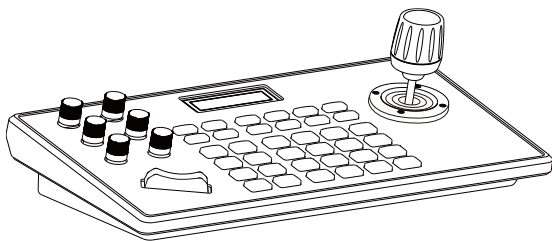


IP Control Keyboard

User Manual



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Statement

The purpose of this section is to ensure that users can use the product correctly through this manual to avoid operation.

Danger or property damage. Please read the product manual carefully and keep it for future reference before using this product.

Preface

The control keyboard is an indispensable device in the integrated monitoring system. All the front-end fastball, pan/tilt and electric lens can be controlled by the control keyboard. The operation is simple and convenient. The control keyboard also has a liquid crystal display for displaying working status and interactive information.

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Before You Read

1. What is the role of CAM NUM when adding a network device?

CAM NUM will be bound to the currently input IP and port information. The CAM NUM set when the device is added by the [CAM] key can be quickly switched to the device bound to the CAM NUM.

2. How to input English when entering user name, password, and custom F1 and F2 functions?

For example, to enter the letter C, simply press the number key [2] three times on the input interface.

3. How do you operate when you enter an IP address?

Because the keyboard does not have a "." button, it is divided into four segments when inputting the IP, for example, to input 192.168.0.1, after inputting 192, 168, it will automatically jump to the next input. When inputting 0, you need to use the joystick "right" to switch to the next input.

4. How to clear in input mode?

The input can be cleared by the joystick "Left".

5. The main interface of each mode refers to the interface displayed after the keyboard initialization is completed. In the IP VISCA. ONVIF mode, there is a display of "VISCA I" or "ONVIF".

The IP address on the screen is the keyboard local IP. If there is "VISCA:" or the IP address on the "ONVIF:" screen is the IP of the connected device.

1 Product Description

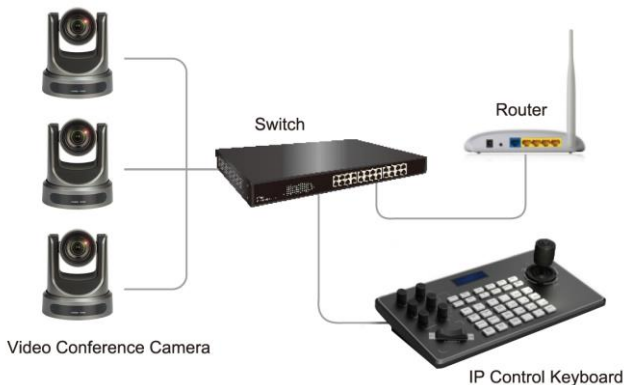
1.1 Features

Four control modes (two network two analog)

Support three control protocols (VISCA, ONVIF, PELCO)

1.2 Connection Diagram

The keyboard and the dome are connected in the same LAN, and the network segment where the IP address is located is consistent. For example, 192.168.1.123 and 192.168.1.111 belong to the same network segment; 192.168.1.123 and 192.168.0.125 is not on the same network segment. In this case, you need to modify the IP address of the keyboard or dome. The default IP acquisition method of the keyboard is dynamically obtained.

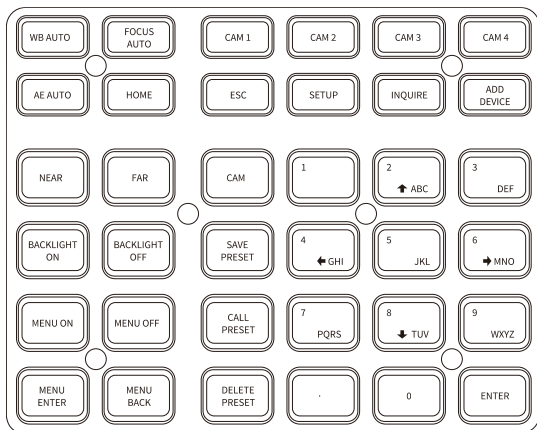


1.3 Control Keyboard Parameters

Ethernet	1 Ethernet port
Rocker Function	Four-dimensional (control: up, down, left, right) rocker buttons and zoom function.
Interface Mode	Lead mode
Display Method	LCD
Beep	Button sound prompt on/off
Working Power	DC 12V 1A \pm 10% inside and outside negative
Power Consumption	0.6W (max.)
Operating Temperature	0°C~50°C
Storage Temperature	-20°C~70°C
Physical Dimension	320*180*100

2 Keyboard Function Description

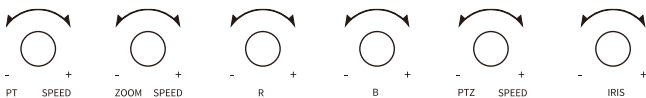
2.1 Key Description

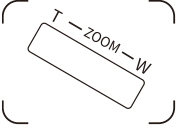


WB AUTO	Auto white balance button: Set the camera to auto white balance mode. This button will light when the camera is in manual white balance mode.
FOCUS AUTO	Auto Focus button: Design the camera to be in auto focus mode. This case will light up when the camera is in manual focus mode.
AE AUTO	Auto Iris button: Set the camera to auto iris mode. This button will light when the camera is in manual iris mode.
HOME	Camera returns to the origin.
CAM1 ~ CAM4	Quickly switch device keys: quickly switch to devices with CAM NUM 1-4 (ONVIF, IP VISCA) or switch to address code 1-4 (VISCA, PELCO).








ESC / ENTER	Return and confirm key
SETUP	Keyboard local settings button: modify, view keyboard local settings.
INQUIRE	Query key: query and added device.
ADD DEVICE	Manually add network device keys; manually add network devices (only ONVIF, IP VISCA mode support).
NEAR	Manual adjustment of near focus
FAR	Manual adjustment of far focus
BACKLIGHT ON	Turn on the backlight
BACKLIGHT OFF	Turn off the backlight
MENU NO	Menu open
MENU OFF	Menu closed
MENU ENTER	Enter menu
MENU BACK	Exit submenu
CAM	The CAM NUM set when IP VISCA or ONVIF mode input device is added can be quickly switched to the device bound to the CAM NUM. In VISICA or PELCO, the input address code switching needs to be used with the numeric keys and the [ENTER] key.
SAVE PRESET	Set preset button: This function should be used together with the number keys and [ENTER] key.
CALL PRESET	Call preset button: This function should be used together with the number key and [ENTER] key.
DELETE PRESET	Delete preset button: This function should be used together with the number key and [ENTER] key.
1 ~ 9	0, 1, 2, 3, 4, 5, 6, 7, 8, 9 (2468 can also be a direction button to control the pan/tilt or movement menu).

2.2 Rocker Switch, Knob



NEAR/FAR	Manually adjust the focus, NEAR (fixed focus) / FAR (far focus).
OPEN/CLOSE	Manually adjust the aperture, OPEN (aperture plus) / CLOSED (aperture reduction).
R-/R+	Manually adjust the red gain
B-/B+	Manually adjust the blue gain
PTZ SPEED + PTZ SPEED -	Adjust PTZ speed, 1 (slow) -8 (fast) gear.
T-ZOOM-W	<p>The lens zooms in/out, the T lens magnification increases, and the W lens magnification decreases.</p> 

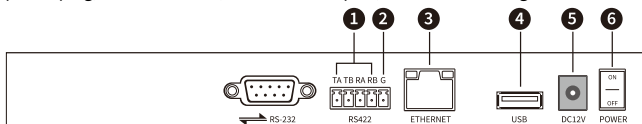
2.3 Rocker Control

Operation	Output Control	Operation	Output Control	Operation	Output Control
	Up		Down		Left
Operation	Output Control	Operation	Output Control	Operation	Output Control
	Right		Zoom +		Zoom -
	Lock (Lock the keyboard to prevent error operation)				

(clockwise/counter-clockwise rotation is only valid for 3D)

2.4 Control Keyboard Rear Interface Terminal Description

Back panel: There is a 5PIN crimp terminal interface, an RS232 interface, a DC-12V power plug, a USB interface, and a network port, as shown in the figure:



2.5 Function Number Description

No.	Mark	Physical Interface	Description
1	RS422	Control output (Ta, Ta, Ra, Rb)	Connect the RS422 bus of the camera; (TA) to the camera (RA), (TB) to the camera (RB), (RA) to the camera (TA), (RB) to the camera (TB).
2	Ground	Control signal line ground (G)	Control signal line ground

3	Ethernet	Network port	Network data connection
4	USB	USB interface	Connect to WIFI
5	DC 12V	Power input	DC power input
6	POWER	Switch	Start off the power

3 Keyboard Local Settings (SETUP button)

3.1 Basic Options

(Through the mast up and down can switch from setting option 1 to 2, 2 to 3, from the left and right of the joystick can be switched from button sound to off (ENTER key confirmation):

- (1) Delete device
- (2) Network type (dynamic, static)
- (3) Button sound (on, off)
- (4) System language (Chinese, English)
- (5) Mode (VISCA, IP VISCA, ONVIF, PELCO)
- (6) Native IP
- (7) Version Number
- (8) Restore Factory Settings

3.2 VISCA, IP VISCA Mode Settings Have a Total of Options:

1. F1 (function of custom F1 button (VISCA command))
2. F2 (function of custom F2 button (VISCA command))

First enter the custom name->ENTER->Enter VISCA command.

For example, if the command to be entered is 81 01 040702 FF, enter 01040702 (Note: 0 cannot be omitted).

3.3 IP VISCA Mode Setting Options

Delete Saved Device

Browse the device up and down through the joystick, browse the device port through the mast, and browse the device IP, CAM NUM, ENTER button to delete the selected device.

3.4 VISCA Mode Setting Options

Control Settings (Set the Baud Rate of an Address Code)

The joystick switches the address up and down (0~255, all sets the address 1-7 at the same time) -> ENTER -> Joint switch left and right to switch the baud rate -> ENTER.

For example: check the address: 1-> ENTER-> select the baud rate: 9600-> ENTER, when the keyboard switches to address 1, the control baud rate is 9600.

3.5 PELCO Mode Setting Options

Control Settings (Set the Baud Rate of an Address Code)

The joystick switches the address up and down (1-255, all sets the address 1-255 at the same time) -> ENTER-> rocker left and right switching protocol -> ENTER-> rocker left and right to switch the baud rate -> ENTER.

For example: selected address: 1-> ENTER-> selected protocol: PELCO-D-> ENTER-> selected baud rate: 9600-> ENTER, when the keyboard is switched to address 1, the control baud rate is 9600, the protocol is PELCO-D.

3.6 ONVIF Mode Setting Options

Delete Saved Device

Browse the device up and down through the joystick, browse the device port through the joystick, and browse the device IP, CAM NUM, ENTER button to delete the selected device.

4 Keyboard Connection and Control Device

4.1 Connection and Control in ONVIF Mode

Need to Add Manually

In ONVIF mode, the operation of adding a LAN device using the keyboard is as follows:

1. Press the keyboard settings button.
2. Choose ADD DEVICE.
3. Enter the IP, port, user name, password, and channel number of the video conference camera.
4. After the input is complete, return to the settings interface and select INQUIRE DEVICES.
5. Select the device you just added and press ENTER to connect the device. Login successfully displayed XXX.XXX.XXX.XXX.

Note: Enter the keyboard in any input state for confirmation, the joystick to the left is BACKSPACE or DELETE.

4.2 Connection and Control in IP VISCA Mode

Search is not supported in IP VISCA mode, only by manually adding devices.

1. Manually add devices via the [IP] key.
2. After adding the device, press the “INQUIRE” button to view the added device, and the joystick “Up” and “Down”. View the saved device (the joystick “Right” can view the port), press the “ENTER” button to select the camera you want to control or use the [CAM] button to connect and control.

4.3 VISCA, Control in PELCO Mode

Just set the address code and baud rate to control, PELCO also needs to set PELCO-D or PELCO-P protocol.

5 WEB Side Configuration

5.1 Home

1. The keyboard is connected to the same LAN as the computer, and the IP address of the keyboard is entered in the browser.
2. Default username: admin; password: empty.
3. After entering the device web client, the page is displayed as follows:



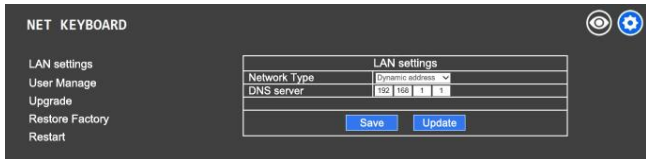
4. After entering the device home page, the three lists are: search device list (green box); device list (blue box) added; device details (orange frame); manual addition (yellow box).
5. Click "Search" to search for ONVIF devices in the LAN. After the search is completed, it will be automatically displayed in the green box.
6. Select the device you want to add in the "Search Device List", click "Add", click "Ctrl" to select more.
7. Select the device you want to delete in "Added device list", click "Delete", click "Ctrl" to select more.
8. After adding a device, click the device IP in the blue box to edit the account and port information of the device.

9. After adding, deleting, and modifying, you need to click "Save".

Ps: After changing the configuration parameters of the home page, you must click save, otherwise the change data will not be modified.

5.2 LAN Settings

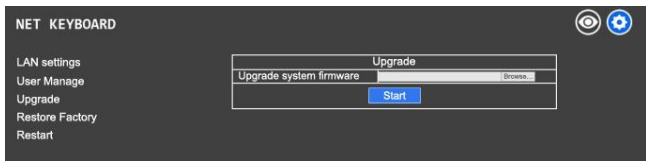
The LAN settings can modify the IP acquisition mode and port parameters of the device, as shown in the following figure:



Dynamic address (default access method): the keyboard will automatically request an IP address from the router.

Static address: When you need to set the network segment by yourself, change the network type to a static address and fill in the network segment information to be modified.

5.3 Upgrade



The upgrade function is used as the maintenance and update keyboard function. After entering the upgrade page, select the correct upgrade file, click "Start", and the device will restart automatically after the upgrade.

Ps: Do not perform any operations on the device during the upgrade process. Do not power off or disconnect the network.

5.4 Restore Default

When the device appears to be unable to work properly due to modification of some configurations, this function can be used to restore the device to factory defaults. Please use with caution when the equipment is working properly!

5.5 Restart

When the device needs to be restarted after a long time running, click Restart to achieve the purpose of restarting maintenance.

