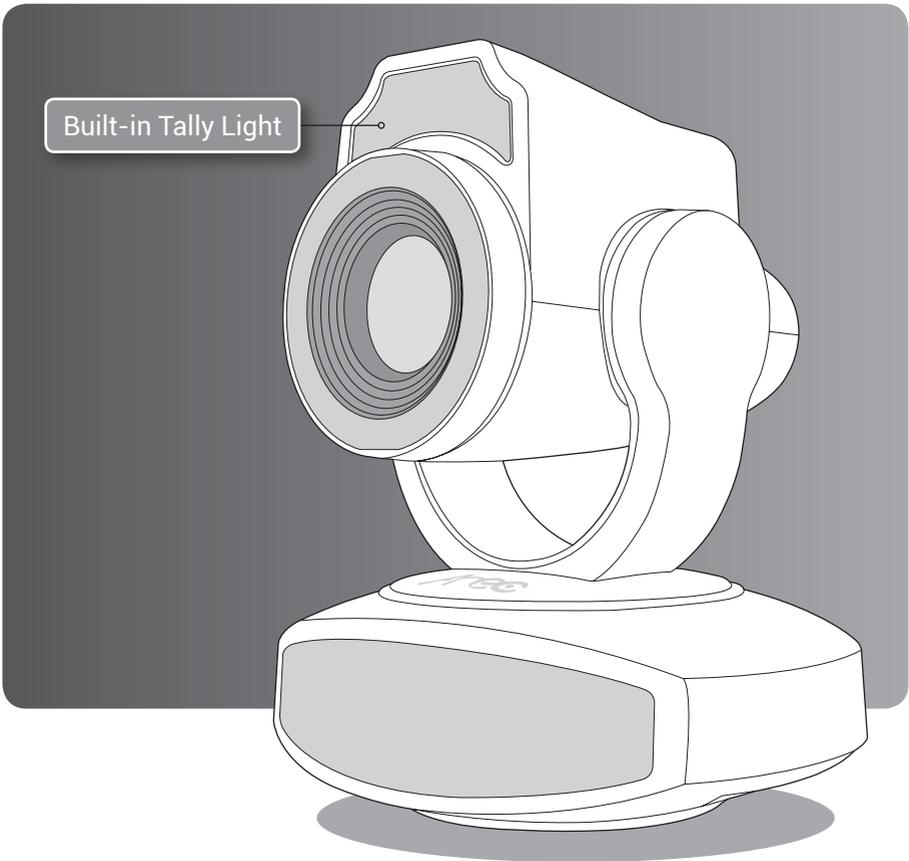




# CI-21H / CI-21S

## Full HD PTZ Conference Camera 10X

Quick Installation Guide | 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.

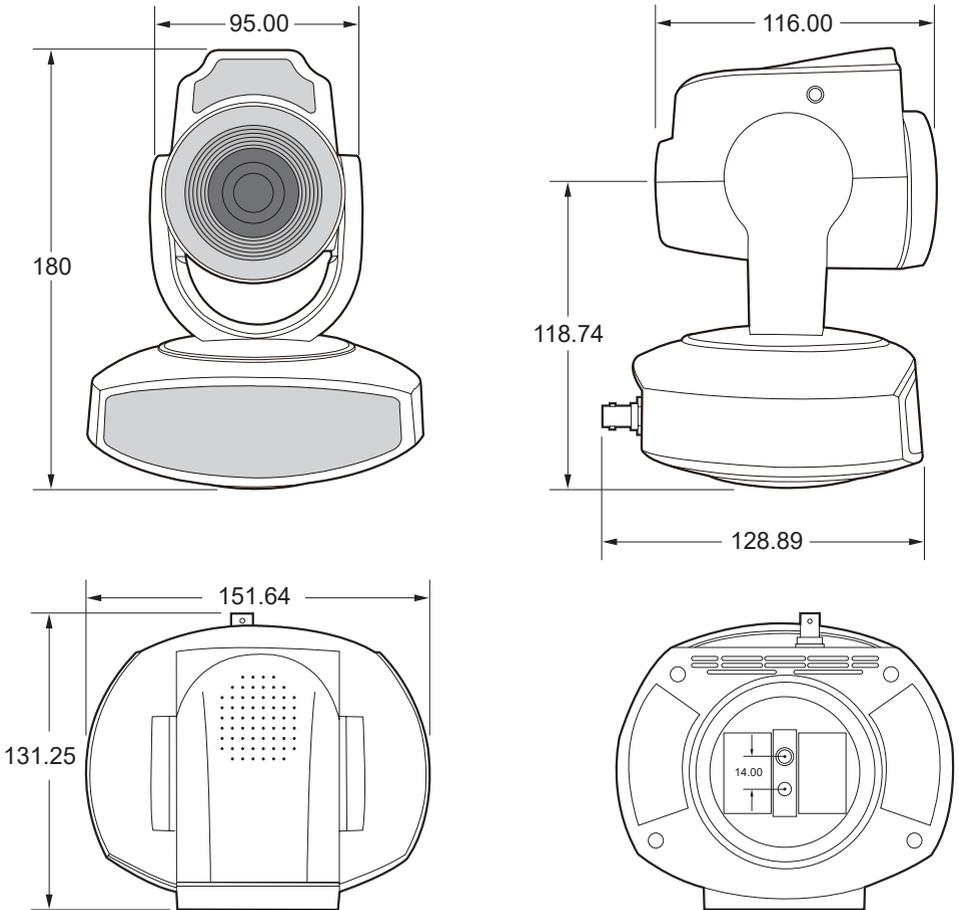
## 7. Attention

Electromagnetic filed under certain rate may affect camera image!

# Product Overview

CI-21H/CI-21S PTZ Camera is a professional-grade high quality PTZ camera, CI-21H/CI-21S 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.	HDMI Model	SDI Model
1	Power Adaptor	Power Adaptor
2	RS-232 Cable	RS-232 Cable
3	USB3.0 Cable	-
4	Remote Controller	Remote Controller
5	X type 2 in 1 Cable (RS-232 & Power)	X type 2 in 1 Cable (RS-232 & Power)
6	Quick Installation Guide	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.

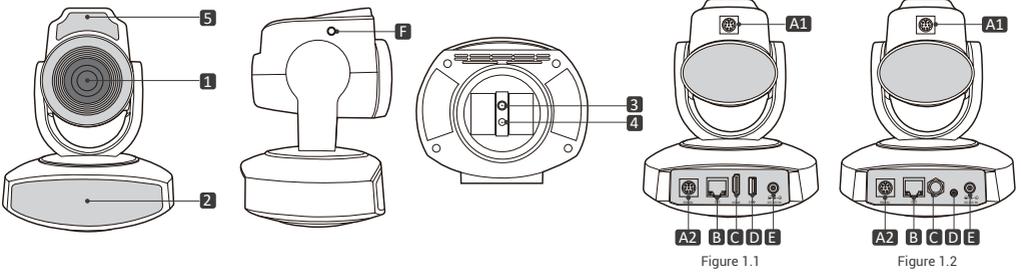
## 4. Technical specification

Camera Parameter	
Optical Zoom	10X, f=4.7~47mm
Sensor	1/2.8 inch high quality HD CMOS sensor
Effective Pixels	16: 9 2.07 megapixel
Video Format	<b>HDMI/SDI video format</b> 1080P60/50/30/25/59.94/29.97;1080I60/50/59.94; 720P60/50/30/25/59.94/29.97 <b>U3 video format</b> (1) U3:1920X1080P60/50/30/25;1280X720P60/50/30/25;960X540P30;640X360P30; 640X480P30;352X288P30;960X540P30; (2) U3 compatible with U2: 960X540P30; 640X360P30; 1280X720P10/15; 720X576P50; 720X480P60; 640X480P30; 352X288P30.
View Angle	6.43°(tele)--60.9°(wide)
Iris	F1.6--F3.0
Digital Zoom	5X
Minimum Illumination	0.5Lux (F1.8,AGC ON)
DNR	2D & 3D DNR
White Balance	Auto / Manual / One Push / 3000K / 3500K / 4000K / 4500K / 5000K / 5500K / 6000K / 6500K / 7000K
Exposure	Auto / Manual / Shutter Automatic Exposure / Aperture Automatic Exposure / Brightness priority
Focus	Auto / Manual / One Push
Aperture	Auto / Manual
Electronic Shutter	Auto / Manual
BLC	ON / OFF
WDR	OFF / Dynamic level adjustment
Video Adjustment	Brightness, Color, Saturation, Contrast, Sharpness, B/W mode, Gamma curve
SNR	>55dB
Input/Output Interface	
Video Interfaces	HDMI Model:RS232(INPUT), LAN, HDMI, USB3.0 SDI Model:RS232(INPUT), LAN, SDI, A-IN
Image Code Stream	Dual stream output
Image Output Multiple Code Source	Dual Code Source output(SDI/HDMI/USB3.0 LAN )

Video Compression Format	H.264, H.265
Audio Input Interface	Double track 3.5mm linear input;
Audio Output	SDI/HDMI/LAN output together with video
Audio Compression Format	AAC/MP3/G.711A
HD IP Interface	100M IP port(100BASE-TX)
Network Protocol	RTSP/RTMP, ONVIF, GBT28181; Support IP Visca control protocol; Distance update, Distance restart, Distance reset
Control Interface	RS232
Control Protocol	VISCA/Pelco-D/Pelco-P; Baud Rate: 115200/9600/4800/2400 bps
Power Interface	HEC3800 outlet (DC12V)
Supply Adapter	AC110V-AC220V to DC12V/2A
Input Voltage	DC12V±10%
Input Current	2A (Max)
Consumption	24W (Max)
<b>PTZ Parameter</b>	
Pan Rotation	±135°
Tilt Rotation	-30°~+30°
Pan Control Speed	0.1-60°/sec
Tilt Control Speed	0.1-30°/sec
Preset Speed	Pan: 60°/sec, Tilt: 30°/sec
Preset Number	255 presets (10 presets by remote controller)
<b>Other Parameter</b>	
Store Temperature	-10°C - +60°C
Store Humidity	20% - 95%
Working Temperature	-10°C - +50°C
Working Humidity	20% - 80%
Dimension (L x W x H)	131 x 151 x 180 mm
Weight	890g
Using Environment	Indoor

# Quick Installation Instructions

## Camera interface and indicators description



No.	CI-21H	CI-21S
1	Camera Lens	Camera Lens
2	Remote Controller Receiver	Remote Controller Receiver
3	Tripod Screw Hole (¼ UNC 20, Depth 6.5mm)	Tripod Screw Hole (¼ UNC 20, Depth 6.5mm)
4	Locating Hole (Ø5.5, Depth 6.5mm)	Locating Hole (Ø5.5, Depth 6.5mm)
5	Tally Light	Tally Light
A	RS232 Control Interface (Input)	RS232 Control Interface (Input)
B	LAN Interface	LAN Interface
C	HDMI Interface	SDI Interface
D	USB3.0 Interface	Audio-IN Interface
E	DC12V Input Power Supply Socket	DC12V Input Power Supply Socket

No.	LED Color	Glow Rule	Operation
2	Red/Green dual-color light	Red light blinking	Power Adaptor plug to Socket
		Green light turns on	Power on
		Green light blinking	Receive remote control signal
5	Red light	Red light turns on	Recording

## 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 head moves from bottom left to the bottom, 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 self-checking is finished.

Note:

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

## 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 refer to No B in Figure 1.1.
- 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) HDMI Video Output

- a. HDMI Video Cable Connection: HDMI Model refer to No.C in Figure 1.1.
- b. Connect the camera and the monitor via HDMI video cable; video output is available after camera self-test.

### (3) SDI Video Output

- a. SDI video cable connection: SDI Model refer to No.C in Figure 1.2.
- b. Connect the camera and the monitor via SDI video cable; video output is available after camera self-test.

### (4) USB3.0 video output

- a. USB3.0 video cable connection: HDMI Model refer to No.D in Figure 1.1.
- b. Connect the camera and the monitor via USB3.0 video cable, open video display software, select image device, and then video output will be available.

### (5) USB3.0 compatible with USB2.0 output

- a. USB3.0 video cable connection: HDMI Model refer to No.D in Figure 1.1.
- b. Connect the camera and the monitor via USB3.0 video cable, open video display software, select image device, and then video output will be available.

# Connection

## Step 1 Connection

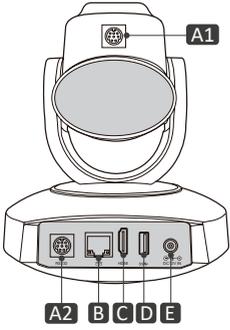


Figure 1.1

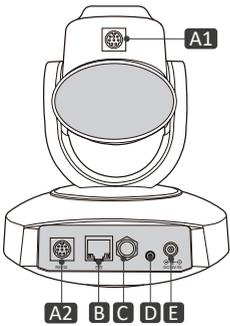
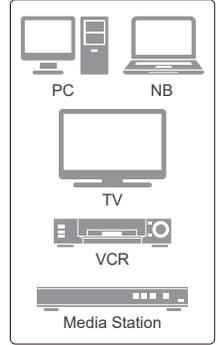
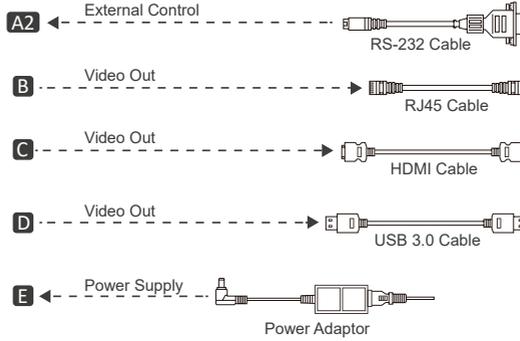
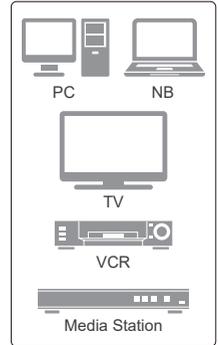
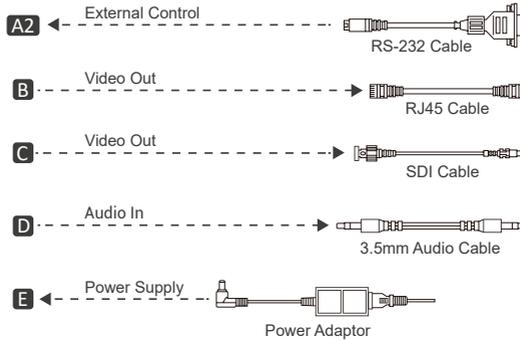
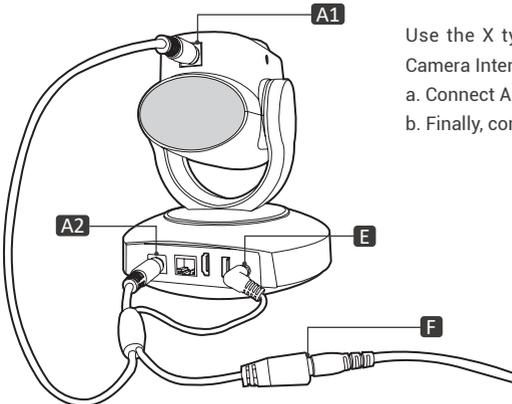


Figure 1.2



## Step 2 Setup X type 2 in 1 tracking cable



Use the X type 2 in 1 tracking cable connected to Tally Light, refer Camera Interface Instruction

- Connect A1, A2, E in sequence
- Finally, connect the camera power adaptor to F



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