

## Control Panel For Addressable Public Address System

Model-AL-PACP-101L

### Features:

- ❖ Interactive TFT display with touch screen control.
- ❖ Two-wire system for power, data , forward and reverse audio signaling.
- ❖ Power supply management system.
- ❖ Password security.
- ❖ Event logging system.
- ❖ Short circuit Protection .

### Overview:

The Panel includes a touchscreen display with call icons, a hand microphone, built-in speakers, efficiently managing the entire system.

The addressable feature allows targeted speaker activation and control from the control panel. When connected in parallel, only the intended speaker is activated to play audio , ensuring the rest remain undisturbed. The system supports both Zone call and all call activation options, providing flexibility in system control.



Notably, the control panels innovative design allows it to connect and to control all external devices using just two wires for Power, data, Forward Audio signaling. This ground-breaking feature significantly reduces cable requirements.

To enhance reliability, the control panel incorporates minimal electronic hardware, hence minimizing the chances of failure. Additionally, the electronic boards are plug-in type, ensuring easy replacement if needed.

Regarding power supply, the control panel operates on 24 volts DC. It also includes a built-in 230 volts to 24 volts SMPS (Switched-Mode Power Supply) and a battery charger provision for batteries. Users have the flexibility to choose between the built-in power supply or connect it to an external 24-volt supply, as required.

Loop current capacity : Each loop can output up to 1.2 amps and comprises both low-power and high-power devices. The User shall calculate and limit device based on this power limit.

Limitations of Loop addressing : Devices come with factory-set software addresses based on the order specifications. If there is a need for address modifications, this can be done using the control panel.

However, it's important to note that this control panel uses high current and power devices like speakers . Therefore, careful consideration must be given to power requirements.

## Expanding Loop Capability:

Primary control panel is equipped with a single loop.

### Incorporating Loop Cards:

When the system necessitates a greater number of devices, we have the option to introduce loop expansion boards. Each loop expansion board can accommodate up to 3 loops. These loop cards are plug-and-play modules, and depending on the specific site requirements, multiple loop cards can be added to extend the panel's capacity, allowing for a maximum of 4 loops.

For scenarios requiring more than 4 loops, adjustments to the enclosure size and power supply unit become necessary. This will expand the panel's capacity to support up to 7 loops.

### Integrating Power Booster Cards:

All our system devices operate on loop power, and it's crucial to account for substantial power requirements. The primary control panel features a single loop and a single power booster module capable of supplying 1.2 Amps on the loop.

If the loop demands more than 1.2 amps, additional power booster modules can be integrated based on site conditions.

## Electrical Specifications :

Primary Power	220V±10 % AC
Standby Power	This control panel has provision to place 12Volts , 18Ah Battery - 2nos, with built-in charger for backup. The user shall calculate backup Power requirement and choose suitable capacity Battery.
No. of Loop	1
Maximum Signal Loop Current	1.2 Ampere
Loop Resistance	40 ohms
Wiring	2 core cable
Wiring Type	Class A / Class B Style

## Mechanical Specifications:

Enclosure Dimensions (H x W x D)	550x380x125 mm
Front door Dimensions (H x W x D)	560x393x11 mm
Housing Material	16 Gauge Cold Rolled sheet
Black box	Black Matte
Front door	Texture Red