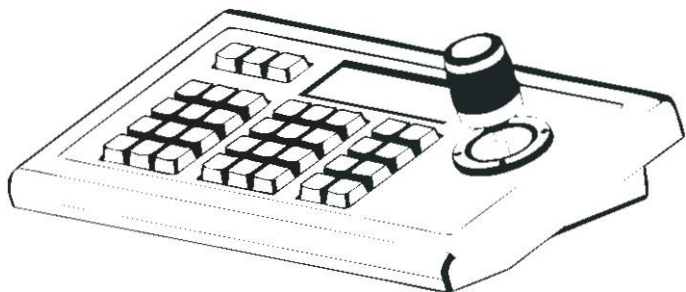# Network keyboard
USER MANUAL

IP-Key-01

Preface:

Thank you for purchasing another product from of Provision-ISR. If you have any questions or concerns after reading this manual, please contact our technical support. This product is designed to independently control multi-IP PTZ dome cameras in local network (LAN). The IP-Key01 adopts ONVIF protocol for all communication, connection, and control and therefore compatible with different brands of IP PTZ cameras.

The IP-Key01 has an integrated Web-Page to support, manage and maintenance cameras connected to it. In order to adapt to different operating systems, this product support all main internet browsers such as: Internet Explorer, Firefox, Chrome and Safari.

The IP-Key01 controller can also support analog PTZ by RS-485, but the two modes (IP and RS-485 cannot be mixed).

Package Content:

IP-Key01 Network Keyboard -- 1

Power Adapter --1

Network Cable ---1

Quick Guide CD --1

Quick Operation Guide --1

Statement:

Due to possible firmware updates, the contents described in this manual may differ from the version you are currently using. If you are in doubt when using this manual, please contact our technical support for help.

Provision-ISR reserve the right to modify this manual without advanced notice.

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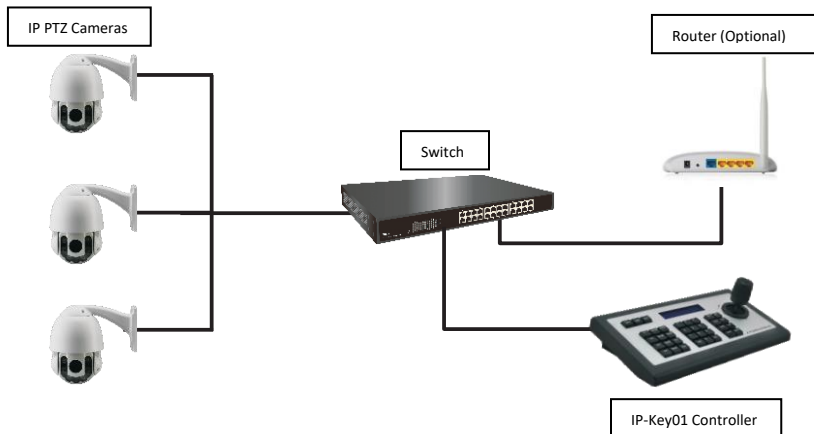
1.Product Overview:

1.1 Description:

The IP-Key01 Support ONVIF protocol which assures great compatibility with most IP PTZ Brands. The controller is integrated with a built-in web page, which makes the configuration process easy and simple.

1.2 Product Features:

- ONVIF protocol support.
- Support quick LAN device search and adding equipment.
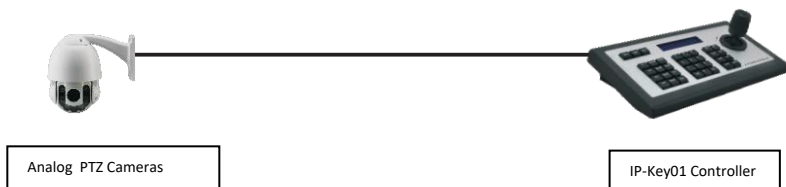- Support Operating presets, patrols and patterns.
- 3D joystick

1.3 Connection diagram (IP Connection):

The controller and the IP PTZ cameras must be in the same network (LAN). For example: both 192.168.1.123 and 192.168.1.111 IP Addresses belong to the same network segment. 192.168.1.123 and 192.168.0.125 does not. The default IP Address of the controller will be set by DHCP and can be changed by the setting menu. At this point you need to ensure the correct IP address of the keyboard or the cameras.

1.4 Connection diagram (Analog Connection):

The controller should be connected directly to the PTZ camera via RS-485 (Using standard 1pair cable)

Analog PTZ Cameras

IP-Key01 Controller

2. Technical Specifications:

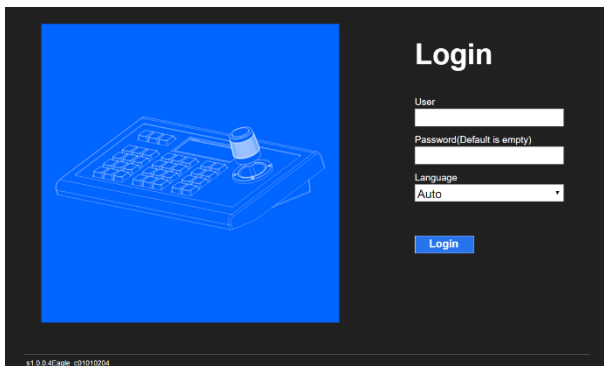|	
Power supply	DC12V-1A
RS485	Connecting terminal: TA/TB
RS232	Db9 male port
Ethernet	RJ45，IEEE 802.11b/g/n
Support protocol	ONVIF 2.4
browser	IE, Firefox, Chrome, Safari.
Work temperature	0°C~55°C / 14°F~131°F
Work humidity	20%~80%(frostless)
Storage Temperature	-10°C~60°C / 14°F~140°F
Storage humidity	0~90% (frostless)
Weight	3kg
certification	CE, FCC, RoHS

3. Installation and Settings:

3.1 .Connection network setup:

Connect the keyboard to the supplied power supply and network cable. After boot-up the screen will display the local IP received by DHCP (HOST: xxx.xxx.xxx.xxx). Input the IP address into the web-browser to access the login page. The default credentials are: Username: admin, Password should be empty.

If there is no DHCP server at present, the controller will not get an IP address. In this case you will have to configure the controller's address manually: Click on SET UP, Scroll down using the joystick to page 02/03. The screen will show IP: DHCP. Scroll right using the joystick. The display will change to IP: STATIC. Click on "Enter" – the display will show "IP ADDRESS:". Use the numeric keypad to set the static IP and press "Enter". The display will show "SUBNET MASK:" Use the numeric keypad to set the subnet mask and press "Enter". the display will show "GATEWAY:". Use the numeric keypad to set the gateway and press "Enter". The keyboard will prompt for a restart. Click "enter" to confirm and wait for the controller to restart.

Once the keyboard have booted up – input the address you have configured into the web-browser.

3.2 Search and add a device:

There are two methods to add a device to the keyboard: Through the keyboard local interface or through the web-page.

1. Using the keyboard to add PTZ Cameras:
   a. Make sure that the keyboard is in the same network segment as the cameras.
   b. Press "Search" button on your keyboard
   c. After a few seconds, the keyboard will display a list of found cameras.
   d. Use the joystick to scroll up/down until you locate the desired camera and click on "Add" (Please note: All IP cameras which support ONVIF and available on LAN will be found and displayed. Not only PTZ cameras)
   e. Input the user name using the numeric keypad and click on "Enter"
   f. Input the password using the numeric keypad and click on "Enter"

   (The keypad is used for both numbers and letters. For example "2" is used for both 2 and A,B,C)

   g. Repeat steps d-f if needed.
   h. Press "ESC" to exit to main interface.

2. Using the web-page to add PTZ Cameras:
   a. Make sure that the keyboard is in the same network segment as the cameras.

b. Login to the web-page of the keyboard

c. Press "Search" on the bottom left and wait for the list to appear.

d. Choose a camera from the left pane (Green color) and click on add.

e. Choose the added camera in the middle pane (Blue color).

f. Input all the missing details in the right pane (Orange color). Make sure that all the other details are correct. (In most cases only the username/password will be missing).

g. For quick reference to this camera, you can input an address (Numbers only). This address can be later used to quickly gain access over the camera.

h. Click on "Save"

i. Repeat steps d-g if needed.

3.3 Query and Control

This stage refers to the local interface only.

1. Click on "INQUIRE" to view a list of the added cameras.

2. Scroll up/down using the joystick to locate the desired camera and click on "Enter".

3. The Keyboard will display ""Connecting..." and upon successful connection the screen will show: "GOAL: xxx.xxx.xxx.xxx".

4. You can now operate the controlled camera.

<u>Troubleshooting:</u>

1. The keyboard displays "CONNECT TIMEOUT!" – Please make sure that both the camera and keyboard are well connected to the LAN.

2. The keyboard displays "CONNECT ERROR!" – Please make sure that the username and password are correct in the configuration menu.

<u>Switching Cameras:</u>

1. Option 1: If several PTZ cameras were configured, you can either repeat steps 1-3 from the section above or use the "NEXT" / "PREV" buttons to quickly switch control between configured cameras.
2. Option 2: Press on "IP" then input the address (If configured when you setup the camera) and then "Enter". The keyboard will take control over the defined camera.

4. Web Configuration:

<u>Home Page</u>

Use the IP Address displayed on the keyboard to access the web page. (Default user name: admin Password: empty - no password).

<u>LAN Setting</u>

You can modify the local network parameters of the keyboard as follows:

The default configuration is "Dynamic addresses" which means that the keyboard will automatically obtain an IP address from the DHCP server.

Static Address can be used when there is no DHCP server in the LAN connection or when the user wishes to fixate the IP address of the controller for easier connection. After changing the setting to "Static Address", the user is required to fill in all the required information.

LAN			
Network Type	Static Address ▼		
Users			
Number	User	Password	Rights
1	admin		Super Admin ▼
2			Visitor ▼
3			Visitor ▼
4			Visitor ▼

<u>User Management Configuration:</u>

The defaulted account is super admin. We recommend on adding a password to the super admin account along with adding a regular user without admin permissions.

The user description is as follows:

1. Super administrator: default account. Have all authorities and permissions on all accounts.

2. Administrator: Have all authorities and permissions on all accounts except of the super administrator

3. Operator: They can control cameras but are not authorized to change any setting.

4. Visitor: can login to devices, but are not authorized to configure any parameters.

Upgrade:

Upgrade function is used to maintain and update the keyboard if necessary. After accessing the update menu, choose the correct update file and click "start". The keyboard will update and automatically reboot if the update was successful.

Important! During the update process, please don't operate the keyboard, shut down the power or disconnect the keyboard from the Internet!

Factory Reset

In case of any improper setting or configuration, select "Restore Factory" function to reset the device to its factory default.

Reboot:

After working for a long time, the keyboard might become slow on reaction or work slowly than expected. Select restart function to ensure the device get the proper maintenance.

5. Switching to Analog (RS-485) Control:

Press 【SET UP】 on the keyboard, Move the joystick down twice, The screen will display [Analog Keyboard], press the Enter key to confirm, wait for the keyboard to restart to switch to the analog keyboard control status.

5.1 Select the PTZ Camera address

Under the control state, press 【IP】, the keyboard will display 【CAMERA ADDR:】 on the screen. Then enter the PTZ Camera's IP that need to be Controlled, and finally press the 【Enter】 key. For example: the PTZ Camera address is 28: Press 【IP】 【2】 【8】 【Enter】, then the screen will display 【CAM: 28 P: Pelco-D B: 2400】

5.2 Select the protocol and baud rate of PTZ Camera

Under the control state, first press 【SET UP】, the screen will display 【CAMERA SET】; Second press 【Enter】 to confirm, the keyboard will display 【CAMERA: 001】 ,then select the address of PTZ Camera. Third press 【Enter】 again, The screen of the keyboard will display [PROTOCOL: Pelco-D], move the joystick up and down to select the protocol. After Selected protocol choose, press 【Enter】 again, the keyboard will display 【BAUDRATE: 2400】, move the joystick up and down to select the baud rate. After selected the baud rate is choose, press 【Enter】 again to save, and then 【ESC】 to exit.

Example: PTZ Camera address is 28, the protocol is Pelco-P and the baud rate is 2400

Press the 【SET UP】 【Enter】 【2】 【8】 【Enter】 ,change the protocol into Pelco-P 【Enter】, change the baud rate to 2400 【Enter】, and finally press 【ESC】 to exit.

6. Key combinations:

Saving Presets:

1. Gain control over the desired camera.
2. Set the camera to the desired location.
3. Press on "PRESET" and make sure that "PRE" is displayed on the screen.
4. Enter the desired preset number and press "ENTER"

Calling Presets:

5. Gain control over the desired camera.

6. Press on "SHOT" and make sure that "SHOT" is displayed on the screen.

7. Enter the desired preset number and press "ENTER"

Calling Cruise:

8. Gain control over the desired camera.

9. Press on "TOUR" and make sure that "TOUR" is displayed on the screen.

10. Enter the desired cruise number and press "ENTER"