VS-PTC-50

Camera PTZ/On-Screen Display Menu
Mini Joystick Controller

User Manual

Thank you for purchasing this Marshall Electronic's product.
Please read the User Manual thoroughly before attempting to setup & use.
If you have any problems with this product please contact Marshall Electronics.
Tel: (800) 800-6608 / (310) 333-0606

www.LCDracks.com

Caution

The LCD screen can be damaged by excessive pressure, direct sunlight, or liquids. Joystick and keyboard should be used in environments within the temperature and humidity range specified.
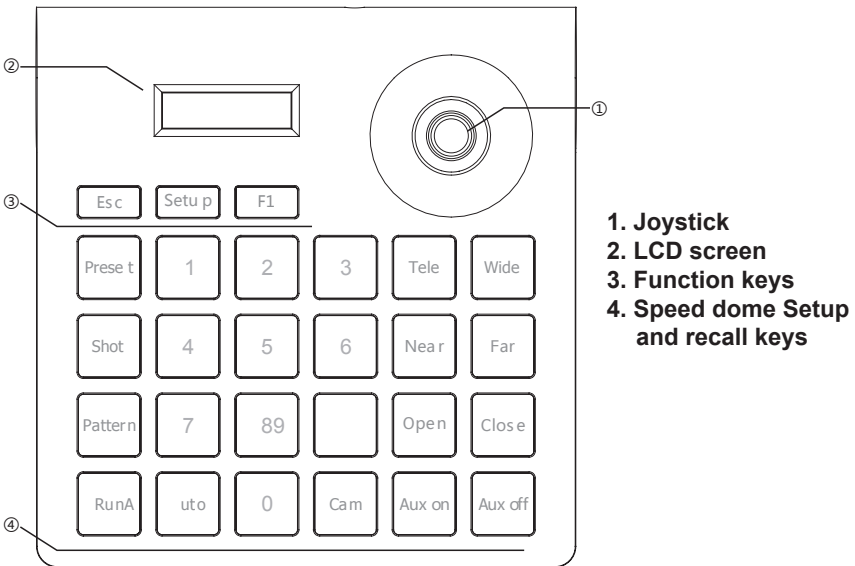Please follow instructions defined in this manual for setup and operation.

List Of Items

1. Power adapter (Input: 100-240VAC 50/60Hz, Output: DC 12V)
2. Users Manual

Keyboard Specs

Item	Parameters
Power Supply	DC12V 1A ±10%
Temperature	-10°C ~ 55°C
Humidity	≤90%RH (No cream node)
Communication	RS485 Half-duplex
Baud Rate	2400bps, 4800bps, 9600bps, 19200bps, 38400bps
Screen	128*32 LCD screen
Package Size	180 (L) x 165 (W) x 90 (H)mm

1.1 Function Keys On Front Panel

1. Joystick
2. LCD screen
3. Function keys
**4. Speed dome Setup
   and recall keys**

|	
(Esc)	Exit key: exit and back to previous menu;
(Setup)	Setup key: press and hold for 3s to setup keyboard's parameter.
(F1)	Adjust the control speed, it has 4 level: 1, 2, 3, 4
(Preset)	Preset special status of ptz (including direction and zoom times). This key should be used together with number key;
(**Shot**)	Recall special status of ptz (including direction and zoom times). This key should be used together with number key.
(Pattern)	Start/stop pattern record: press for 3 seconds to start pattern record, after all operation, press this key again to stop pattern record, this key should be used together with number key.
(Run)	Recall the stored pattern, this key should be used together with number key.
(0) ~ (9)	Number key: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.
(Auto)	Control ptz rotate in horizontal direction automatically or clear input number: when user input some numbers, press this key can delete the numbers, else it will control ptz rotate in horizontal direction automatically.
(Cam)	Address selection key: select ptz address; this key should be used together with number key.
(Tele)	Zoom in: zoom in the object, enlarge the object size.
(Wide)	Zoom out: zoom out the object, reduce the object size.
(Open)	Iris + / enlarge iris.
(Close)	Iris - / reduce iris.
(Far)	Focus+ / adjust the lens focus on distant object.
(Near)	Focus- / adjust the lens focus on near object.
(Aux on)	Aux on: turn on ptz's aux. This key should be used together with number key; directly press this key without keying in any number, the controlled ptz ID will add 1.
(Aux off)	Aux off: turn off ptz's aux. This key should be used together with number key; directly press this key without keying in any number, the controlled ptz ID will take away 1.
(Aux off)	Press and hold for 3s to recall number 95 preset, normally it will be opening the menu of ptz.

1.2 LCD Screen

Pressing and holding each function key will engage the LCD screen and relevant information will appear. When function keys are released they will disappear. When there is no operation within 30 seconds the LCD and keyboard will go into power-save mode (backlight will turn off and standby image will appear).

```
PTZ ADDR: XXX
P:PELCOD B:2400
```

1.3 Joystick Control

When control speed dome and mounting plate:

Operating	Output Control	Operating	Output Control	Operating	Output Control	Operating	Output Control
	Upward		Downward		Left		Right

When control Setup of keyboard controller:

Operating	Output Control	Operating	Output Control	Operating	Output Control	Operating	Output Control
	Menu turned up		Menu turned down		Parameter of the left		Parameter of the right

KEYBOARD CONTROLLER OPERATIONS

2.1 Introduction to single-press keys and combined keys

2.1.1 Single-press key: When single key is pressed, the corresponding PTZ will respond.
Single-press keys include: Near, Far, Tele, Wide, Open, Close, Auto, F1, Run, Esc, joystick.

2.1.2 Combined key operations mean 2 or more keys, or key and joystick are pressed, the corresponding PTZ will respond.
Single-press keys include: Near, Far, Tele, Wide, Open, Close, Auto, F1, Run, Esc, joystick.

The operations include: **Preset, Pattern, Shot, Cam, Setup.**

2.2 Detailed introduction to combined keys

2.2.1 Select PTZ ID:
select speed dome or decoder whose ID is 28: press 2, 8, Cam in turn,
LCD will display as below (corresponding protocol and baud rate will also be
showed).

```
PTZ ADDR:  028 ④
P:PELCOD   B:2400
```

2.2.2 Set and recall pattern:
Set pattern: select PTZ addr., press (**Pattern**) key and hold for more than 3s,
LCD will display:

```
PTZ ADDR:  028 ④
PATTERN RECORD
```

Operate joystick to control PTZ moving to relevant position, adjust zoom
time. After setup, press (**Pattern**) key to finish, LCD will display:

```
PTZ ADDR:  028 ④
PATTERN STOP
```

Recall pattern: press (**Run**) key PTZ will run in the certain route which
recorded in relevant pattern;
Press any single-press key will stop pattern scan and back to normal status.

Note: This keyboard supports setting one pattern at present.

2.2.3 Set and recall preset point:
Set preset point 1: key in (**1**), press (**Preset**).
Recall preset point 2: key in (**2**), press (**Shot**).

2.2.4 Turn on/Turn off aux function:
Turn on: need to open number 1 aux. function, press (**1**), press (**AUX on**).
Turn off: need to close number 1 aux. function, press (**1**), press (**AUX off**).

3.1 Parameter Setup & Inquiry

e.g.: change the protocol of PTZ 28 to PelcoP, baud rate to 9600.
in normal status, press and hold (**Setup)** key for more than 3s, LCD will display:

```
PTZ ADDR:  028 ④
PASSWORD: ----
```

Key in password (default: 8888), press joystick, LCD will display:

```
*PTZ SETUP
 SYSTEM SETUP
```

Press joystick, LCD will display:

```
*PTZ ADDR:    001
 P:PELCOD
```

Move the joystick toward left/right to select PTZ 28, LCD will display:

```
 *PTZ ADDR:  028
 P:PELCOD
```

Press joystick, LCD will display:

```
 PTZ ADDR:  028
*P:PELCOD
```

Move the joystick toward right, LCD will display:

```
 PTZ ADDR:  028
*P:  PELCOP
```

Press joystick, finish protocol setup and switch to baud rate setup, LCD will display:

```
 PTZ ADDR:  028
*B:  2400
```

Move the joystick toward right till LCD display:

```
 PTZ ADDR:  028
*B:  9600
```

Press joystick, finish setup and back to select PTZ ID menu, repeat above steps,
you can set other PTZ parameter.
After finishing all setup, press (**ESC**) key to quit setup.

VS-PTC-50 Manual

Note:
If you want to set all PTZ's protocol and baud rate as same, when you select PTZ ID in setup menu, please select 0-255, details as below:

```
*PTZ ADDR:  0-255
 P:PELCOD
```

Follow above steps, all PTZ's protocol and baud rate will be set as same.

3.2 System Parameter Setup

System parameter including: language, password, key-press volumn, key backlight, default factory setup.

The following example is "**default factory setup**" operation steps:

In normal status, press and hold (**Setup**) key for more than 3s, LCD will Display:

```
PTZ ADDR:  028 ④
PASSWORD:  ----
```

Key in password (default password: 8888), press joystick, LCD will display:

```
*PTZ SETUP
 SYSTEM SETUP
```

Move the joystick toward down, LCD will display:

```
 PTZ SETUP
*SYSTEM SETUP
```

Press joystick, LCD will display:

```
*LANGUAGE
 PASSWORD SETUP
```

Move joystick till LCD display:

```
* DEFAULT FACTORY
 SETUP
```

Move joystick toward right, LCD will display:
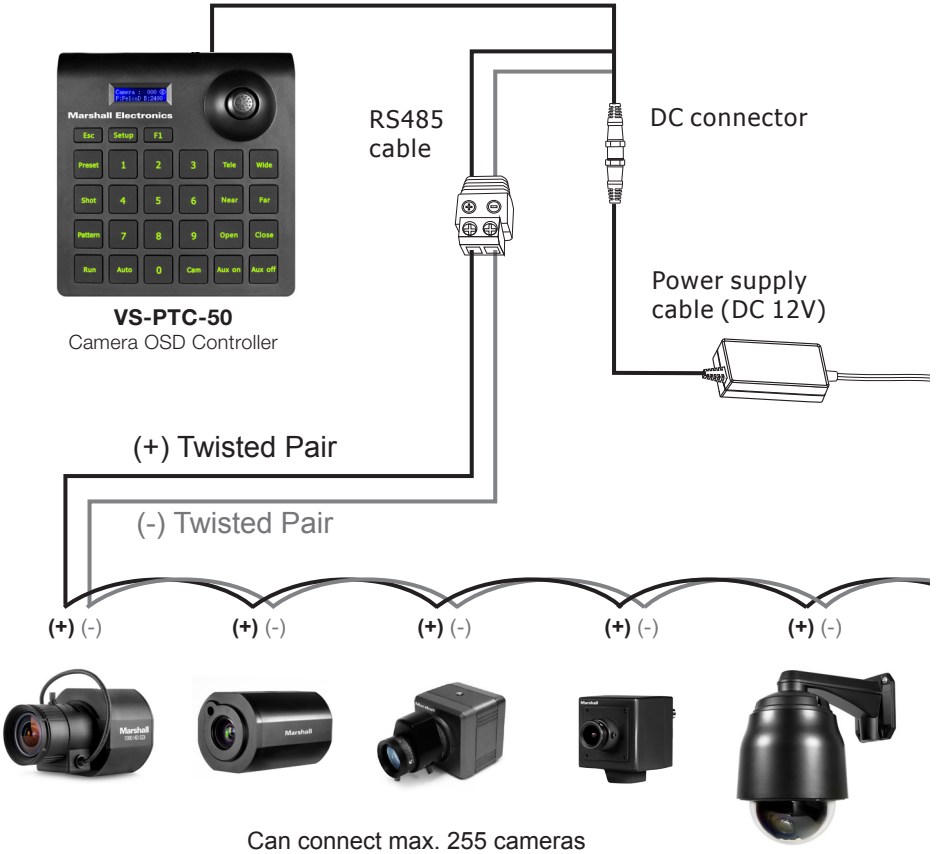
```
*DEFAULT FACTORY
 SETUP  ?
```

Press joystick, the buzzer will give out long time sound, the question mark "?" on screen will disappear, denote setup finished, press (ESC) key to quit setup.

3.3 Parameter Setup Framework

*PTZ setup	*PTZ addr : xxx	protocol	Pelco D 、PelcoP HIK、DAHUA
	*PTZ addr : 0-254 （all PTZ parameter will be set as same）	Baud rate	2400、4800、9600、19200、38400
*system setup	*Language	Chinese、English	Move joystick to select
	*password setup	Old password :	4 digit number
		New password :	4 digit number
		Enter again :	4 digit number
	Key-press sound volumn	close、low、mid、high	Move joystick to select
	Key backlight (optional)	close、30S、60S、120S、open	Move joystick to select
	Default factory setup	N/A	Move and press joystick to select

4. Typical Connecting Diagram

RS485 cable

DC connector

Power supply cable (DC 12V)

VS-PTC-50
Camera OSD Controller

(+) Twisted Pair

(-) Twisted Pair

(+) (-)   **(+)** (-)   **(+)** (-)   **(+)** (-)   **(+)** (-)

Can connect max. 255 cameras

5. FAQ

Symptom	Analysis	Methods
Keyboard Controller cannot control the speed dome	1. Check the hardware: RS485	Step 1: RS485 A and B is reversed Step 2: Check RS485 cable continuity is OK or not
	2. Check the software settings: keyboard controller and speed dome address, protocol, baud rate	Step 1: check the current protocol and baud rate is correct or not Step 2: Restore the settings to default setting and reset
Some speed domes can be controlled but some not	1. Check hardware	Check the continuity of each branch cable
	2. Check software settings	Check the protocol and baud rate of each address code
	3. Might be the problem of star-type connection	Step 1: Connect RS485 to a 120Ω resistor at far end. Step 2: Install RS485 distributor between the speed dome and keyboard controller.
Many speed domes respond simultaneously when operate the keyboard controller	Check the ID of speed domes	Check whether those speed dome that respond simultaneously have the same address code or not. Set different address.
No key tone	Turn on key tone in system settings	