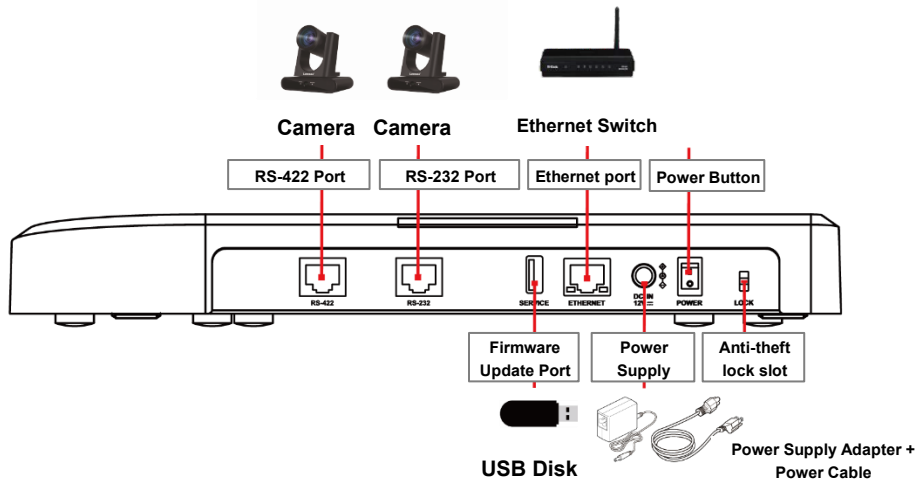


1. Product IO Overview



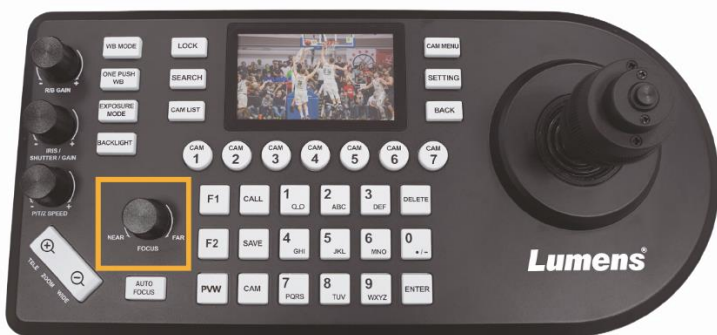
Note

- Ethernet port supports PoE (IEEE 802.3af) power supply
- RS-232/ RS-422 port do not support POE. Please do not connect with POE Switch

2. Menu Main Button Operation Instructions

When the menu is activated, the **Focus** button is the main control button.

- Left/Right rotation: Adjust parameters and navigate the menu
- Press: Perform "Confirm" action



3. Initial setting

- 3.1 Use the DC 12V power cord provided with the accessory or power it with a PoE (IEEE 802.3af) compatible network switch
- 3.2 Use the network cable (CAT5e or CAT6) to connect the IP port on the back of the keyboard to the local area network
- 3.3 If using power cord for power supply, please press the power button to turn on the control keyboard

4. Camera Setting

- **IP Control**
Confirm that the camera and the control keyboard are on the same network segment, such as 192.168.100.xxx
- **RS-232/RS-422 Control**
Confirm that the camera control port/protocol/baud rate/VISCA address and other parameter settings match the control keyboard

Depending on the camera, the following methods are supported to adjust the parameters

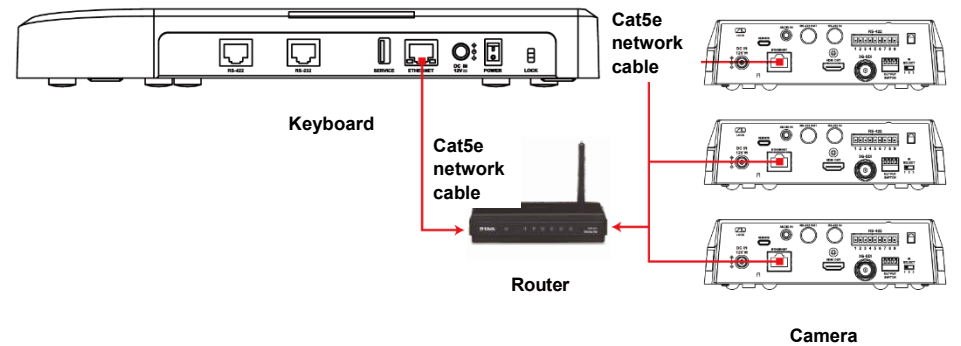
- Setting Menu: **[System]**
- Webpage: (According to different webpage versions, there are two possible paths for settings.)
[Settings] > [Maintenance] > [System Services] > [Control Port/Protocol/Baud Rate]
[System] > [Control] > [Protocol] > [Baud Rate]
- Camera bottom **Dip Switch** settings

5. How to Connect IP

5.1 Connect the keyboard and camera to the network switch

*If not connected to a network switch, the default IP for the control keyboard is

192.168.100.100. Please set the camera to the same network segment

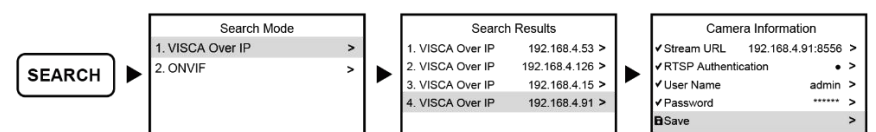


5.2 Add the camera to the device list

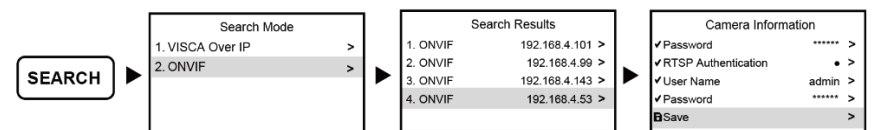
(1) Automatic search camera

Press **[SEARCH]** > Select search mode > Select camera > Save camera to list

- **VISCA Over IP**



- **ONVIF**

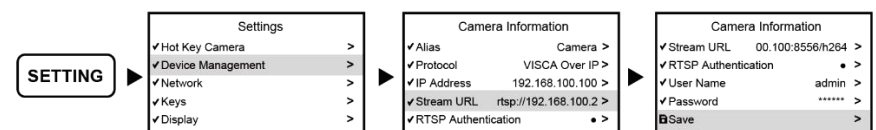


- **NDI (only applicable to VS-KB21N)**

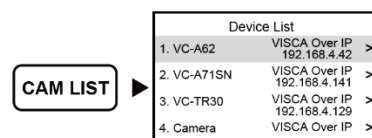


(2) Manually add camera

Press **[SETTING]** > [Device Management] > Set Control Protocol/IP Address > Save to List



5.3 Confirm CAM ID in the **[CAM LIST]**



5.4 Call the camera

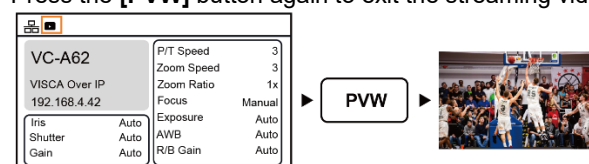
Press the number and then **[CAM]** to call the camera.

e.g. **1** > **[CAM]**

5.5 Preview streaming video

IP connection supports previewing camera RTSP streaming. Confirm screen display preview icon > press **[PVW]** > display camera RTSP streaming image

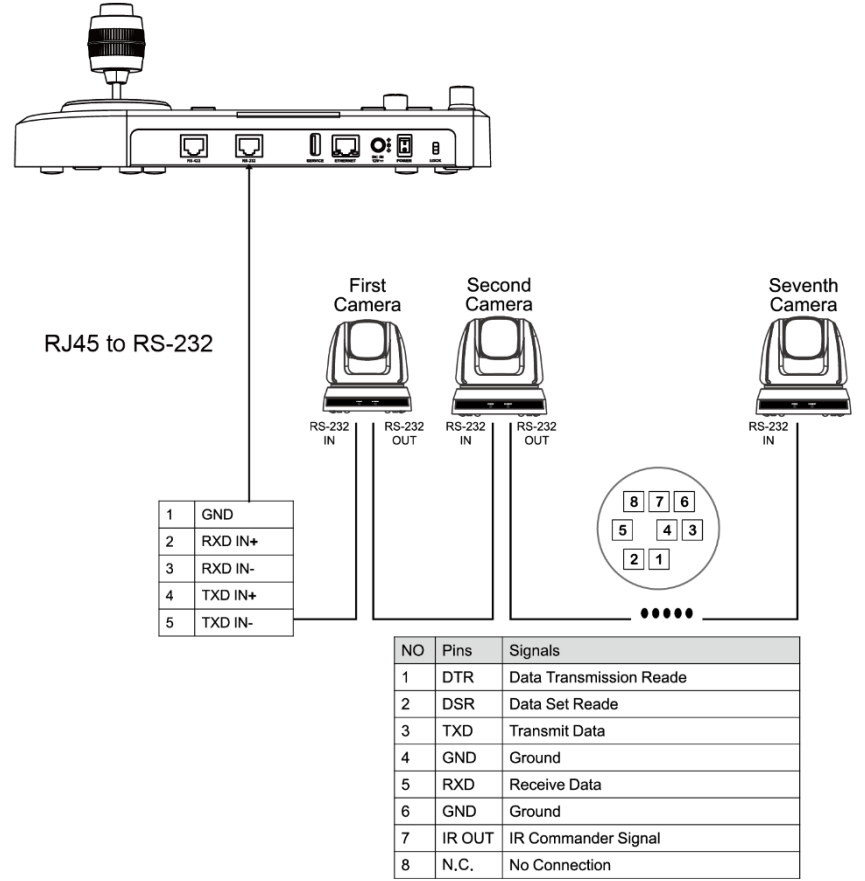
*Press the **[PVW]** button again to exit the streaming video screen



▪ RS-232

6. RS-232/RS-422 Connection Instruction

RS-232			RS-422 (A/B)		
Pin No.	Function	Color	Pin No.	Function	Color
1	-	Orange/White	1	TX-	Orange/White
2	-	Orange	2	TX+	Orange
3	GND	Green/White	3	GND	Green/White
4	-	Blue	4	-	Blue
5	-	Blue/White	5	-	Blue/White
6	GND	Green	6	-	Green
7	RXD	Brown/White	7	RX-	Brown/White
8	TXD	Brown	8	RX+	Brown

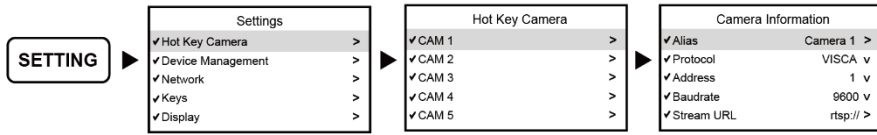


6.1 Please refer to the pin definitions of RS-232/RS-422 for connecting the camera and control keyboard.

Note RS-232 connection can be used with Lumens optional accessory VISCA cable extender (VC-AC07), combined with a network cable, no need to wire it yourself to use with control keyboard

6.2 Set camera

Press **[SETTING]** > **[Hot Key Camera]** > select camera > set VISCA/IP address/baud rate and other information to match the camera

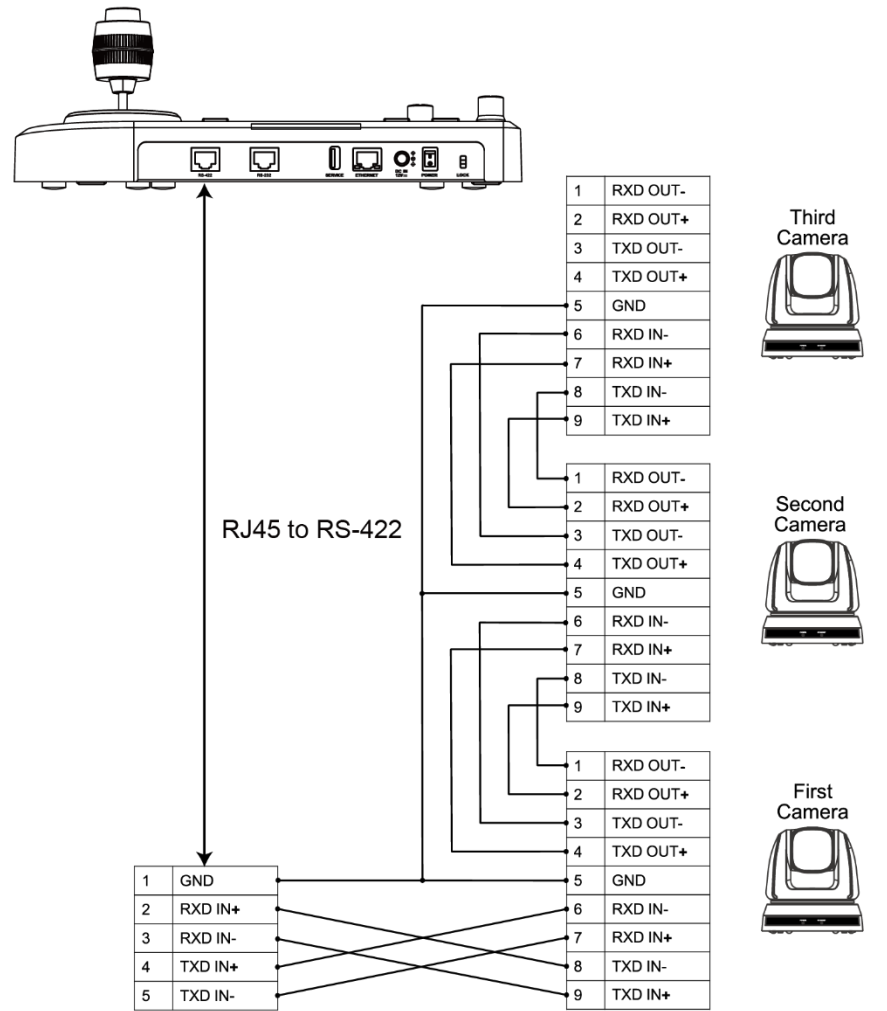


6.3 Call the camera

Setup complete, select the **[Hot Key Camera]** (e.g. **CAM 1**) to call the camera

6.4 If the camera is daisy chained, please refer to the pin definition of camera to complete the connection of multiple cameras.

▪ RS-422



※For questions about the installation, please scan the QR Code. A support person will be assigned to assist you.

