x00	0x55	0x00	0x00	0xAF	XOR
Query Zoom Position Response	0xA0	Address	0x00	0x5D	Value High Byte	Value Low Byte	0xAF	XOR

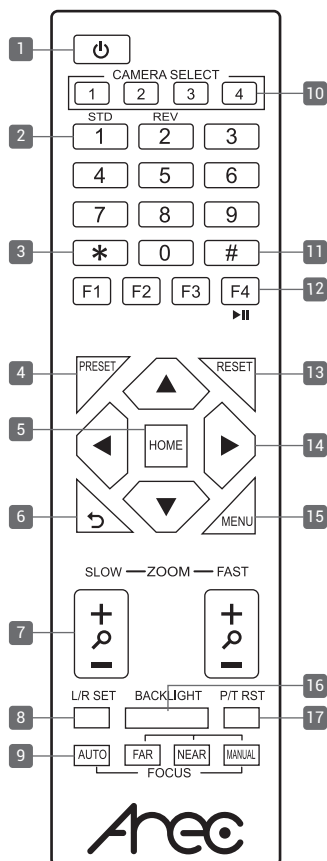
Chapter 2. Remote Controller

2.1 Keys Instruction

Remote Controller



No.	Name	Function/Description
1	Standby Key	Press this button to enter standby mode. Press it again to enter normal mode. Note: Power consumption in standby mode is approximately half of the normal mode
2	Number Key	To set preset or call preset.
3	* Key	Used with other buttons.
4	Preset Key	Set preset: Store a preset position. [SET PRESET] + Numeric button (0-9): Setting a corresponding numeric key preset position.
5	HOME Key	Confirm menu or the PTZ will back to the middle position after pressed it
6	Return Key	Return back the last level menu
7	Zoom Key	Slow Zoom: Zoom In [+] or Zoom Out [-] slowly Fast Zoom: Zoom In [+] or Zoom Out [-] fast
8	Left/Right Setting Key	Press with 1 button and 2 button setting the direction of the Pan-Tilt. Simultaneously press L/R Set + 1 [STD]: set the Pan-Tilt turn the same direction as the L/R Set. Simultaneously press L/R Set + 2 [REV]: set the Pan-Tilt turn the opposite direction as the L/R Set.
9	Focus Key	Used for focus adjustment. Press [AUTO] adjust the focuses on the center of the object automatically. Press [MANUAL] adjust the focus on the center of the object manual. MANUAL button, and adjust it with [Far] (Focus on far object) and [NEAR] (Focus on near object).
10	Selection Key	Press the button corresponding to the camera you want to operate with the remote controller.
11	# key	Used with other buttons.
12	IR Remote Control Key	[*]+[#]+[F1/F2/F3/F4] : Address 1/2/3/4



13	Reset Key	Clear preset: Erase a preset position. [CLEAR PRESET] + Numeric button (0-9) Or: [*]+[#]+[CLEAR PRESET]: Erase all the preset individually.
14	PTZ Control Key	Press arrow buttons to perform panning and tilting. Press [HOME] button to face the camera back to front.
15	Menu Key	MENU: enter or exit OSD MENU.
16	Backlight Key	BLC ON/OFF: Press this button to enable the backlight compensation. Press it again to disable the backlight compensation. NOTE: Effective only in auto exposure mode. If a light behind the subject, the subject will become dark. In this case, press the backlight ON/OFF button. To cancel this function, press backlight ON/OFF button.
17	PTZ Reset Key	Preset Pan/Tilt self-test.
18	Image Freezing Function	Manually freeze: Open the freezing function after press the remote control [F4], display "Freeze" on the left upper corner character, after five seconds display disappear automatically. If you want to cancel the freeze, press [F4] key and then can return to normal, display "Unfreeze" on the left upper corner, after five seconds display will disappear automatically. Recalling the Preset image Freeze: By the OSD Menu "Image Freeze" to set recalling the preset image freeze function. After the function is opened, the screen will stay in before Recalling the Preset when Recalling the Preset, the screen can be switched to the preset position screen until the camera points to the preset position.
19	Shortcut Set	*]+[#]+[1]: OSD menu default English *]+[#]+[3]: OSD menu default Chinese Traditional *]+[#]+[4]: Display current IP address *]+[#]+[6]: Quickly recover the default *]+[#]+[8]: View the camera version *]+[#]+[9]: Quickly set up inversion

2.2 Menu Setting

2.2.1 Main Menu

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

MENU =====	Exposure: Exposure mode and optional items setting
Exposure	Color: Color setting
Color	Image: image (Luminance, Contrast, Sharpness, etc.) setting
Image	P/T/Z: Pan, tilt and zoom setting
P/T/Z	Noise Reduction: NR2D/NR3D Level setting
Noise Reduction	Setup: language setting
Setup	Communication Setup: communication mode setting
Communication Setup	Restore Default: Reset setting
Restore Default	[Home]: Press [Home] to enter
[Home] Enter	[Menu]: Press [Menu] to exit
[Menu] Exit	

2.2.2 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, Manual, SAE, Bright
Mode	ExpCompMode: On, Off (Effective only in Auto mode)
ExpCompMode	ExpComp: -7 ~ 7 (Effective only in ExpCompMode item to On)
Backlight	Backlight: On, Off (Effective only in Auto mode)
Gain Limit	Bright: 0 ~ 17 (Effective only in Bright mode)
Anti-Flicker	Gain Limit: 0 ~ 15 (Effective only in Auto, SAE, Bright mode)
Meter	Anti-Flicker: Off, 50Hz, 60Hz (Effective only in Auto, Bright mode)
DRC	Meter: Average, Center, Smart, Top
[↑ ↓] Select Item	DRC: optional items: 0 ~ 8
[← →] Change Value	
[Menu] Back	

2.2.3 Color

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

COLOR		
=====		
WB Mode	Auto	WB-Mode: Auto, Indoor, Outdoor, One Push, Manual, VAR
RG Tuning	0	RG Tuning: -10 ~ +10 (Effective only in Auto, One Push, VAR mode)
BG Tuning	+1	BG Tuning: -10 ~ +10 (Effective only in Auto, One Push, VAR mode)
Saturation	110%	Saturation: 60% ~ 200%
Hue	7	AWB Sens: Low, Middle, High
AWB Sens	High	RG: 0 ~ 255 (Effective only in Manual mode)
[↑ ↓] Select Item		BG: 0 ~ 255 (Effective only in Manual mode)
[← →] Change Value		Color Temp: 2500K ~ 8000K (Effective only in VAR mode)
[Menu] Back		

2.2.4 Image

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

IMAGE		
=====		
Luminance	7	Luminance: 0 ~ 14
Contrast	7	Contrast: 0 ~ 14
Sharpness	5	Sharpness: Auto, 0 ~ 15
Flip-H	OFF	Flip-H: On, Off
Flip-V	OFF	Flip-V: On, Off
B&W-Mode	OFF	B&W-Mode: On, Off
Gamma	Ext	Gamma: Default, 0.45, 0.5, 0.56, 0.63, Ext
Style	Default	Style: Norm, Default, Clarity, Soft
[↑ ↓] Select Item		
[← →] Change Value		
[Menu] Back		

2.2.5 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		
=====		
Speed by Zoom	ON	SpeedByZoom: On, Off
AF-Zone	Center	AF-Zone: Top, Center, Bottom
AF-Sense	High	AF-Sense: Low, Normal, High
L/R Set	STD	L/R Set: STD, REV
Display Info	On	Display Info: On, Off
Display Zoom	OFF	Display Zoom: Off, 2x, 4x, 8x, 16x
Call Preset Speed	18	Call Preset Speed: 1 ~ 24
[↑ ↓] Select Item		
[← →] Change Value		
[Menu] Back		

2.2.6 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.

NOISE REDUCTION		
=====		
NR2D Level	1	NR2D Level: Off, Auto, 1 ~ 5
NR3D Level	3	NR3D Level: Off, 1 ~ 8
[↑ ↓] Select Item		
[← →] Change Value		
[Menu] Back		

2.2.7 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	Language: English, Simplified Chinese or Traditional Chinese
[↑ ↓] Select Item		
[← →] Change Value		
[Menu] Back		

2.2.8 Communication Setup

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

COMMUNICATION SETUP		
=====		
Protocol	VISCA	
V_Address	1	PROTOCOL: VISCA, Pelco-P, Pelco-D, Auto
V_Addrfix	Off	Visca ADDR: VISCA=1~7, Pelco-P=0~31, Pelco-D = 0~254
Net Mode	Serial	Baud rate: 2400, 4800, 9600, 38400
Baudrate	9600	
[↑ ↓] Select Item		
[← →] Change Value		
[Menu] Back		

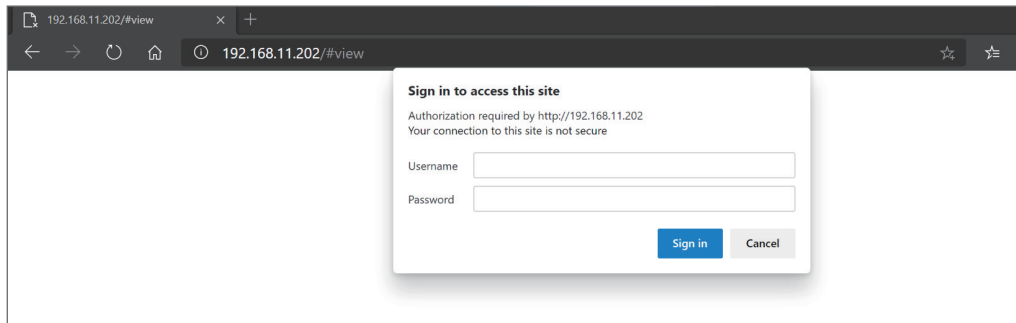
2.2.9 Restore Default

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

RESTORE DEFAULT		
=====		
Restore?	NO	Restore: Yes, No
[← →] Change Value		Note: Press [HOME] button to confirm, all parameter restore default, include IR Remote address and VISICA address.
[Home] OK		
[Menu] Back		

Chapter 3. Network Connection

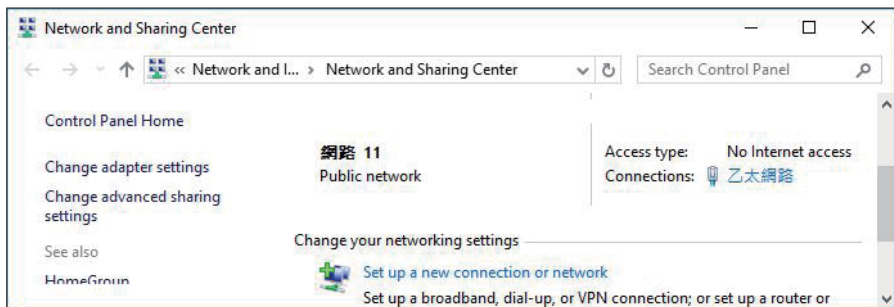
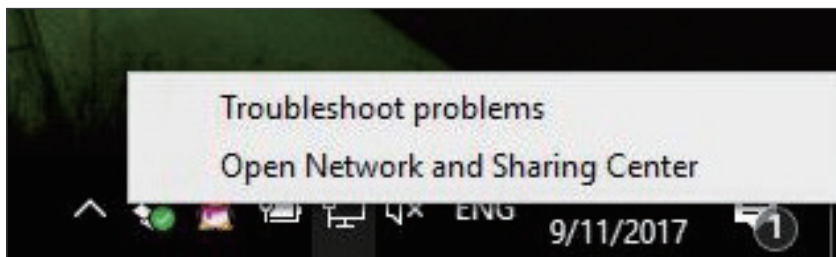
You can connect your camera to a PC or notebook with standard network cable and enter the management site via your Internet browser or connect your camera to a router or any DHCP server. See below for details.



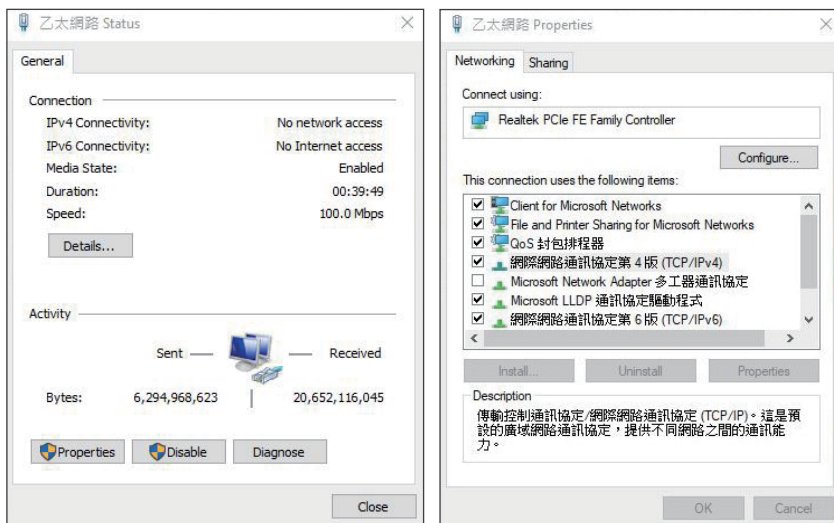
3.1 Direct connection

To access the camera for the first time, connect the camera and computer by network connecting cable. The computer must have the network segment where the camera IP address belong to. The device will not be accessible if without the segment. I.E. The camera default IP address is 192.168.11.202, then segment 11 must be added in the computer. Specific steps are as below :

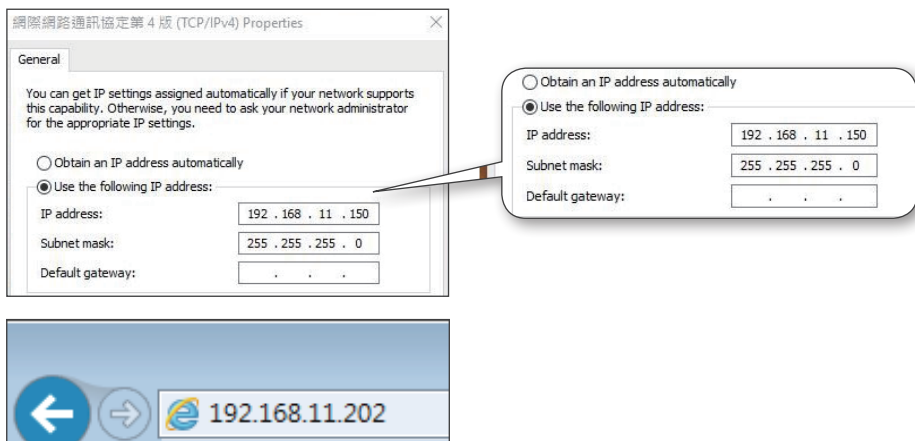
- (a) Click "Open Network and Sharing Center".



- (b) Click the Properties button in Local Area Connection window and click the Internet Protocol Configuration (TCP/IPv4) option.



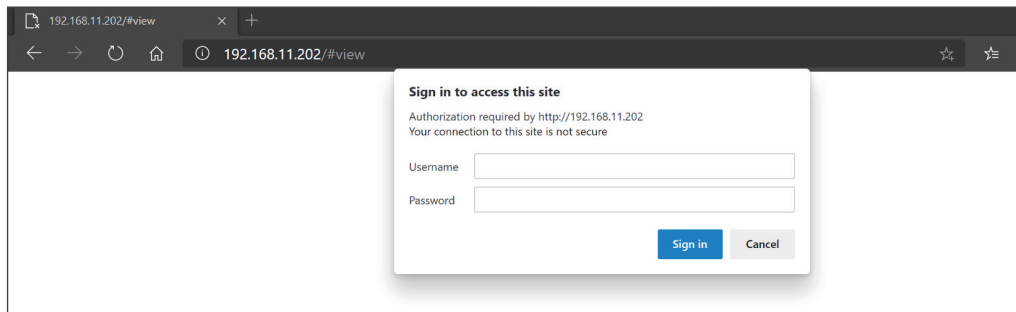
- (c) Type IP : 192.168.11.1XX in "Use the following IP address:" field (Figure 1). Enter the static IP address of your CI-T21H/CI-T21S : 192.168.11.202 in your browser's URL bar (Figure 2). The management login page displays. (Enter account ID and password admin/admin for the first time.)



Chapter 4. Overview of the Web Interface

Web client: Input the IP address 192.168.11.202 of the device in the address field of browser and click Enter button to enter into Web Client login page.

Note: Web access supported browsers: IE, 360 browser and other regular browser.



Input the username and password after plug in installed. You can choose to log in as administrator or login in as normal user.

(1) Login in as administrator:

The default user name and password are both "admin".

After log in successfully, enter Administrator webpages. Users can preview, control camera pan / tilt / zoom, view device information and configure, etc..

(2) Login in as normal user:

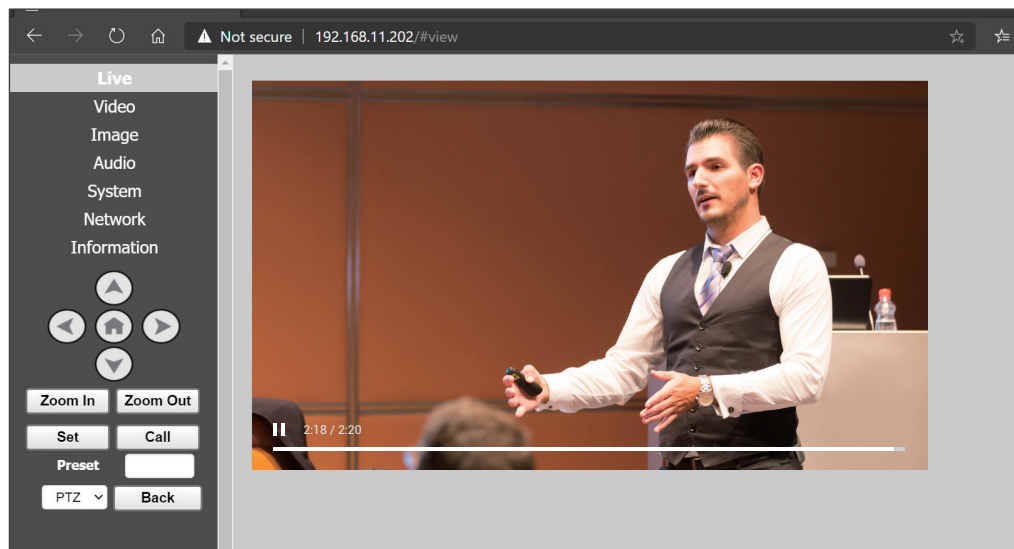
The default user name and password are both "user1" or "user2".

After log in successfully, enter Administrator webpages. Users can preview, control camera pan / tilt / zoom and view device information.

Note: Normal user does not have permission to configuration page.

4.1 Preview

After log in successfully, enter Administrator webpages. By default, the page shows Preview interface.



4.2 Video Settings

After entering the Video Settings, users can set the video format, encode level, first stream and second stream. Note: After changing the settings, please click "Submit" and reboot CI-T10. Then the change will take effect. The reboot method is to click "System Settings", and then click "Reboot".

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⚠ Not secure | 192.168.11.202/#video

Live

Video

Image

Audio

System

Network

Information

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⬇

Zoom In

Zoom Out

Set

Call

Preset

PTZ ▾

Back

Language

English ▾

Video Settings

Video Format 60Hz ▾

Encode Level highprofile ▾

First stream

Encode Protocol H264 ▾

Resolution 1920x1080 ▾

Bit Rate 4096

Frame Rate 30 ▾

I Key Frame Interval 30

Bit Rate Control CBR ▾

Slice Split Enable off ▾

Split Mode Fixed blocks ▾

Slice Size 68

Second stream

Encode Protocol H264 ▾

Resolution 640x360 ▾

Bit Rate 800

Frame Rate 30 ▾

I Key Frame Interval 30

Bit Rate Control CBR ▾

Slice Split Enable off ▾

Split Mode Fixed blocks ▾

Slice Size 15

Submit

Cancel

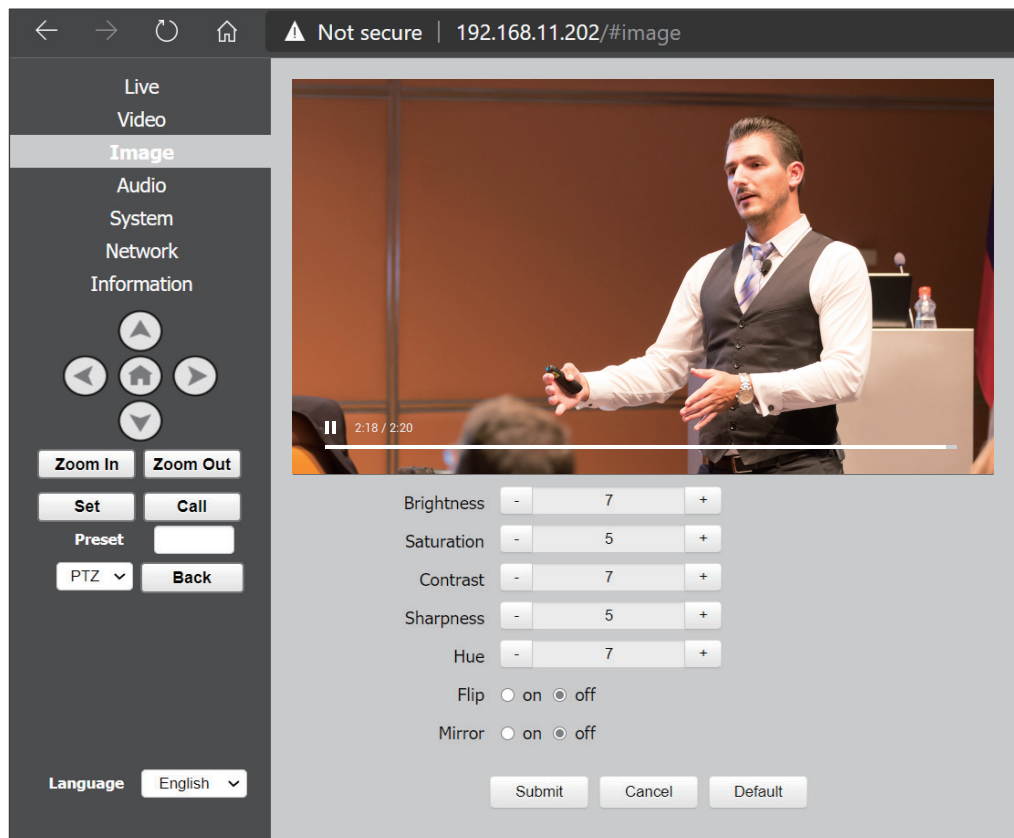
Set Option		Explanation
Video Settings	Video Format	60Hz (default), 50Hz (optional)
	Encode Level	highprofile (default), baseline and mainprofile (optional)
First stram/ Second stram	Encode Protocol	H264 (default), H265, MJPEG (optional)
	Resolution	640*360 (default), 1920*1080, 1280*720, 1024*576, 960*540, 640*480 (optional)
	Bit Rate	4096 (32~16384 kbps)
	Frame Rate	30 (default), 1~60 (optional)
	I Key Frame Interval	30 (2~1200)
	Bit Rate Control	CBR, VBR
	Slice Split Enable	on, off
	Split Mode	Turn on Split Mode to select the slice type: Fixed blocks, Fixed bytes
	Slice Size	68

4.3 Image Settings

After entering the Image Settings, users can set the brightness, saturation, contrast, sharpness, hue, flip on/off and mirror mode on/off.

Note: After changing the settings, please click "Submit" and reboot CI-T10. Then the change will take effect.

The reboot method is to click "System Settings", and then click "Reboot".



Set Option	Explanation
Brightness	0~14
Saturation	0~14
Contrast	0~14
Sharpness	0~15
Hue	0~14
Flip	on/off
Mirror	on/off

Click "Submit" after changed, then the set is to take effect; to restore the settings, please click "Cancel" or "Default".

4.4 System Settings

After entering the System Settings, users can initialize the device and reset the password of the user or guest.
 Note: After changing the settings, please click "Submit" and reboot CI-T10. Then the change will take effect.
 The reboot method is to click "System Settings", and then click "Reboot".

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⚠ Not secure | 192.168.11.202/#system

Live

Video

Image

Audio

System

Network

Information

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Zoom In

Zoom Out

Set

Call

Preset

PTZ ▼

Back

Language

English ▼

Initialize

Reboot

Reboot

factory default

factory default

User

UserName

admin

Passwd

.....

👁

Guest

guest

Passwd

.....

👁

Submit

Cancel

Set Option		Explanation
Initialize	Reboot	Reboot the device.
	factory default	Restore factory defaults.
User		Users can change the password of the user or guest.

After entering the Network Settings, users can set the LAN, port, RTMP(S) settings, RTMP(S), RTSP, ONVIF, and NTP settings.

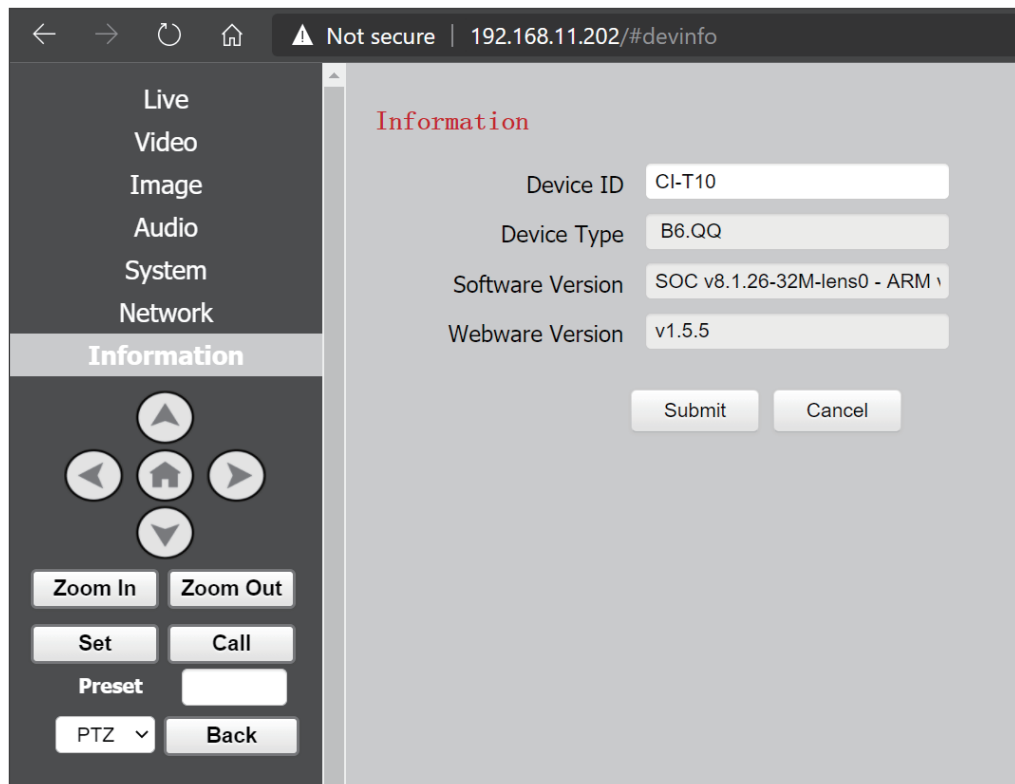
Note: After changing the settings, please click "Submit" and reboot CI-T10. Then the change will take effect.

The reboot method is to click "System Settings", and then click " Reboot".

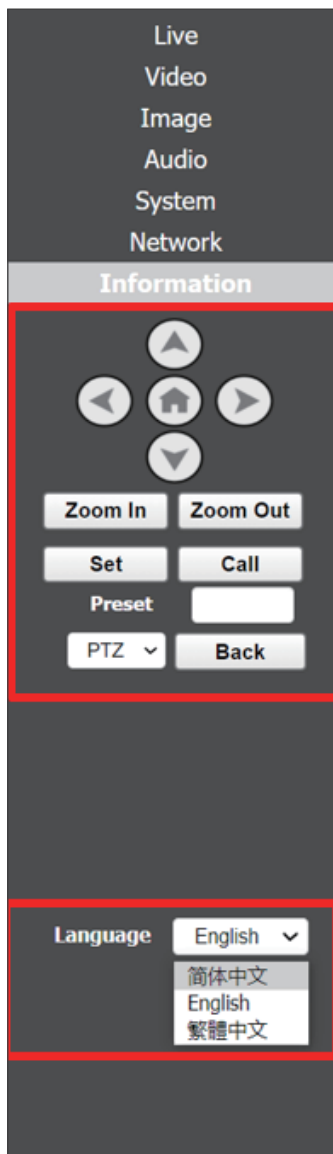
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Set Option		Explanation
IP Configuration Type		Fixed IP Address, manual
Port Settings	HTTP Port	Port range from 1025 to 65535 or 80
	RTSP Port	Port range from 1025 to 65535 or 554
	PTZ Port	Port range from 1025 to 65535 (Default 5678)
	UDP Port	Port range from 1025 to 65535 (Default 1259)
	Sony Visca	52381
RTMP(S) Settings		Please acquire the streaming URL and key from the live streaming platform, then copy and paste them to MRL, click "Submit" and reboot CI-T10.
RTSP Settings		on/off
ONVIF Settings		on/off
NTP Settings		on/off If you select "on", you can set the time zone, server address, time interval, main stream show on/off, sub time show on/off and position.

After entering the Information, the device ID, device type, software version and webware version will be displayed. The "Device ID" can be edited. Please click "Submit" after the change.



4.7 PTZ control option and language settings



In the settings list, if you select "PTZ" in the drop-down menu, you can control the Pan-Tilt-Zoom movement of the camera, or return to the HOME position (horizontal and vertical middle position). You can also set or control the preset position.

If you change to "Menu", you can go to the setting page.

Under the list, you can set the language(Simplified Chinese, English or Traditional Chinese)

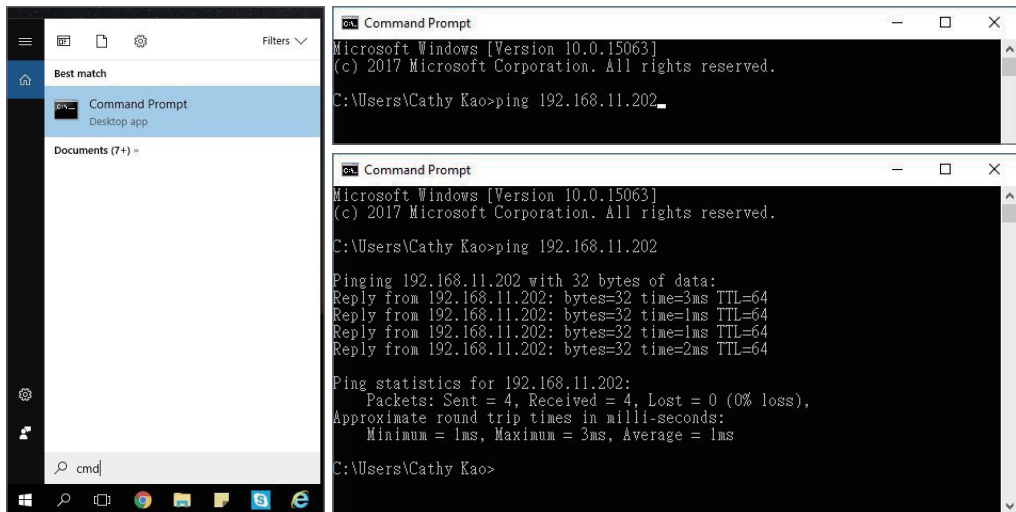
Chapter 5. Camera Maintenance and Troubleshooting

5.1 Camera Maintenance

- (1) If camera is not used for long time, please turn off power adapter switch and AC plug.
- (2) Use soft cloth or tissue to clean the camera cover.
- (3) Use soft cloth to clean the lens; Use neuter cleanser if bad smeared. No use strong or corrosive cleanser or corrosive cleanser avoiding scuffing.

5.2 Troubleshooting

- (1) No video output
 - (a) Check whether the camera power supply is connected, the voltage is normal, the power indicator is lit.
 - (b) Whether the machine could do self-inspection after restarted.
 - (c) Check whether the video output cable or video display is normal
- (2) No image sometimes
 - (a) Check whether the video output cable or video display is normal
- (3) Image dithering when zoom-in or zoom-out
 - (a) Check whether the camera installation position is solid
 - (b) Whether there is shaking machine or objects around the camera
- (4) Remote controller can not work
 - (a) Remote control address is set to 1 (if the machine is set back to the factory defaults, remote control addresses need to be back to 1 too)
 - (b) Check whether the battery is installed on the remote controller or low .
 - (c) Check the menu whether is closed, camera control through remote controller is only available after exiting the menu. If video output from LAN, menu will not be displayed, menu will automatically exists 30s later, then it can be controlled by remote controller.
- (5) Serial port can not work.
 - (a) Check whether the camera serial device protocol, baud rate, address is consistent
 - (b) Check whether the control cable is connected properly
- (6) Web pages cannot log in
 - (a) Check whether the camera is showing normally.
 - (b) Check whether the network cable is connected properly (Ethernet port yellow light flashes to indicate normal network cable connection)
 - (c) Check whether your computer is added the segment and the segment is consistent with the IP address of the camera. For instance, if the IP address of the computer is 192.168.11.250 and the camera is 192.168.11.202, then both are in the same network segment.
 - (d) Click "Start" and select "Run" and then type "cmd" in the computer; Click "OK" then turn on a DOS command window to enter ping 192.168.11.202. Press the Enter key to appear message as follows: Description network connection is normal





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