

# 8-Button Programmable IP Wall Plate Keypad with PoE

TCP/IP Macro Control for AV Systems — 128 Commands, Relay Output, WebGUI & Telnet Programming

## Table of Contents

|  |   |
|--|---|
| <b>1. Introduction</b>                       | 2 |
| <b>2. Package Contents</b>                   | 2 |
| <b>3. System Requirements</b>                | 2 |
| <b>4. Features</b>                           | 2 |
| <b>5. Operation Controls &amp; Functions</b> | 3 |
| <b>5.1 Front Panel</b>                       | 3 |
| <b>5.2 Rear Panel</b>                        | 3 |
| <b>5.3 Telnet Commands</b>                   | 4 |
| <b>5.4 WebGUI Control</b>                    | 4 |
| <b>6. Connection Diagram</b>                 | 5 |
| <b>7. Specifications</b>                     | 5 |
| <b>8. Troubleshooting / FAQ</b>              | 6 |

## 1. Introduction

The KanexPro WP-IPKEYPAD8 is a programmable 8-button IP control keypad that fits a standard US single-gang wall plate and requires no dedicated control processor. Each of the 8 backlit buttons can trigger a fully customized macro, sending TCP/IP commands to any Ethernet-connected AV device on the network — projectors, matrix switchers, displays, relay-controlled screens, and more. With up to 128 total commands storable across all macros (up to 16 per macro) and an additional 8 software-only extension macros accessible via WebGUI, the WP-IPKEYPAD8 delivers enterprise-grade macro control at a fraction of the cost of a full control system.

## 2. Package Contents

- 1× IP Control Keypad (US single-gang wall plate)
- 1× USB Type-A to Mini-B cable
- 1× Terminal block connector (2-pin)
- 2× Button sticker sheets
- 1× 5V/2.6A DC power adapter (CE/FCC/UL certified)
- 1× Operation manual

## 3. System Requirements

- Active Ethernet network (switch or router) on the same subnet as controlled devices
- PoE switch/hub (48V PSE) for PoE power — or local 5V AC outlet for DC adapter power
- Web browser on a PC/laptop connected to the same network (for WebGUI setup)

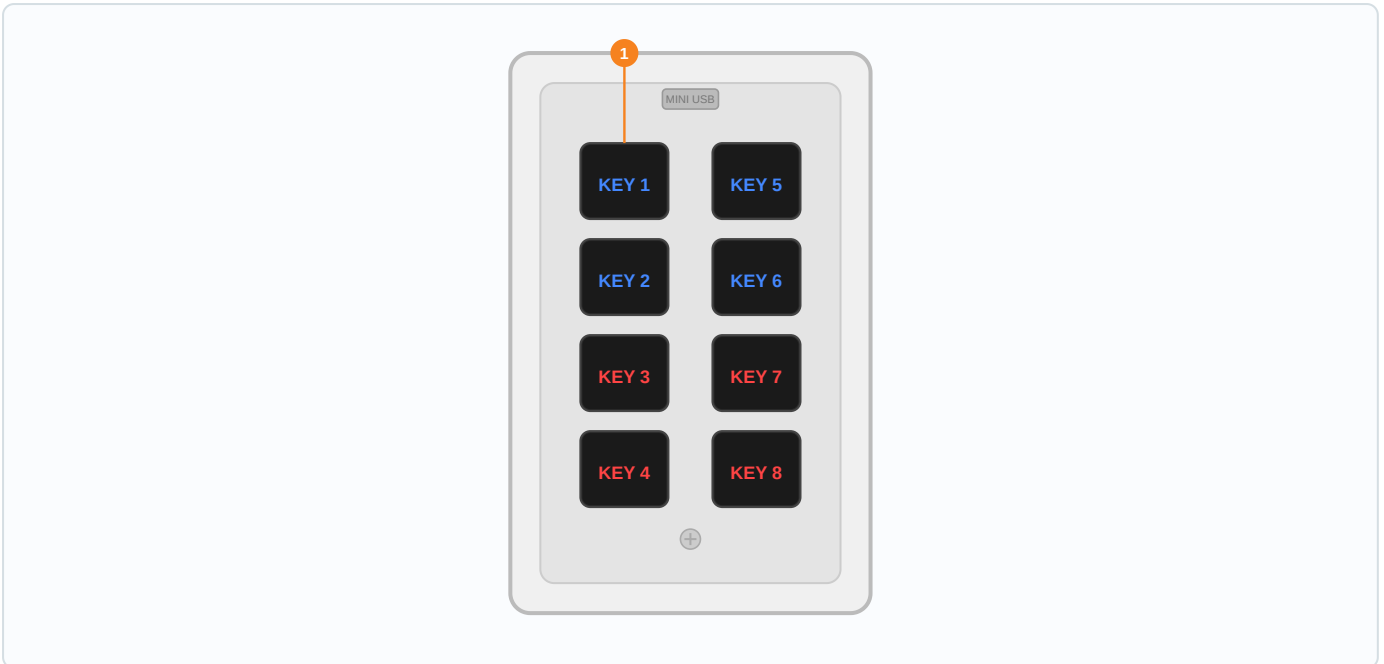
## 4. Features

- US single-gang wall plate design with adjustable LED brightness
- 8 physical macro buttons; each configurable to execute multiple commands via WebGUI
- Up to 128 total commands across all macros (up to 16 per macro)
- 8 additional software-only extension macros (WebGUI / Telnet only)
- Relay output (DC 0–24V / 5A) — open, close, or toggle
- Time and date macro scheduling — up to 32 recurring + 8 one-time events
- 48-hour battery backup for internal clock against power loss
- Customizable daylight saving time settings
- Toggle mode — alternate between two macro sets on successive button presses
- Repeat mode — macro repeats continuously while button is held
- PoE powered (48V PD) or DC 5V/2.6A adapter (included)
- Control via WebGUI, Telnet, or physical buttons — no software license required
- DHCP or static IP; default IP: 192.168.1.50
- Dual-color LEDs (red + blue) per button, individually adjustable (0–100%)
- Mini USB port (behind wall plate) for direct configuration access
- ESD protection: ±12kV air discharge / ±8kV contact discharge



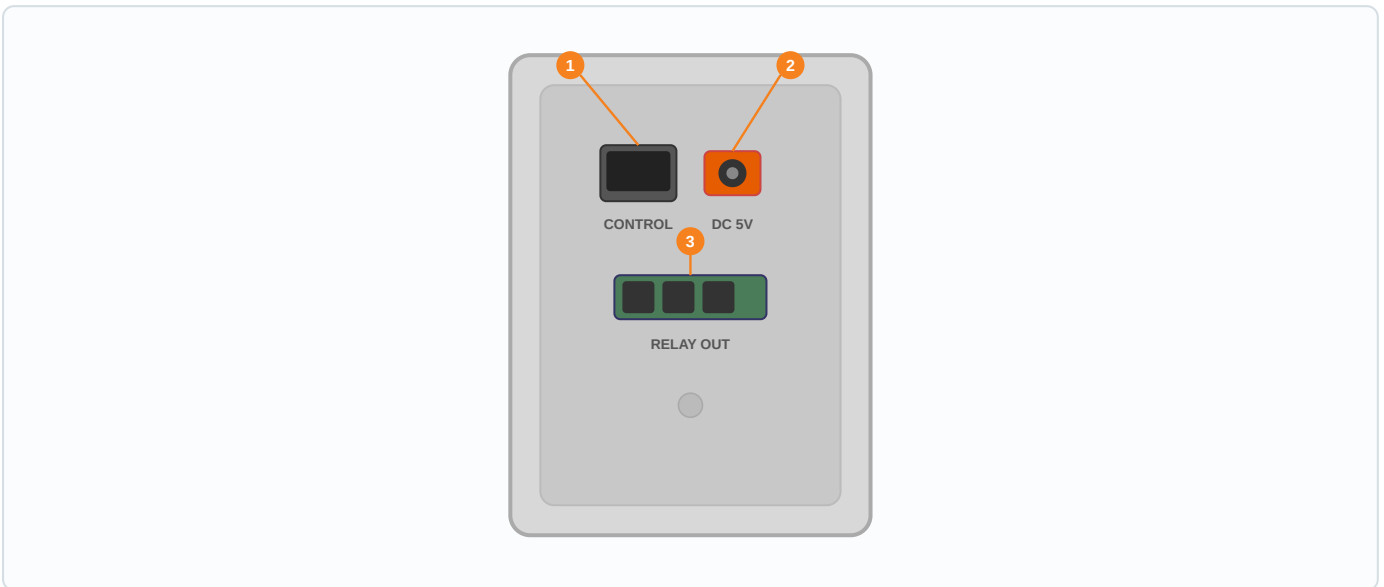
## 5. Operation Controls & Functions

### 5.1 FRONT PANEL



| NO. | NAME                           | FUNCTION DESCRIPTION   |
|-----|--------------------------------|--|
| 1   | <b>Macro Buttons (KEY 1-8)</b> | Each button contains dual-color LEDs (red and blue) with individually adjustable brightness (0–100%). Press to activate the assigned macro. Refer to WebGUI → Macro Settings to configure each button. |

### 5.2 REAR PANEL



| NO. | NAME                  | FUNCTION DESCRIPTION   |
|-----|-----------------------|--|
| 1   | <b>CONTROL (RJ45)</b> | Connect to an active Ethernet network via switch or router to allow TCP/IP device control and WebGUI/Telnet access. Supports PoE (48V PD) — the unit can be powered directly by a PoE switch without a DC adapter. |
| 2   | <b>DC 5V</b>          | Plug the included 5V/2.6A DC power adapter into this port. Optional when PoE is available.   |
| 3   | <b>RELAY OUT</b>      | Connect to any device supporting DC 0–24V / 5A relay trigger (screens, switchers, etc.). Can be opened, closed, or toggled via macro command.  |



## 5.3 Telnet Commands

Connect to the keypad via Telnet (port 23) at its IP address. Commands are not case-sensitive and must be followed by a carriage return.

| COMMAND               | DESCRIPTION   |
|-----------------------|---|
| IPCONFIG              | Display current IP configuration  |
| SETIP N, N1, N2       | Set static IP address (N), netmask (N1), and gateway (N2) simultaneously. X=0–255 |
| SIPMODE N             | Set IP mode. N=STATIC or DHCP   |
| VER                   | Show firmware version   |
| FADEFAULT             | Reset all configurations to factory defaults                                      |
| ETH_FADEFAULT         | Reset Ethernet settings to factory defaults                                       |
| REBOOT                | System reboot   |
| RELAY N N1            | Relay control. N=1 (port); N1=OPEN, CLOSE, TOGGLE                                 |
| LEDBLUE N N1          | Individual blue LED brightness. N=1–16 (LED); N1=0–100 (%)                        |
| LEDRED N N1           | Individual red LED brightness. N=1–16 (LED); N1=0–100 (%)                         |
| LEDBLUES N            | Set all blue LED brightness. N=0–100 (%)  |
| LEDREDS N             | Set all red LED brightness. N=0–100 (%)   |
| BACKLIGHT N           | Set all LED brightness. N=0–100 (%)   |
| KEY_PRESS N RELEASE   | Set button N to activate macro on key release (single fire)                       |
| KEY_PRESS N HOLD      | Set button N to activate macro on hold (repeats while held)                       |
| MACRO RUN N           | Run macro N. N=1–32   |
| MACRO STOP [N]        | Stop all macros, or stop specific macro N   |
| DEVICE ADD N N1 N2 N3 | Add Telnet device to slot N. N1=IP, N2=Port, N3=Name (max 24 chars, no spaces)    |
| DEVICE DELETE N       | Delete device definition in slot N. N=1–16  |
| HELP [N]              | Show command list or description of command N                                     |

Recommended minimum delay: 100ms for system commands, 500ms for Telnet commands, to ensure proper receipt before the next command is sent.

## 5.4 WebGUI Control

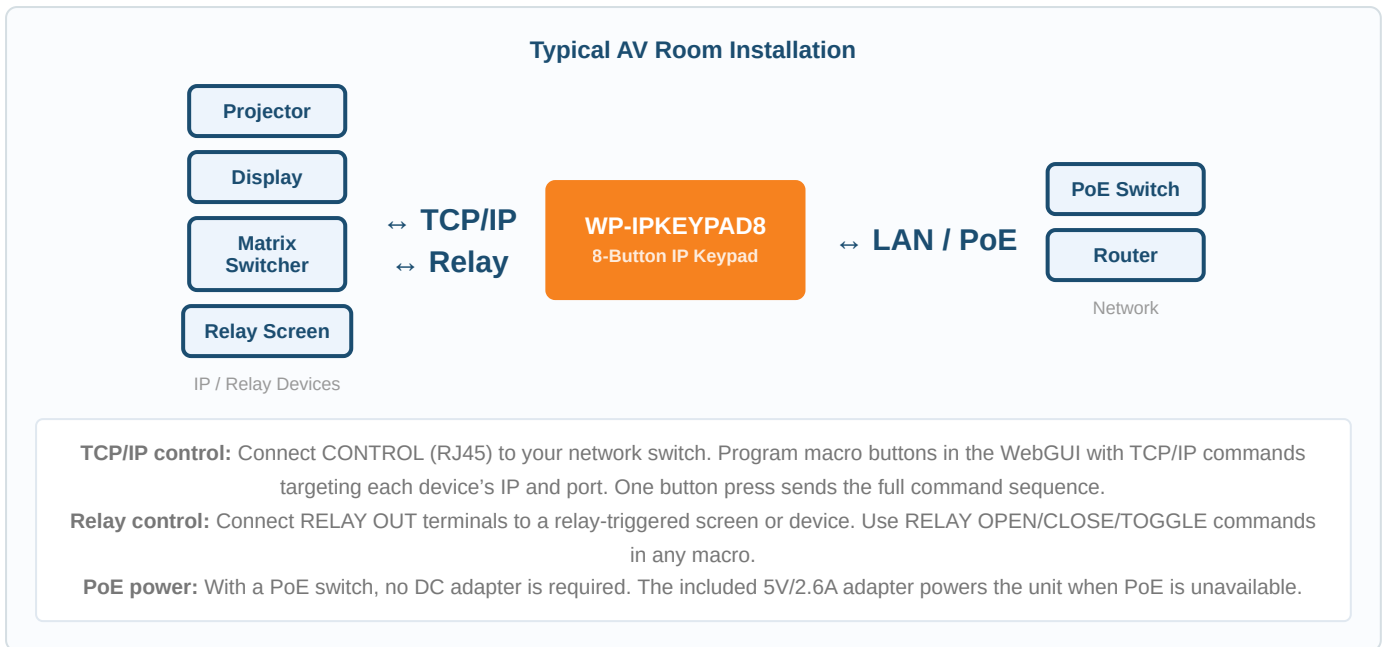
Open a browser on the same network and navigate to the keypad's IP address (default: **192.168.1.50**). Login with username **admin** and password **admin**. Use the Device Discovery Tool to locate the keypad's IP on the network if needed.

### WebGUI Tabs

- **Macro Settings** — Edit, name, and execute macros for physical buttons. Up to 16 commands per macro. Set delay and interface (SysCMD, Device, Telnet, Relay) per command.
- **Extension Macro** — 8 additional software-only macros (WebGUI/Telnet only). Same editing interface as Macro Settings.
- **Command Settings** — Create and manage reusable command strings (max 128 chars recommended; up to 512 chars for up to 32 commands).
- **Device Settings** — Define up to 16 Telnet-controlled network devices (IP address + port). Used in macro command routing.
- **Key Settings** — Enable Repeat mode (macro repeats while held) or Toggle mode (alternates between two macros per button).
- **Schedule** — Configure up to 32 recurring and 8 one-time scheduled macro events by day/time.
- **Network Settings** — Set static IP/netmask/gateway or enable DHCP.
- **System Settings** — Change WebGUI password, set session timeout, save/restore full configuration, factory reset, and reboot.
- **Time Settings** — Set system time and configure daylight saving time start/end dates.



## 6. Connection Diagram

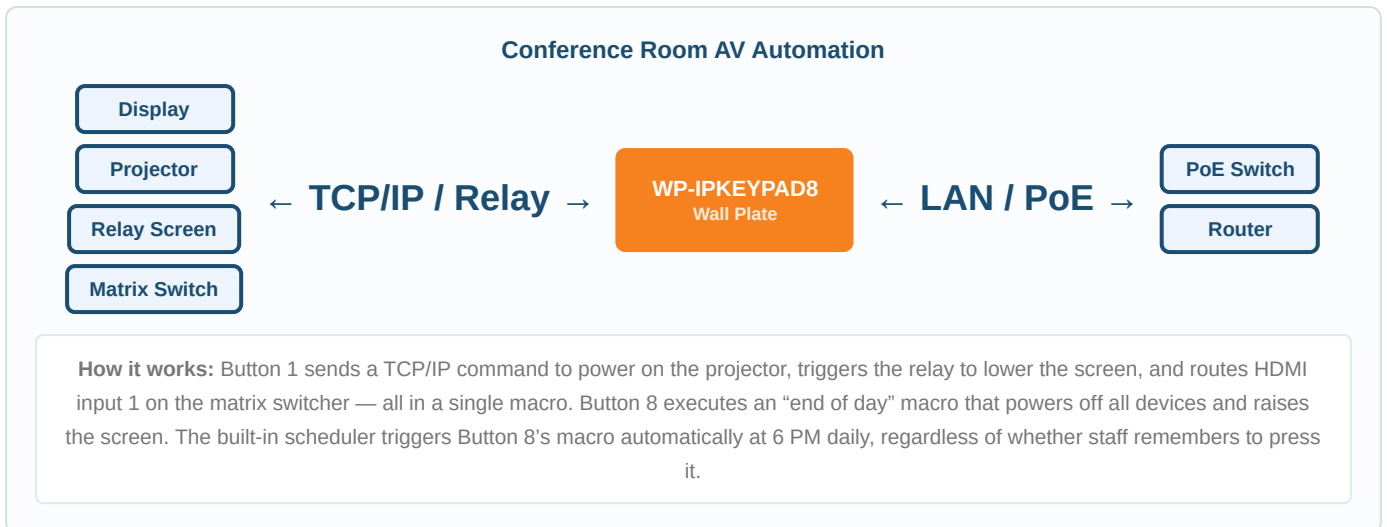


## 7. Specifications

| CONNECTIONS                 |   |
|-----------------------------|---|
| Input Ports                 | 8× Backlit Buttons, 1× IP Control (RJ45)                  |
| Output Port                 | 1× Relay (2-pin Terminal Block, DC 0–24V / 5A)            |
| Config Port                 | 1× Mini USB (behind wall plate)                           |
| POWER                       |   |
| PoE                         | 48V PD (requires PoE PSE switch/hub)                      |
| DC Power                    | 5V/2.6A DC adapter included (CE/FCC/UL)                   |
| Power Consumption           | 3.3W  |
| CONTROL                     |   |
| Protocols                   | TCP/IP, Telnet, WebGUI                                    |
| Macro Capacity              | 16 physical + 8 extension (WebGUI only)                   |
| Command Capacity            | 128 total (up to 16 per macro)                            |
| Scheduling                  | 32 recurring + 8 one-time events                          |
| Clock Backup                | 48-hour battery-backed                                    |
| Default IP                  | 192.168.1.50  |
| PHYSICAL                    |   |
| Dimensions (W×H×D)          | 2.75" × 4.50" × 1.49" (69.9 × 114.3 × 38mm) All Inclusive |
| Net Weight                  | 0.33 lbs (150g)   |
| Form Factor                 | US single-gang wall plate                                 |
| Chassis Material            | Plastic, Metal  |
| Color                       | White   |
| ENVIRONMENTAL               |   |
| Operating Temp              | 32°F – 104°F (0°C – 40°C)                                 |
| Storage Temp                | –4°F – 140°F (–20°C – 60°C)                               |
| Humidity                    | 20–90% RH (non-condensing)                                |
| CERTIFICATIONS & PROTECTION |   |
| Certifications              | CE, FCC, UL   |
| ESD Protection              | ±12kV air discharge / ±8kV contact discharge              |



## Application Example



## 8. Troubleshooting / FAQ

### Q: The keypad is not responding to button presses after programming.

A: Verify all destination devices are on the same LAN subnet as the keypad. In Command Settings, confirm IP addresses and ports are correct. Ensure macro commands have a minimum 500ms delay between Telnet commands.

### Q: The relay output is not triggering the connected device.

A: Confirm the terminal block wiring is secure and the connected device supports DC 0–24V / 5A relay input. Verify the macro command uses RELAY CLOSE or RELAY TOGGLE (not OPEN if the device expects a closed circuit to activate).

### Q: Scheduled macros are not executing at the correct time.

A: Verify the system time is set correctly in the Time Settings tab of the WebGUI. If your region uses daylight saving time, configure the DST start and end dates. If the time reset (shows 2015/01/01), the 48-hour clock backup was exhausted — re-set the time and re-enable the schedule.

### Q: I cannot connect to the WebGUI.

A: Ensure your PC and the keypad are on the same network. The default IP is 192.168.1.50. Use the Device Discovery Tool to locate the unit. If the IP was changed and is unknown, hold the reset procedure in System Settings (FADEFAULT via Telnet) to restore defaults.

### Q: Can I use the keypad without any network connected?

A: The relay output will function independently of the network. TCP/IP commands and WebGUI access require a live Ethernet connection. PoE power requires a PoE-capable switch; the DC adapter provides power without network.

### Q: LED buttons are not illuminated.

A: LED Demo Mode is ON by default — disable it in the Macro Settings tab if it interferes with programmed LED states. Check the BACKLIGHT or individual LEDBLUE/LEDRED settings are not set to 0%.

