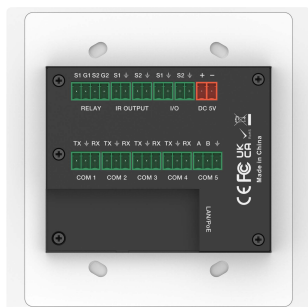
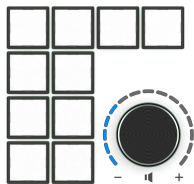


Prestel MFCP-10PW

Programmable Control Panel



Thank you for purchasing this product

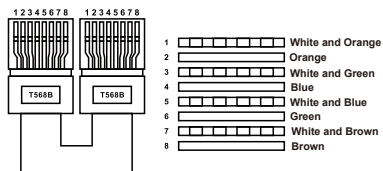
For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

Surge protection device recommended

This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, lighting strikes, etc. Use of surge protection systems is highly recommended in order to protect and extend the life of your equipment.

Caution

The network cable connection method required for this product is direct connection. Please do not cross connect.



Direct Interconnection Method

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1. Introduction

This intelligent control terminal is designed specifically for smart office and home scenarios, using an embedded wall mounting structure and compatible with US 2-Gang/CN 120 standard cassette boxes.

The control panel integrates 10 programmable buttons and 1 precision knob (with real-time numerical feed-back function), equipped with RS232/RS485 serial port, IR remote control, relay signal and universal I/O ports, supporting universal network protocol. Through modular configuration management, cross device linkage control can be achieved, enabling the rapid construction of scenario based solutions such as one click switching of projection modes in conference rooms, collaborative operation of training center equipment, or intelligent guidance of exhibition venues.

2. Features

- ☆ ARM Cortex-A7 architecture 1.2Ghz main frequency
- ☆ Linux system, 256MB RAM, 256MB ROM
- ☆ Installation specifications: US 2-Gang/CN 120 standard cassette boxes
- ☆ Magnetic aluminium panel design, beautiful and easy to replace
- ☆ 10 programmable buttons and 1 programmable knob, supporting light status feedback (with light indicators)
- ☆ 4-channel RS232 two-way serial communication ports, with configurable baud rate
- ☆ 1-channel RS485 serial communication port, with configurable baud rate
- ☆ 2-channel isolated low-voltage relay ports
- ☆ 2-channel I/O ports, with configurable input/output mode
- ☆ 2-channel IR output ports, supporting 20Khz-60Khz wideband output
- ☆ 1-channel 100Mbps network port, integrated with industry standard network communication protocols (TCP IP/UDP/HTTP/Websocket)
- ☆ Dual power supply mode, supporting PoE or DC power supply

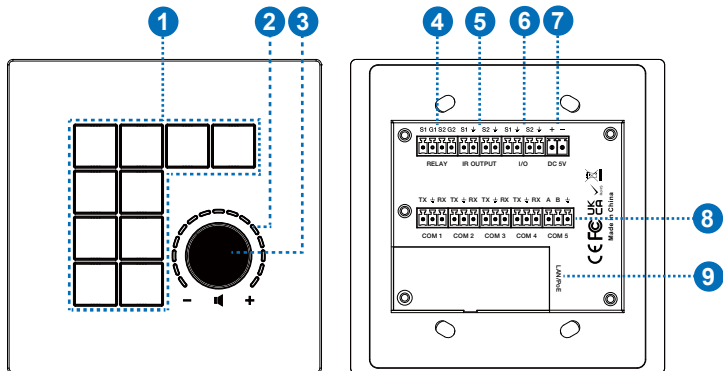
3. Package Contents

- ① 1× Programmable Control Panel
- ② 5× 3pin-3.5mm Phoenix Connector (male)
- ③ 1× 4pin-3.5mm Phoenix Connector (male)
- ④ 4× 2pin-3.5mm Phoenix Connector (male)
- ⑤ 1× 2pin-3.81mm Phoenix Connector (male)
- ⑥ 4× Wall Mounting Screw
- ⑦ 1× User Manual

4. Specifications

Technical	
CPU	ARM Cortex-A7 1.2GHz
Operation System	Linux
RAM	256MB
Flash Memory	256MB
ESD Protection	IEC 61000-4-2: ±8kV (Air-gap discharge) & ±4kV (Contact discharge)
Connection	
COM 1/2/3/4	4× 3-pin phoenix connector, for RS232 serial data communication
RS485	1× 3-pin phoenix connector, for RS485 serial data communication
RELAY	2× 2-pin phoenix connector, isolated low-voltage relay port
IR OUTPUT	2× 2-pin phoenix connector, for IR signal output
I/O	2× 2-pin phoenix connector, for I/O input and output
CONTROL	1× 10M/100M Ethernet port, supporting PoE function
DC 5V	1× 2-pin phoenix connector, for power supply
USB	1× USB Type C port, for system debug
Mechanical	
Housing	Front Panel — Aluminum alloy; Rear Case — Metal enclosure
Color	Front Panel — Black/White (optional); Rear Case — Black
Dimension	116mm (W) × 116mm (H) × 36mm (D)
Weight	391g
Power Supply	DC 5V/1A or PoE
Power Consumption	< 5W
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage Temperature	-20°C ~ 60°C / -4°F ~ 140°F
Operation Humidity	20%~80% (relative humidity, non-condensing)
Storage Humidity	10%~90% (relative humidity, non-condensing)

5. Operation Controls and Functions



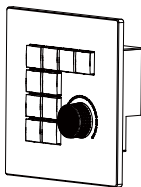
No.	Name	Function Description
1	1~10 buttons	10 programmable buttons, which can be flexibly configured according to application requirements. The button icon is made from film, which can be customized and replaced.
2	Knob LED (Blue)	Knob progress LED, indicating the changes of the knob.
3	Knob	1 programmable knob (with button function), which can be flexibly configured according to application requirements.
4	RELAY port	2 sets of isolated low-voltage relay ports. Each relay is normally open, with a maximum load capacity of 2A 30VDC / 0.3A 125VAC. The ports do not support internal output voltage. Pin definition: PIN1 is for signal input, and PIN2 is for signal output.
5	IR OUTPUT port	2-channel programmable IR ports, with a carrier range of 20KHz-60KHz for infrared output. Pin definition: PIN1 is IR output, PIN2 is GND.

No.	Name	Function Description
6	I/O port	2-channel programmable I/O ports, configurable as input or output mode. Input mode: Used to collect digital level signals, low level is effective, with port withstand voltage of 24V. Output mode: 5V level, maximum output 50mA current, with low level by default. Pin definition: PIN1 is I/O, PIN2 is GND.
7	DC 5V port	The power input port (2pin phoenix connector), used for connecting with external 5V DC power supply.
8	COM 1/2/3/4/5 port	4-channel programmable RS232 serial communication ports (3pin phoenix connector). It can be programmed to configure 8 baud rates in the range of 2400-115200bps. Pin definition: PIN1 is TXD, PIN2 is GND, and PIN3 is RXD. 1-channel programmable RS485 serial communication port (3pin phoenix connector). It can be programmed to configure 8 baud rates in the range of 2400-115200bps. Pin definition: PIN1 is A, PIN2 is B, and PIN3 is GND.
9	LAN/PoE port	1 standard 10M/100M Ethernet RJ45 port, supporting PoE function. It is in automatic rate negotiation mode by default, mainly used for connecting devices, uploading/downloading projects, network communication, debugging, etc. By default, the DHCP function of the control panel is disabled, with IP address set to 192.168.0.101, and subnet mask set to 255.255.0.0.
10	RESET button (behind the front panel)	Reboot: After the device boots up, press and hold the RESET button for more than 1s less than 5s, then release it, the device will reboot. The device won't upload the user projects after rebooting. Reset: After the device boots up, press and hold the RESET button for more than 5s, then release it, the device will reset the user configuration information, the IP will be restored to the default settings (IP address: 192.168.0.101, subnet mask: 255.255.0.0), the login password of the management page will be initialized to "admin", the device time will be initialized to automatic acquisition mode, but user projects won't be deleted by factory initialization.
11	USB-C port (behind the front panel)	The reserved port for system debugging.

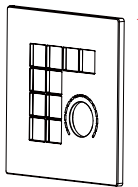
6. Mounting Instruction (Take the US 2-Gang box mounting for example)

This wall-in control panel can be mounted on an US 2-Gang wall box, the mounting steps are as follows.

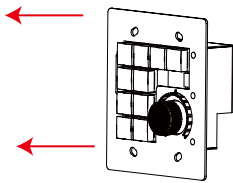
Step 1: Take out the control panel from the packaging and remove the magnetic panel horizontally.



Control panel

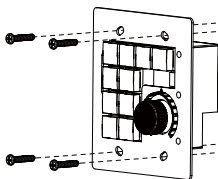


Magnetic panel

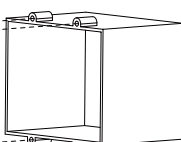


Control panel

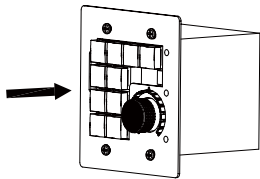
Step 2: Install the control panel onto the US 2-Gang wall box and fasten it with 4 screws.



Control panel

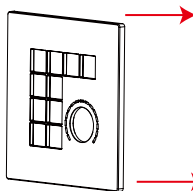


US 2-Gang
wall box

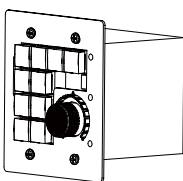


Wall box installation effect

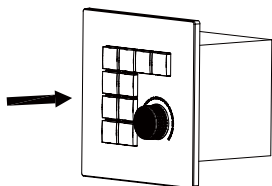
Step 3: Install the magnetic panel back on the control panel to complete the installation.



Magnetic panel

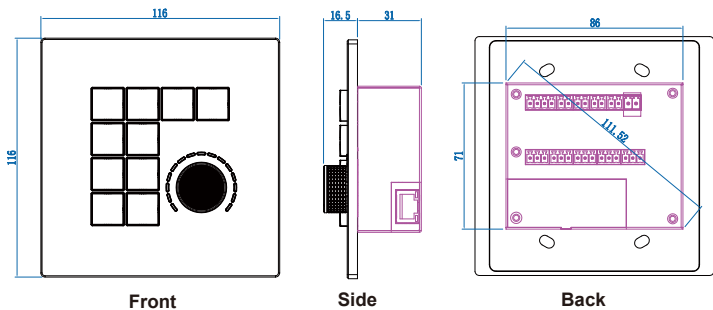


US 2-Gang wall box
installation effect



Effect after installation

7. Product Dimensions



Unit: mm

8. Application Example

