VC-TR61

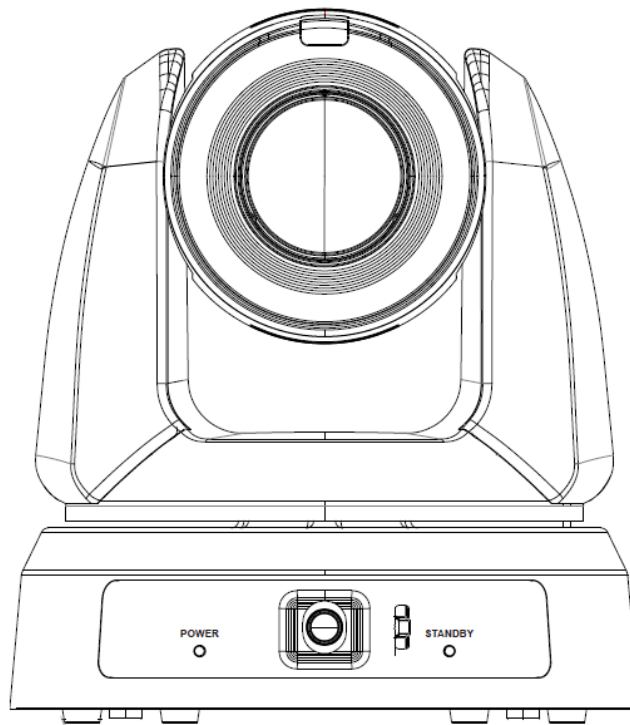## Auto Tracking Camera

User Manual - English

Version VYW100Q
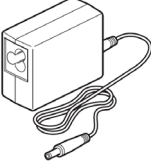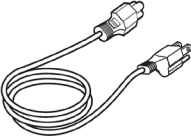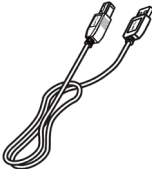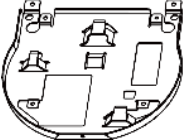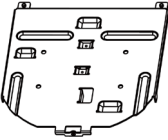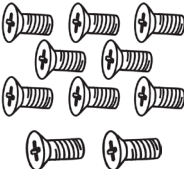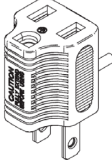
To download the latest version of Quick Start Guide, multilingual user manual, software, or driver please visit the Lumens website:

https://www.MyLumens.com/support

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Contents

Chapter 1 Packing List

Power Adapter	Power Cord	USB 3.0 Cable-2m (Type B - Type A)	Remote Control
	Appearance may vary depending on country/ region		

Metal Plate A	Metal Plate B	M3 Screws Silver x8/ Black x2	3 PIN-2 PIN Connector
			(For Japan only)

Chapter 2 Product Appearance

2.1 I/O interface

Front
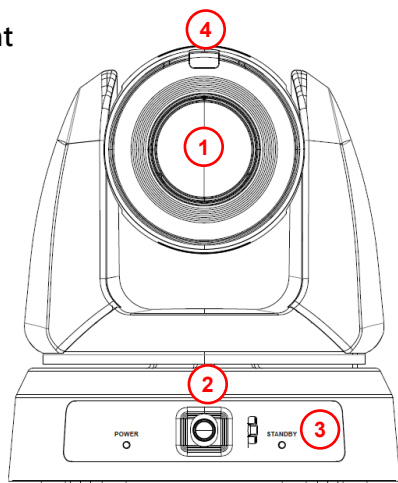
Back
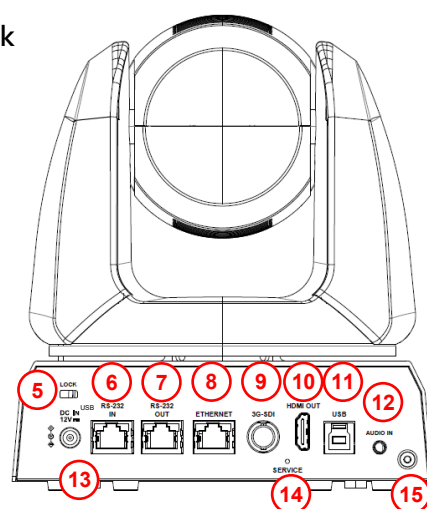
NO.	項目	功能說明
1.	Main camera lens	PTZ camera lens
2.	Panoramic lens	Panoramic camera lens Note When the camera is installed at a height above **2 meters**, we recommend adjusting the tilt position. Refer to **3.2.5 Tilting the Panoramic Lens**
3.	LED indicators	Displaying the status of the camera, refer to **2.2 LED Indicator**
4.	Tally Lamp	Displays the Tally Lamp status of the camera
5.	Lock	Safety lock slot
6.	RS232 IN	RS-232 port, up to 7 cameras can be connected.
7.	RS232 OUT	Pin out please refer to **3.3.2 RS-232 Pin Definition**
8.	Ethernet	Network port, with PoE+ (IEEE802.3at) support
9.	3G-SDI	3G-SDI output (BNC 75Ω / supports SMPTE 425M)
10.	HDMI OUT	Video output
11.	USB3.0	Connect to the computer's USB port; delivers USB video
12.	Audio In	3.5mm Line in
13.	DC IN 12V	DC supply connecting port
14.	Service	Safety lock slot
15.	Lock	Safety lock slot

2.2 LED Indicators

Status	Power	Standby
Power not connected	No light	No light
Startup in progress (initialization)	Green	Orange
Power on (In use)	Green	No light
Standby	No light	Orange
Tracking / Framing mode	Green Flickering	Green Flickering
Privacy mode	Orange	No light

2.3 Tally Lamp

The Tally lamp function can be enabled by an RS-232 command. Please refer to the RS-232 command set document

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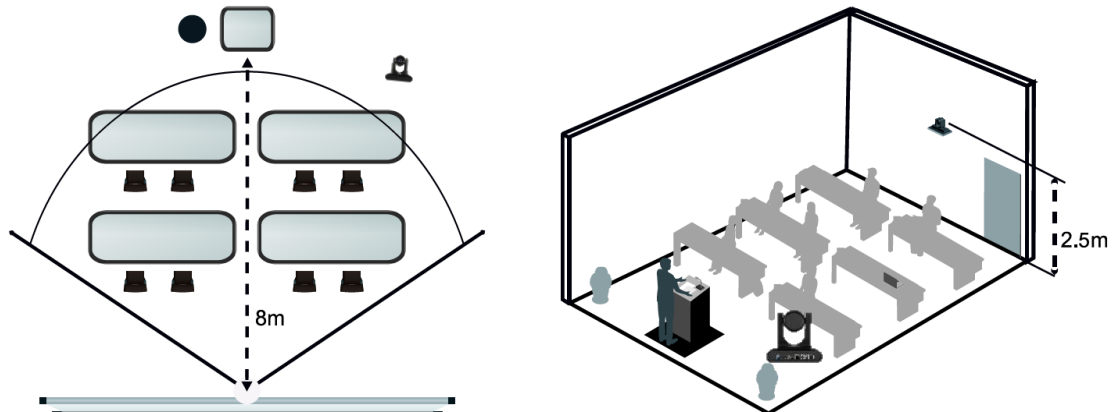# Chapter 3 Installation Instructions

3.1 Scenario

VC-TR61 supports a tracking range of 2-18m

Note *For best tracking results, avoid placing images of people on posters or screens behind the subject.

3.2 Installation Instructions

PTZ installation and connection requires special skills. It is important to securely install the device. Pay attention to your safety and to the safety of those around you during the installation. Ensure the safety of the installation environment. Do not install the device to an unstable ceiling or at a height that may risk injury to people below.

3.2.1 Please ensure installation safety, please do not mount the device on an unstable ceiling or in any location where it may fall, as this could lead to accidents.

3.2.2 Please check that accessories in the box are complete. Please contact the supplier for any shortage, and make sure to keep the accessories in the box.

3.2.3 Please choose an appropriate location for installation of camera in advance. Please determine an installation site according to the following requirements:

(A) Confirm the position for the object to be captured.

(B) Confirm whether the camera is set at a proper distance from light sources

3.2.4 Handling Instructions

▪ Do not hold the camera by its pan/tilt head.

▪ Do not manually rotate the camera head. Improper rotation may result in damage.
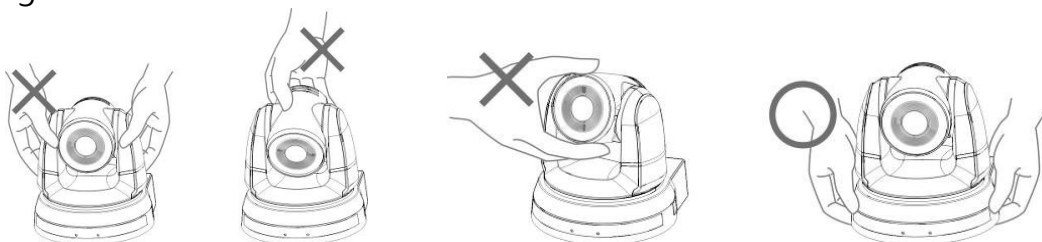
▪ Before installation, confirm the camera orientation relative to the object to be captured.

▪ It is recommended that the camera should be set at a distance of more than 1.5 meters from the object to be captured. Adjust the position to achieve your required shooting angle.

▪ The Camera (including metal plates) weighs approximately 2.7 kg. For ceiling mountain, use a hanger that has obtained UL security approval to prevent the unit from falling down.

▪ Regularly check the stability and strength of the camera installation.

3.2.5 Tilting the Panoramic Lens

The panoramic lens supports three tilt positions: **Up / Normal / Down**

· When the camera is installed at a height above **2 meters**, it is recommended to adjust the angle of the lens.
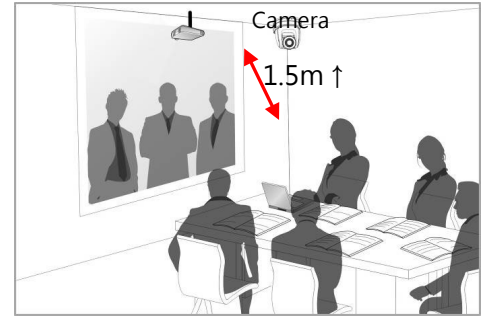
· Upright Installation: Adjust to the **[Down]** position.

· Inverted Installation: Adjust to the **[Up]** position.

· After adjusting the tilt angle, please go to **[Tracking]**> **[Lens Tilt Direction]** and select the corresponding value in the web interface.
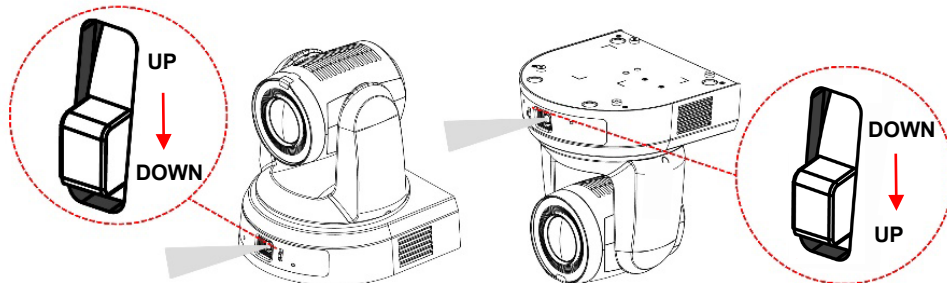
*For inverted installation, please enable the mirror/ flip function.

3.2.6 Installing the camera on the desk

Place the camera on a flat desk to ensure normal operation.
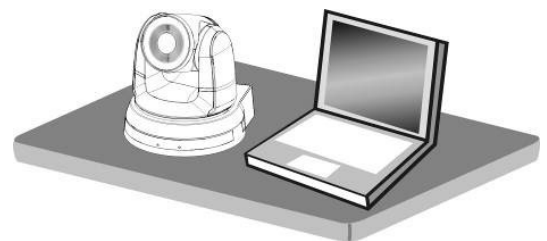
3.2.7 Mounting the camera to the ceiling

(A) Prepare the following items:

▪ Accessories in the box (metal plates A, B, M3 screw silver x 8, black x 2)

▪ 4x screws for locking the ceiling mounted hanger

▪ Drilling, screwdriver and ladder

▪ For dimensions of the camera and metal plate, please refer to Chapter 7 Addendum

(B) Installation steps

1. Fix the metal plate A to the camera base with
2. 4x M3 silver screws
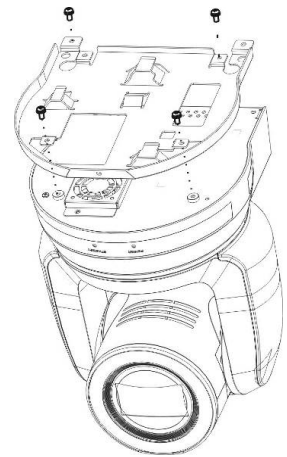
3. Lock the metal plate B on ceiling mounted hanger

※Caution：

▪ Please use a hanger that has obtained UL security approval.

▪ Please ensure space for cable access.

4. Combine metal plate A and metal plate B

(1) Push metal plate A up to the ceiling and then to the right to latch onto metal plate B

(2) Then secure with 2x M3 silver screws and 1x M3 black screw

Black Screw
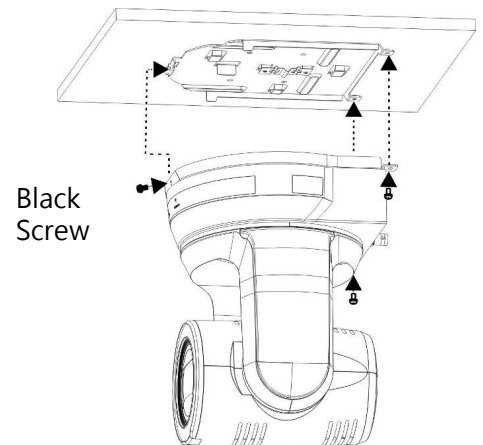
3.2.1 How to remove

1. Remove the connecting cables from the camera
2. Loosen the three screws that fix the metal plates A and B and push to the left to remove the camera
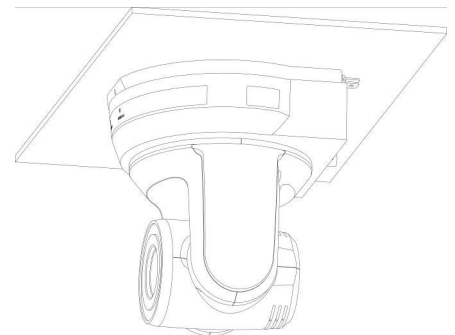
3.   Remove the three screws

3.3 Connection

3.3.1 Connecting devices
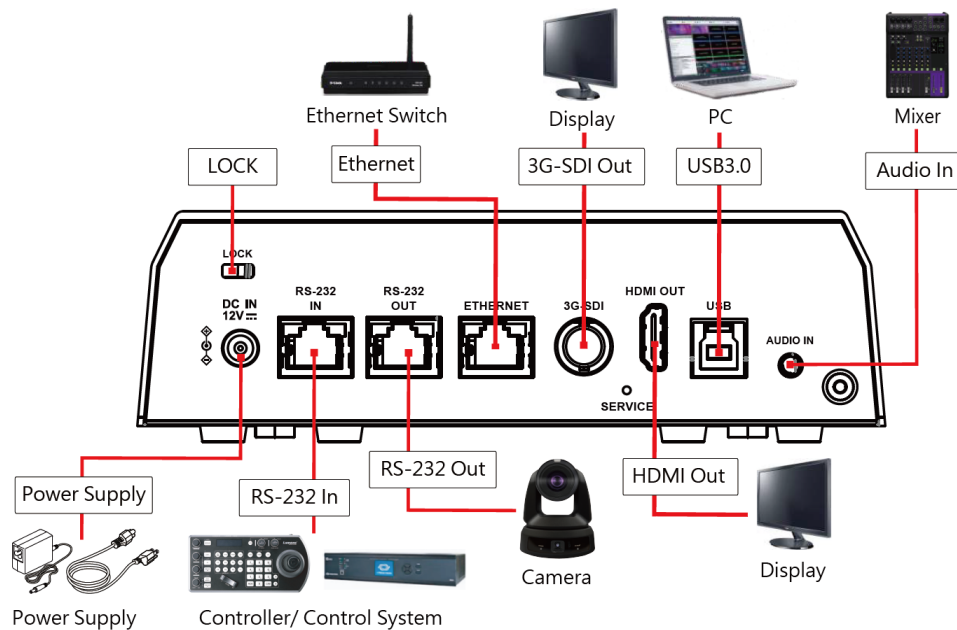
Note Ethernet port supports PoE+ (IEEE802.3at)

3.3.2 RS-232 Pin Definition

Note Daisy Chain for up to 7 connected cameras
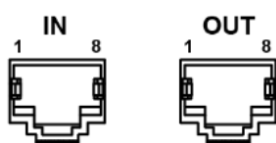
Pin No.	IN	OUT
1	NA	NA
2	NA	NA
3	GND	GND
4	TX	RX
5	RX	TX
6	DTR	DSR
7	NA	NA
8	NA	NA

Chapter 4 Remote Control and Setting Menu

4.1 Remote control
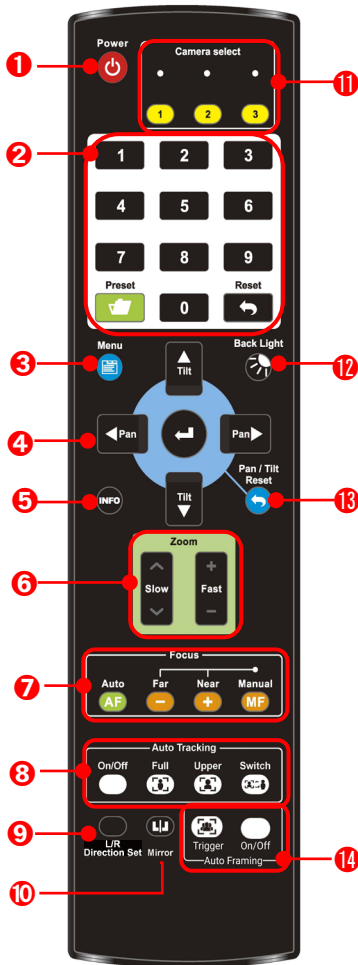
No.	Item	Description
1.	Power	Power on / off
2.	Preset	▪ 0-9: Click to call the preset ▪ Preset: Assign a preset number (0-9) to save the current position data ▪ Reset: Select a preset number (0-9) to clear its position data
3.	Menu	Display OSD menu
4.	Pan/ Tilt/ Enter	▪ Pan / Tilt: Move the camera head ▪ Home / Enter: Go back to Home position / Execute
5.	Info	Status information
6.	Zoom	▪ Fast: high speed zoom ▪ Slow: low speed zoom
7.	Focus	▪ Auto: Auto focus ▪ Manual: Enable Manual Focus ▪ Far/ Near: Adjust the focus in Manual mode
8.	Auto Tracking	▪ On/Off: Enable/Disable Auto Tracking ▪ Full: Frames presenter's full body ▪ Upper: Frames presenter's torso ▪ Switch: Switch target to a different presenter
9.	L/R Direction Set	L/R Direction / Normal
10.	Mirror	Rotate the image (OFF / Mirror / Flip / Rotate)
11.	Camera select	Choose Camera ID 1 - 3
12.	Back Light	Turn on/off back light compensation
13.	Pan/Tilt Reset	Clear the Pan/Tilt setting
14.	Auto Framing	▪ On/Off: Enable/ Disable Auto framing ▪ Trigger: (Not supported in VC-TR61)

4.2 Setting Menu

Press [MENU] on the remote control to call the on-screen menu. Default is indicated in bold.

Layer 1	Layer 2	Layer 3	Description
Exposure	Mode	**Full Auto**/ Shutter Priority/ Iris Priority/ Manual/ White Board	Exposure mode setting
	Exposure Comp	On/ **Off**	Turn on/off Exposure Compensation
	Exposure Comp. Level	-6-**C**-+4	Adjustable after **Exposure Comp.** s activated
	Spot Light	On/ **Off**	Turn on/ off Spot Light
	Spot Light Position	X(0-6)Y(0-4)	Adjustable after **Spot Light** is activated
	Gain Limit	8-**30**dB	Max. limit value of electron gain
	WDR	**Off**/ 1/ 2/ 3	WDR settings
	Anti-Flicker	**50Hz/ 60Hz/ Off**	Activate the anti-flicker function to eliminate flicker from lighting.
	Shutter Speed	1/10000-1/25	Adjustable when the **Exposure mode** is set to **Shutter Priority** or **Manual**
	Iris Level	F1.8-**C**-F11/ Off	Adjustable when the **Exposure mode** is set to **IRIS Priority** or **Manual**
	Gain Level	**0-30dB**	Adjustable when the **Exposure mode** is set to **Manual**
White Balance	Mode	**1.Auto** 2.Indoor 3.Outdoor 4.One Push WB 5.ATW 6.Manual 7.Sodium Lamp	Select the color temperature 1. 4000k - 7000k 2. 3200k 3. 5800k 4. 1700k - 10000k 5. 1700k - 10000k 6. Manual 7. 2800k
	One Push Trigger	**ENTER**	One push trigger
	Manual Red	0-**C**-128	Adjustable when the white balance mode is set to **Manual**
	Manual Blue	0-**C**-128	Adjustable when the white balance mode is set to **Manual**

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Layer 1	Layer 2	Layer 3	Description
Tracking	Type	Auto Tracking/ Auto Framing	
Picture	3D NR	Off / 1-C-7	3D noise reduction
	Image Mode	Default/ Custom	Users can customize the selected image mode
	Gamma	0-C-3	Adjustable when Image Mode set to Custom
	Brightness	0-C-25	Adjustable when Image Mode set to Custom
	Contrast	0-C-25	Adjustable when Image Mode set to Custom
	Saturation	0-C-25	Adjustable when Image Mode set to Custom
	Sharpness	0-C-11	
Pan Tilt Zoom	Pan/Tilt Limit	On/ Off	On/ Off Set angle limit
	Pan Right Limit	0-170	Limit the panning angle (right side)
	Pan Left Limit	-170-0	Limit the panning angle (left side)
	Tilt UP Limit	0-90	Limit the tilt angle (up)
	Tilt Down Limit	-30-0	Limit the tilt angle (down)
	Pan Flip	On/ Off	Reverses the Pan direction
	Tilt Flip	On/ Off	Reverses the Tilt direction
	Preset Speed	5/ 25/ 50/ 80/ 120 deg/sec	Set the robotic and zoom speed of the camera
	PTZ Speed Comp	On/ Off	Enable the zoom speed independent from the robotic speed
	D-Zoom Mode	On/ Off	Set the digital zoom limit
	Limit	2x-8x	Note Digital zoom not supported with: ■ 4K resolution ■ 1080P/ 720P, Stream/ UVC outputs
D-Effect	Mirror	Off/ Mirror/ Flip/ Mirror+Flip	Activate image rotation and/or mirroring
Auto Focus	AF Sensitivity	Low/ Middle/ High	Changes the sensitivity of the auto-focus

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Layer 1	Layer 2	Layer 3	Description
	AF Frame	Center Area/ All Area	Changes the focusing zone to the selected mode ■ Central area: focusing will be performed based on the center ■ Full Frame: focusing will be calculated based on the full screen
	Zoom tracking	On/ Off	Focus mode during lens zooming (It can be set to Manual Focus (MF) mode)
	PTZ Assist	On/ Off	Available when Focus is in Manual Mode Note PTZ Assist is triggered only when the camera has moved in any axis. It will not dynamically respond to changes in the scene.
Ethernet	DHCP	On/ Off	Enable/Disable dynamic host configuration
	IP Address	192.168.100.100	Configurable when DHCP is set to Off
	Subnet mask	255.255.255.0	
	Gateway	192.168.100.254	
Audio	Audio In	Line In	3.5m Line In
	Audio Enable	On/ Off	Turn on/off audio output
	Audio Volume	0-C-10	Volume Setting
	Audio Delay	On/ Off	When the audio is not synchronized with the video, enable this function to set an audio delay time
	Audio Delay Time(ms)	-10--500ms	Set audio delay time
	Encode Sample Rate	48 (AAC)	Set the encode type and sample rate
System	Prompt	On/ Off	Turn on/off the prompt information on the display
	IR Receive	On/ Off	Turn On/off the infrared reception. When off, the remote control will not be able to control the camera. Re-start the camera to re-activate.

Layer 1	Layer 2	Layer 3	Description
	IR Select	1/ 2/ 3	Pair the remote controller with the camera.
	Tally Lamp	On/ **Off**	Enables the camera's tally lamp.
	Tally CMMD Mode	Normal/ **Link**	Set whether the tally lamp is linked with RS232 commands. ■ Normal (Not linked): The tally lamp and mode are set separately. ➢ When the tally lamp is on but the default mode is off, an additional command is required to set the indicator light mode ➢ When the tally lamp is off, setting the mode will not trigger the indicator light ■ Link: ➢ When the tally lamp is on, the default mode is a red light ➢ When the tally lamp is off, setting the mode will turn on the tally lamp.
	Tracking Led Status	On/ **Off**	When enabled, LED on the front panel will flash green while the camera is tracking.
	Language	**English**/ 中文	
	Initial Position	**Last MEM**/ 1st Preset	After turning on the camera, you can select the lens to be returned to **Last MEM** or **1st Preset** Note **1st Preset** =Preset 0
	Motionless Preset	On/ **Off**	The image will freeze when **Preset** is executed. Freeze will be released after the **Preset** move is completed
	Privacy Mode	On/ **Off**	When the camera is turned off via the remote control or software, the lens will automatically turn to the bottom right to ensure the user's privacy
	Protocol	VISCA	Supports VISCA protocol

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| Layer 1	Layer 2	Layer 3	Description
	Baud Rate	<u>9600</u>/38400	Transmission speed of the control signal
	VISCA Address	<u>0</u>-7	The camera ID address can be manually assigned.
	Output Mode	**2160P 59.94**/50/29.97/25 1080p 59.94/50/29.97/25 720p 59.94/50/29.97/25 1080i 59.94/50	Set the output resolution
	Factory Reset	On/ **Off**	Engage factory default settings
Status			Display the current settings information

Chapter 5 Network setting and Web interface
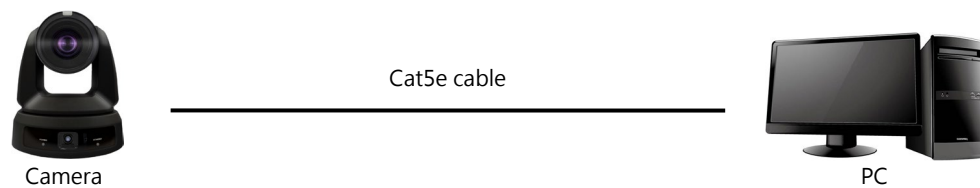
5.1 Connecting Camera to Network

5.1.1 Connection

Two common connection methods are shown below

1. Connect via switch or router

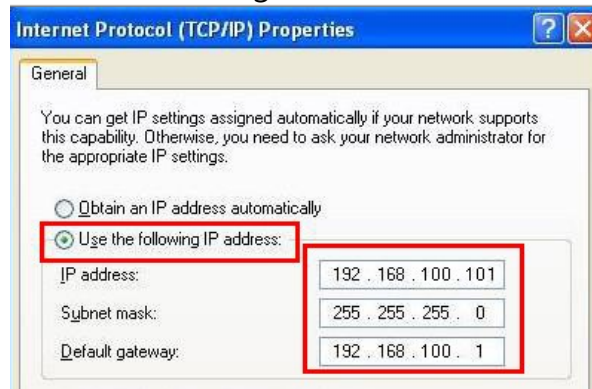| Camera | Cat5e cable | Ethernet Switch | Cat5e cable | PC |
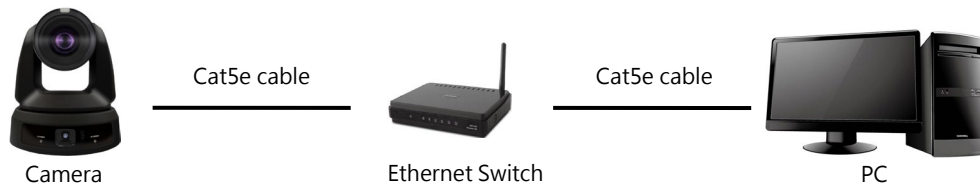
2. Connect directly via an Ethernet cable. The computer's IP address must match the network segment used by the camera.

E.g. The camera's default IP address is 192.168.100.100. The computer's IP address should be set to the same segment, such as 192.168.100.101.

| Camera | Cat5e cable | PC |

■ Modify the PC's network settings

Internet Protocol (TCP/IP) 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:

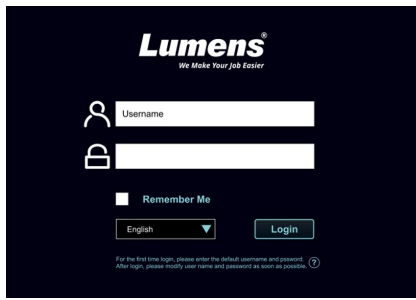| IP address: | 192 . 168 . 100 . 101 |
| Subnet mask: | 255 . 255 . 255 . 0 |
| Default gateway: | 192 . 168 . 100 . 1 |

5.1.2 Use a Browser to view Images

■ Open the browser, and enter the IP address of the camera in the address bar

E.g.: http://192.168.100.100 (default IP address)

■ Enter the Username and Password

Note Please refer to 5.2.11 System-User to change the default password.

Lumens IP Camera
  ■ Account: admin
  ■ Password: 9999

5.1.3 Use an RTSP Player to View Live Images

Free software can be used for RTSP connection, such as VLC, Quick Time or PotPlayer.

RTSP connection address formats are as follows:

■ RTSP Stream 1 =>rtsp://camera IP:8554/hevc
                       rtsp://camera IP:8557/h264

■ RTSP Stream 2 => rtsp://camera IP:8556/h264

■ Panoramic Camera Output => rtsp://camera IP:8553/h264

If password authentication is enabled, the RTSP connection address is as follows:

■ rtsp://Username:Password@VC IP address:8557/stream1(or stream2)

■ To enable password authentication function, please refer to 5.2.9 System-Network

Example:

Open the VLC software, click [Open Network Streaming], and enter the URL:
rtsp://192.168.100.150:8557/h264
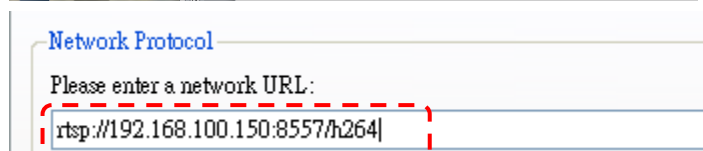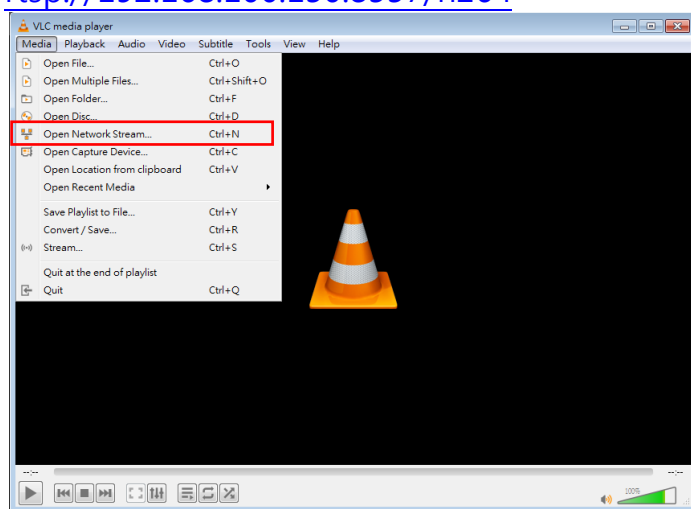
5.2 Web interface functions

5.2.1 Login
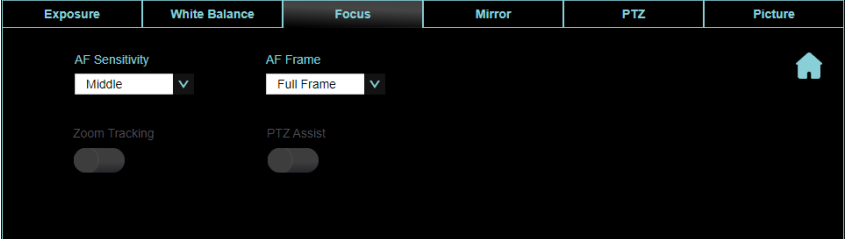
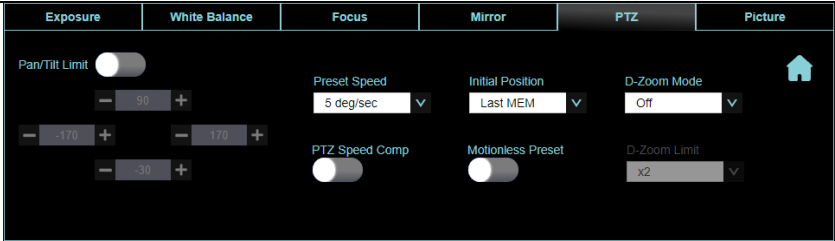| No	Item	Function Descriptions
1	User name	Enter user login credentials (default: admin)
2	Password	Enter user password (default: 9999) Note Please refer to **5.2.11 System-User** to change the default password
3	Remember Me	Save the user name and password. When you log in next time, there is no need to re-enter them
4	Language	Supports English/ Traditional Chinese/ Simplified Chinese
5	Login	Log into the web interface
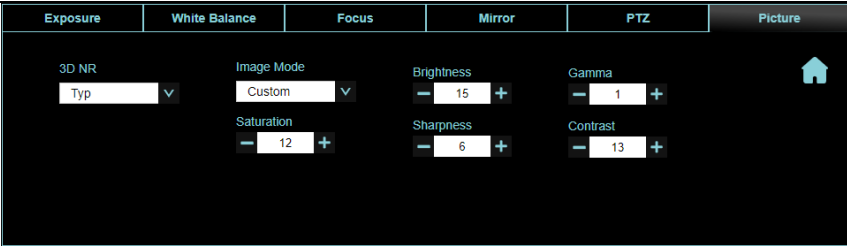
5.2.2 Live View

No	Item	Function Descriptions
1	Camera ID/ Location	Display camera ID/ Location Please refer to 5.2.7 System-**Device**
2	Preview screen	Display the live view of the camera
3	Preset setting	Select the number first and then select Store or Load
4	Pan/Tilt	Adjust the Pan/Tilt position of the camera
5	Zoom	Zoom In/Zoom Out
6	AF/ MF	Switch Auto Focus/ Manual Focus.
7	Pan/ Tilt Speed	Adjust the pan/ tilt speed
8	Zoom speed	Adjust the zoom speed
9	Tracking	Enable/ Disable Auto Tracking/ Auto Framing [Note] Select Auto Tracking or Auto Framing
10	Camera Setting	Please refer to 5.2.3 Live View - **Camera Setting** for related settings

5.2.3 Live View - Camera Setting

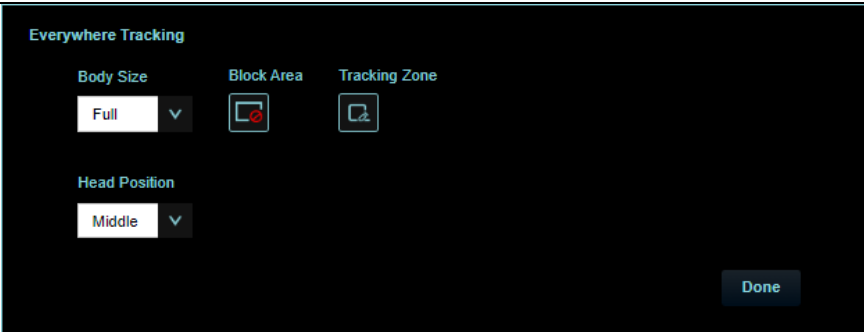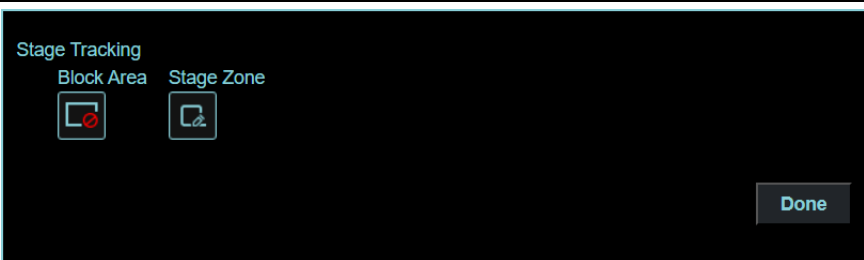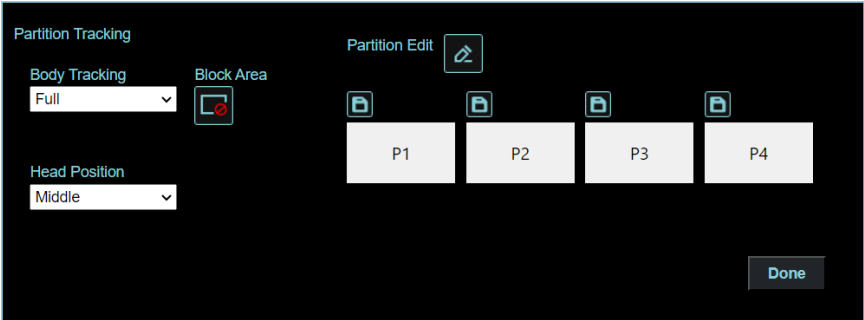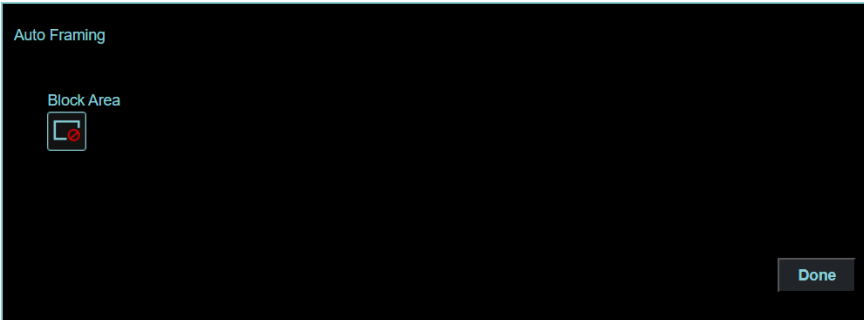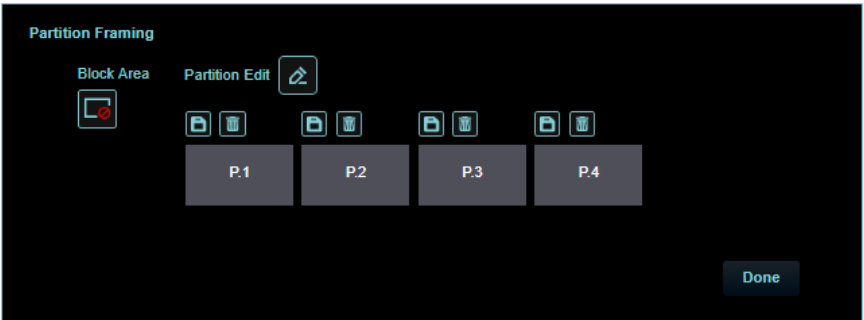| No	Item	Descriptions
1.	Exposure	■ Mode: Exposure mode (Full Auto/ Shutter Pri/ Iris Pri/ Manual/ White Board) ■ WDR: set the level to change the dynamic range of the picture ■ Exposure Comp. Level: select exposure compensation level ■ Gain Level: adjust gain level (adjustable under "Manual"mode.) ■ Iris Level: adjust the aperture (adjustable under "Manual" or "Iris Priority" mode) ■ Shutter Speed: adjust the shutter speed (adjustable under "Manual" or "Shutter Priority" mode) ■ Anti-Flicker: Activate to eliminate flicker from lighting
2.	White Balance	 ■ Mode: Select the color temperature ■ One Push: Executes a one-time color temperature adjustment (configurable in [One Push WB] mode) ■ Manual Red/Blue: Manually adjust red/blue color temperature
3.	Focus	 ■ AF Sensitivity: change the sensitivity of the auto focus. ■ AF Frame: Changes the focusing zone to the selected mode. ■ Zoom Tracking: The focus mode during lens zooming (can be set in "Manual") ■ PTZ Assist: Available when Focus is in Manual Mode 　Note　PTZ Assist is triggered only when the camera has moved in any axis. It will not dynamically respond to changes in the scene.

|		
4.	Mirror	 ■ Mirror: Set image mirroring ■ Flip: Set the mode at which the image is turned
5.	Pan Tilt Zoom (PTZ)	 ■ Pan/Tilt Limit: Enable to set the pan/tilt limit ■ Pan/Tilt Flip: Set On to reverse the Pan/Tilt direction. ■ Preset Speed: Set the rotation speed of the robotic head when a Preset is executed ■ Initial Position: Set the camera lens to return to the **Last MEM** or the **1st Preset** after POWER ON Note 1st **Preset** = Preset 0 ■ D-Zoom Mode: Enable/ Disable digital zoom ■ D-Zoom Limit: Set the digital zoom limit Note 4K resolution does not support digital zoom ■ PTZ Speed Comp: The Pan/Tilt robotic speed will vary according to the zoom position ■ Motionless Preset: Image will freeze when a preset is activated. Freeze will be released after a Preset camera move has been completed
6.	Picture	 ■ 3D noise reduction: 3D noise reduction settings ■ Image Mode: Users can customize image parameters ■ Brightness: Adjustable when **Image Mode** is set to **Custom** ■ Gamma: Adjustable when **Image Mode** is set to **Custom** ■ Saturation: Adjustable when **Image Mode** is set to **Custom** ■ Sharpness: Adjusts the sharpness level ■ Contrast: Adjustable when **Image Mode** is set to **Custom**
7.	PTZ Control	Go back to PTZ Control page

5.2.4 Tracking

No	Item	Descriptions
1.	Camera ID/Location	Display camera ID/ location. Please refer to **5.2.7 System-Device**
2.	PTZ preview	Display the live view of the main lens.
3.	Panoramic preview	Display the live view of the panoramic lens
4.	Lens Tilt Direction	Set the tilt position for the panoramic lens Note Ensure the setting matches the actual installed tilt angle of the camera. Please refer to **3.2.5 Tilting the Panoramic Lens**
5.	People Count	Display the number of people visible to the panoramic camera
6.	Tracking	Enable/ Disable Auto Tracking/ Auto Framing Note ▪ Select Auto Tracking or Auto Framing ▪ Not applicable with [Center Stage] mode
7.	Zoom	Zoom In/Zoom Out image
8.	Pan/ Tilt	Adjust the Pan/Tilt of the camera Note PTZ setting is not supported when tracking is enabled
9.	Take turn	Switch the target Note Applicable in [Auto Tracking] mode only
10.	Setting Area	Display the configured tracking and blocked areas in the panoramic preview screen. Note Applicable in [Auto Tracking] mode only
11.	Designated ID	Display individuals the camera has detected Target ID can be switched by clicking on a subject with the mouse Note Not applicable in [Center Stage] mode
12.	Tracking Mode	Set the Tracking Mode ▪ Voice Tracking: Voice Tracking ▪ Auto Tracking: Everywhere Tracking/ Stage Tracking/ Partition Tracking ▪ Center Stage

		▪ Auto Framing: Auto Framing/ Partition Framing
13.	Sensitivity	Set tracking sensitivity
14.	Tracking Speed	Set tracking speed
15.	Target Lost Time	Set a delay to take action after a tracking target is lost
16.	Target Lost Action	Set the action after a tracking target is lost
17.	Auto-trigger zone	After a person enters the area for 3 seconds, tracking/ framing will be triggered Note ▪ [Tracking Mode]> [Center Stage] is not supported. ▪ Enabling Auto Tracking/ Auto Framing will disable the [Auto-trigger zone] function ▪ Stopping Auto Tracking/ Auto Framing will reactivate the [Auto-trigger zone] function
18.	Tracking Mode Setting	Advanced settings for tracking
18.1	Everywhere tracking	 ■ Body Size: Set Full/ Half Body ■ Head Position: Set the head position of the person in the screen ■ Block Area: Click the left mouse button to draw a frame on the panoramic view to set a blocked area ■ Tracking Zone: Click the left mouse button to draw a frame on the panoramic view to set a designated tracking area
18.2	Stage Tracking	 ■ Body Size: Set Full/ Half Body ■ Head Position: Set the head position of the person in the screen ■ Block Area: Click the left mouse button to draw a frame on the panoramic view to set a block area ■ Tracking Zone: Click the left mouse button to draw a frame on the panoramic view to set a designated tracking area

18.3	Partition Tracking	Set Partition Tracking. Up to 4 zones can be set When a person enters the specific zone, the camera switches to the partition. Tracking will not be performed within the zone. Outside the zone, everywhere tracking will be active. ■ Head Position: Set the head position of the person on the screen ■ Block Area: Click into the Edit mode, frame by holding the left mouse button and set the blocked area ■ Block Area: Click the left mouse button to draw a frame on the panoramic view to set a blocked area ■ Partition Edit: Edit and save partition positions
18.4	Auto Framing	 ■ Block Area: Click to enter the Edit mode. Frame by holding the left mouse button and set the block area
18.5	Partition Framing	 ■ Block Area: Click the left mouse button to draw a frame on the panoramic view to set a block area ■ Partition Edit: Edit and save partition positions

5.2.5 Audio
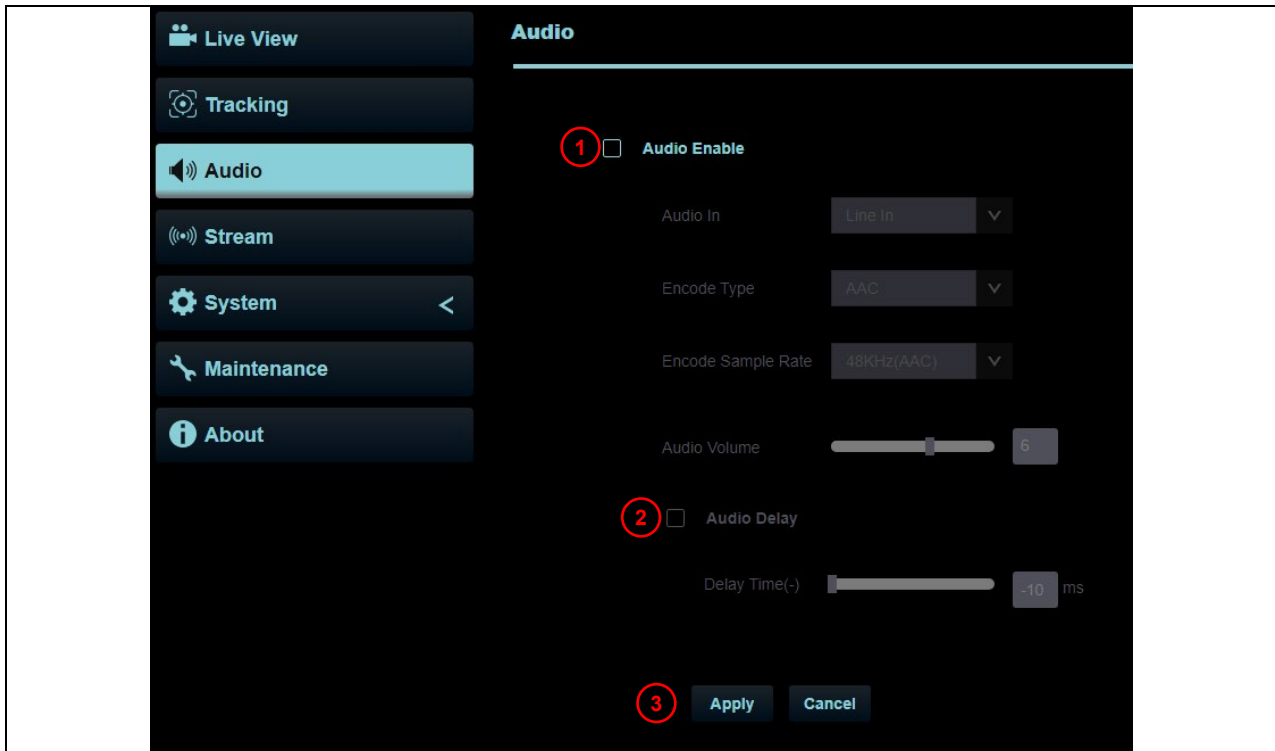
No	Item	Descriptions
1	Audio Enable	Select to enable Audio function ■ Audio In: Set Line In ■ Encode type: AAC ■ Encode sample rate: 48KHz (AAC) ■ Volume: Adjust Audio Volume
2	Audio Delay	Check to set the audio delay time (10 - -500 ms)
3	Apply/ Cancel	Apply/ Cancel Audio Settings

5.2.6 Stream

No	Item	Descriptions
1	Stream	Supports 2 streams plus the panoramic live stream
2	Stream settings	Please refer to **5.2.6.1 Stream Settings**.
3	RTSP	Select to enable RTSP ■ Enable/ Disable Multicast 　Multicast is recommended when the stream is watched by more than 4 viewers ■ Enable/Disable Password Authentication 　➢ Please refer to **5.1.3 Using RTSP Player to View the Images** for the connection format 　➢ The username/ password is the same as the web login password of the camera. Refer to **5.2.11 System Settings - User** to add/modify account information
4	RTMP/ RTMPS	Use the RTMP URL provided by the RTMP service platform to publish the camera live view For YouTube streaming, refer to **5.2.5 Audio** to turn on the audio function
5	SRT	■ Check to enable and set SRT streaming 　After the SRT streaming is opened, it will be connected automatically upon camera startup ■ The port number must be set in the range above 1024 with a

		maximum value of 65535
		Note The following ports are used by the camera. Setting the ports may result in connection issues. 8554, 8556, 8557, 8080, 9090, 1935 ■ Latency can be set between 20-8000 microseconds. (Default is 120 microseconds

5.2.6.1 Streaming settings

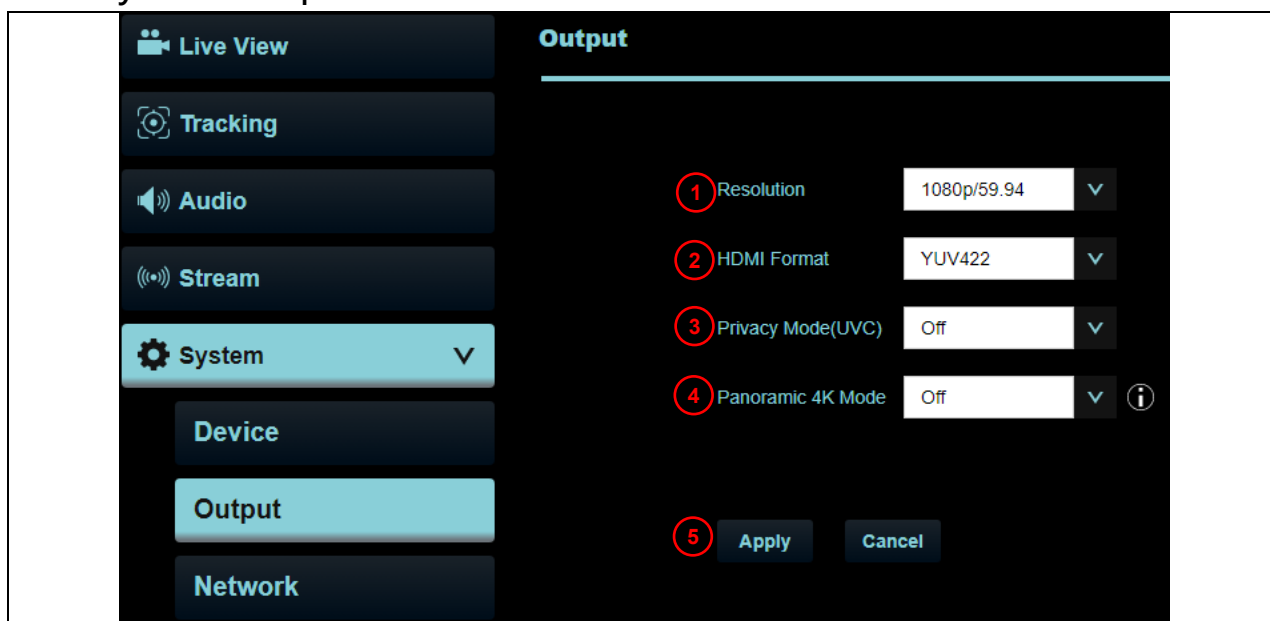| Function		Stream 1	Stream 2
Encode Format		HEVC/ H.264	H.264
Resolution		4K/ 1080p/ 720p	720p
Bit rate	Bit rate	2,000-20,000	2,000-20,000
	Default	7,000	3,000
Rate Control		CBR / VBR	
Frame Rate/ Group of Pictures		Setting according to the supported resolution	

5.2.7 System - Device

Descriptions
Edit camera ID/ Location ■ Camera ID: Supports 1 - 32 characters ■ Location: Supports 1 - 30 characters ■ Supports English, Chinese and numbers. Special symbols such as "/" and "space" cannot be used Note Modifying this field will also update the ONVIF device name/location.

5.2.8 System - Output

No	Item	Descriptions
1	Resolution	Set the resolution of the camera Note After changing resolution, the camera will restart. The browser will need to be refreshed
2	HDMI Format	Supporting YUV422/ RGB
3	Privacy Mode (UVC)	After the privacy mode is enabled, when the camera is turned off via the remote control or software, the lens will automatically turn to the bottom right to ensure the user's privacy
4	Panoramic 4K Mode	Supports 4K output Note ■ This mode is available when the system resolution is set to 4K at 60/30fps ■ UVC is limited to 720p when Panoramic 4K mode is selected ■ After changing resolution, the camera will restart. The browser will need to be refreshed
5	Apply/ Cancel	Apply/ Cancel Setting

5.2.9 System - Network

No	Item	Descriptions
1	DHCP	Camera network settings. Configurable when DHCP is set to Off
2	HTTP Port	Set HTTP port. The default Port value is 80
3	HTTPS Port	Set HTTPS port. The default Port value is 81
4	Apply/ Cancel	Apply/ Cancel Setting

5.2.10   System - Date & Time

Description
Display the current camera/PC date/time, and set the display format. Manually set [Time Settings], Date & Time or synchronize with your PC.

5.2.11 System - User

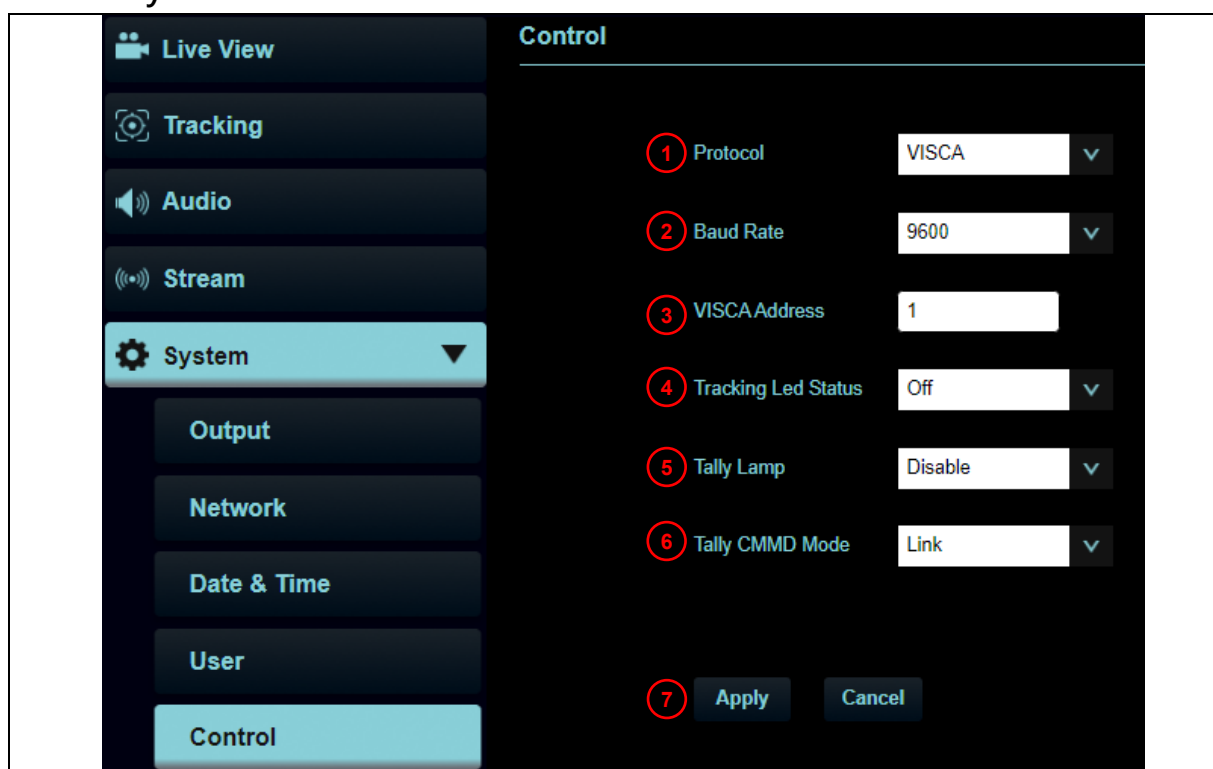| Description |
| --- |
| Add/Modify/Delete user account |

■ User name and password supports 4 - 32 characters
■ Use uppercase, lowercase letters or numbers. Special symbols cannot be used
■ Account permissions:

User Type	Admin	Operator	Viewer
Live View	V	V	V
Settings	V	V	X
Account management	V	X	X

Note Performing a factory reset will clear all user data.

5.2.12 System - Control

No	Item	Function Descriptions
1	Protocol	Supports VISCA protocol
2	Baud Rate	Select the transmission speed of the control signals
3	VISCA address	The camera ID address 0 - 7 can be assigned
4	Tracking LED status	When enabled, the LED on the front panel will flash green during tracking
5	Tally Lamp	Enable/ disable the tally lamp
6	Tally CMMD Mode	Set whether the tally lamp is linked with RS232 commands ▪ Normal (Not linked): The tally lamp and mode are set separately ➤ When the tally lamp is on but the default mode is off, an additional command is required to set the indicator light mode ➤ When the tally lamp is off, setting the mode will not trigger the indicator light ▪ Link: ➤ When the tally lamp is on, the default mode is red light ➤ When the tally lamp is off, setting the mode will turn on the tally lamp.
7	Apply/ Cancel	Apply/ Cancel Setting

5.2.13 Maintenance
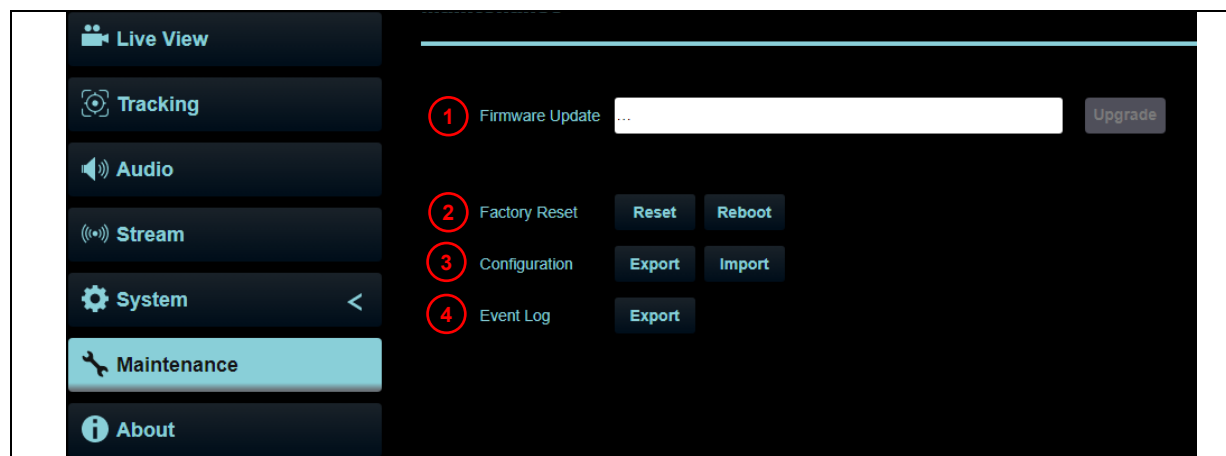
No	Item	Descriptions
1	Firmware Update	Click [....] to select the firmware file and click [Upgrade] to start updating Note ▪ The update process takes 2-3 minutes ▪ Do not operate or turn off the power of the device during the update to avoid firmware failure
2	Factory Reset	▪ Reset all configurations to default settings ▪ Reboot the camera
3	Configuration	Save parameters as a Profile. Users can share camera setup parameters
4	Event Log	If the camera operates abnormally, please export event log and provide it to Lumens for investigation

5.2.14 About
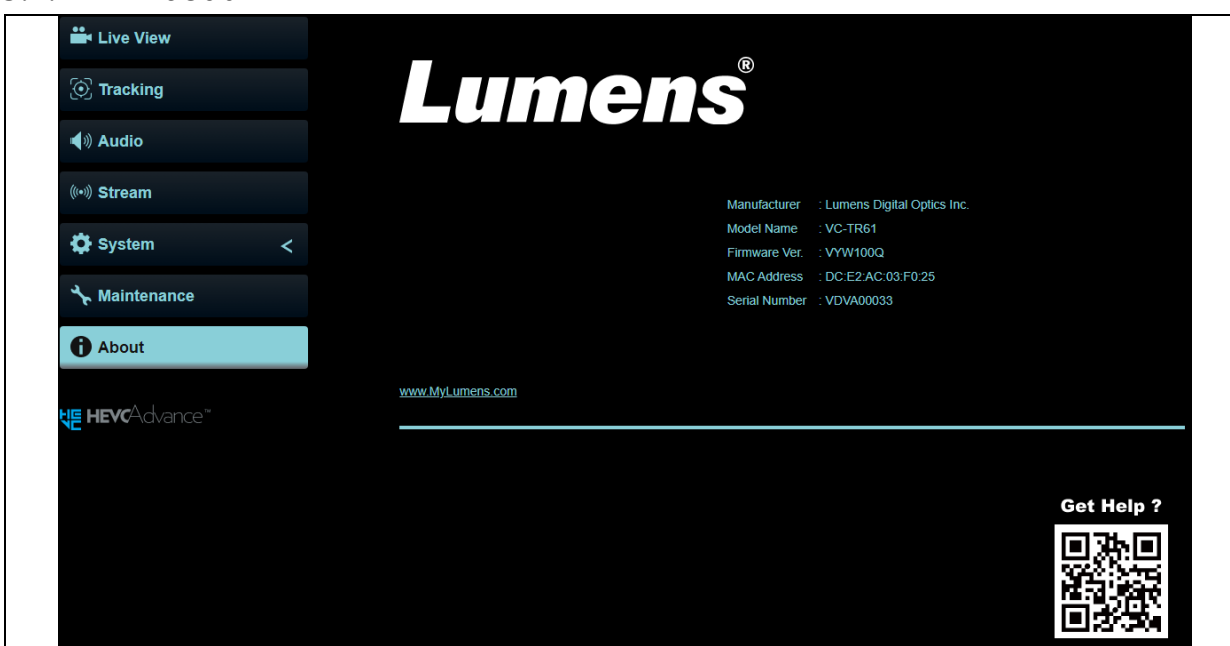
Description
Display the firmware version, serial number, and other related information. For technical support, please scan the QR code at the bottom right.

Chapter 6 Troubleshooting

This chapter describes problems you may encounter while using VC-TR61. If you have questions, please refer to related chapters and follow all the suggested solutions.
If the problem still occurs, please contact your local distributor or Lumens.

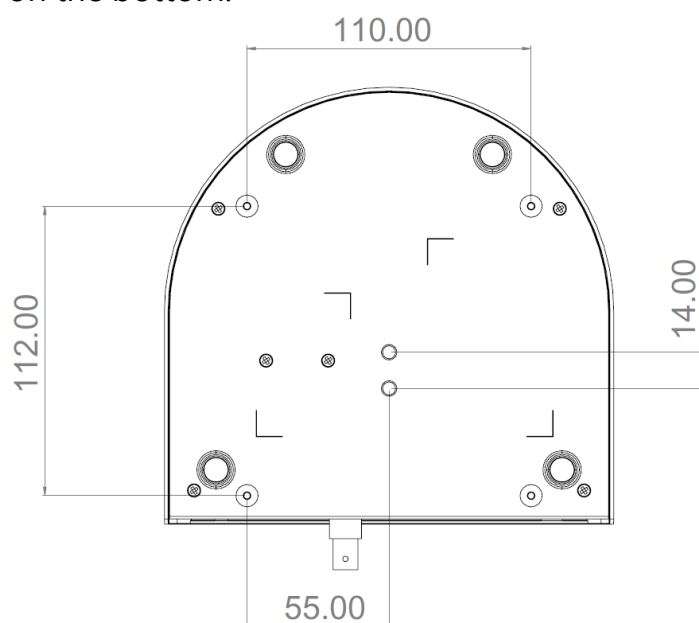| No.	Problems	Solutions
1.	**No power to the device**	1. Make sure you have plugged in the power cord 2. When using a PoE connection, ensure that the power supply supports PoE+ (IEEE802.3at)
2.	**There is no image output from camera**	1. Check the power supply or PoE supply functions 2. Confirm whether the camera resolution can be used with the connected display ▪ If the camera is set to 4K resolution, output, confirm the display supports 4K output 3. Replace the cable and make sure it's not faulty
3.	**Camera image is severely delayed**	Use 60/50 fps rather than 25/30 fps signals
4.	**RS-232 cannot be controlled**	1. Confirm the connection is correct (RS-232 In/ Out) 2. Please make sure the Baud rate setting is the same as the control device
5.	**ONVIF software cannot discover the camera**	Please make sure that [System]> [Device]> [Camera ID]/ [Location] in the web page uses only English letters or numbers. The ONVIF software cannot find the camera if you use special symbols or space
6.	**The camera does not save relevant parameters (PTZ, AWB ...) after reboot**	Please make sure if the [Initial Position] is set to [Last MEM] from the setting menu or web page ▪ OSD Menu: [System]> [Initial Position] ▪ Web page: [Live View]> [Setting⚙]> [PTZ]> [Initial Position]
7.	**How to log into the webpage if you have forgotten the password**	Please contact your local distributor or Lumens technical support

Chapter 7 Addendum

7.2 Camera Size

- Length x Width x Height: 174 x 186.65x 197.11mm
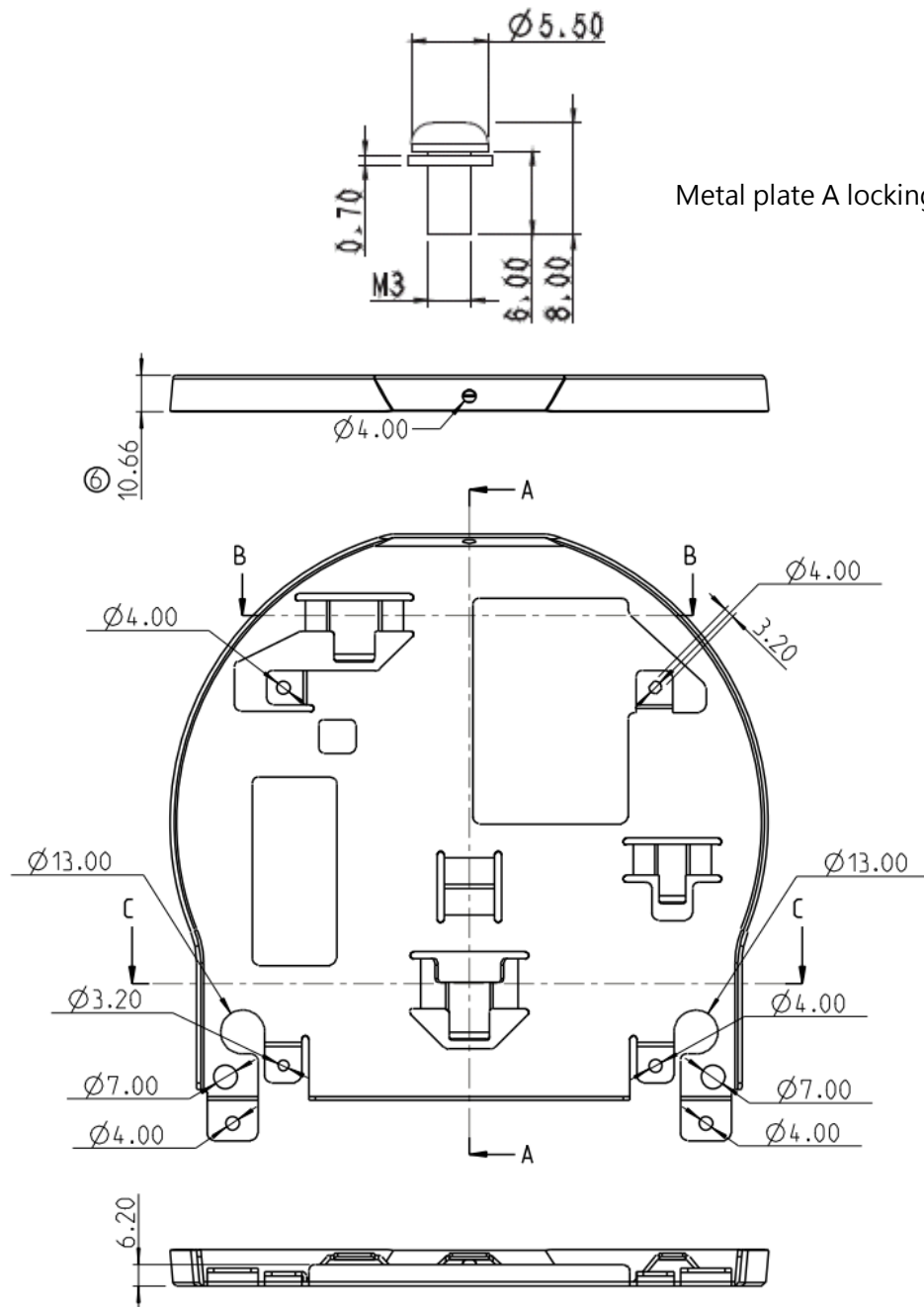
- Weight: 2.2Kg
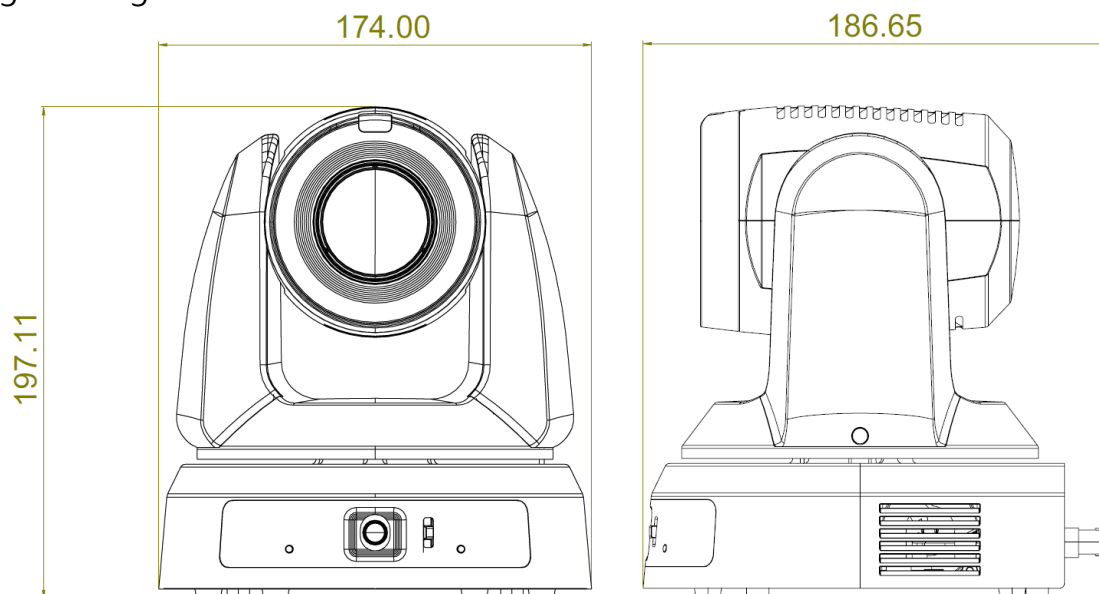
7.3 Dimensions of the base

The camera can be mounted on a 1/4" -20 UNC PTZ tripod head by using the locking holes on the bottom.
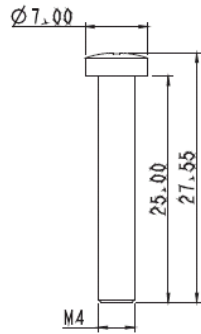

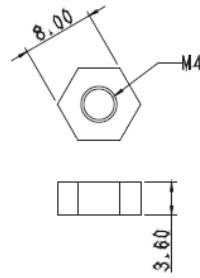## 7.4 Metal Plate diagram

(1) Metal plate A - camera side

Ø5.50

M3

0.70

6.00

8.00

Metal plate A locking screw

Ø4.00

⑥ 10.66

A

B   B

Ø4.00   Ø4.00

3.20

Ø13.00   Ø13.00

C   C

Ø3.20   Ø4.00

Ø7.00   Ø7.00

Ø4.00   Ø4.00

A

6.20

Metal plate A - Camera side

(2) Metal plate B - ceiling side

Metal plate B locking screw

Metal plate B locking bolt

M3 threaded hole

M3 threaded hole

4-Ø4.50

M3 threaded hole
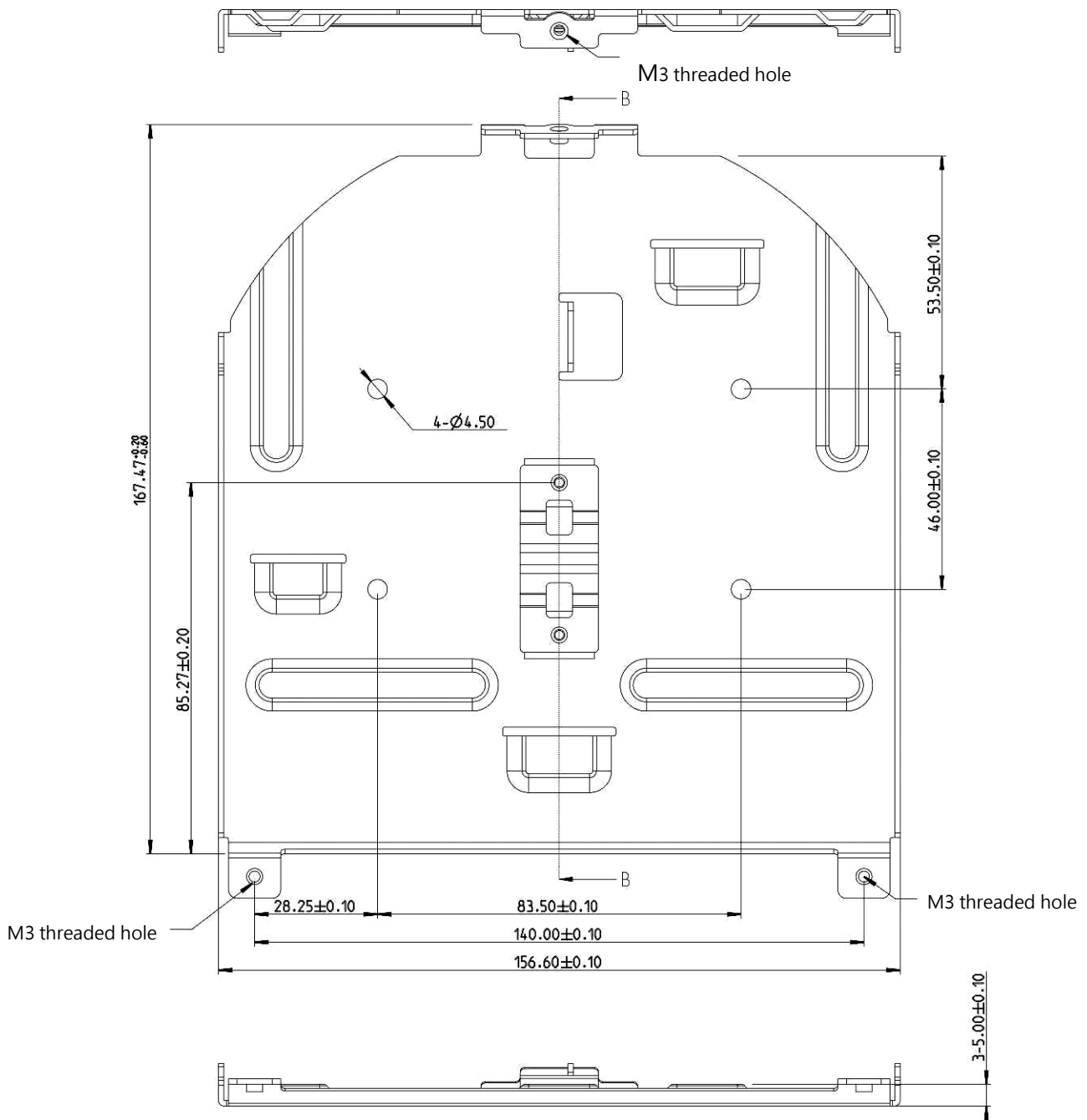
Metal plate B - ceiling side

Chapter 8 Safety Instructions

Always follow these safety instructions when setting up and using PTZ Video Camera:

1 Operation

1.1 Please use the product in the recommended operating environment, away from water or source of heat

1.2 Do not place the product on an uneven surface.

1.3 Ensure the power plug is free of dust prior to usage. Do not insert the product's power plug into a multiplug to avoid the risk of fire.

1.4 Do not block the slots and openings in the case of the product. They provide ventilation and prevent the product from overheating.

1.5 Do not open or remove covers. It may expose you to dangerous voltages and other hazards. Refer all servicing to licensed service personnel.

1.6 Unplug the product from the wall outlet and refer servicing to licensed service personnel when the following situations happen:
- If the USB port becomes damaged or frayed.
- If liquid is spilled into the product or the product has been exposed to rain or water.

2 Installation

2.1 Use a mount with UL or CE safety certifications. Only technical personnel approved by your sales agent should install the device.

2.2 Storage

2.3 Do not place the product where the cables can be stepped on as this may result in damage to the lead or the plug.

2.4 Unplug the product during thunderstorms or if it is not going to be used for an extended period.

2.5 Do not place the product or accessories on top of vibrating equipment or heated objects.

3 Cleaning

3.1 Disconnect all the cables prior to cleaning. Wipe the surface with a dry cloth. Do not use alcohol or solvents for cleaning.

4 Batteries (for products or accessories with batteries)

4.1 When replacing batteries, please only use the same type of batteries.

4.2 When disposing of batteries or products, please adhere to the relevant instructions in your country or region for disposing of batteries or products.

- **Precautions**

⚡	This symbol indicates that this equipment may contain dangerous voltage which could cause electric shock. Do not remove the cover (or back). No user-serviceable parts inside. Refer servicing to licensed service personnel.	⚠	This symbol indicates that there are important operating and maintenance instructions in this User Manual with this unit.

- **FCC Warning**

This equipment 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 when the equipment is operated in a commercial environment.

Notice :

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment 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 when the equipment is operated in a commercial environment.

Lumens®

- **IC Warning**

  This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

  Cet appareil numerique respecte les limites de bruits radioelectriques applicables aux appareils numeriques de Classe A prescrites dans la norme sur le material brouilleur: "Appareils Numeriques," NMB-003 edictee par l'Industrie.

- **EN55032 CE Warning**

  Operation of this equipment in a residential environment could cause radio interference.
  Warning: Operation of this equipment in a residential environment may cause radio interference

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