PTZ Controller Keyboard
User Manual

SBPTZJOY

Notes

Please read this user manual carefully to ensure that you can use the device correctly and safely.

1. Electrical safety
- All installation and operation here should conform to local electrical safety codes.
- Use a certified/listed 12VDC class2 power supply only (included).
- Improper handling and/or installation could run the risk of fire or electrical shock.

2. Environment/Handling
- Heavy stress, violent vibration or exposure to water is not allowed during transportation, storage and installation.
- This product should be installed in a cool, dry place away from direct sunlight and heat sources.
- Do not install the product in extreme temperature conditions.
- Do not block any ventilation openings.
- To maintain precision, handle the joystick with care.
- Do not operate the device outside of its specified operating temperature range.
- This device is for indoor use only. Do not expose the device to moisture.

Items	Amount	Note
Network keyboard	1	/
DC12V power adapter	1	Input：AC100-240V
Power cable	1	/
CD	1	Included user manual

Contents

1.3 Front Panel Instructions

Name	Functions
MENU	Skip to the main menu of the current mode.
CAPTURE	Currently no function
SHIFT	In IP dome mode, press digital number + SHIFT to control this PTZ camera.
MULT	Set the screen display mode of the current output.
LAYOUT	Call plan.
WIN	Set the window of the current output.
MON	not supported.
CAM	Select the camera.
▶	Play
❚❚	Pause
■	Stop
●	Enable / disable manual record. (unavailable as of now)
SETUP	Local setup, such as keyboard ID, network setup, etc.
INQUIRE	Search the speed dome list; in IP dome mode, select a speed dome and press "ENTER" to switch to this PTZ camera and then you can control this camera by your keyboard.
SEARCH	Currently no function
ADD	Currently no function

0-9	Input the number/ alphabet /symbol.
ESC	1. Cancel the number/alphabet; cancel the operation; return to the previous menu. 2. Press and hold the ESC button for 2s to lock the keyboard.
ENTER	Enter menu or confirm to save the current settings.
PRESET	Set and call the preset.
CRUISE	Call or stop the cruise.
TRACK	Call or stop the track.
AUTO	Enable or disable the auto scan.
FOCUS+	Click it to have long focus.
FOCUS-	Click it to have short focus.
ZOOM+	Zoom in
ZOOM-	Zoom out
IRIS+	Iris increases
IRIS-	Iris decreases
WIPER	Enable or disable wiper.
LIGHT	Enable or disable light.

1.4 Rules of Key Press

Double press--- the interval time between two presses less than 2 seconds. It mainly uses to switch the alphabet.

For example, press 2 twice to input A; press 2 three times to input B. Please see appendix for the detailed rules of key press.

When selecting or switching the operating object, it usually starts with the number key and ends with the corresponding functional key. Take the following as examples.

1+MON (press 1 and then press MON)—— not supported

123+CAM (press 1, 2, 3 and then press CAM)—— select No.123 Camera

10+PRESET (press 1, 0 and then press PRESET)—— call preset 10

1.5 Joystick and Knob Control

Joystick/Knob	Operation	Function
	Up	Control the speed dome to move up.

Introduction

	Down	Control the speed dome to move down.
	Left	Control the speed dome to move left.
	Right	Control the speed dome to move right.
	Rotate left	Zoom out
	Rotate right	Zoom in
	Rotate left	Focus-
	Rotate right	Focus+
	Rotate left	1. IRIS- 2. In the setup interface or its sub menu interface, rotate the knob left to move the cursor up
	Rotate right	IRIS+ 2. In the setup interface or its sub menu interface, rotate the knob right to move the cursor down

2   Setup

2.1 Startup the Keyboard

Connect the network cable to the keyboard and then connect the power. After the device starts, please enter the default password (1234) by moving the joystick right one by one and then press "ENTER" key to go to main/home interface (see left figure). Press "SETUP" key and verify the password again to go to the system setup menu.

Platform Mode

IP Address:10.15.2.41   Offline
Mon:
Win:
Cam:

Setup

> 1 System Setup
  2 Plat Setup
  3 IP Dome Setup
  4 Serial Setup
  5 Mode   :<Platform Mode>
  6 Language   :<English>
  7 Test Key
  8 About
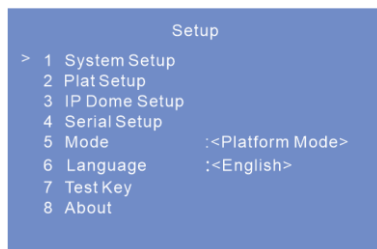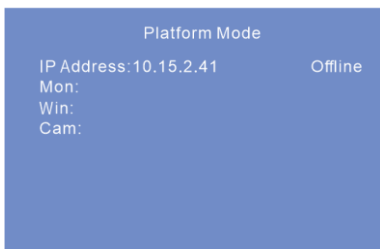
2.2 System Setup

All system setup menus are as follow. You can move the joystick up or down to see all system setup menus.

System Setup

> 1 Modify Password
  2 Keyboard ID   :11
  3 Network
  4 Restore Default
  5 Pwd Question
  6 Playback Period(s) : 180
  7 Keypad Tone   : <OFF>
  8 About
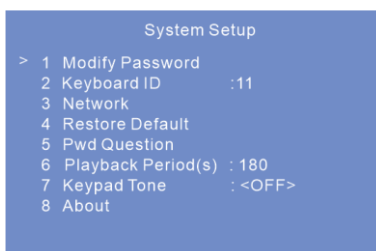
2.2.1 Password Setup

1. Select "Modify Password" and press "ENTER" key to set the password.

Modify Password

> 1 Old Pwd   :------
  2 New Pwd   :------
  3 Confirm   :------
  4 Save

Modify Password

> 1 Old Pwd   :******
  2 New Pwd   :*****8
  3 Confirm   :------
  4 Save
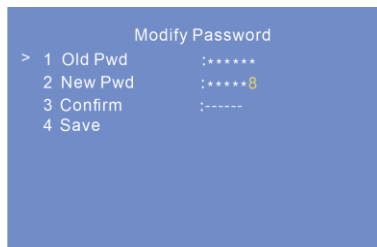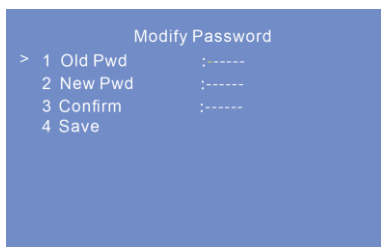
2. Select "Old Pwd" and then press "ENTER" key to enter the old password. Enter the old password by moving the joystick right one by one (the default password is 1234). After that, press "ENTER" to save.

3. Select "New Pwd" by moving the joystick down. Press "ENTER" to enter the edition status. Enter the new password as the above mentioned method.

If you want to change the inputted number, please move the joystick to the position you want to change and then press the correct number. If you want to cancel the inputted number, you can press "0" for two times. Press "ENTER" key to save the new password. Press "ESC" key to return to the previous menu.

4. After confirming the new password, press "ENTER".

5. Move to the "Save" menu and press "ENTER" to save the settings.

2.2.2 Keyboard ID Setup

Select the keyboard ID menu and press "ENTER" key to go to the keypad ID setup.
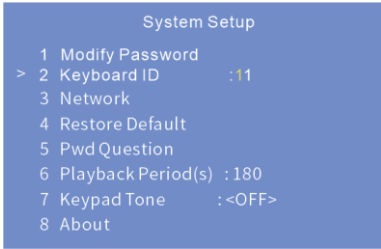

The effective value of the ID ranges from 1 to 32.

To set keyboard ID, press the digital number and "ENTER" key (eg. press 32 and then press "ENTER" to set the keyboard ID at 32).

2.2.3 Local Network Setup

Select "NETWORK" and press "ENTER" to go to local network setup. You can set the local IP address, subnet mask, default gateway, DNS 1/2 and HTTP port.
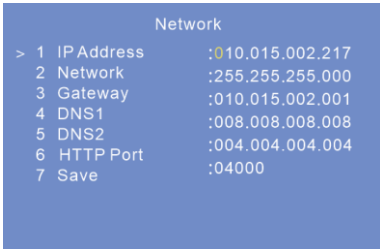
❖ IP address: Select IP address and press "ENTER" to set the IP address. The default IP address is DHCP.

Tips: Move the joystick right to set the IP address. Press "ENTER" to save the settings. Move the joystick down to set other network parameters. After you set all network parameters, select "Save" and then press "ENTER" to save all settings.

2.2.4 Default Setup

Select "Restore Default" and press "ENTER". Then press "ENTER" again to confirm to restart the device. After restarting, the device will restore to the default factory settings.

2.2.5 Security Question Setup

Select "Pwd Question" and press "ENTER" to set the security question which can help you reset your password once you forget your password.

2.2.6 Instant Playback Period Setup

Select "Playback Period(s)" and press "ENTER" to set the instant playback period when using the network keyboard to control video output of the decoder.

2.2.7 Keypad Tone Setup

Select "Keypad Tone" and press "ENTER" to turn on/off the keypad tone. After the keypad tone is enabled, you can hear a sound when pressing a key on the keyboard.

2.4 IP Dome Setup

Select it and press "ENTER" to go to the settings of IP Dome (PTZ camera) to set the parameters of
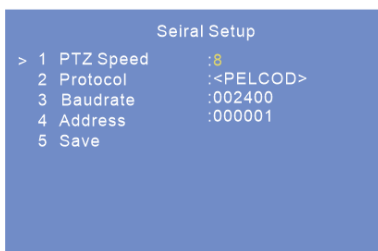
IP domes.

Press "SETUP", select "IP Dome Setup" and press "ENTER" to go to the IP dome setup interface. Select a PTZ camera and then set the IP address, port, name, password of the PTZ camera selected.

```
                    IP Dome Setup
 >  1  IP Address        :010.015.002.162
    2  Port              :00080
    3  Protocol          :<Private>
    4  User              :admin-------------
    5  Password          :*------------------
    6  Clear
    7  Save
```

❖ IP address: Enter the IP address of the PTZ camera. This IP address must be in the same local network segment with the local IP address of the network keyboard.

❖ Port: The default port is 80 (the http port of the PTZ camera).

❖ Protocol: Choose "Private" or "Onvif" protocol as needed.

❖ User and password: The username and password must be the same with that of the PTZ camera.

❖ Clear: To clear the information of the PTZ camera.

2.5 Serial Port Setup

Select "Serial Setup" and press "ENTER". In this interface, you can set PTZ speed, protocol, baudrate and address.

```
                    Seiral Setup
 >  1  PTZ Speed         :8
    2  Protocol          :<PELCOD>
    3  Baudrate          :002400
    4  Address           :000001
    5  Save
```

PTZ Speed: Set the speed value as needed.

Protocol: PELCOD or PELCOP can be optional. Please select it according to the protocol of the PTZ camera.

Address: Please set it according to the address of the PTZ camera.

Baudrate: Please set it according to the baudrate of the PTZ camera.

2.6 Mode Setup

Select it and press "ENTER" to go the mode selection mode. Three mode options: platform mode, IP dome mode and serial port mode.

2.7 Language Setup

Select it and press "ENTER" to switch the language between English and Chinese.

2.8 Test

Select it and press "ENTER" to test if the button is available. User can also check whether the silk-screen on the button and display on the screen is consistent.

2.9 View Information

Press "SETUP" and select "About". After you press "ENTER", you can view the keyboard information, including keyboard number, model, SN, current mode, version, date, local IP, subnet mask and so on.

3 IP Dome Mode

3.1 Mode Setup

Platform mode, IP Dome mode and Serial Port mode are optional. Select PTZ mode and press "ENTER" to select. A maximum of 256 PTZs can be controlled. It also supports PTZ control via ONVIF protocol.

Tips: This device supports a default mode (platform mode or IP dome mode), namely it will restore to the last working mode after restart. In IP dome mode, you only need to select operational PTZ, do not need to choose the output and the window, and the other operations are similar to the platform modes.

3.2 PTZ Operation

After setting up the IP address, port, name and password of the PTZ camera (See IP Dome Setup), you can operate the PTZ by joystick or PTZ control keys. Please see PTZ Control for more details.

3.3 IP Dome Switch

The operating IP dome can be switched by pressing "Number plus SHIFT".
Select another IP dome and setup the IP address, port, name and password. Please see IP Dome Setup for more details.
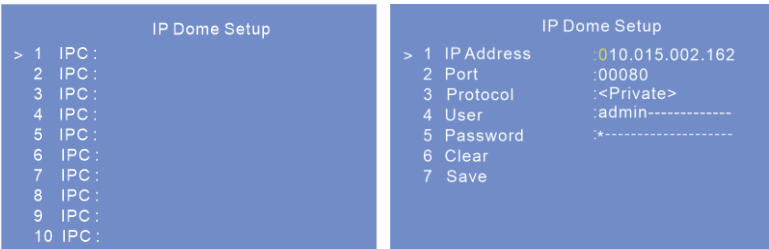
Press "SHIFT" to switch the PTZ camera listed in the IP dome setup interface in sequence.
Press "Digital number + SHIFT" to switch to the corresponding IP dome. Move the joystick to control the IP dome camera. The current operation shows on the screen of the keyboard as shown below.

IP Dome Mode

IP Address: 192.168.1.100   Online
ID: 1

Right

IP Dome Mode

IP Address: 192.168.1.100   Online
ID: 1

Stop

4 Serial Port Mode

4.1 Mode Settings

Press "SETUP" on the keyboard and select "Mode". Press "ENTER" to switch to the serial port mode. In serial port mode, the PTZ camera can only connected to the keyboard by RS422/232 interface directly. After the PTZ camera and the keyboard are connected, please configure the PTZ parameters.

4.2 PTZ Control

After the serial port parameters are set (See Serial Port Setup), please return to the main operation interface by pressing "MENU". The PTZ camera can be controlled by the joystick or PTZ control buttons. The setting steps are similar to the PTZ control in Platform mode. See PTZ control for details.
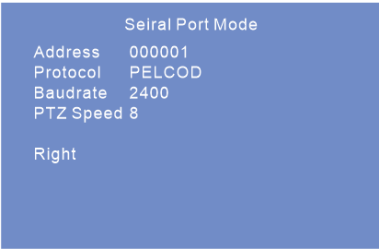

Note: In serial port mode, many PTZ operations can be done, such as change direction, zoom in/out, adjust IRIS, call or set preset, etc.

6 Web

6.1 Web Access

In order to view the keyboard from a network it may be connected to a LAN or internet. The network setup should be done accordingly.

① The keyboard should be powered on and connected to the network. Please see Local Network Setup for details.

② Set the local IP address and HTTP port. The default local IP address is DHCP and the default HTTP port is 4000. You shall add the port number when typing IP address in IE address blank as http://192.168.0.201:4000 into web browser.

③ Enter the password in the login window (the default password is 1234).
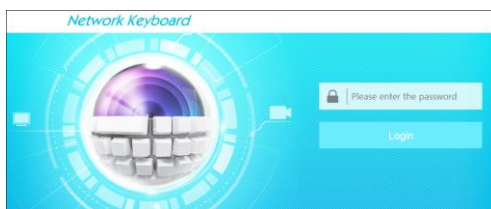
❖ Please make sure the IP address of the web client is in the same local network as that of the keyboard. If the IP address of the keyboard is 192.168.0.201, the IP address of the IP client must be 192.168.0.XXX.

❖ Some models may be searched by IP-Tool. Make sure the PC and keyboard are connected to the LAN and double click the IP-Tool icon to run this software. Then the keyboard can be searched; if the keyboard can't be searched, please check whether the PC and the keyboard are connected to the network or not. Double click the keyboard in IP-Tool and the system will pop up the web browser to connect to the keyboard.

You can check the system information. Click "logout" in the top-right corner and log out the Web client.

6.2 Upgrade

Get the software from your vendor when there is a new software version.

1. Click "Browse" button to select the save path of the upgrade file.

2. Click "Upgrade server firmware" to start upgrading the application program.

4. After successfully update the software, the device will restart automatically.

Notice: You can't disconnect to PC or close the keyboard during upgrade.

Appendix

Digital number/ alphabet/symbol input rules are listed in the following table.

Key	The relationship between the frequency of key-press and input display								
	once	twice	three times	four times	five times	six times	seven times	eight times	nine times
1	1	,	.	!	@	#	$	%	^
2	2	A	B	C	a	b	c		
3	3	D	E	F	d	e	f		
4	4	G	H	I	g	h	i		
5	5	J	K	L	j	k	l		
6	6	M	N	O	m	n	o		
7	7	P	Q	R	S	p	q	r	s
8	8	T	U	V	t	u	v		
9	9	W	X	Y	Z	w	x	y	z
0	0	blank							
Key	The relationship between the frequency of key-press and input display								
	ten times	eleven times	twelve times	thirteen times	fourteen times				
1	&	*	(	)	?				