Mini Pro RM-LP5 Mini PTZ Controller User Manual

Contents

Mini Pro RM-LP5 Mini PTZ Controller

Product Information

- **Communication & Control Interface:** RS422/RS485 Interface, RS232C Interface, LAN Interface

- **Camera Control or Operation:** Supports up to 5
- **Cameras, Communication Protocol:** VISCA, PELCO P/D, UDP
- **Control Signal Format:** Baud Rate: 2400bps, 4800bps, 9600bps, 19200bps, 38400bps, Date
- **Bits:** 8 Bit, Stop
- **Bit:** 1 Bit, Parity bit: NONE, Internet
- **Protocol:** UDP / VISCA OVER IP
- **Power Supply and Consumption:** Rated Voltage:
- **DC 12V, Rated Current:** 0.3A max, Max
- **Power Consumption:** 3.6W
- **Physical & Others:** Password Privacy
- **Protection: Y**ES, Kingston's Lock
- **Holes:** YES, Works
- **Temperature:** 0 ~ 40°C, Storage
- **Temperature:** -20 ~ +60°C, Works
- **Environments:** Indoor, G.W: 1.1 kg

Product Usage Instructions

To use the Mini PTZ Controller RM-LP5, follow the steps below:

1. Connect the camera(s) to the controller using the appropriate communication and control interface (RS422/RS485 Interface, RS232C Interface, LAN Interface).
2. Adjust camera settings using the various knobs and buttons on the controller. The rotation knobs can be used to adjust camera exposure parameters and color gain values. The LED displays show real-time parameter values as they are adjusted.
3. Use the zoom bridge key to control the camera zoom in/out. Pressing the TELE end of the bridge key will zoom in on the tele direction object. The zoom speed can be adjusted by pressing with more pressure.
4. Use the presets short keys to quickly access up to 5 presets per camera channel.
5. Adjust the pan/tilt rotation speed and zoom in/out speed using the 7-level adjustment options.
6. Use the system menu to access additional settings, such as communication and Ethernet settings, password protection, and camera menu options.

Parameters & Specs

CRSo4m22m/RuSn4i8c5atIniotenrf &acCeontrol RS232C Interface	InPhteorefnaicxeContact 4 pin 3.81mm Terminal DB9 Male Interface
LAN Interface	RJ45 Female Interface
Power Supp y	JEITA type4 Female Interface
Upgrade Online	Micro USB Female Interface
Camera Control or Operati	on

Supports up to Control Cameras 5	
Co unication Protocol	VISCA, PELCO P/ , UDP
Number of LED Displays	4 Units Color LED Display Screen
Numb r of Camera Channel	5
Infinitely variable knobs	4
J ystick	2-Axis
Zoom Mode	Tele-Wide Bridge Keys
Buttons	17 Silicon Button
Presets Short keys	5 Presets per Each channel
Focus Mode	Auto/ Manual/ OPT
Pan/Tilt Rotation Speed	7-Level Adjustment
Zoom In/Out Speed	7-Level Adjustment
AE Mode	The mod can be switched arbitrarily, and the value can
WB Mode	be adjusted
Camera Menu	One-keys for call
Control Signal Format	
BDatedBRiatste 824B0i0tbps, 4800bps, 9600bps, 19200bps, 38400bps	
Stop Bit	1 Bit
Parity bit	NONE
Internet Protocol	UDP / VISCA OVER IP
Power Supply and Consum	ption
Rated VCoulrtraegnet D0.C3A12mVax	
Max Power Consumption	3.6W
Physical & Others	
PKainsgswstond'sPLroivcakcHy oPlreostection YES	
W ks Temperature	0℃ ~ 40℃ 32 ℉ ~ 104 ℉
Storage Temperature	-20℃ ~ +60℃ -4 ℉ ~ 140 ℉
Works Environments	Indoor
Dimensions (L× W × H)	244 × 164 × 48mm
G.W	1.1 kg

Description of Button & Knob Function
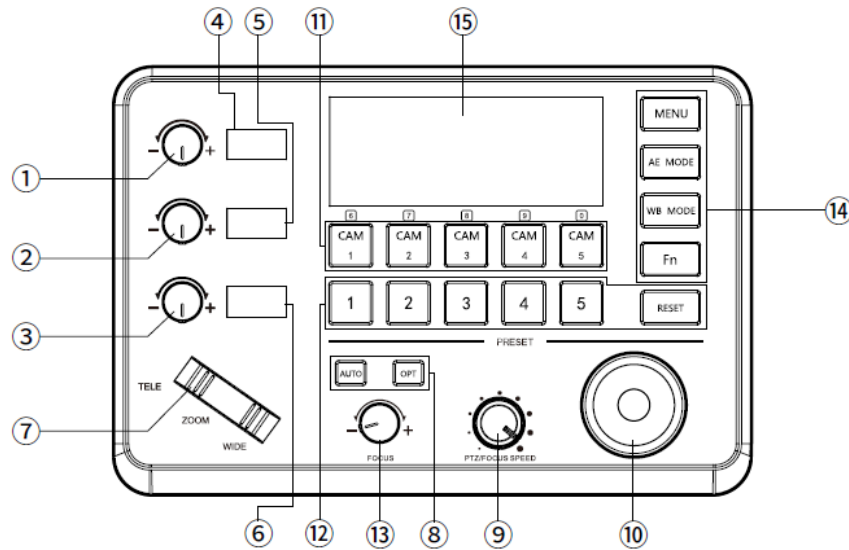
1. This Rotation Knob was to adjust the Camera Exposure Parameter or Red Gain Value, Turn Right Rotation was to change the value to Increased, the Turn Left Rotation changed the Valued Decreased.
2. This Rotation Knob was to adjust the Camera Exposure Parameter or Blue Gain Value, Turn Right Rotation was to change the value to Increased, and the Turn Left Rotation changed the Valued Decreased.
3. This Rotation Knob was to adjust the Camera Exposure Parameter, Turn Right Rotation was to change the value to Increased, and Turn Left notation was changed to the Valued Decreased.
4. LED Display, Real-time display of items and parameter values of adjusted by " knob ① ".
5. LED Display, Real-time display of items and parameter values of adjusted by " knob ② ".
6. LED Display, Real-time display of items and parameter values of adjusted by " knob ③ ".
7. Zoom Bridge Key
8. Focus Function Zoon

   When the Backlight of the [AUTO]Button is Light up, it means that the current focusing mode is the automatic; When the Backlight of the [AUTO] Button is Light Off, it means that Current Focus Mode is changed to Manual. Users can Press this button to switch the mode.

   [OPT key] is used to trigger the single focus of the camera.At the same time, the camera enters the one-shot autofocus mode.

9. PTZ Speed Adjustment Knob

   This knob is used to adjust the speed of the Camera Pan, Tilt and Zoom, with a total of 7 gears.

   The Current Gear will be displayed at Led Display. The Gear Value is smaller then the pan/tilt rotation speed or the zoom speed of the camera controlled by the keyboard will be more Slowly.

10. 2-Axis Joystick

    The joystick supports the control camera to Up/Down, Left and Right movement.

    When the camera or keyboard menu is opened, the joystick is used to control the menu cursor's Up/Down, Left/Right movement, and modify parameters.

11. Channel Button Zone

[CAM1] to [CAM5] are shortcut keys for camera channels, which can be freely switched and selected according to your need. When you select any camera channel, the backlight of the corresponding camera channel will be lit up in green, and all the parameters and settings of the keyboard will be changed to the current Channel.

Note: The communication parameters (address ID, protocol, baud rate, IP address, port number, etc.) of each channel can be set individually. Support the mixed use of multiple protocols through different channels.

12. Presets Function Zone

- [Number Keys] SETTING PRESETS :

13. FOCUS Knob

This Knobs is using to adjust the camera's focal length, Rotation right direction is adjustment focus length near, and Rotation Left 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).

14. Function Key Zone

Long Press and hold the number key for 2 seconds (such as [Number key 1], when the screen displays "Set Preset 1" means that preset 1 has been saved)
CALL PRESETS :
Short press the preset number to be call Presets, (for example, [Number key 1],

It is used to control the camera to Zoom In/Out, for example, press the TELE end of the bridge key, and the camera will Zoom in the TELE direction object, When you Press with more Large Pressure, then the Zoom Speed changes more Faster. when you press the [Number key 1]the screen displays "Show Preset 1", it means that preset 1 has been call).

- [RESET Key] TO BE CLEAR THE PRESET SETTING
- Press[RESET key]+[Number key]to clear the preset position setting.

After pressing the [RESET key], the green backlight starts to flash, Then press the preset number that needs to be cleared, (for example,[RESET]+ [Number key 1], at this time, the green Backlight of the button of the [RESET key]stops flashing, and at the same time, "Reset Preset 1" is displayed on the screen, which means that preset 1 has been cleared.

The specific functions of the knobs are shown in Table 1

Exposure Mode	Knob 1	Knob 2	Knob 3
Auto	NOT USED	NOT USED	Exposure Compensation
Manual	Shutter	Iris	Gain
Shutter Priority	Shutter	NOT USED	Exposure Compensation
Iris Priority	Iris	NOT USED	Exposure Compensation
Brightness Priority	Iris	Gain	Exposure Compensation

Description of Button & Knob Function

- [WB MODE Key]

This Key is used to change the White Balance of the camera. Each Time is pressed, the camera will be changed to a different WB Mode. Under in difference of WB mode, the corresponding functions of Knob 1, and Knob 2 are different.

The specific functions of the knobs are shown in Table 2:

White Balance Mode	Knob 1	Knob 2
Auto	NOT USED	NOT USED
Manual	Red Gain	Blue Gain

- [Fn Keys]
  This key is reserved for adding custom functions.

The factory default state is: short press this key to send the command to enter the Sub-menu of the camera, long press this key for 3 seconds to back Home Position of the Camera.
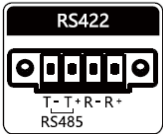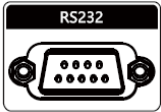
LED DISPLAY
It is used to display the current status information & Setting information of the keyboard in real-time (including IP address, Port number, serial port address, communication protocol, Baud Rate and other information) and the keyboard menu, the brightness of the display can be set through the keyboard menu.
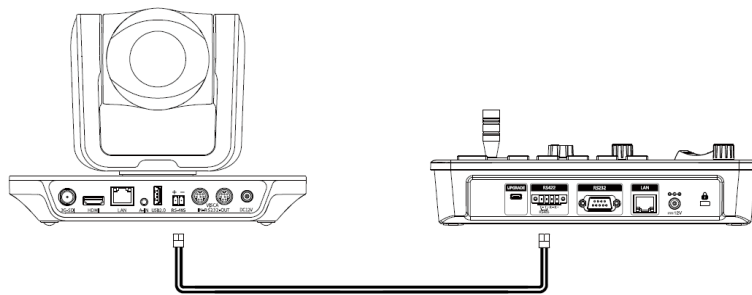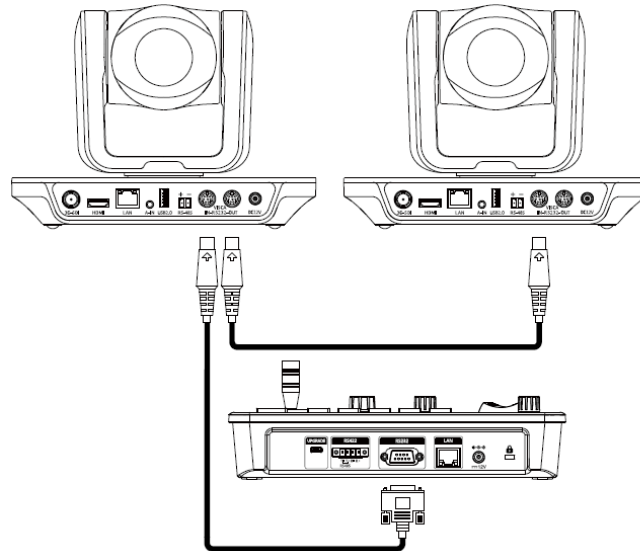
Interface Function and Connection Diagram
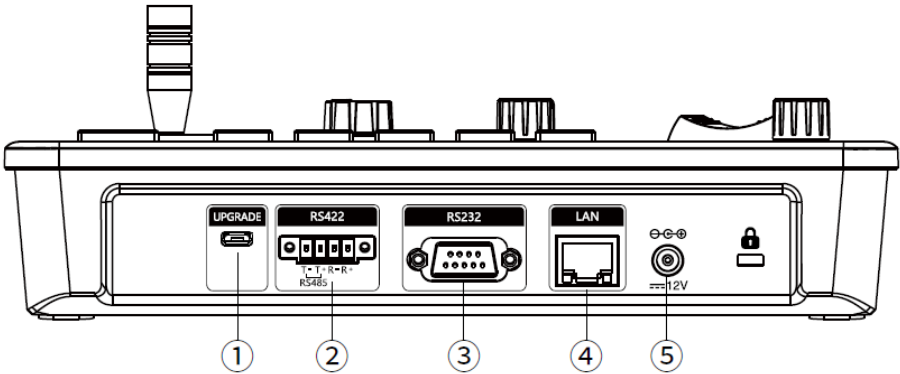
 1. Upgrade Interface The interface is for the upgrade of the Hardware of the keyboard by Laptop. Use a Micro USB Cable direct connection with your PC, And Upgrade by our upgrade tools software.

 2. RS422/RS485 Interface This Interface is used to Connection with the Camera by RS422 or RS485, detailed connection diagram as follows pictures

3. RS232 Interface This Interface is used to connect with Camera through RS232, detailed connection diagram as follows Pictures

1. LAN Interface The LAN Interface is used for connection with Network switches or others. Network PTZ Camera, detail connection diagram as follows:

Connect with Single Unit Network PTZ Camera connection diagram as follows

- 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).
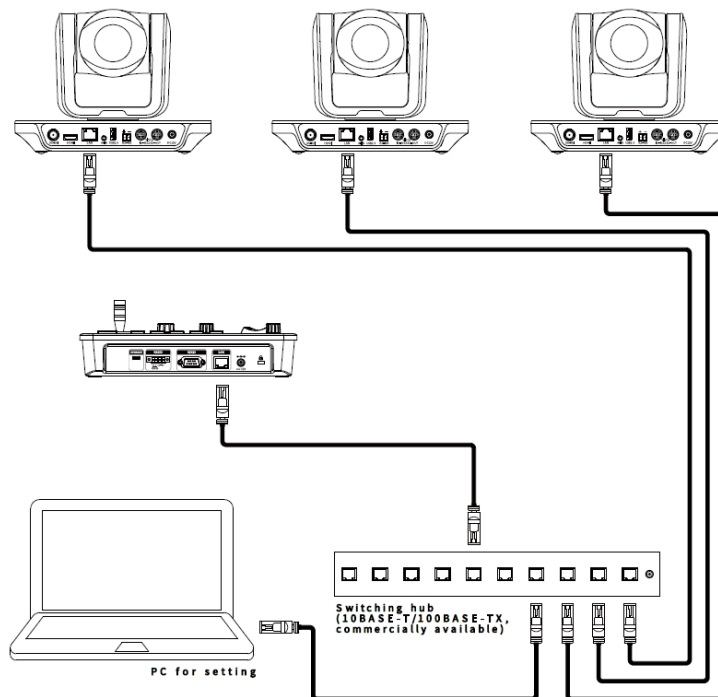
DC Power Supply Interface
This interface is the Power supply interface, you can direct connection it with the Power adapter; please don't use the non-original Power adapter.

System Menu Operation Instructions

System Menu Operation & Explanation

1. Long Press [MENU] with 3secs will turn on the Keyboard system Menu;
2. The joystick swings up and down: control the system menu cursor to move up and down / change the parameters of the current menu item;
3. The Joystick swings Right: enter the current menu item / save and exit the current menu item;
4. The Joystick swings Left: Exist current Menu item/ No Saved and Exit current Menu item;
5. Press [MENU]to exist System Menu;
6. Press the number keys[0]~[9]: input numerical value (only valid for menu items that need to input numerical value). example IP Address or Port number setting.
7. When the current value is number input, the green backlight of [CAM1]~[CAM5] is Light on, and at this time [CAM1]~[CAM5] Corresponds to the numbers 6~0 on the silk screen above the buttons.

SYSTEM MENU

1. Long Press [MENU] with 3 secs will turn on
2. Keyboard system Menu.
3. The joystick swings up and down to control the menu cursor to move up and down
    1. System Setting
    2. COMM Setting
    3. Ethernet Setting
    4. Password Setting

SYSTEM SETTING

The joystick swings up and down the Cursor to [System Setting], then Movement right to enter the System Setting menu.

- **[Language]**

  The Joystick swings up/down to [Language], then Movement right to enter the setting. The Joystick swing up/down can change the current Parameters setting, Swing the joystick to the right to save the current parameters and exit the language setting state. The following menu operation setting is the same. Optional Language: Chinese, English; other languages can be customized and developed according to customer needs.
- **[LED Display Brigtness]**

  Change the brightness of the LED display: Low, Normal, or High.
- **[Automatically Standby]**

  Set the keyboard to automatically enter standby mode without any operation within a limited time. Selectable: Off, 1 minute, 2 minutes, 5 minutes, 10 minutes, 20 minutes, 30 minutes, 60 minutes.
- **[Itself IP]**

  To setting the Keyboard itself IP Address / Port Number, the default IP is 192.168.1.88, default Port is 52381.

1. Language: English

2. LED Display Brightness: Normal

3. Automatically Standby: Off

4. Itself IP: 192.168.001.088

5. Itself Port: 52381

6. Factory default Setting

7. About the Keyboard

[Factory default Setting]
To change the Keyboard restore to the Factory default setting.

- **[About Keyboard]**

  To review the relevant information of the keyboard, including the keyboard model, Firmware version, factory

  S/N and other information.
- **COMM SETTING**

  To move the cursor to[Comm Setting], then Movement right to enter Comm Setting:
- **[Channel]**

  The available channels CAM1~5 correspond to the buttons [CAM1]~[CAM5].
- **[Address]**

  To set the serial communication address of the corresponding channel. If the current communication protocol is

  VISCA, the communication address can be selected from 1~7. If the current communication protocol is

  PELCO-D/P,The communication address can be selected from 1~255.
- **[Baud Rate]**

  To set the serial communication Baud Rate of the corresponding channel. Available in: 2400, 4800, 9600,

  19200, 38400bps.
- **[Protocol]**

  To set the Serial communication Protocol of the corresponding channel (Including Serial Communication

  Protocol and Internet Communication Protocol). Available in: VISCA, PELCO P/D, UDP.

    1. Channel: CAM1
    2. Address: 1
    3. Baud Rate: 9600
    4. Protocol: VISCA

ETHERNET SETTING
To move the cursor to [Ethernet Setting], then Movement right to enter Ethernet Setting:

- **[Channel]**

  The available channels CAM1~5 correspond to the buttons [CAM1]~[CAM5].
- **[Cam IP]**

  To set the Cam IP of the corresponding channel, which can be directly input through the number keys. When

  the number of input digits reaches 3, the cursor will automatically Jump to the next entry.
- **[Port]**

  To set the UDP Port of the corresponding channel, it depend for the UDP Port number of cameras at current

  channel

    1. Channel CAM1

2. Cam IP 192.168.1.162
3. Port 52381

PASSWORD SETTING

To move the cursor to [Password Setting], then Movement right to enter Password

- **[Using Password]**

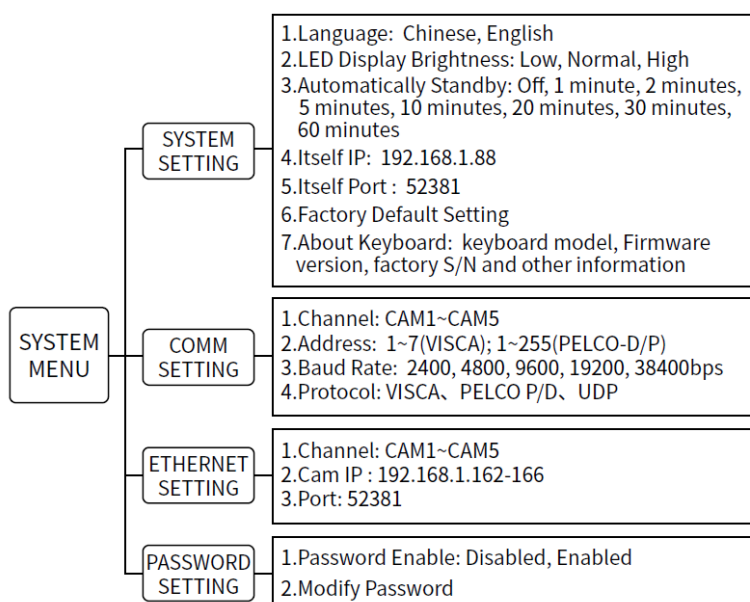 How to Use the Password FunctionTo change the Password setting is Enabled; When the password function is Enabled, a password is required to enter the menu. The default password is: 8888

- **[Modify Password]**

  The user can change the password by himself. If the password is not changed, the password is the default password. Warning: Please use this function with caution. If the product cannot be used normally due to the password set by the customer, the manufacturer does not assume any responsibility.

  1. Using Password: enabled
  2. Modify Password

SYSTEM MENU GUIDE

SYSTEM MENU	SYSTEM SETTING	1.Language: Chinese, English 2.LED Display Brightness: Low, Normal, High 3.Automatically Standby: Off, 1 minute, 2 minutes, 5 minutes, 10 minutes, 20 minutes, 30 minutes, 60 minutes 4.Itself IP: 192.168.1.88 5.Itself Port : 52381 6.Factory Default Setting 7.About Keyboard: keyboard model, Firmware version, factory S/N and other information
	COMM SETTING	1.Channel: CAM1~CAM5 2.Address: 1~7(VISCA); 1~255(PELCO-D/P) 3.Baud Rate: 2400, 4800, 9600, 19200, 38400bps 4.Protocol: VISCA、 PELCO P/D、 UDP
	ETHERNET SETTING	1.Channel: CAM1~CAM5 2.Cam IP : 192.168.1.162-166 3.Port: 52381
	PASSWORD SETTING	1.Password Enable: Disabled, Enabled 2.Modify Password

Products Dimensions

The size for Mini Pro PTZ Controller is as below: (Unit of length: mm)
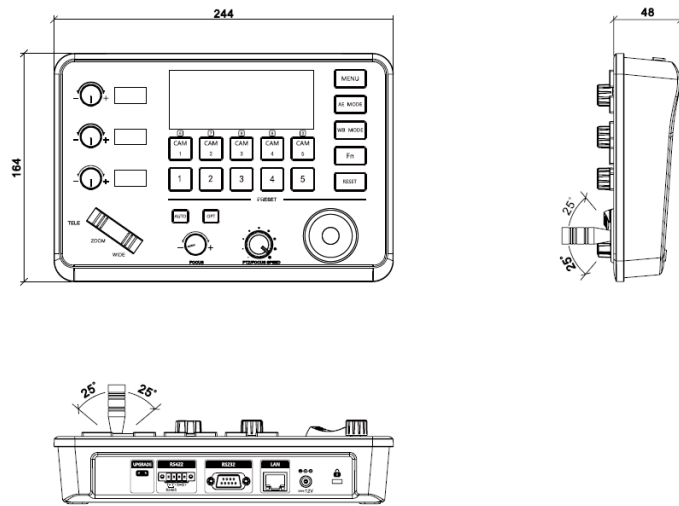
Documents / Resources

Mini PTZ Controller **RM-LP5** User Manual 	[**Mini Pro RM-LP5 Mini PTZ Controller**](#) [pdf] User Manual RM-LP5 Mini PTZ Controller, RM-LP5, Mini PTZ Controller, PTZ Controller, Controller