

PNK-3A-PTZ 1.0
network PTZ controller
user manual



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Overview

This Network Keyboard can be used to control the speed dome, as well as support 1 channel of video view at up to 1080P encoder. It is easy to operate and configure settings.

Features

5" LED screen, 3-axis joystick;

Support H.265, Onvif 2.4 compatible.

Administrator management;

1 channel video display, support encode up to 1080P.

Auto searching connected devices in the same network segment;

Shortcut keys for dome control, setting and callup of preset, tour and pattern;

Technical Specification

Model Name	Network keyboard controller
Control Mode	Network
Controllable Device	Network High Speed Dome, network PTZ
Screen display	5" LED screen
Interface	1 RJ45, 2 RS485(reserved), 1 DC12V, 1HDMI output, 1 USB port
Ambient Temp.	-20°~55°
Power Supply	DC12V/2A
ONVIF	ONVIF2.5
Joystick	3D joystick
Language	English
Access Device No.	No upper limit (display by single image)
Image Switch Mode	ID by key
Product Size	260mm*160mm*48mm
Weight	Gross: 1.52KG / Net:1.0KG
Carton Size	300mm*210mm*160mm

Package Contents

Keyboard controller	1 pc
Power supply	1 pc
User manual	1 pc

1. Appearance

1.1 Front panel and function keys introduction



Fig.1

1.2 Rear panel interface introduction



Fig.2

- ① Input power : DC12V/2A
- ② Power Switch
- ③ Power indicator
- ④ USB interface :reserved
- ⑤ RJ45 : for LAN
- ⑥ HDMI : available to connected to the monitor

2. Function & Operation

2.1 Connection

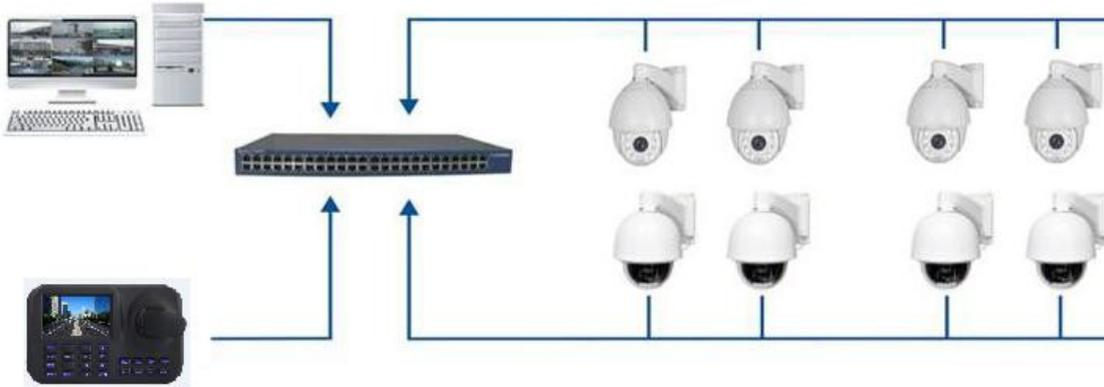


Fig.3

As Fig.3 show, make sure the keyboard in the same LAN with the devices.

Remark: The keyboard supports up to 255 device in each segment, when in “0” & “1” segment, the keyboard can manage the device of both segment together.

2.2 Power on and add device

2.2.1 User management

Log in

After power on 60s, the screen will display the log in interface as below:



Fig.4

Default password is 123456, press “**Menu**” key after enter the password, then press “**Enter**” to confirm the log.

User management

To change the password or add operator press “**Menu**” key and then choose user, you will see.

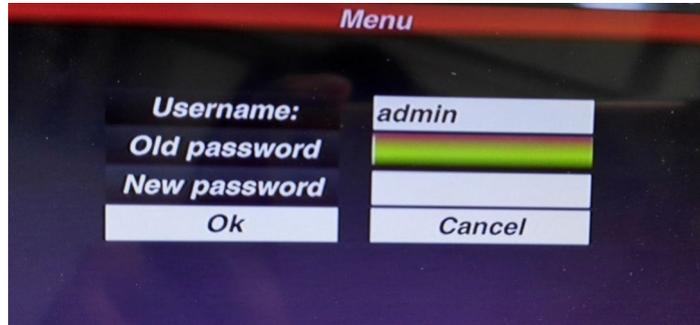


Fig.5

You can change the password or you can create operator and password.
Remark: after create the operator, it can not modified the operator name.

2.2.2 Add device

After log in, the keyboard will search the IP device and assign a Dome ID for each device automatically, as below picture(Fig.6) shows.

After searching, the IP address of device connected to the keyboard is displaying on the screen. User can move the cursor up and down by joystick to select IP address (the device)which one need to access , and then press "Enter" to save the device and display the corresponding image; after get the image of the device, the user could control the PTZ camera.

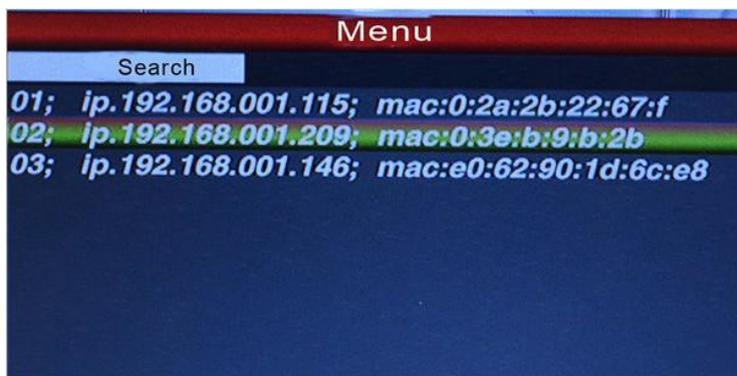


Fig.6

Remark: The keyboard is with power-off memory function. After off and power on again, the keyboard is recovered to the status before power off.

User can clear the devices that are off line from the memory list.

2.2.3 Automatic search and manually add device

Automatic search

If user want to add the more device, please press the “Menu” button,



Fig.7

move the cursor to choose the “device management” and click “Enter” to enter the sub-menu, select “Search and Add” to confirm.

Move the cursor to select “search” and click “enter”, then the keyboard will search and add the device automatically.

Select the IP address which device need to access, press “Enter” to save the corresponding image and displayed.

Resolution

Optional resolution: 1024x768, 1920x1080, 1280x720.

Manually add device

Some camera maybe with limited of different Port or need the Log-in password, the keyboard maybe not able to search and add automatically, then the user needs to add the IP devices manually:

Please click the “Enter”, select “device management”, “manual add”, enter to the following Interface (Fig.6):

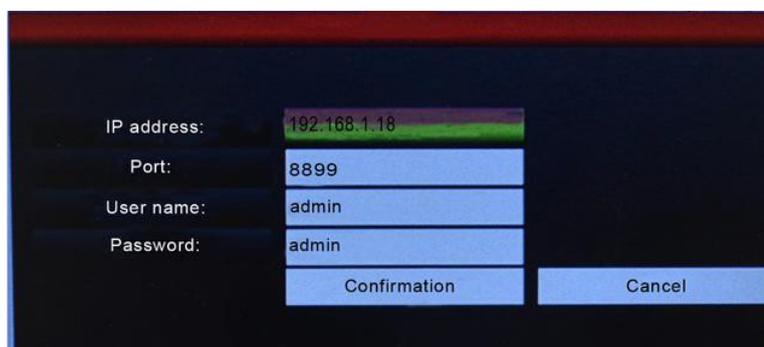


Fig.8

On this interface, input “IP address, port, name, password”, then press confirmation, then the keyboard will display and save corresponding IP images.

- Remark: 1. Please make sure IP port, password and all of information is correct before add IP address manually
2. Here the “Menu” button is also the return button.

2.3 PTZ control and image switching

2.3.1 Device switching

As the above fig. 6 show, the user could switch Dome by the corresponding Dome ID which is on the left of IP address list.

Press “**Addr**” button, and No. of the corresponding Dome ID then “**Enter**” button.

Keyboard will switch to the corresponding IP address.

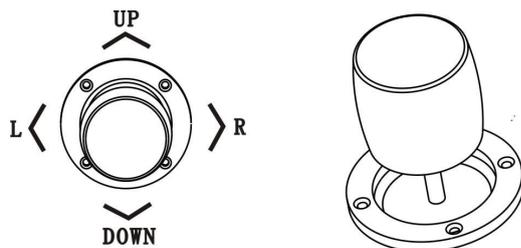
For example, switching to Fig. 6 192.168.1.146, please press “**Addr**” button; and press “No.3”; then press “**Enter**”.

Remark: Device switching is also available from “equipment management”. Please select the corresponding IP address and press “Enter” to save to come true.

2.3.2 Joystick and key operation

Joystick Operation

3 Axis joystick outline is as below:



3 Axis Joystick can control speed dome as following:

- (1) Control dome camera Pan and Tilt :moving the joystick in any direction, speed dome will pan or tilt accordingly. User can control the speed of the dome by moving speed of the joystick.
- (2) Zoom Adjust : Rotate the joystick to zoom in and zoom out. Clockwise rotation of Joystick, zooming in to get closer and larger image; Counterclockwise rotation to zooming out, image will get farther and smaller.

Key Operation

【Focus+】 / 【Focus-】 : Manual adjust focus value of zoom module to get clear image.
(default of zoom module is auto-focus.)

【Zoom+】 / 【Zoom-】 : zoom+/- get the ideal image.

【Iris+】 【Iris-】 : Adjust the aperture to get brighter or darker image gradually. (Some zoom module is only with Auto Iris function)

【Setup】 : [Setup]+number+[Enter] to set the preset point of the camera or set the short commands of the keyboard (See 2.5).

【Preset】 : [Preset]+number+[Enter] to enable the preset point.

【Menu】 : press to enter Menu or to Return back.

【Addr】: Address key, [Addr]+ID number+[Enter] to choose the corresponding IP address.

【0】 ~ 【9】 : Number keys [0], [1], [2], [3], [4], [5], [6], [7], [8], [9].

【Clear】 : Delete key, [Clear]+number+[Enter] to delete the preset point.

【Enter】 : Confirm key, to confirm the present operation.

【Aux ON】 : Aux ON.

【Aux OFF】 : Aux OFF.

2.4 Preset operation instruction

Preset instruction

Preset function means that store camera state (horizontal angle, tilt angle and lens spec). It can realize recover the setting status in advance and call it.

2.4.1 Set preset

Move PTZ to the target position. Press “**Setup**” and No. key, for example: “**1**” and press “**Enter**” button to confirm preset setting.

Remark: 1. New preset No. will cover the previous one if user used same preset number .
2. Max preset quantity always limited by the IP speed dome, but not the keyboard controller.

2.4.2 Call preset

Please make sure the setting preset is successful. Otherwise, call preset will not valid

1. Press “**Preset**” button;
2. Input the preset number;
3. Press “**Enter**” button. PTZ will automatically run to the preset point setting

2.4.3 Delete preset

1. Press “**Clear**” button;
2. Input the preset point need to delete;
3. Press “**Enter**” to delete preset point.

2.5 Shortcut commends.

If speed dome supported shortcut commend, user can use the keyboard controller to call the shortcut commend to enable the function easily.

The following are shortcut commends for the speed dome, please Press the Preset No. +Enter to enable those function:

Preset No.	Function	Preset No.	Function
81	Auto Day/Night	84	Force on Far Light
82	Switch to Night	85	Force on Near Light
83	Switch to Day	92	A-B Scan
98	Tour 1	97	Tour 3
96	Tour 3	99	Pan Scan

Remark: Different speed dome manufacturer may use different shortcut commend.

2.6 Language

This keyboard controller is with Chinese and English as optional.

Enter to the Main OSD and select the Language you need, press the button “**Enter**” to confirm and save.

As below picture show:

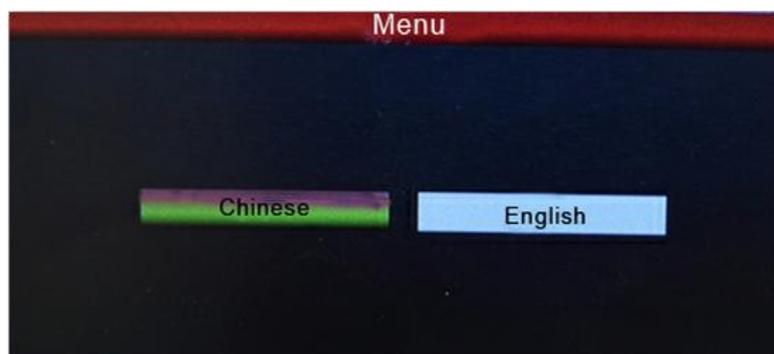


Fig.9

2.7 Main stream and sub stream switching

This Keyboard controller with the 5" LED screen, supports both main Stream and sub-Stream display

Press the button **Menu** Enter to the Main OSD, find the "System" item and choose the "Main Stream" or "Sub Stream", press "Enter"

- Remark: 1. The keyboard controller support the encoder max 1080P, for the camera is more than 1080P, please use Sub Stream, so image will be displayed properly.
2. The keyboard controller is with screen standby function, when the controller is not operated for long time, the screen will be in standby mode, user can move the joystick or press any key to wake up the screen.

2.8 Factory default

To enable the factory default, user just need to enter menu, choose "Default config"

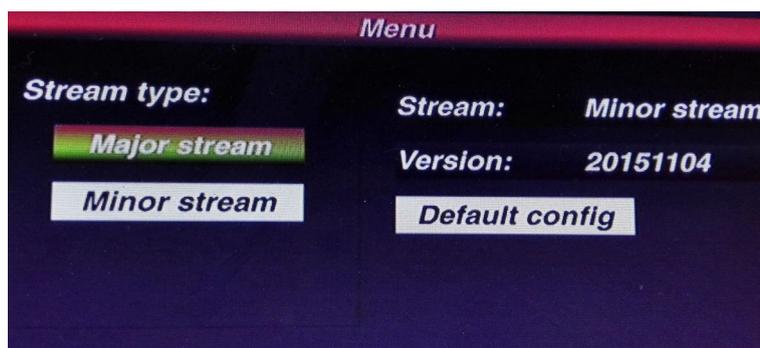


Fig.10

2.9 IP address

The Default IP address of the keyboard is "192.168.1.2"

To be sure the controller and dome connected work properly, please make sure they are in the same network segment, but not same address.

If they are used the same IP address, please change either the dome address or the keyboard controller address.

Changing the IP address of the Keyboard as following:

Press the button **Menu** enter to the main OSD and then find the "Network", input the IP address .press the "Enter" to save. after that the keyboard will be reboot, that means changing address is successful.

3.0 Troubleshooting

Issue	Possible Reason	Solution
Can't add the Camera	IP address of the IP camera and controller is same	Change either IP address of keyboard or IP address of camera
Can't run the Tour	The command is inconsistent with dome connected	Check the dome manual, make sure the right command to run tour.
Auto Reboot	Input power voltage is too low	Change the correct power supply
Get the IP address ,but can't add the Device	The cursor has been stuck in the search, when you add the device, the keyboard research again	Move the Cursor to the IP address and confirm to add
After Power on, the controller can not work,	1.Power supply used is not correct; 2.The controller is broken	1.Change a correct power supply 2. Contact your supplier for replacement.
Controlling is not sensitivity	Compatibility between controller and dome	Contact supplier to check the compatibility
No Image display, but can control.	The encode of Dome is higher than 1080P.	Change the main stream to sub Stream from the controller