



Q-AK030

PTZ Camera Controller

User Manual



Contents

Statement	1
Foreword.....	1
Packing List.....	1
1. Product Overview.....	2
1.1 Highlights	2
1.2 Control Mode (3 IP Control + 2 Serial Port Control)	2
1.3 Controller Parameter	6
2.Controller Configuration	7
3.Controller Local Setting	10
4.Controller Connection	10
4.1 Control Type over Controller	10
4.2Connection and Channel Switching	13
5.AK030 Keys Light Configuration.....	13
6.Web Page Configuration.....	13

Statement

This manual is to ensure that the user can use the product properly through following this manual to avoid danger while operating. Before using this product, please read the product manual carefully and keep it properly for future reference.

Foreword

The camera controller is an essential device in the integrated monitoring system. All- round control of the lens can be achieved through the camera controller, which is simple and convenient.

There is also a liquid crystal display screen on the controller, which is used to display the working status and interactive information.

Packing List

Items	Quantity
IP Camera Controller	1
Power Adapter	1
RS45-DIN8 Cable	1
Magnetic Pad	1
Quality Certificate	1
Warranty Certificate	1

1. Product Overview

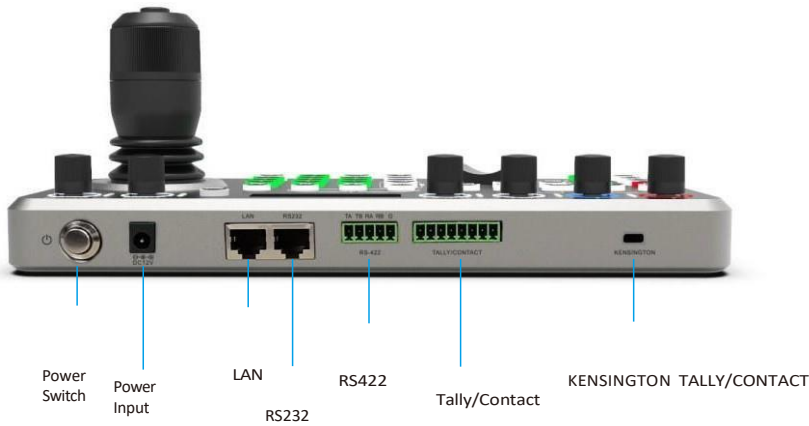
This camera controller has brand new design and adopts metallic panel with frosted film upper shell and CNC oxidation lower shell. With powerful operation, it solves the troubles while operating the camera via web. The adoption of industrial-grade LED module make the display excellent and the character clear. This controller support VISCA, ONVIF, PELCO, and NDI protocols, it fully compatible with VISCA with powerful extension. The web client terminal makes the configuration interface simple and clear.

1.1 Highlights

- Support network and stimulation control methods. Dependent IP address available in network mode.
- Support VISCA, ONVIF, PELCO-P, PELCO-D and NDI protocols, and fully compatible with VISCA.
- With central control function, this controller can work on cameras' software.
- Adopting four-dimensional rocker, and the texture is comfortable. Twisting the rocker can directly control the camera in all directions. The lens can be zoomed in and out, and the strength of joystick control can determine the control speed.
- IE browser can add configuration of front-end equipment
- This controller provides four instant access to control cameras and 255 cameras can be quickly switched through a simple tap.
- Support Power over Ethernet
- Five control modes available(3 IP control plus 2 serial port control)
- Five control protocols: IP (ONVIF, IPVISCA, NDI) Stimulation (PELCO, VISCA)

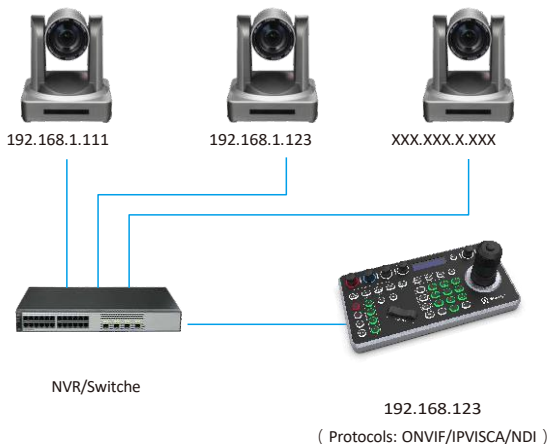
1.2 Control Mode (3 IP Control + 2 Serial Port Control)

5 Control Protocols available : IP Control (ONVIF 、 IPVISCA 、 NDI) Serial Port Control (PECLO 、 VISCA)
> Interfaces



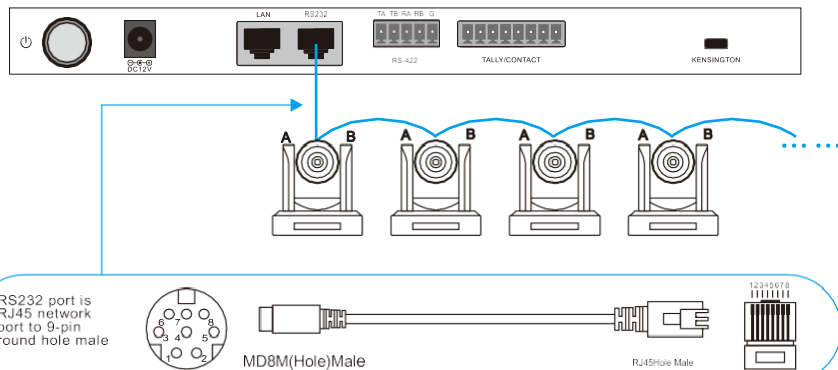
> Connection Diagram of IP Mode

The controller and cameras need to be connected in the same LAN and their IP address are in the same IP segment. Following is an example: If 192.168.1.123 and 192.168.1.111, which are in the same IP segment, don't fall in the same LAN, you need to correct the IP address of the controller or the cameras. Dynamic obtaining IP address is the default method.

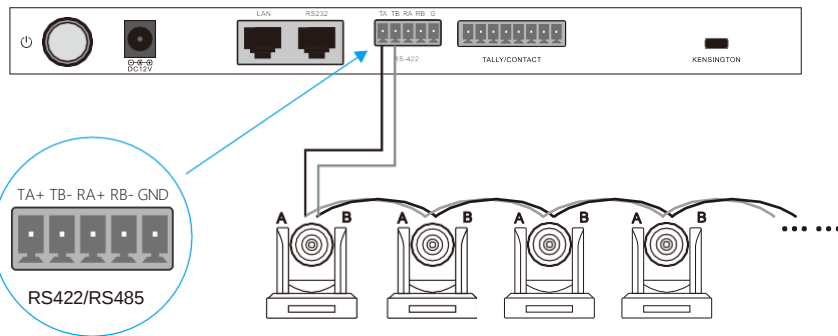


> Serial Port Connection Diagram

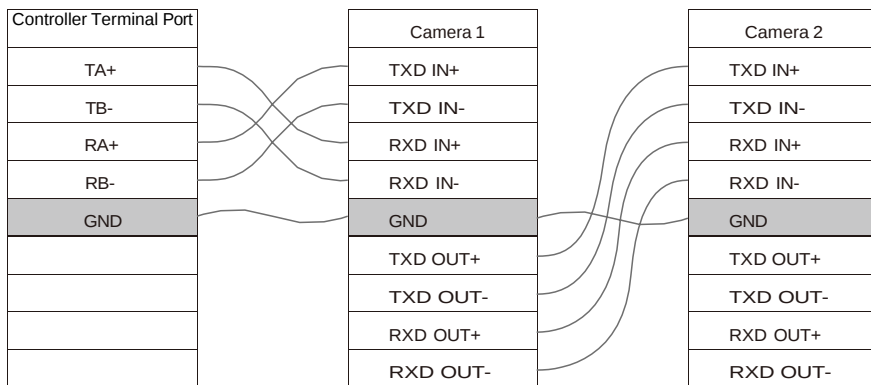
(1) Serial Port Connection: RS232



(2) Serial Port Connection: RS485/RS422



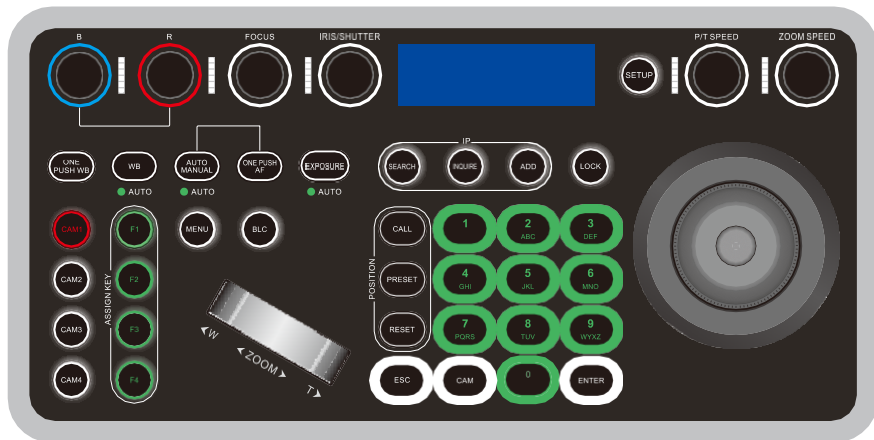
The wiring corresponding to the camera is shown in the following table



1.3 Controller Parameter

Ethernet	1 * Ethernet
Joystick Function	4 dimension(up, down, left, right) joystick buttons and zoom function
Working Power	LCD
Power Consumption	DC12V1A±10%
Working Temperature	0.6W max
Storage Temperature	0°C-50°C
Dimension	-20-70°C
Working Power	270mm x 135mm x 110m

2. Controller Configuration



Knob Area

-  B: Blue Gain+-
-  R: Red Gain+-
-  FOCUS: Focus
-  IRIS/SHUTTER: Iris/Shutter
-  P/T SPEED: PTZ speed adjustment
-  ZOOM SPEED: Zoom speed adjustment

Camera Function Area

- ONE PUSH WB: One push WB
- WB: Auto/Manual WB
- AUTO MANUAL : Auto/Manual Focus
- ONE PUSH AF: One push auto focus
- EXPOSURE: Auto/Manual Iris, Manual Shutter
- MENU: Camera menu
- Boat-shaped switch: Zoom +-
- BLC: BLC on/off

Controller Keys Function

SEARCH: Search, automatic search key in LAN

INQUIRE: Inquiry, view and connect saved devices

ADD: Add, manually add devices in LAN

LOCK: Lock controller keys

SET UP: Set controller

CALL: Call out presetting position, number keys + CALL=
Call out corresponding presetting position.

PRESET: Set preset, number keys + PRESET = set presetting

RESET: Reset presetting, number keys + RESET = Reset
the presetting

ESC: Exit, exit the controller system.

0-9 : Number Keys 0-9: Number keys used for IP and
presetting

ENTER: Confirmation keys. Confirm the controller system.

CAM: Switch channel

Assign Keys

CAM1-4:1-4 camera switching
keys

F1-F4 :
Assigned keys can be configured as
shortcuts to activate
camera functions like HOME position
setting, PTZ resetting, Restart, Button
Mute, image freeze, image flipping.

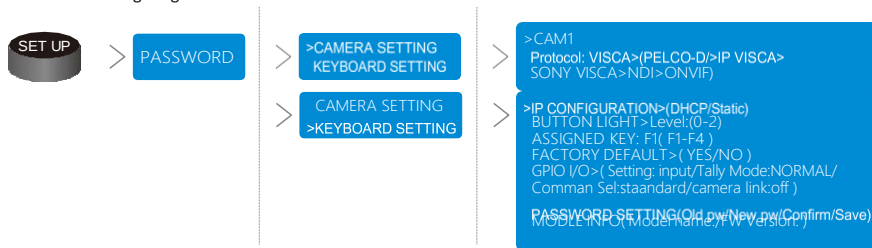
Joystick Control

Operation	Control	Operation	Control	Operation	Control
	Up		Down		Left
Operation	Control	Operation	Control	Operation	Control
	Right		Zoom +		Zoom -

3. Controller Local Setting

The joystick can switch setting option between 1, 2 and 3 (Press 'Enter' to confirm)

Controller Setting Diagram



4. Controller Connection

4.1 Control Type over Controller

The cameras can be added through network or serial port. There are 4 methods when you add camera through network port and one method when you add camera through serial port.

(Long press the center button of the joystick to initialize the network simulation protocol.)

4.1.1 IP Connection

The first method: Search in LAN [SEARCH]

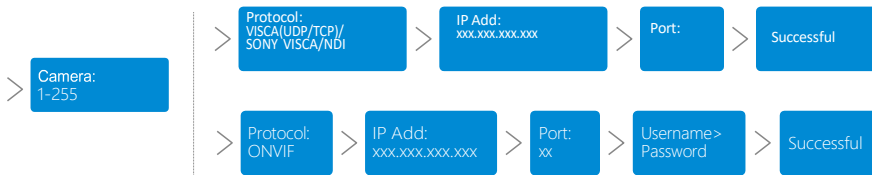
In the local area network, click the [SEARCH] button on the controller to enter the search interface, and the [VISCA/ONVIF/NDI] will appear. Move the cursor to [ONVIF] and click the remote sensing center to search. After the device is found, select the IP to confirm, and enter the user name and password (only ONVIF protocol is required to enter user name and password), the camera number [Username/Password]-[cam].

As shown in the figure:



The second method: Manually add in LAN [ADD]

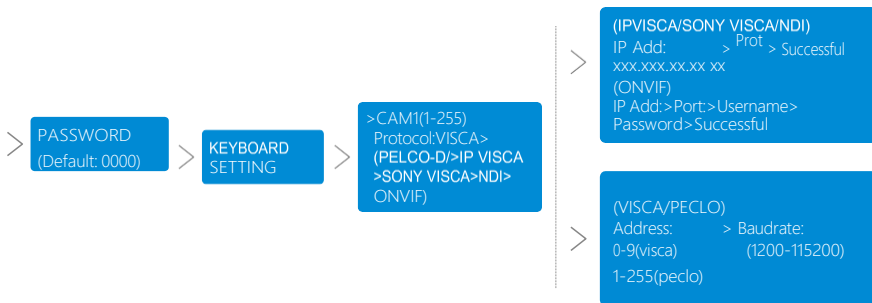
In the local area network, click the [ADD] button on the controller to enter the manual adding interface, set the camera number 1-255 [CAM1-255], select the protocol VISCA/Sony VISCA/ONVIF/NDI, enter the IP address, port number, as shown in the figure Show:



The third method: Add through controller system [CAMERA SETTING]

(Stimulate IP device is qualified to add)

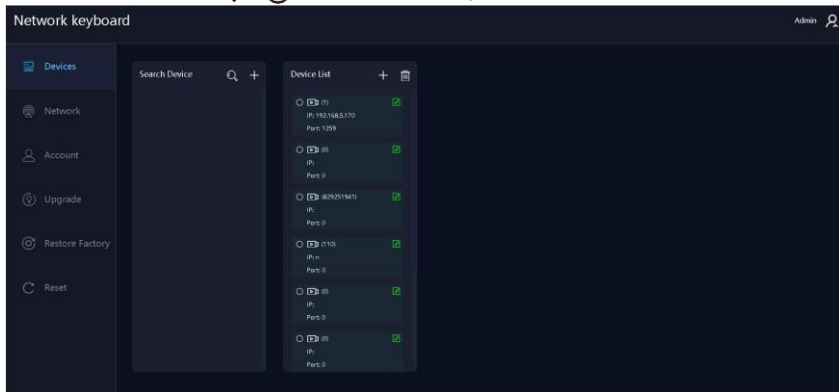
In the local area network, click the [SETUP] button on the controller to select [CAMERA SETTING] to select the camera number 1-255[CAM], protocol [Protocol: VISCA (analog)/PECLO D P (analog)/IP VISCA/SONY VISCA/NDI/ONVIF], network add [IP VISCA, SONY VISCA/NDI/ONVIF] need to input IP address, user name Password (only ONVIF protocol is required to enter user name and password), port number.



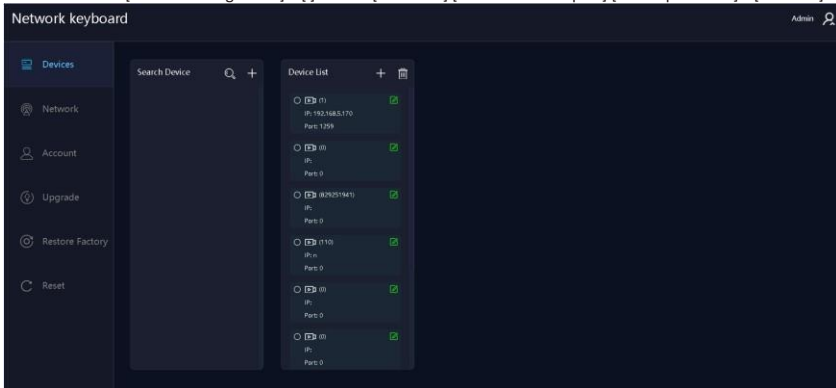
The forth method: Add through webpage (This method only work in ONVIF protocol)

The computer, controller and camera need to be in the same local area network. The computer opens the browser and enters the IP address of the controller, and enters the web page to enter the user name and password (user name: admin password: none)

> LAN Search [Device] > [Q] > [🔍] > [+] > enter [admin password], as shown below:



> Manual Add [Device Management] > [⊕] > enter [device IP] [ONVIF terminal port] [Admin password] > [Conform]



4.2 Connection and Channel Switching

When finishing adding cameras, you need to manually connect the added cameras with the controller. There are two methods for connection, one is by 'INQUIRY' button, and the other is by quick switching camera channel numbers.

4.2.1 [INQUIRY] Saved Camera List

After adding devices to the LAN, click [INQUIRE] to enter the list of saved devices, and select the camera process to be connected, as shown below:

【 INQUIRE 】 >

```
Device list 001/020
xxx.xxx.xx.xx( Added IP)
Protocol: xx (Added protocols)
Port: xx(Added terminal port)
```

> Switch setting options from 1 to 2 with joystick control > Select the IP to be connected and click the confirm button on the joystick.

4.2.2 【 CAM 】 Switch added cameras number

When adding a device, set the [CAM] number. This number is used for controller connection control to switch quickly.

The specific process is as follows:

[CAM] + Camera Number + [Enter]/[Center button of joystick]

5. AK030 Keys Light Configuration

3 light modes for option: Level 0 (no light), level 1 (standard luminance) level 2 (strong luminance)

Level 0: Primitive mode. All of keys light off, applicable to daytime.

Level 1: Standard luminance, applicable to dimly lit environment.

Level 2: Twice brighter than level 1, applicable to dark environment.

Setting process is as below:

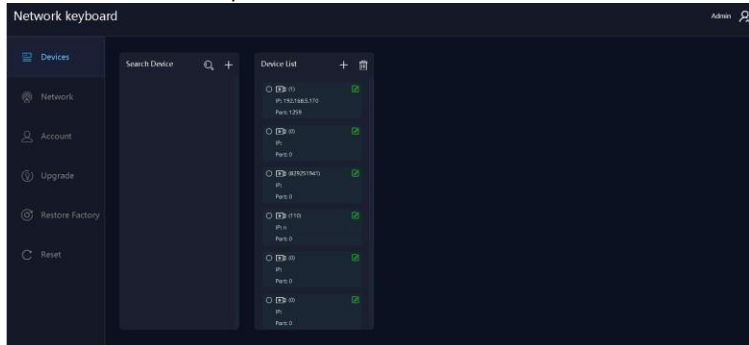
【SET UP】>【PASSWORD】>【KEYBOARD SETTING】>【BUTTON LIGHT】>

【level (0-2)】

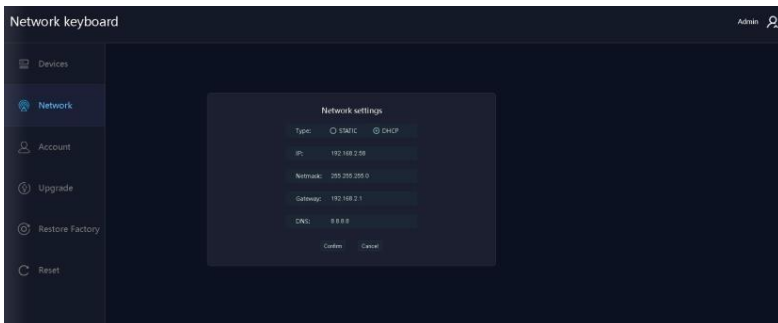
6. Web Page Configuration

The controller comes with web terminal to facilitate user's configuration on controller. It is only in the same local network that users can login the interface to add cameras. Camera assignment can be divided into manual assignment and auto search

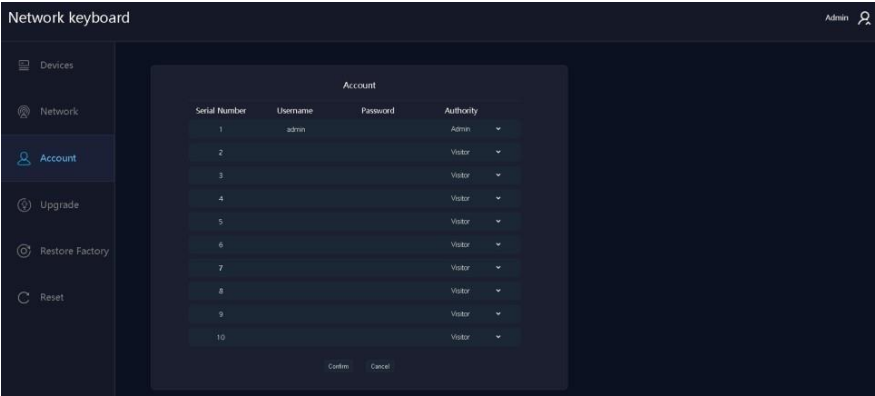
6.1 Search and manually add devices in local network.



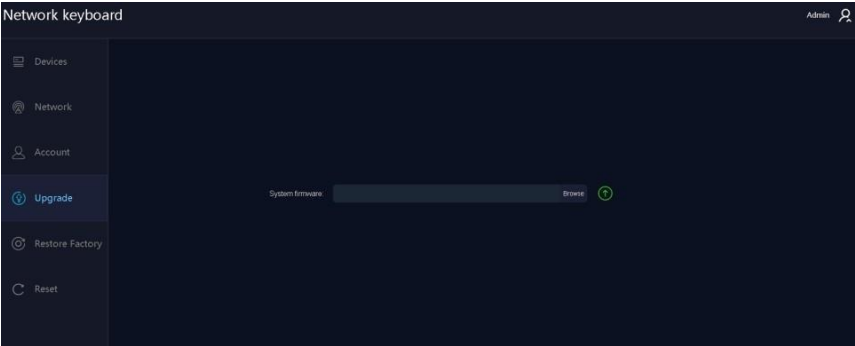
6.2 [Network] Set controller IP, [DHCP] automatically obtain IP, [STATIC] manually add IP



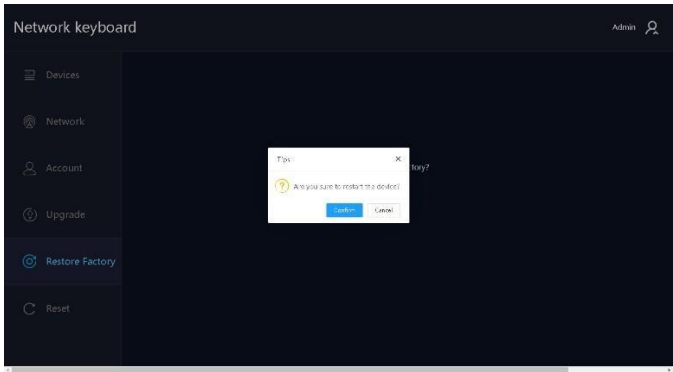
6.3 [ACCOUNT] Add and change user’s login information and password of web terminal



6.4 【 Firmware Update 】 Version Firmware Update



6.5 【Restore Factory】 Restore Factory



6.6 【Restart】 Restart the controller

