

PRO VIDEO PTZ CONTROLLER

User Manual



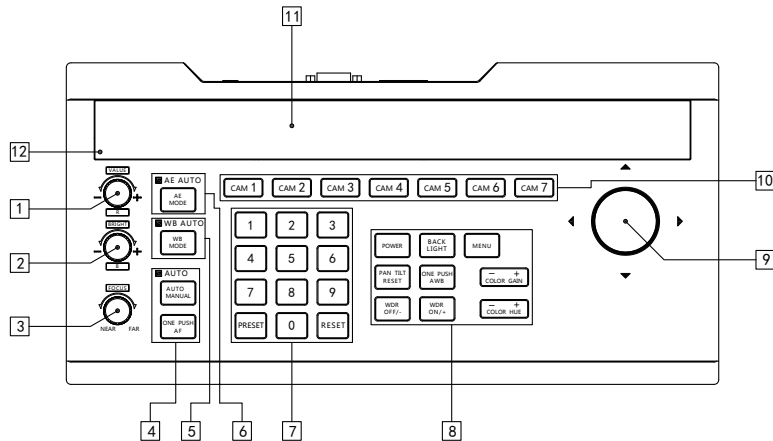
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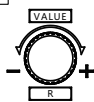
1. Specification & Parameters

Communication Interface <small>(All of Communication Port can working at the same time)</small>	
RS422/RS485 Interface	4Pin Terminal
RS232C Interface	DB 9Pin Male Interface
LAN Interface	RJ45 Female Interface
Power Interface	JEITA type4 Female
Upgrade Interface	Micro USB Female Interface
Camera Control	
Max Support	255pcs PTZ Camera
Control Protocol	VISCA , PELCO P/D
Display Screen	OLED Screen
Camera Channel	7
Knobs	3
Control Signal Format	
Baud Rate	2400bps、 4800bps、 9600bps、 19200bps、 38400bps
Data Bit	8bits
Stop Bit	1bit
Parity Bit	NONE
Ethernet Protocol	UDP / TCP /IP
Power	
Rated Voltage	DC 12V
Rated Current	0.3A max
Power Consumption	3.6W
Physical	
Working Temperature	0℃ ~ 40℃ (32 ℉ ~ 104 ℉)
Storage Temperature	-20℃ ~ +60℃ (-4 ℉ ~ 140 ℉)
Working temperature	Indoor
Dimension Size (L*W*H)	350mm x 173mm x 99mm
G.W (kg)	2.5kgs
Packing Accessories	User Manual / RS422 4PIN Terminal / Power Adapter

➤ 2.Keys Function Description

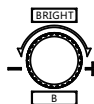


1 VALUE/R-Knobs



This Knobs is using for adjustment camera's Exposure parameters or Red Gain Valued, Clockwise direct is added the valued, Counterclockwise direction is reduce the valued

2 BRIGHT/B- Knobs



This Knobs is using for adjustment camera's Exposure parameters or Blue Gain Valued, Clockwise direct is added the valued, Counterclockwise direction is reduce the valued

3 FOCUS Knobs



This Knobs is using to adjustment camera's focal length, clockwise direction is adjustment focus length near, Counterclockwise direction is adjustment focus length Far; (When User using this function, the keyboard's Focus mode will be changed to MANUAL, It wasn't available on AUTO Mode)

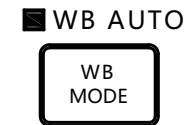
4 FOCUS Function Area



『AUTO MANUAL』 Keys is using for adjustment Camera's Focus Mode, When AUTO indication light is ON, Then it means current model is AUTO MODE,

『ONE PUSH AF』 Keys is using for trigger one time Auto FOCUS, Each time you press, the camera focuses once, and meanwhile the camera enter to AUTO FOCUS Mode;

5 WB Mode Keys



This key is using to modify the camera Whit balance mode, Each time press, it will changed to different mode. Under the different White balance mode, the R-Knobs and B-Knobs with different function; detail information please refer to Sheet I, When the indication of light of WB Mode keys is ON, Then Knob-R and Knob-B only available for white balance mode.

WB Mode	R-Knobs Function	B-Knobs Function
Auto	None	None
Manual	Red Gain	Blue Gain

Sheet I

6 AE Mode Keys



This keys is using to modify Auto Exposure mode, Each time press, it will changed to different mode. Under the different exposure mode, VALUED-Knobs and BRIGHT-Knobs with different function, The Knobs function has been display on the LED Screen, detail function please refer to Sheet II

When AE Mode indication Light is ON, Then means Knobs-R & Knobs -B application for Exposure parameters adjustment.

Exposure Mode	VALUE-Knobs Function	BRIGHT-Knobs Function
AUTO	None	Gain Compensation
MANUAL	Shutter	IRIS
Shutter Priority	Shutter	Gain Compensation
Iris Priority	IRIS	Gain Compensation
Brightness Priority	None	Brightness

Sheet II

7 2.1 PRESETS Function Area



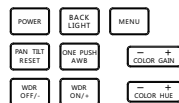
『PRESET』 Keys is used to Save and Call Presets;

SAVE Preset: Press 『PRESET』 Button & Relax, the light of 『PRESET』 keys starting twinkling, After that press the number of Preset position to saved the presets, e.g 『PRESET』 + 『1』 『2』 『0』 , to setting the number of 120 Presets.


Call Presets :Preset Number Keys+ 『PRESET』 e.g Press 『1』 + 『2』 + 『0』 , after that press 『PRESET』 , then Call 120 Presets.

『RESET』 Keys is for clean Presets ;

Press 『RESET』 button and relax, the light of 『RESET』 keys starting twinkling, after that press the number of presets position to Clean current presets. E,g Clean 25 presets, 『RESET』 + 『2』 + 『5』 , then now 25 presets already clean.




8 2.2 Camera function Area


『POWER』  key is to check the power statuses of all of the Channel of camera, Press this keys the indication light of 『CAM1』 ~ 『CAM7』





status is means Camera Power statuses, Green is means This channel of camera is power on, White is means this channel of camera is standby statue, No light is means this channel of camera doesn't connection or can't get the camera's power statuses.


Meanwhile press 『POWER』 + 『CAM1』 ~ 『CAM7』 , is means Turn ON/OFF Corresponding Channel of camera Power


『BACK LIGHT』  Keys is to Turn ON/OFF Back light;

『MENU』  Keys is to Open or closed Camera or keyboard menu, Long press 『MENU』 enter to Keyboard menu setting;

『PAN TILT RESET』  Keys is using to Reset the Pan/Tilt Position of Camera

『ONE PUSH AWB』  Keys is using to trigger one time white balance, Each time you press, the camera will calibration White balance once time., and meanwhile the camera enter to Single time White balance Mode;

『WDR OFF/-』  Key is to Turn OFF WDR Function or reduced Dynamic Grade (Only available for Multigrade WDR Camera)

『WDR ON/+』  Key is to Turn on WDR Function or Increased Dynamic Grade (Only available for Multigrade WDR Camera)

『COLOR GAIN+』 Key is to increased the valued of COLOR GAIN;

『COLOR GAIN-』 Key is to reduce the valued of COLOR GAIN

『COLOR HUE+』 Key is to increased the valued of COLOR HUE

『COLOR HUE-』 Key is to reduce the Valued of COLOR HUE

9 3-Axis Joystick



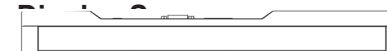
The joystick can support Up/down, left/right and clockwise/ Counterclockwise direction rotation, It can control PTZ Camera UP/DOWN, LEFT/Right Moving and Zoom in/Out, Clockwise rotation is Zoom in(TELE), Counterclockwise direction rotation is Zoom out(WIDE). During enter the camera or keyboard menu, Joystic can moving cursor and modify parameter.

10 2.3 Channel short Keys Area



『CAM1』 ~ 『CAM7』 is the short key to switch the channel of camera. When you press 『CAM1』 Button,The indication of light of keys is green, then now all of the keyboard display information is means Camera1, All of the channel of camera can working with different communication protocol & COMM Parameters.

『CAM2』 ~ 『CAM7』 The function & Operation is the same to above.:

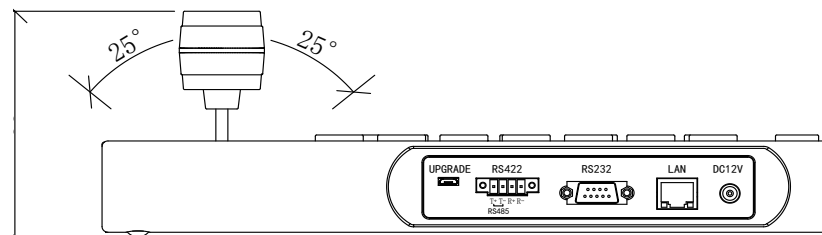


It can display current real time Keyboard statue information(Including IP Address\ Port Number\COMM ID\Communication Protocol\ Baud Rate etc) and Keyboard Menu, The brightness of Display screen can setting it by Keyboard Menu.

12 Light Sensor 

Light Sensor is using to detection the current environmental brightness, When the keyboard back light setting to AUTO, Then the keyboard will adjustment it according to environment brightness, When the environment bright light, then Turn OFF the back light. When the environment bright light is gloomy, then the back light will be Turn ON and more Gloomy more light.

3.Interface Function & Connection Diagram

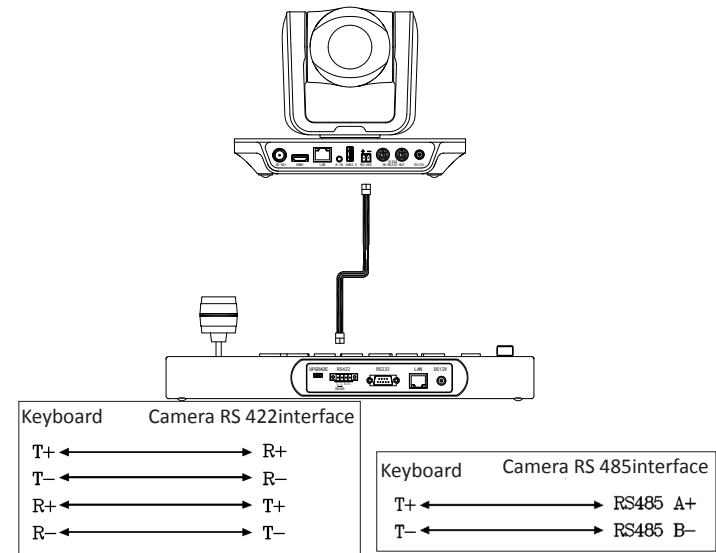


13 Upgrade Interface 

The interface of Number 13 is for upgrade of Hardware of Control keyboard by Laptop. Using Micro USB Cable direct connection with PC, And Upgrade by our upgrade tools software.

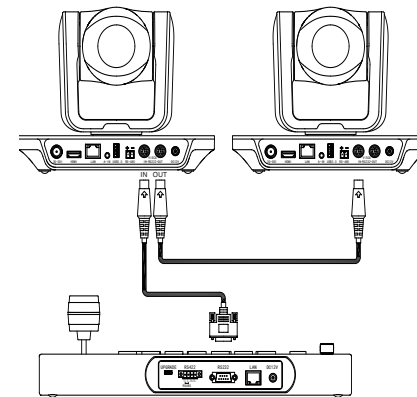
14 RS422/RS485 Interface 

This Interface is using to Connection with Camera by RS422 or RS485, detail connection diagram as follows pictures:



15 RS232 Interface 

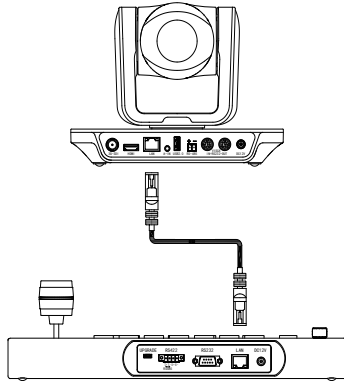
It was using to connection with Camera, detail connection as follows pics:



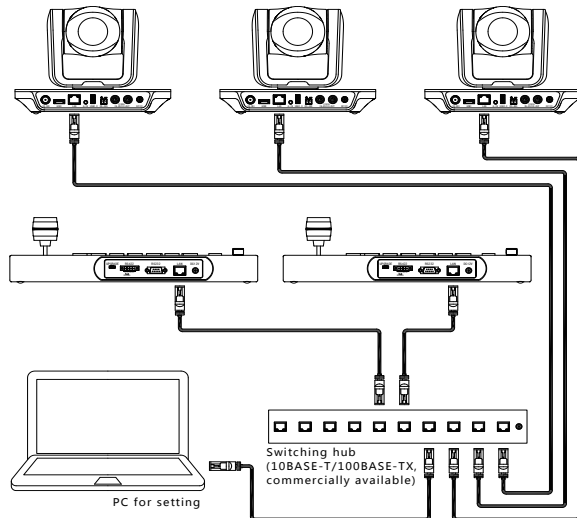
16 LAN Port

The LAN Interface is using for connection with Network switch or others Network PTZ Camera, detail connection diagram as follows:

(1) Connect with Single Unit Network PTZ Camera connection diagram as follows:



(2) Connect with multiple cameras by LAN interface detail connection diagram as follows: (When connecting multiple cameras, you need to set the IP of each camera separately with a computer)



17 12V Power Interface

This interface is the Power supply interface, you can direct connection it with Power adapter; please don't using non-original Power adapter.

3.1 Keyboard Menu Operation

- Long Press 『MENU』 keys over 3secs enter Keyboard Menu.
- Swinging joystick Left & right, to Control the Cursor up/down moving or changed current menu parameter;
- Joystick toward to right: it means enter current menu/Saved & Exit Current Menu
- Joystick toward to left: it means exit current menu/Not saved current menu
- Press 『MENU』 key: It means Exit current Menu/Not saved current menu;
- Press Number keys 『0』 ~ 『9』 : Input Number valued (Only valid for menu items that require input number)
- Press 『PRESET』 key: Backspace/Return to previous input number valued (Only valid for menu items that require input number)
- Press 『RESET』 key: To confirmed current input valued/ Enter to next input items (Only valid for menu items that require input number)

4. Main Menu

1. Long press 【MENU】 Keys over 3secs, to enter Main Menu;
2. Up-Down Moving Joystick to control Cursor up-down moving

- | |
|---------------------|
| 1. System Setting |
| 2. Com Setting |
| 3. Ethernet Setting |
| 4. Password Setting |

4.1 System Setting

Moving Cursor to 【System Setting】 ,Joystick toward-right to enter

【Language】

Move cursor to 【Language】 , Joystick toward-right To enter language setting status, Now the parameter Was optioned, up/down moving Joystick can changed the parameters. Joystick toward to right, which can saved & exit current parameter setting.

- | | |
|--------------------------|----------------|
| 1. Language: | English |
| 2. LED Brightness: | Normal |
| 3. Back light: | Mid |
| 4. Joystick Sensitivity: | Normal ↓ ↓ ↓ ↓ |

Optional: Chinese / English; Others language can be customized

•【LED Screen Brightness】

Setting LED Screen Brightness, For selection: LOW\ Normal\ High

•【Button Back Light】

Setting the brightness of button back light, to selection : OFF、LOW、MID、HIGH、AUTO;

When selection“**AUTO**”, the keyboard will according to environmental brightness to AUTO adjustment. E.g At the day time, it will closed the back light, when changed to night time, it will AUTO open back light

•【Joystick Sensitivity】

To Setting Joystick sensitivity, for optional of Low、Normal、High; It was according to adjustment The degree of swing of the joystick to control the amplitude of the pan-tilt rotation. When the sensitivity of the joystick is set to high, the joystick a little swing, then PTZ Pan/Tilt rapid moving.

•【AUTO STANDBY】

To setting keyboard enter to standby mode within limited time during without any operation, it can optional of 1mins、2mins、5mins、10mins、20mins、30mins、60mins

5. Auto Standby ON	↑↑↑↑↑
6. Itself IP: 192.168.1.88:5000	
7. About Keyboard	

•【Keyboard IP】

To setting keyboard itself IP Address & Port Number, Default IP: 192.168.1.88, default Port: 5000

•【About Keyboard】

To check the keyboard information, including Keyboard Model No\ Version\ S/N No#

Noted : 【↓↓↓↓↓】 Indicates the menu can page down, 【↑↑↑↑↑】 Indicates the menu can page up ;

➤ 4.2 COM Setting

Move the cursor to 【COMM SETTING】 , Joystick toward Right to enter;

1. Channel:	CAM1
2. ID:	1
3. BaudRate:	9600
4. Protocol:	VISCA

•【CHANNEL】

To selection Channel CAM1 ~ CAM 7,Corresponding keyboard Keys 『CAM1』 ~ 『CAM7』 ;

•【ID】

Setting Communication ID Address according corresponding Channel, If Current Communication Protocol is VISCA, Then the ID only available of 1~7

If current Communication Protocol IS PELCO P/D, then Communication ID can optional 1~7、Others;

When the ID Setting to others, after Exit the Menu, you can revised the Communication ID according to the Number Keys+ Corresponding Channel Keys, (e.g The ID of Channel CAM1 has been setting to others, Then Press 『1』 + 『2』 + 『CAM1』 , The ID of Communication of Channel CAM1 has been changed to 12

•【Baud Rate】

To setting Corresponding CAM Channel setting Baud Rate, To selection 2400、4800、9600、19200、38400;

•【PROTOCOL】

To setting Corresponding Channel of PROTOCOL, To selection: VISCA、Pelco-D、 Pelco-P

➤ 4.3 ETHERNET SETTING

Moving Cursor to 【Network Setting】 , Joystick toward To right to enter.

•【CHANNEL】

To selection the corresponding Channel 『CAM1』 ~ 『CAM7』

1. Channel1:	CAM1
2. Cam IP	: 192.168.1.160
3. Port	: 08090

•【IP Address】

Setting corresponding channel of Cam IP Address. It can direct input by Digital Buttons. When the number input to 3 bits, the cursor will Auto enter next item, When the input number less 3 bits, Press 『RESET』 to confirmed and enter next items; when input wrong number, which can press 『PRESET』 to backspace;

•【PORT】

Setting UDP Communication PORT OF Corresponding Channel Camera.

➤ 4.4 Passwords Setting

Moving Cursor to 【Password Setting】 , Joystick toward Right to enter

•【Password Enable】

Setting whether open the Passwords function, to Selection: Disable / Enable When open the Password function, Enter the

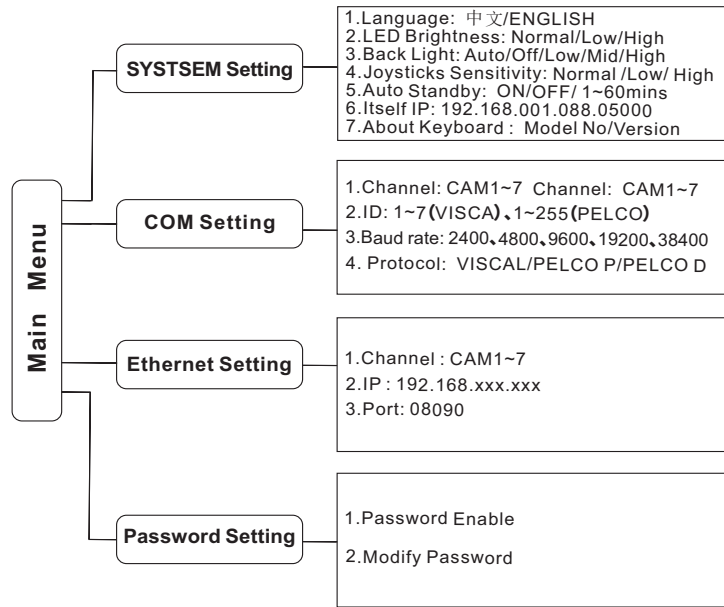
Menu will be need PASSWORD
Default Password : 8888

1. Password Enable:	Disable / Enable
2. Modify Password	

•【Modify Password】

The User can modify password, If you doesn't revised, then it was default Passwords

➤ 4.5 Menu Guide



5. Dimensions Size (Unit:mm)

