

Control Panel for Addressable Talkback System

Model-AL-TBCP-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 talkback control panel in fire and safety systems serves as a critical component for communication and control during emergency situations, particularly in the event of a fire. Its primary purpose is to enable two-way communication between building occupants and the command center.

This is how Talkback system works:

When occupants require emergency assistance, they can activate the call button. Upon pressing this button, the control panel will indicate the caller's location and activate a ringtone. Support personnel can then accept the call and establish two-way voice communication to facilitate interaction



Notably, this control panels innovative design allows it to connect and control the Talkback Unit using just two wires for Power, data, Forward and Reverse 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 .

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.

Expanding Loop Capability:

Primary control panel is equipped with a single loop.

Incorporating Loop Cards:

When the system necessitates more number of loop, 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.

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