HDC-713

HD Camera

Installation Guide

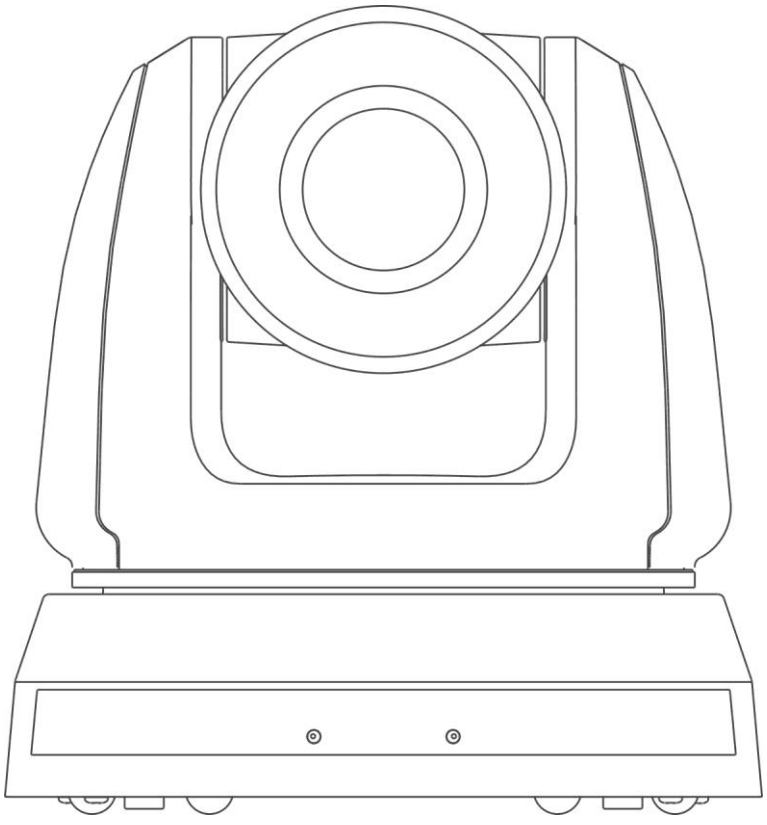


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Chapter 1 Safety Instructions

Please use the product following the safety instructions below:

1 **Operation**

1.1 Please use the product in the recommended operating environment.

1.2 Do not place Light Engine in tilted position.

1.3 Do not place the product on an unstable trolley, stand or table.

1.4 Do not use this product near water or source of heat.

1.5 Use attachments only as recommended.

1.6 Use the type of power source indicated on the HD Camera. If you are not sure of the type of power available, consult your dealer or local electricity company for advice.

1.7 Always take the following precautions when handling the plug. Failure to do so may result in sparks or fire.

- Ensure the plug is free of dust before inserting it into a socket.
- Ensure that the plug is inserted into the socket securely.

1.8 Do not overload wall sockets, extension cords or multi-way plug boards to avoid potential risks.

1.9 Do not block slots and openings in the case of this product as poor ventilation may lead to overheating of this product.

1.10 Except as specifically instructed in this User Manual, do not attempt to open or remove covers by yourself. It may expose you to electric shock or other hazards. Refer all servicing to licensed service personnel.

1.11 Unplug this product from the wall outlet and refer servicing to licensed service personnel when the following situations happen:

- If the power cords are damaged or frayed.
- If liquid is spilled into the HD Camera or the HD Camera has been exposed to rain or water.

2 **Installation**

2.1 For security considerations, please make sure the standard hanging rack you bought is in line with UL or CE safety approbations and installed by technician personnel approved by agents.

3 **Storage**

3.1 Do not place the HD Camera where the cord can be stepped on as this may result in fraying or damage to the lead or the plug.

3.2 Never push objects of any kind through cabinet slots. Never allow liquid of any kind to spill into the HD Camera.

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

3.4 Do not place this product or accessories on top of vibrating equipment or heated objects.

4 **Cleaning**

4.1 Unplug all the cables before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.

5 **Remote control (if the accessories are equipped with remote control)**

5.1 Using an incorrect battery type in the remote control may result in breakdown. Follow local instructions on how to dispose of used batteries.

■ Precautions

Warning: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

If HD Camera will not be used for an extended time, unplug it from the power socket.

<table>
<tr><td colspan="4"> Note
Risk of Electric Shock
Please do not open it by yourself. </td></tr>
<tr><td colspan="4">Caution: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to licensed service personnel.</td></tr>
<tr><td></td><td>This symbol indicates that this equipment may contain dangerous voltage which</td><td></td><td>This symbol indicates that there are important operating and maintenance</td></tr>
</table>

	could cause electric shock.		instructions in this User Manual with this unit.

■ FCC Warning

This HD Camera has been tested and found to comply with the limits for a Class A digital device, pursuant to Article 15-J of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

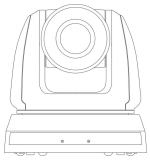
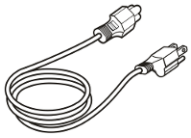
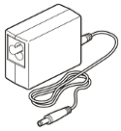
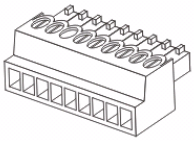
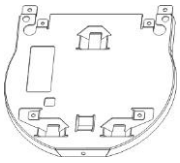
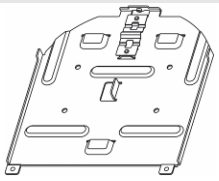
This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

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 Radiation) Warning

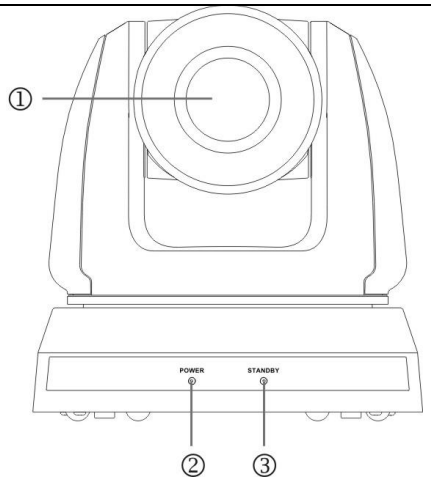
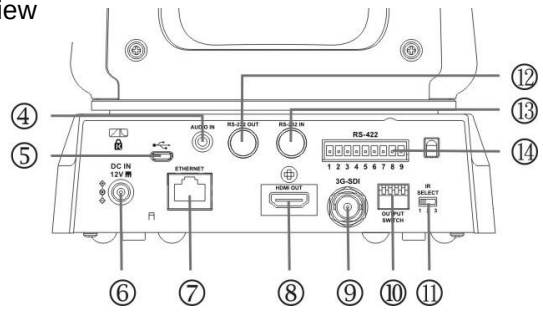
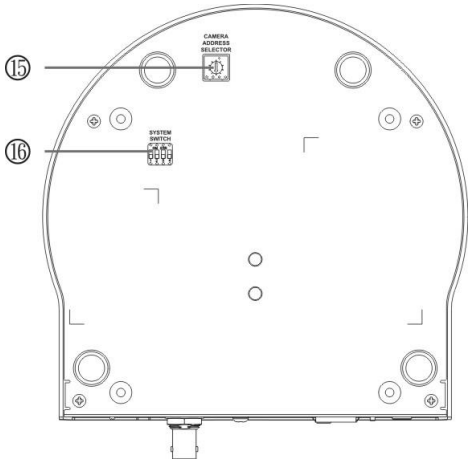
Operation of this equipment in a residential environment could cause radio interference.

Chapter 2 Package Contents

HDC-713	Instruction for installation	Remote Control
		
Power Cord	**Power Adapter**	**RS-422 Connector**
 Appearance may vary depending on country/region		
Metal Plate A	**Metal Plate B**	**M3 Screws**
		

Chapter 3 Product Overview

3.1 Overview

<table>
<tr><td>Front View

</td><td>1. Camera lens</td></tr>
<tr><td rowspan="0"></td><td>2. Power LED indicator</td></tr>
<tr><td></td><td>3. Standby LED indicator</td></tr>
<tr><td></td><td>4. Audio In</td></tr>
<tr><td></td><td>5. USB port (for FW update)</td></tr>
<tr><td>Back View

</td><td>6. Power input</td></tr>
<tr><td></td><td>7. Network port (supporting IEEE 802.3at PoE+ power)</td></tr>
<tr><td></td><td>8. HDMI Output</td></tr>
<tr><td></td><td>9. 3G-SDI</td></tr>
<tr><td></td><td>10.OUTPUT Switch</td></tr>
<tr><td>Bottom

</td><td>11.IR SELECT</td></tr>
<tr><td></td><td>12.RS-232 output</td></tr>
<tr><td></td><td>13.RS-232 input</td></tr>
<tr><td></td><td>14.RS-422 Connection</td></tr>
<tr><td></td><td>15.Camera Address Selectors</td></tr>
<tr><td></td><td>16.SYSTEM Switch</td></tr>
</table>

3.2 Description of LED indicator

Status	Power	Standby
Startup in progress	Green light	Orange light
In use	Green light	No indicator
In standby mode	No indicator	Orange light
Tally mode	Red light	Red light

Chapter 4 Instruction for installation

4.1 Preparation before installation

Installation and connection of HDC-713 HD camera requires special skills. To install by yourself, please follow necessary steps, ensure steady and tight installation of the device, and pay attention to your safety to avoid any accident.

4.1.1 **Ensure the safety of the installation environment. Please do not install the device on unstable ceiling or in a place where the device is in danger of falling to avoid any accident.**

4.1.2 **Please check whether accessories in the box are complete or not. Please contact the supplier for any shortage, and make sure to keep the accessories in the box intact.**

4.1.3 **Please choose a proper place for installation of HDC-713 in advance. Please determine an installation place according to the following requirements**

4.1.1.1 Confirm the position for the object to be captured.

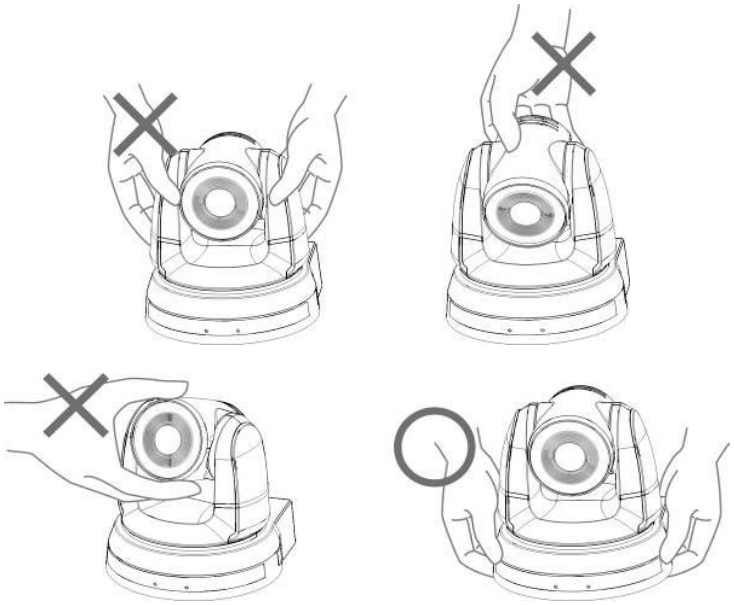
4.1.1.2 Confirm whether the HDC-713 is set at a proper distance from other light sources.

4.2 Instruction for installation

4.2.1 I would like to install HDC-713 on the desk

4.2.1.1 Precautions for installation

- ◆ Please install the machine on a flat desk
- ◆ Do not grab the camera head by hand when handling the device
- ◆ Do not rotate the camera head by hand. Improper rotation may result in breakdown of the camera

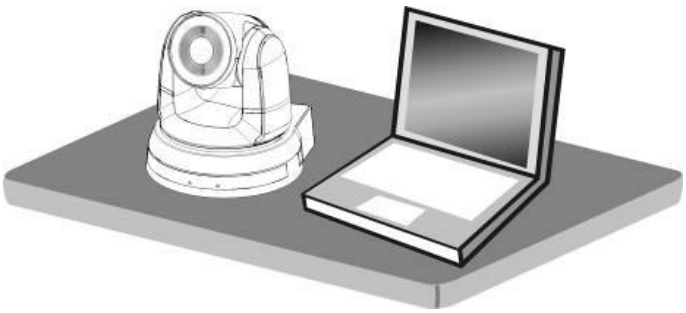


4.2.1.2 Installation steps

1. Please adjust DIP switch at first prior to installation

<Remark> Please refer to Chapter 7 DIP Switch Setting for the relevant descriptions on DIP switch.

2. Place the camera on a flat desk directly to ensure the normal vertical and horizontal operation of the machine



4.2.2 I would like to install HDC-713 on the ceiling

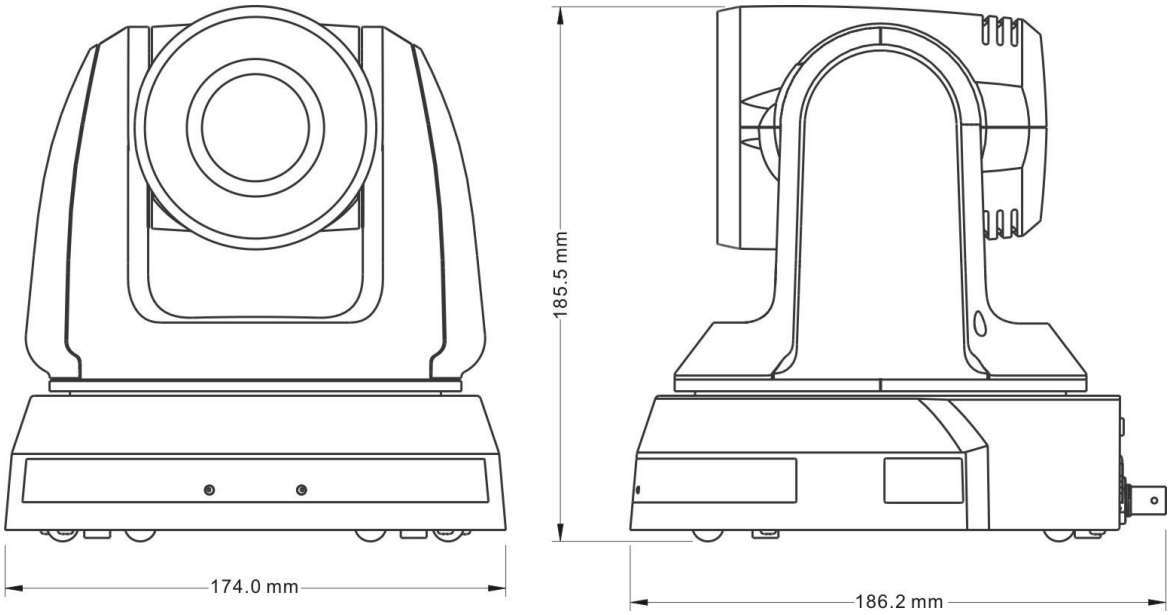
4.2.2.1 Prepare for the parts and equipment required during the installation

1. Accessories of HDC-713 in the box (metal plates A,B, M3 screw silver x 8, black x 2)
2. Screw for locking on ceiling mounted hanger x 4
3. Drilling machine, screw driver, ladder

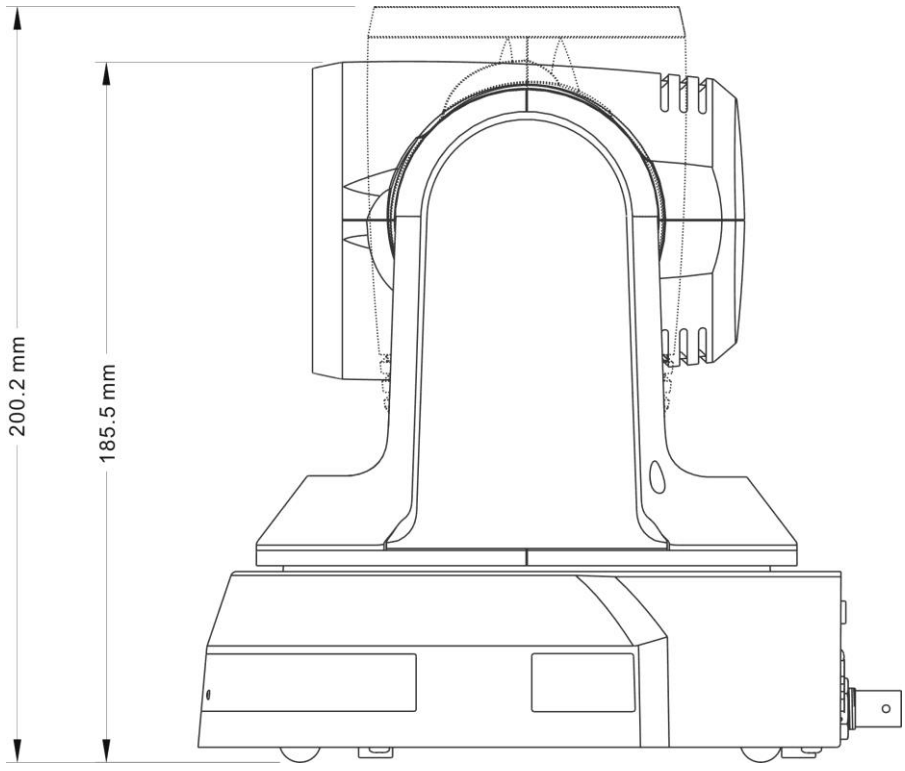
4.2.2.2 Camera Size

Length x Width x Height : 174 x 186.2 x 185.5 mm

Weight : 1.8 Kg

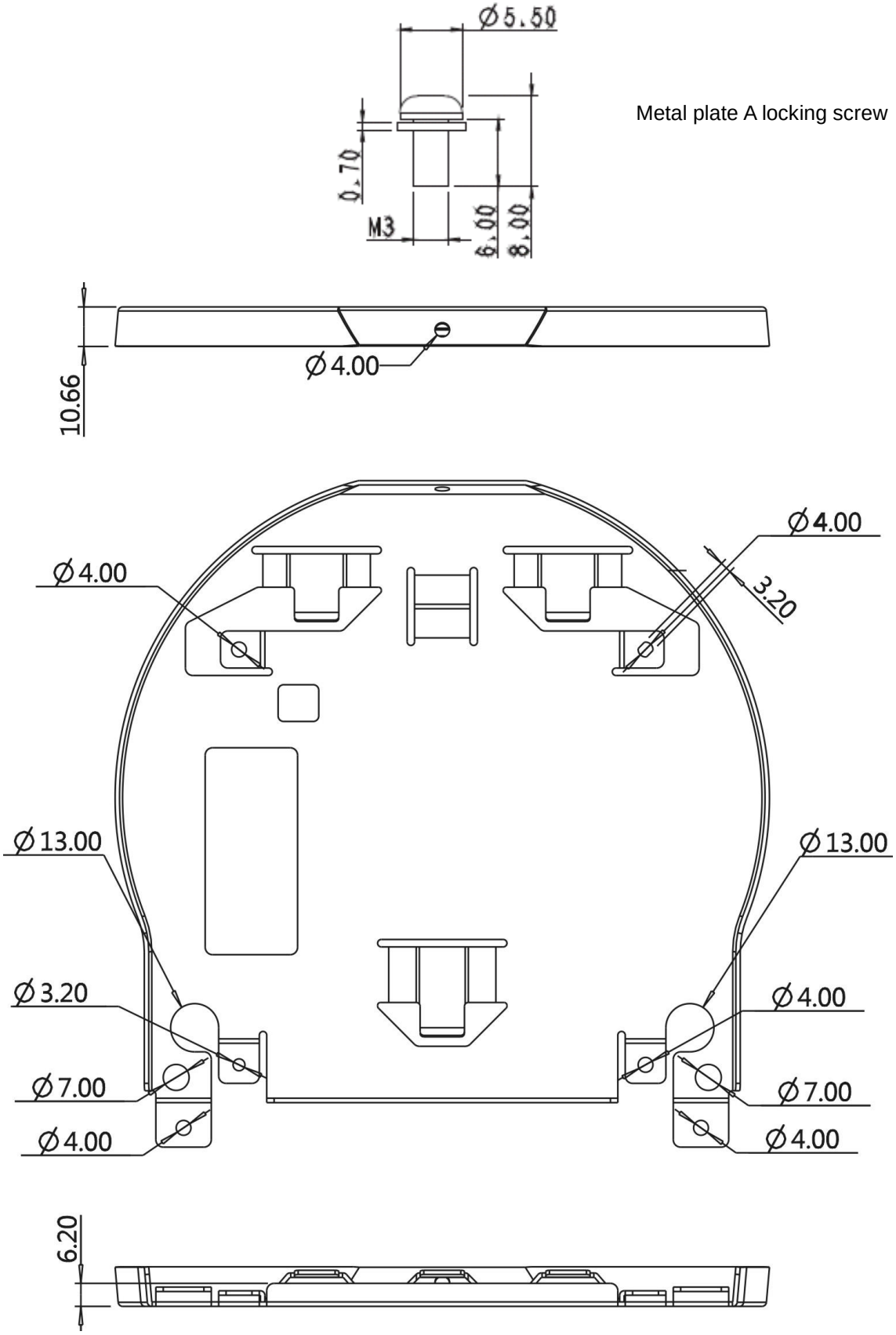


4.2.2.3 Max. rotation dimension of camera



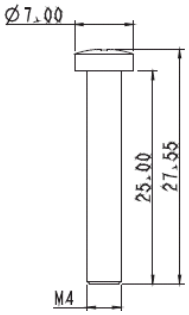
4.2.2.4 **Size Diagram**

1. Metal plate A - machine side

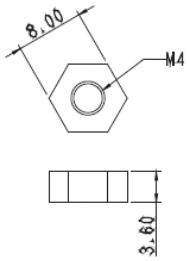


Metal plate A - machine side

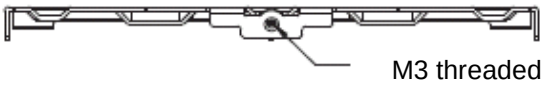
2. Metal plate B - ceiling side

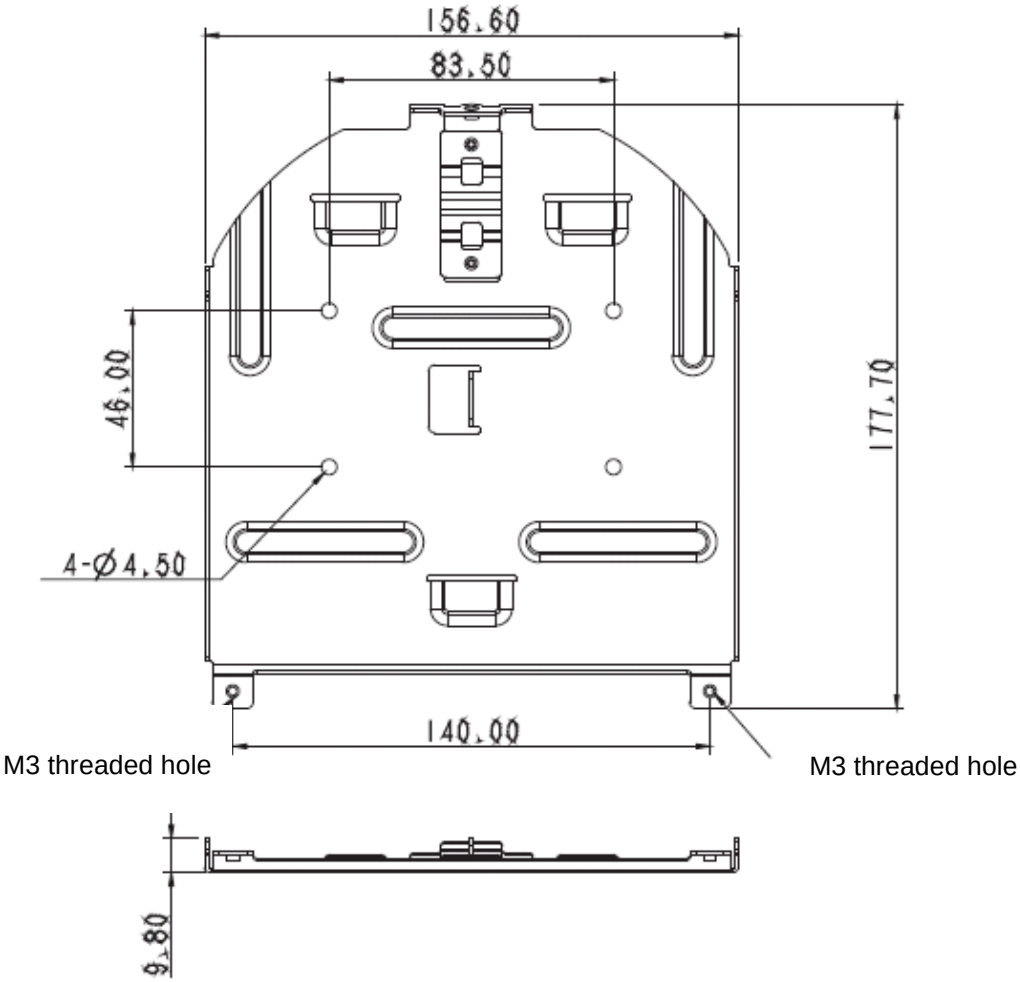


Metal plate B locking screw



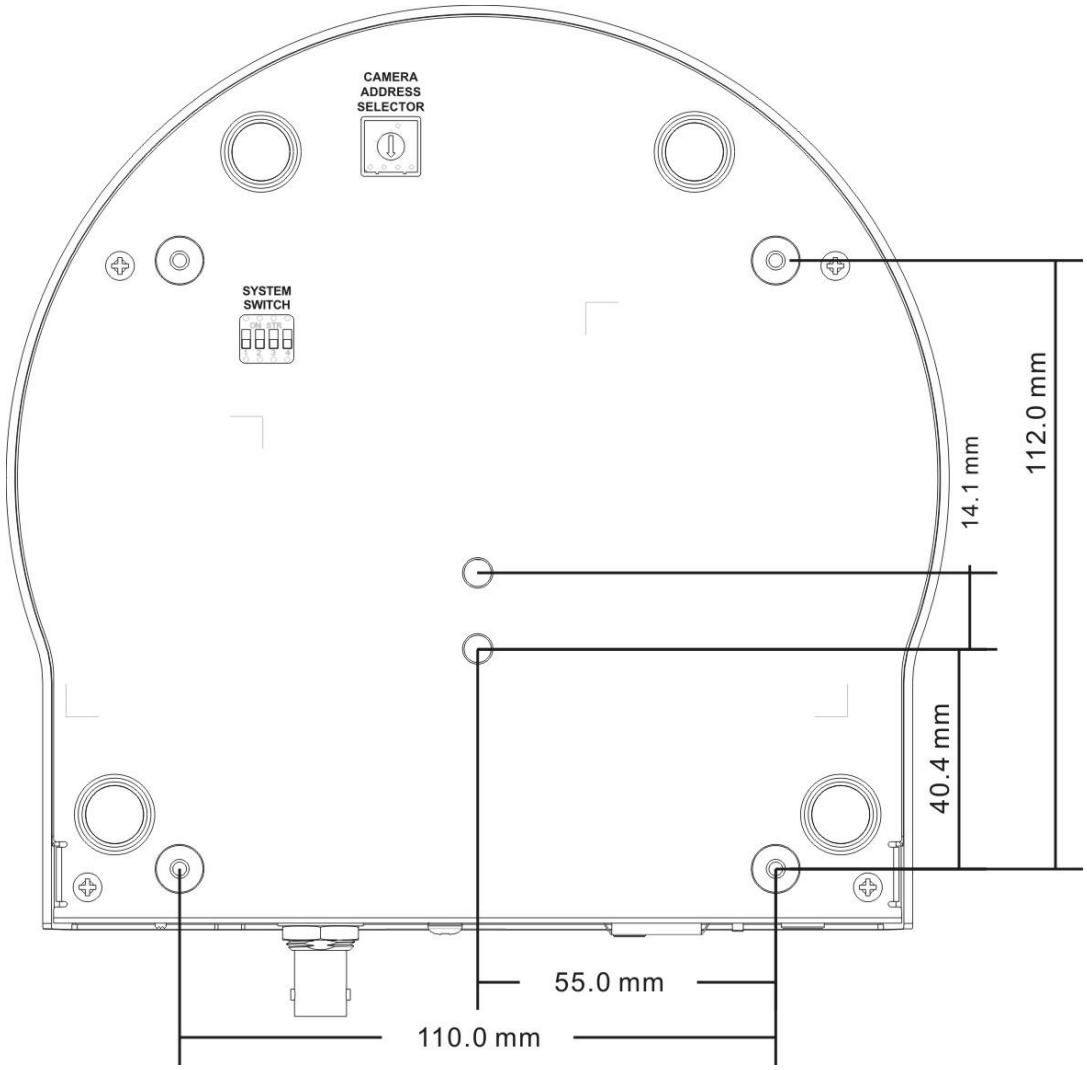
Metal plate B locking bolt





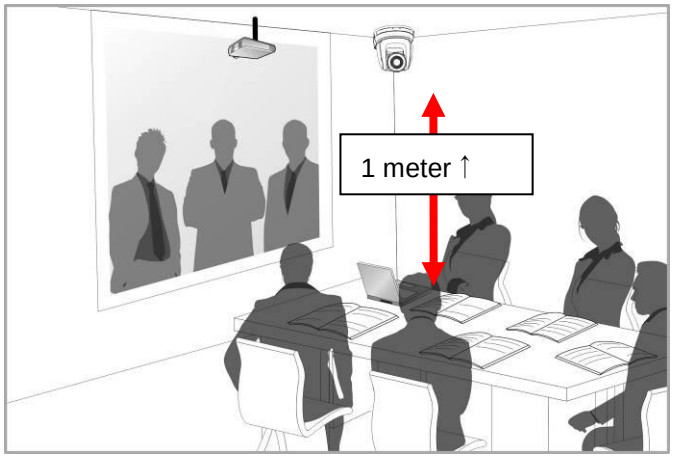
Metal plate B - ceiling side

3. Bottom of machine



4.2.2.5 **Precautions for installation**

1. Before installation, please confirm the orientation of the machine relative to the object to be captured
2. It is recommended that the machine should be set at a distance of more than 1 meter away from the object to be captured. Please adjust for a best distance according to the magnification of the lens



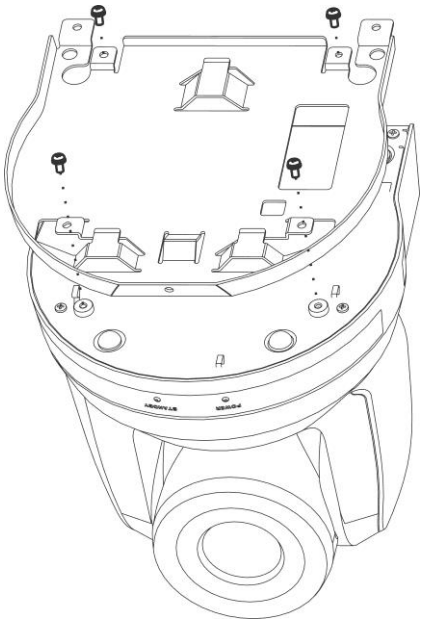
3. The machine (including metal plates) is weighed at about 2.5 kg. If it is to be installed on the ceiling, please use the hanger that has obtained UL security approval to prevent the machine from falling down.
4. Please check whether the camera is installed securely on a regular basis

4.2.2.6 **Installation steps**

1. Please adjust resolution on DIP switch at first

<Remark> Please refer to Chapter 7 DIP Switch Setting for the relevant descriptions on DIP switch.

2. Fix the metal plate A on the machine base with 4 M3 silver screws



3. Lock the metal plate B on ceiling mounted hanger

※Caution:

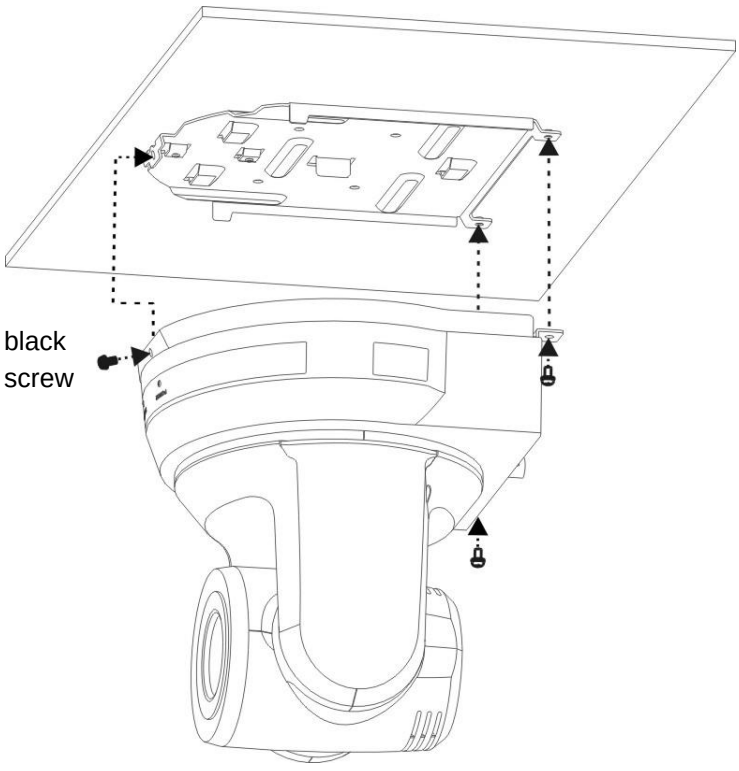
(1) Please use the hanger that has obtained UL security approval

(2) Please reserve the hole for the connecting wires of the camera

4. Combine the metal plate A and the metal plate B

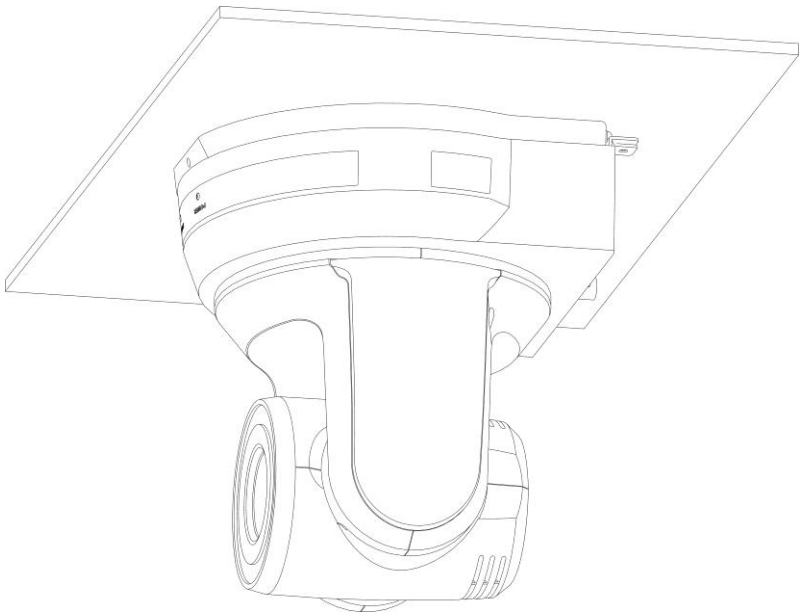
(1) Push the metal plate A up to the ceiling and then to the right to latch the metal plate B

(2) And then secure with 2 M3 silver screws and 1 M3 black screw



4.2.2.7 **How to remove**

1. Remove the connecting wires from the camera
2. Uninstall the camera together with the ceiling, loosen the three screws that fix the metal plates A and B and push to the left to remove the machine

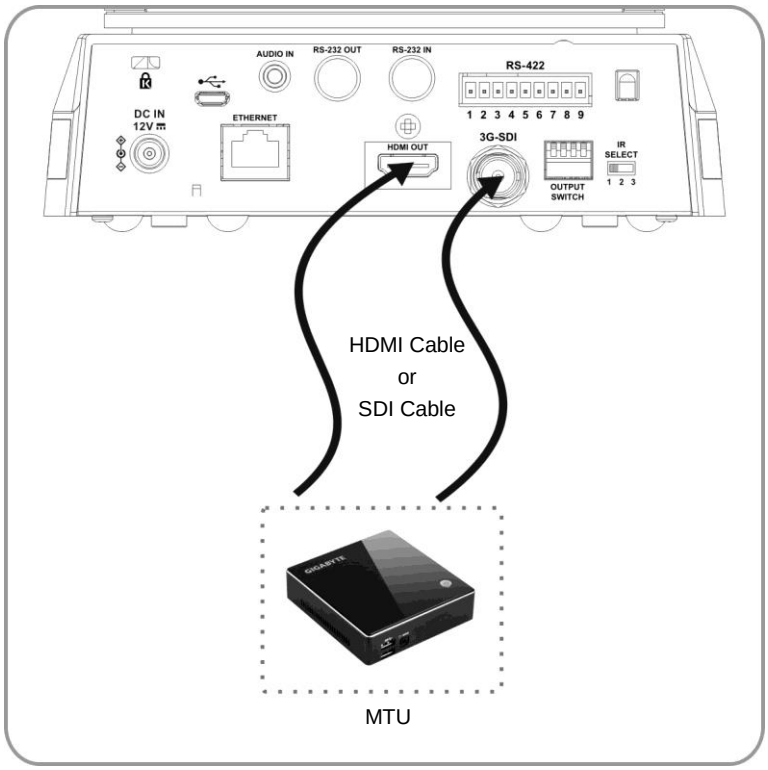


3. Then remove the screws on the hanger and the machine

4.3 Connecting devices

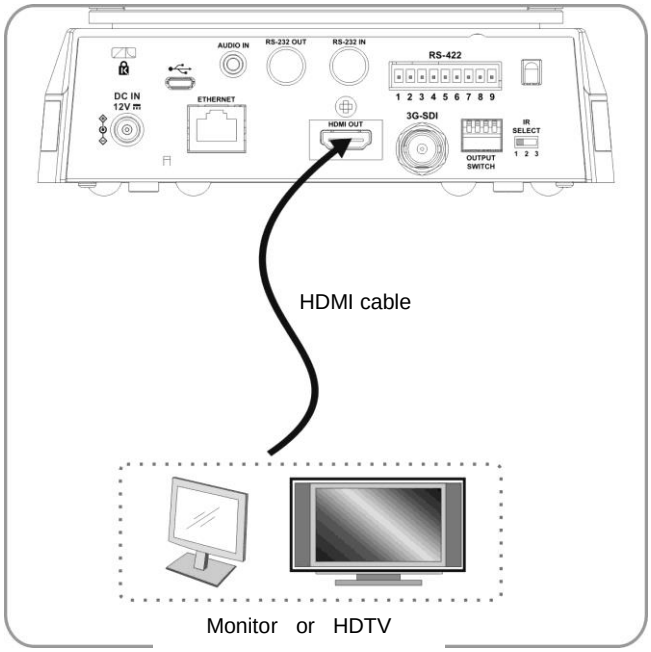
4.3.1 **Image Output**

4.3.1.1 Connecting to PC (video conference)

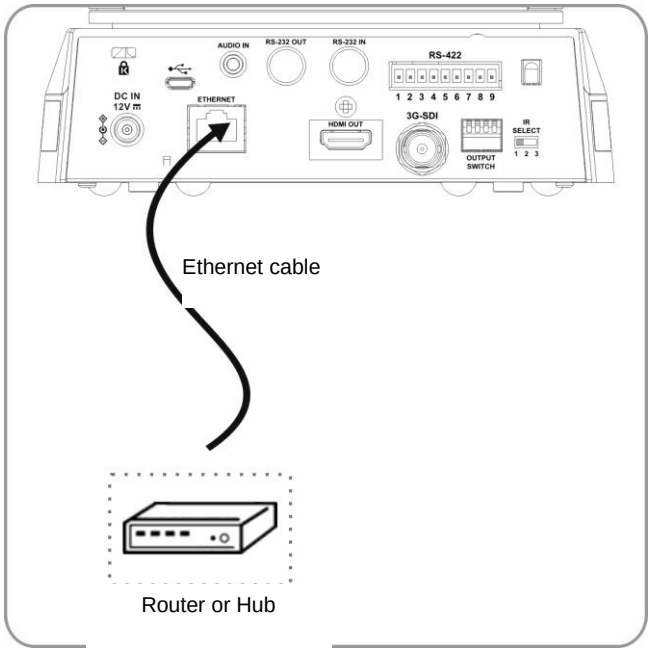


<Remark 1> SDI supports the audio output of 48 KHz only.

4.3.1.2 Connecting to an HDTV/computer monitor (HDMI)



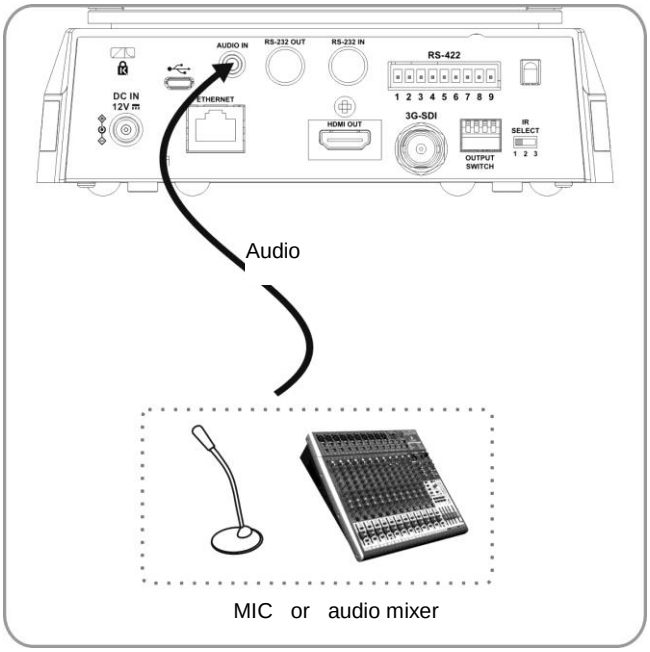
4.3.1.3 Connecting to Internet



<Remark 1> HDC-713 supports PoE power supply when coupled with an IEEE 802.3at router or hub.

<Remark 2> For better performance, please use the ethernet cable of CAT 6 or above

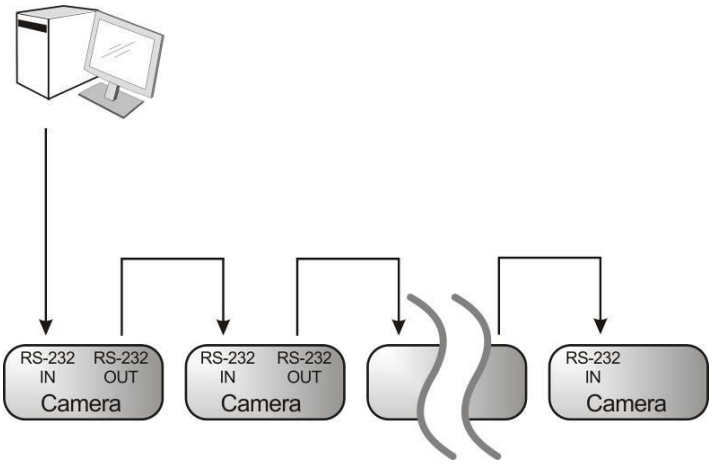
4.3.1.4 Connecting AUDIO IN



<Remark 1> Set the [Audio In] in the OSD to reflect the input device

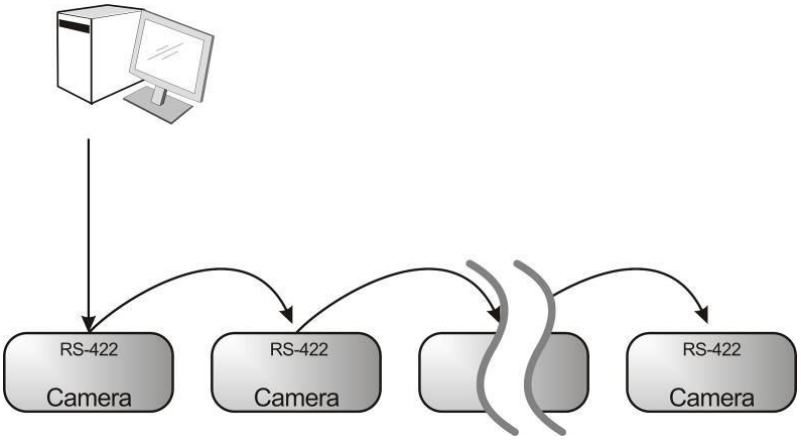
4.3.2 Controlling cameras with the computer

4.3.2.1 Connecting to one computer for connection between the cameras (RS-232 in/out)



<Remark> With RS-232 in/out, at most 7 cameras can be connected.

4.3.2.2 Connecting to one computer for connection between the cameras (RS-422)



<Remark> Please refer to 7.2 RS-422 connection for the RS-422 connection instructions.

<Remark> With RS-422, at most 7 cameras can be connected.

4.3.3 Use of HDC-713 with Internet Connection

4.3.3.1 Setup before use

- Connecting the screen through HDMI output.
- Press [MENU] on the Remote Control to display the OSD menu.
- Shift down to [Ethernet] to modify and confirm the IP address

  DHCP: Enable/disable the dynamic host configuration protocol

  IP Address: Confirm or modify the IP address of HDC-713

  Subnet mask: 255.255.255.0

  Gateway: Preset 192.168.100.254

[Remark] Please modify the above settings based on the LAN setting of the operating environment. To use DHCP, please connect the HDC-713 to LAN and then confirm IP address.

- After completing settings, press [MENU] to exit the OSD menu.
- After completing setting and confirming IP address, HDMI cable can be disconnected.

4.3.3.2 Start Using

- Connect network cable to HDC-713 network port to connect HDC-713 to LAN.
- Press [MENU] on the Remote Control to display the OSD menu.
- Open the browser, and enter the URL of HDC-713 in the address bar,

  e.g.: http://192.168.100.150 (default IP address)
- Enter administrator's account and password

  Account: admin (Default)

  Password: 9999 (Default)

  Subnet mask: 255.255.255.0

  Gateway: Preset 192.168.100.254

Chapter 5 Remote Control and Setting Menu

5.1 Functions of remote control

<Remark> The below functions are listed alphabetically.



Item	Description
• , • , • , •	Move the lens
Back Light	Turn on/off back light compensation
Camera select	Choose 1 ~ 3 of HDC-713
Focus-Manual / Far/Near	Turn on manual focus to adjust the focal length
Focus-Auto	Auto focus
Freeze	Freeze the screen
Home-Enter	Go back to the main page / Execute
Info	Status information
L/R Direction Set	L/R Direction / Normal
Menu	Display OSD menu
Mirror	Rotate the image (OFF / Mirror / Flip / Rotate)
Pan/Tilt Reset	Clear the Pan / Tilt setting
Picture	Switch image effect (OFF / NEG / Black & White)
Power	Power Switch
Preset	Appoint an ID (0 ~ 9) to save the current position data
Reset	Appoint an ID (0 ~ 9) to delete the current position data
Zoom-Fast	Adjust image size
Zoom-Slow	Fine-tune image size

5.2 Setting Menu

<Remark> Press [Menu] on the remote control to enter the setting menu; the bold underlined values in the following table are defaults.

1st Level Major Items	2nd Level Minor Items	3rd Level Adjustment Values		Function Descriptions
Exposure	**Mode**	1. **<u>Full Auto</u>** 2. Shutter Pri 3. Iris Pri 4. Manual 5. White Board 6. Smooth Auto		Exposure mode setting
	Exposure Comp.	On / **<u>Off</u>**		AE Level
	Exposure Comp. Level	-6~**<u>0</u>**~5		The value can be adjusted only after **Exposure Comp.** is activated
	Shutter Pri	60/30 mode	50/25 mode	Shutter priority setting
		1/10000	1/10000	
		1/5000	1/5000	
		1/3000	1/3000	
		1/2500	1/2500	
		1/2000	1/1750	
		1/1500	1/1250	
		1/1000	1/1000	
		1/725	1/600	
		1/500	1/425	
		1/350	1/300	
		1/250	1/215	
		1/180	1/150	
		1/120	1/120	
		1/100	1/100	
		1/90	1/75	
		<u>1/60</u>	**<u>1/50</u>**	
		1/30	1/25	
		1/15	1/12	
		1/8	1/6	
		1/4	1/3	
		1/2	1/2	
		1/1	1/1	

<table>
<tr><td></td><td>Iris Pri</td><td>1. <u>F1.6</u>
2. F2
3. F2.2
4. F2.7
5. F3.2
6. F3.8
7. F4.5
8. F5.4
9. F6.3
10. F7.8
11. F9
12. F11
13. F13
14. F16
15. F18</td><td>Iris setting</td></tr>
<tr><td></td><td>Manual Gain</td><td>1. <u>0dB</u>
2. 2 dB
3. 4 dB
4. 6 dB
5. 8 dB
6. 10 dB
7. 12 dB
8. 14 dB
9. 16 dB
10. 18 dB
11. 20 dB
12. 22dB
13. 24dB
14. 26 dB
15. 28 dB
16. 30 dB</td><td>Manually set the gain</td></tr>
<tr><td></td><td>Manual Speed</td><td><table><tr><td>60/30 mode</td><td>50/25 mode</td></tr><tr><td>1/10000</td><td>1/10000</td></tr><tr><td>1/5000</td><td>1/5000</td></tr><tr><td>1/3000</td><td>1/3000</td></tr><tr><td>1/2500</td><td>1/2500</td></tr><tr><td>1/2000</td><td>1/1750</td></tr><tr><td>1/1500</td><td>1/1250</td></tr><tr><td>1/1000</td><td>1/1000</td></tr><tr><td>1/725</td><td>1/600</td></tr><tr><td>1/500</td><td>1/425</td></tr><tr><td>1/350</td><td>1/300</td></tr><tr><td>1/250</td><td>1/215</td></tr><tr><td>1/180</td><td>1/150</td></tr><tr><td>1/120</td><td>1/120</td></tr><tr><td>1/100</td><td>1/100</td></tr><tr><td>1/90</td><td>1/75</td></tr><tr><td><u>1/60</u></td><td><u>1/50</u></td></tr><tr><td>1/30</td><td>1/25</td></tr><tr><td>1/15</td><td>1/12</td></tr><tr><td>1/8</td><td>1/6</td></tr></table></td><td>Manually set the shutter</td></tr>
</table>

		1/4 1/3 1/2 1/2 1/1 1/1	
	Manual Iris	1. **F1.6** 2. F2 3. F2.2 4. F2.7 5. F3.2 6. F3.8 7. F4.5 8. F5.4 9. F6.3 10. F7.8 11. F9 12. F11 13. F13 14. F16 15. F18	Manually set the iris
	Gain Limit	1. 8 dB 2. 10 dB 3. 12 dB 4. 14 dB 5. 16 dB 6. 18 dB 7. **20 dB**	Max. limit value of electron gain
	Iris Limit	1. F1.6 2. **F2.2** 3. F3.2 4. F4.5 5. F6.3 6. F9 7. F13 8. F18	Max. limit value of iris
	WDR	1. **Off** 2. 1 3. 2 4. 3 5. 4 6. 5	WDR settings
White Balance	**Mode**	1. **Auto** 2. Indoor 3. Outdoor 4. One Push WB 5. ATW 6. Manual 7. Sodium Lamp 8. 3000K 9. 4300K 10. 5000K 11. 6500K 12. 8000K 13. WideAuto	Select the color temperature mode 1. 4000k ~ 7000k 2. 3200k 3. 5800k 4. 1700k ~ 10000k 5. 1700k ~ 10000k 6. Custom 7. 2800k 8. 3000K 9. 4300K 10. 5000K 11. 6500K 12. 8000K 13. 3000k ~ 7000k

	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**
Picture	**Picture effect**	1. **Off** 2. Neg 3. B & W	Set the picture effect
	Sharpness	0~ **C**~15	Adjust the **sharpness** of the image
	2D NR	1. **Auto** 2. Off 3. 1 4. 2 5. 3 6. 4 7. 5	2D noise reduction settings
	3D NR	1. Off 2. Low 3. **Typ** 4. Max 5. Auto	3D dynamic noise reduction settings
	Image Mode	1. Mode 1 2. **Mode 2** 3. Mode 3 4. Mode 4 5. Mode 5 6. Mode 6 7. Custom	The user may customize his/her desired image mode.
	Image Mode Load	1. Mode 1 2. Mode 2 3. Mode 3 4. **Mode 4** 5. Mode 5 6. Mode 6	Adjustable when the ***image mode*** is set to ***Custom***. After selected, the corresponding ***image mode*** parameters will be read and applied to ***Custom***
	Brightness	0~ **C**~25	Adjustable when the ***image mode*** is set to ***Custom***
	Contrast	0~ **C**~25	Contrast adjustment; Adjustable when the ***image mode*** is set to ***Custom***
	Saturation	0~ **C**~25	Adjustable in the ***Custom Mode***
	Black Level	1. **Off** 2. Type 1 3. Type 2 4. Type 3 5. Type 4 6. Type 5	Adjustable in the ***Custom Mode***
	Gamma	0~ **C**~3	Adjustable in the ***Custom Mode***
	Skin Tone	0~ **C**~5	Skin tone setting, adjustable in the ***Custom Mode***
Pan Tilt Zoom	**Pan/Tilt Limit**	ON/**Off**	Turn on/off the angle limit setting
	Pan Right Limit	0~**170**	Limit the right angle

	Pan Left Limit	**-170**~0	Limit the left angle
	Tilt UP Limit	0~**90**	Limit the upward angle
	Tilt Down Limit	**-30**~0	Limit the downward angle
	Pan Flip	On/**Off**	Activate the reverse Pan command
	Tilt Flip	On/**Off**	Activate the reverse Tilt command
	Preset Speed	1. 5 per second 2. 25 per second 3. 50 per second 4. **120 per second**	Set the rotation speed of the cradle head when Preset is executed
	PTZ Speed Comp	On/**Off**	PTZ Speed Compensation
	Zoom Limit	x1 ~ **x20**	Optical zoom limit
Dig-Effect	**Mirror**	1. **Off** 2. Mirror 3. Flip 4. Mirror + Flip	Set the mode at which the image is turned
Auto Focus	**AF Sensitivity**	1. Low 2. **Middle** 3. High	Select the AF triggering speed. The higher the speed is, the faster AF is triggered
	AF speed	Fast / **Normal**	Focus speed after AF triggering
	AF Frame	**Full Frame**/Center	AF frame setting, when central area was set as AF frame, focusing will be on the center of the screen. When Full Frame was set as AF frame, focusing will be calculated based on the full screen
	Zoom Tracking	**On** / Off	Turn on/off zoom tracking
Ethernet	**DHCP**	**On** / Off	Enable/Disable DHCP setting using left and right arrow keys and press [ENTER] to apply setting.
	IP Address	**192.168.100.150**	Press [ENTER] to modify the items; select the item to be modified using left and right arrow keys, and modify the value using numeric keys.
	Subnet mask	**255.255.255.0**	Press [ENTER] to modify the items; select the item to be modified using left and right arrow keys, and modify the value using numeric keys.
	Gateway	**192.168.100.254**	Press [ENTER] to modify the items; select the item to be modified using left and right arrow keys, and modify the value using numeric keys.
Audio	**Audio In**	**Line In**/Mic In	Set Audio In
	Audio Enable	On / **Off**	Turn on/off audio output
	Audio Volume	0~**C**~10	Volume Setting
	Audio Delay	0 ~ 500 ms/ **Off**	Set audio delay
	Encode Sample Rate	1. **48 KHz (AAC)** 2. 44.1 KHz (AAC) 3. 16 KHz (G.711 4. 8 KHz (G.711)	Set the encode type and sample rate SDI supports the audio output of 48 KHz only.

System	**Prompt**	On / **Off**	Turn on/off the prompt information on the display
	IR Receive	**On** / Off	Turn on/off the infrared reception
	Motionless Preset	On / **Off**	When the function is enabled, the screen will Freeze when Preset is executed. Freeze will be released after Preset is completed.
	Tally Lamp	**Enable** / Disable	Turn on/off the Tally Mode
	Language	**English** / Chinese	Language
	Initial position	**Last MEM** / 1st Preset	
	Output Mode	1. **1080p/60** 2. 1080p/59.94 3. 1080p/50 4. 1080p/30 5. 1080p/29.97 6. 1080p/25 7. 1080i/60 8. 1080i/59.94 9. 1080i/50 10. 720p/60 11. 720p/59.94 12. 720p/50	Set output resolution
	Control Device	Encoder / **Controller**	Control Device setting Controller: Used as a joystick Encoder: Used for tracking system
	Protocol	**Protocol V** / Protocol PD	Protocol V: VISCA Protocol PD: PELCO D
	PD Address	1~ **C**~255	The Protocol set to PD allows the camera ID address to be assigned
	Factory Reset	On / **Off**	Resume the factory default setting
	FW Upgrade	On / **Off**	Upgrade Firmware
Status			Display the current setting status

Chapter 6 Descriptions of Major Functions

6.1 I would like to switch to HDC-713

1. Press **[Camera 1 ~ 3]** on the **remote control** to select HDC-713.

- **Camera 1 ~ 3 is selected with IR SELECT.**

6.2 I would like to save the current lens position data

1. Hold **[Preset + ID]** on the **remote control** to save the current position data.

- **ID shall be a digit [0 ~ 9].**
- **Use BXB's graphical control software to store position data to [0 ~ 127]**

6.3 I would like to clear the saved position data

1. Hold **[Reset + ID]** on the **remote control** to clear the given position data.

- **ID shall be a digit [0 ~ 9].**
- **Use BXB's graphical control software to clear position data stored in [0 ~ 127]**

6.4 I would like to turn on the back light compensation function

1. Press **[Back Light]** on the **remote control** to turn on or turn off the back light compensation

6.5 I would like to adjust the shooting angle of the lens

1. Press **[Tilt ▲]** or **[Tilt ▼]** on the **remote control** to adjust the angle upward or downward.
2. Press **[Pan ・]** or **[Pan ・]** on the **remote control** to adjust the angle to right or left.
3. Press **[Pan - Tilt Reset]** on the **remote control** to reset the angle to the center point.

6.6 I would like to zoom in/out images

6.6.1 Adjust image size

1. Press **[Fast +]** on the **remote control** to zoom in images.
2. Press **[Fast -]** on the **remote control** to zoom out images.

6.6.2 Fine-tune image size

1. Press **[Slow +]** on the **remote control** to zoom in images.
2. Press **[Slow -]** on the **remote control** to zoom out images.

6.7 I would like to adjust the focal length

6.7.1 Auto tune

1. Press **[AF]** on the **remote control** to adjust automatically.

6.7.2 Manual focus

1. Press **[MF]** on the **remote control** to turn on the manual focus function.
2. Press **Focus - [+]** or **Focus - [-]** to adjust.

6.8 I would like to adjust the AF speed

6.8.1 Adjust the AF Sensitivity

Triggering speed of focus. The higher the speed is, the faster focus is triggered

To shoot fast-moving objects, ***AF Sensitivity*** can be set to **[High]** or **[Medium]**, which is applicable

to quick focus.

When the environment is too dark to enable auto focus or fixed objects have to be shot in different brightness, ***AF Sensitivity*** can be set to **[Low]**.

1. Press [MENU] to activate the setting menu.
2. Press [►] or [◄] to select [Auto Focus].
3. Press [ENTER] to activate.
4. Press [▲] or [▼] to select [AF Sensitivity].
5. Press [ENTER] to activate.
6. Press [►] or [◄] to select [High / Middle / Low].
7. Press [MENU] to exit.

6.8.2 Adjust the AF speed

The focus speed upon triggering ***AF Sensitivity***

- **[Normal]** (default)**:** Image flickering may not occur
- **[Fast]:** Fast focus speed

1. Press [MENU] to activate the setting menu.
2. Press [►] or [◄] to select [Auto Focus].
3. Press [ENTER] to activate.
4. Press [▲] or [▼] to select [AF speed].
5. Press [ENTER] to activate.
6. Press [►] or [◄] to select [Fast / Normal].
7. Press [MENU] to exit.

6.9 I would like to set the image mode

1. Press **[Picture]** on the **remote control** to switch [Off / Neg / B&W].

6.10 I would like to freeze images

1. Press **[Freeze]** on the **remote control** to freeze the current image on the display.

6.11 I would like to rotate the image

1. Press **[Mirror]** on the **remote control** to switch [Off / Mirror / Flip / Mirror + Flip].

6.12 I would like to change the camera direction

1. Press **[L/R Direction Set]** on the **remote control** to switch [L/R Direction / Normal].

6.13 I would like to display the current status

1. Press **[Info]** on the **remote control** to display the current status information. `

6.14 I would like to reset to the default value

Reset to default value using OSD menu or Remote Control combination key

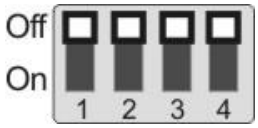
- **OSD menu:** Press [MENU] → [System] → [Factory Reset] → [On] → [Enter] on the Remote Control and reset to the default value
- **Remote Control combination key:** press [+]→ [8] → [8] → [6] → [Enter] one by one on the Remote Control in order to reset to the default value

Chapter 7 DIP switch setting

<Note> Please turn off the machine before changing DIP switch setting.

7.1 DIP SWITCH

7.1.1 OUTPUT Switch



Output Mode	Setting	Output Mode	Setting
1920x1080/60p		1920x1080/50p	
1920x1080/30p		1920x1080/25p	
1920x1080/60i		1920x1080/50i	
1280x720/60p		1280x720/50p	
1080/59.94p		1080/59.94i	
1080/29.97p		720/59.94p	

7.1.2 IR SELECT



ID	Setting
1	
2	
3	

1.1.4 Camera Address Selector



Setting	Function Descriptions
0~7	ID 0~7
8~9	Reserved

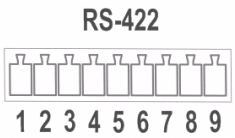
7.1.4 System Switch



Setting	Function Descriptions
DIP 1	RS-232C/RS-422 selector OFF : RS-232C / ON : RS-422
DIP 2	Infrared signal output switch OFF : Off / ON : On
DIP 3	Communication baud rate selector OFF : 9600 / ON : 38400
DIP 4	Reserved

7.2 RS-422 Connection

1.2.2 RS-422 Pin Description

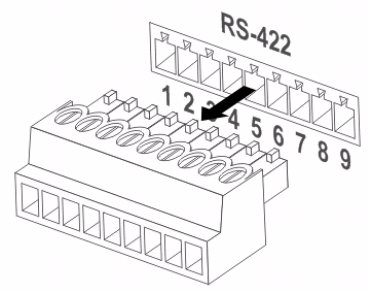


Pin NO.	Function
1	RXD OUT -
2	RXD OUT +
3	TXD OUT -
4	TXD OUT +
5	GND
6	RXD IN -
7	RXD IN +
8	TXD IN -
9	TXD IN +

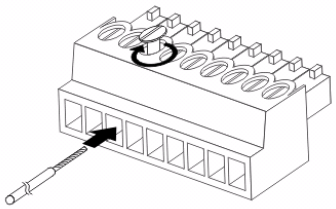
<Note>
Please connect IN+ to OUT+ when connecting to SONY products
For non-SONY products, it may be necessary to connect IN+ to OUT-

7.2.2 Use RS-422 Connection

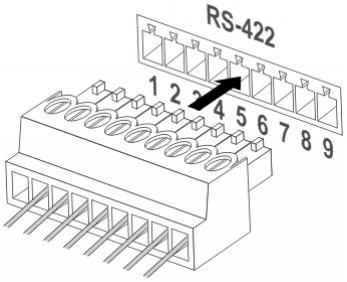
1. Hold the two sides of RS-422 connector and pull out in the direction shown by the arrow in the figure below



2. Peel off a section of copper wire (AWG Nos.28 to 18) and insert it into the connector hole; then use flat screw driver to fix it



3. Insert the wired RS-422 connector back to the camera. Now the connection is completed



<Note> When RS-422 connection is being used, do not use RS-232C connection.

Chapter 8 Troubleshooting

This chapter describes problems you may encounter while using HDC-713. If you have questions, please refer to related chapters and follow all the suggested solutions. If the problem still occurred, please contact your distributor or the service center.

No.	Problems	Solutions
1.	**Boot without power signal**	1. Make sure you have plugged in the power cord. 2. Make sure the Service DIP switch is Off. 3. Make sure that the terminal point is a hub that supports IEEE 802.3at when connecting via PoE.
2.	**There is no image output from HDC-713**	1. Check the power. 2. Check if DIP switch is properly set. Please refer to **Chapter 7 DIP Switch Setting for related settings**. 3. Make sure the display supports the output resolution; in general, the resolution is 1080p60/1080i60/720p60. 4. Replace the cables and make sure they are not faulty.
3.	**HDC-713 image is severely delayed**	Please use 1080p or 720p 60/50 Hz signals rather than 25/30 Hz signals.
4.	**Not working after changes to DIP Switch setting**	After completing DIP Switch setting, unplug and reconnect the power cord and turn on the machine to change the setting.
5.	**HDC-713 cannot be operated by remote control**	1. Please confirm if the Camera Select on the remote control can be used together with the IR Select on HDC-713. 2. Please prevent HDC-713 from direct sunshine. 3. Make sure the energy-saving bulb and the IR touch screen are as far as possible in order to avoid interference. 4. When several HDC-713 are connected in the same area, the operation of two remote controls at the same time may result in signal interference. It is recommended to use one remote control only.
6.	**The device cannot be controlled with Codec**	1. Please consult the distributor to make sure the firmware version is the latest one. The steps to check version is as follows: 1.1 Press [MENU] on the remote control 1.2 Choose [Status] 1.3 Go to Page 5 of [System] 1.4 Make sure the firmware version is correct. 2. Make sure the connection is correct (RS-232/422 Input). 3. Make sure System Switch DIP 1 and DIP 3 are correct.
7.	**The device cannot be controlled with RS-232/RS422**	1. Make sure the connection is correct (RS-232/422 Input). 2. Make sure System Switch DIP 1 and DIP 3 are correct.