Prestel MFCP-10 Programmable Control Panel User Manual

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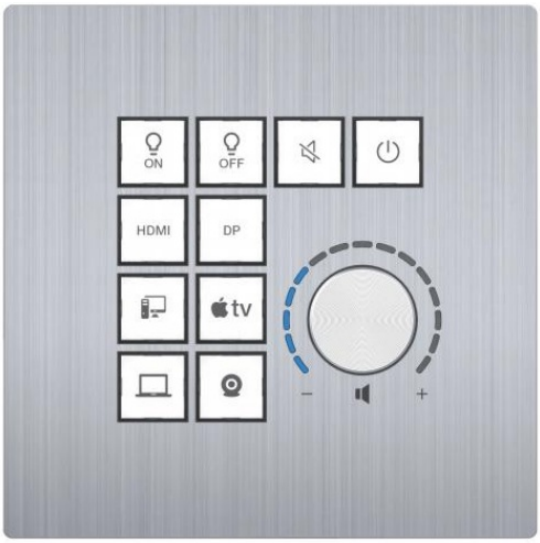


Thank you for purchasing this product
For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

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.

Contents

Introduction

The programmable control panel is designed to be utilized in the sectors of automated office system, multi-media room and smart home. With a programmable interactive user interface over configuration protocols, the integrated system provides intelligent networking service. The control panel features 10 programmable buttons, 1 programmable knob, 2 two-way serial ports, 1 IR output port, 2 Relay ports, 1 digital I/O port and 1 Ethernet port. It is used in a diverse range of installations and applications across industries including multi-media conference rooms, multi-functional halls, training centers, show room, broadcasting studios and industrial automation.

Features

- With 2 two-way serial ports to connect matrixes, projectors or other A/V devices
- With 1 IR output/one-way serial port to connect DVD, TV sets, or other home appliances
- With 2 relay ports to control lights, doors or curtains
- With 1 digital input port to receive sensor signals
- With 10 programmable buttons for custom control logic
- With 1 programmable knob (with light indicator), volume can be controlled through the knob
- Capable of connecting with Ethernet-control devices for Ethernet monitoring and control
- Provide a high-performance Web server, supporting on-line firmware upgrade
- Compliant with standard network communication protocols
- Password protection against unauthorized accesses
- Built-in sync clocks
- Support factory reset

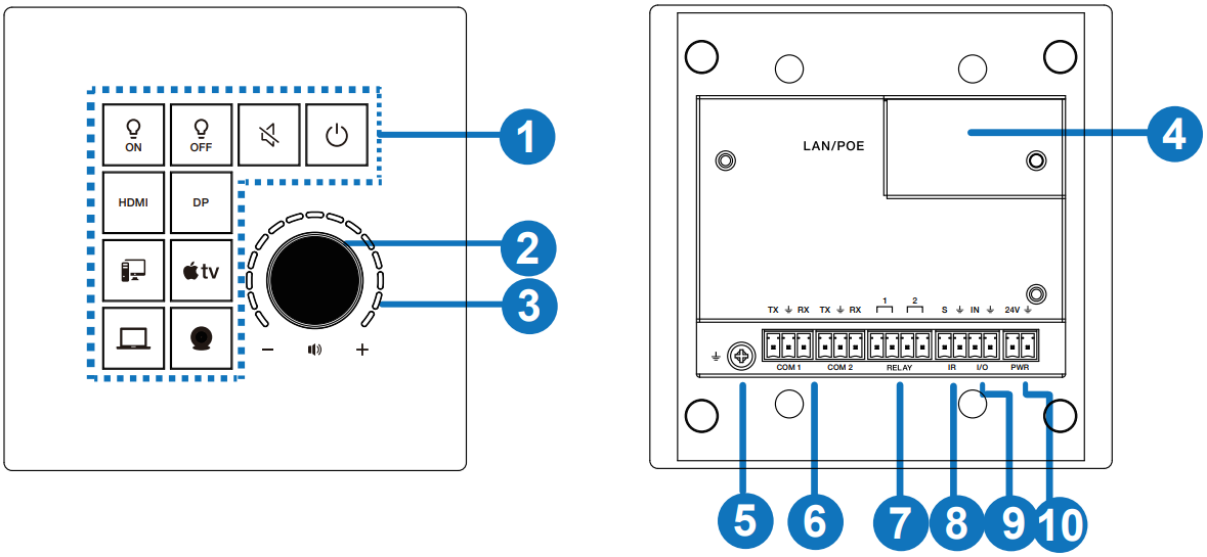
Package Contents

1. 1 × Programmable Control Panel
2. 2 × 3pin-3.81mm Phoenix Connectors (male
3. 2 × 4pin-3.81mm Phoenix Connectors (male
4. 2 × Films (button icon)
5. 10 × Key Caps
6. 1 × 24V 1A Multinational Power Supply (2pin-3.81mm Phoenix Connector
7. 1 × User Manual

Specifications

Technical	
CPU	ARM Cortex-A53 1.8GHz
Operation System	Android 9
RAM	2GB DDR4 RAM
Flash Memory	8GB EMMC Flash
Connection	
COM1/2	2 × 3-pin Phoenix Connectors, for two-way RS-232 serial data communication
IR	1 × 2-pin Phoenix Connectors, for IR transmitting or one-way RS-232 serial data co mmunication
RELAY	2 × 2-pin Phoenix Connectors, low-voltage relays, isolated, normally open,switching up to 30VDC, 1A / 125VAC, 0.3A
I/O	1 × 2-pin Phoenix Connectors, for digital signal inputting
LAN/POE	1 standard 10M/100M/1000M Ethernet RJ45 interface, supporting POE function
PWR	1 × 2-pin Phoenix Connectors, for power supply
Buttons	10 × programmable buttons
Knob	1 × programmable knob
Mechanical	
Housing	Metal enclosure with aluminium alloy front panel
Color	Silver panel, black back shell
Dimension	116mm (W) × 54mm (D) × 116mm (H)
Weight	450g
Installation	Type 120 Cassette Mounting
Power Supply	24V DC/1A or POE
Power Consumption	3.5W
Operation Temperature	0°C ~ 40°C / 32°F ~ 104°F
Relative Humidity	10~90% RH (non-condensing)

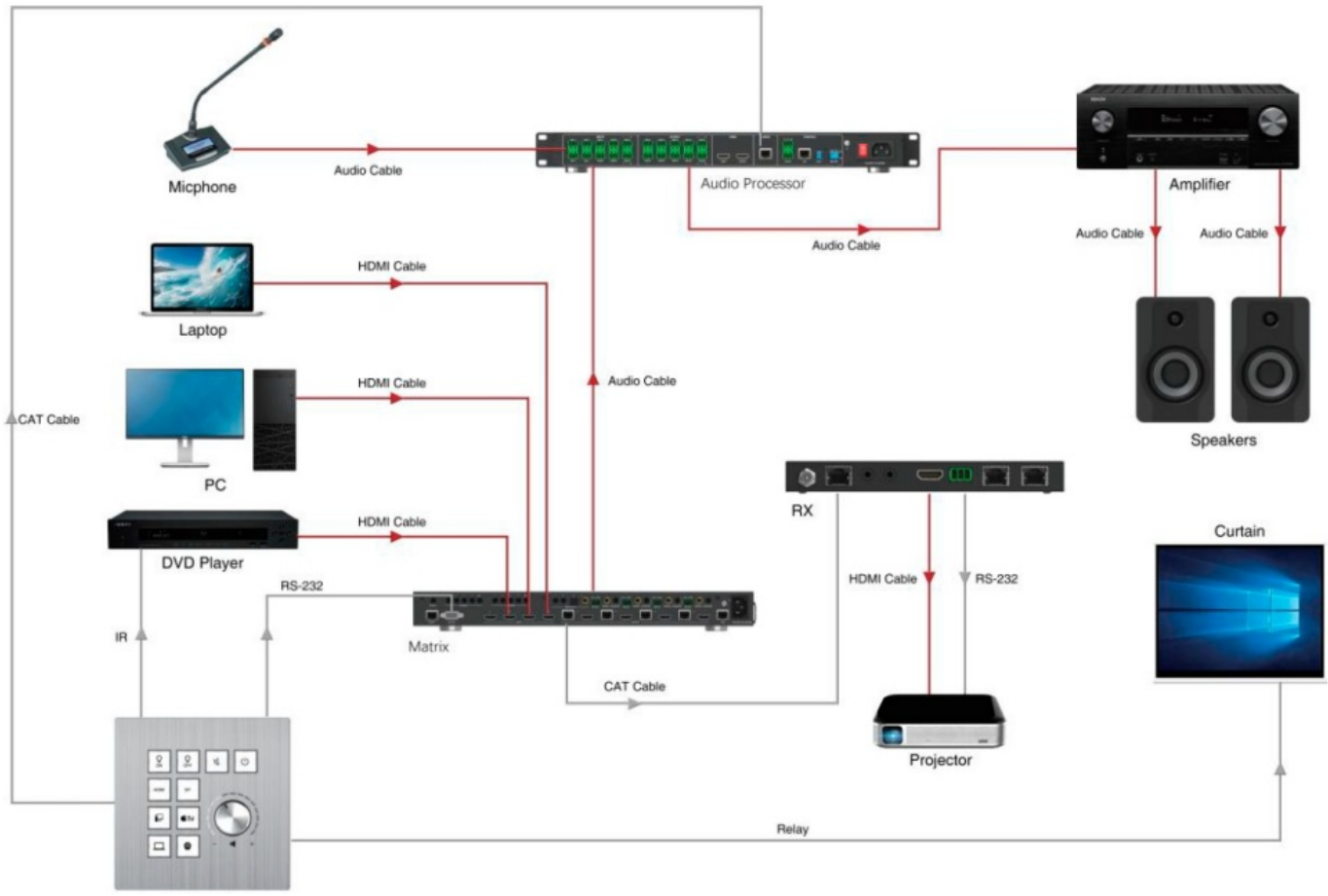
Operation Controls and Functions



No.	Name	Function Description
1	**1~10 Buttons**	10 programmable buttons, which can be flexibly configured according to applicati on requirements. The button icon ismade from film, which can be customized an d replaced.
2	**Knob**	1 programmable knob (with button function), which can be flexibly configured acc ording to application requirements.
3	**Knob LED (Blue)**	Knob progress LED, indicating the changes of the knob.
4	**LAN**	1 standard 10M/100M/1000M Ethernet RJ45 interface with default auto-negotiated speed for device connection, projects uploading & downloading, netw ork communication and debugging. The control panel boots up with DHCP enabled by default. After powering on, wh en the control panel connects to a network where there is no router present to as sign IP addresses, the control panel will take the pre-set IP address: 192.168.0.1 01. If there is a router present on the same network, the router will assign an IP a ddress to the controlpanel in three minutes and the pre-set IP address will be inv alid. **Note:** When the control panel is DHCP enabled after power on, the router (if con nected to the same network) will assign an IP address to the control panel. If net work is disconnected at this time, the control panel won't be able to pre-set an IP address and its IP address would be 0.0.0.0. If a pre-set IP address is needed, y ou need to power off the control panel and then power it on again. If it is in static IP mode after power on, the control panel won't preset an IP address either. If th ere is no router present, you can connect your PC to the LAN port of the control panel and modify the PC's IP address in the network segment of 192.168.0.X, th en the PC will pre-set an IP address to the control panelin three minutes for data communication.
5	**Ground Terminal**	Used for connecting the ground or the earthing conductor of the rack.
6	**COM1/2**	2 sets of programmable two-way RS-232 serial ports, each of which is a 3-pin ph oenix connector (male), compliant with RS-232 communication protocol, and cap able of configuring 8 baud rates in the range of 2400-115200bps.The pin-outs of the RS-232 ports are PIN1 for TX, PIN2 forGND, and PIN3 for RX.
7	**RELAY**	2 sets of relay 2-PIN phoenix connectors (the left PIN is for signal input, and the r ight for signal output). Each relay is isolated and normally open, and can switch up to 1A 30VDC/ 0.3A 125VAC peak. The connector does not support voltage output.

8	**IR**	1 set of multi-mode 2-PIN phoenix connectors for IR transmitting or one-way seri al signal outputting. The ports can connect to devices with signal level 0-5V in R S-232 mode. The left PIN is for IR/serial data, the right for GND. The IR-Serial w orking mode is programmable:In IR transmitting mode, the outputting IR wave le ngth ranges within 20K-60KHZ.In one-way serial data outputting mode, the left PI N is for TXD, the right for GND, and both are configurable in the program.
9	**I/O**	1-CH GPIO dry contact input interface, with a voltage range of 0~24V, for collecti ng digital level signals, capable of low level signal sensing.
10	**PWR**	The power input port (2-PIN phoenix connectors), used for connecting with exter nal 24V DC power supply.
11	**RESET button (b ehind the front p anel)**	**Reboot:** After the device boots up, press and hold the RESET button for more th an 1s less than 5s, then release it, the device will reboot. The device won't uploa d the user projects after rebooting. **Reset:** After the device boots up, press and hold the RESET button for more tha n 5s, then release it, the device will reset the user configuration information, the I P will be restored to DHCP state, the login password of the manage- ment page will be initialized to "admin", the device time will be initialized to automatic acquisi tion mode, but user projects won't be deleted by factory initialization.
12	**MICRO USB(behi nd the front pane l)**	The reserved port for test debugging.

Application Example



Documents / Resources

	Prestel MFCP-10 Programmable Control Panel [pdf] User Manual MFCP-10 Programmable Control Panel, MFCP-10, Programmable Control Panel, Control Panel