

PERTRONIC INDUSTRIES LTD

DATASHEET

Audio Distribution Module 2-Way

ADM-2-PMB125, ADM-2



Overview

The Pertronic Audio Distribution Module (ADM-2-PMB125) creates a pair of independently supervised 100 V rms audio lines (channels). This module simplifies the provision of two separate audio channels covering one area or evacuation zone.

A system built with an ADM-2-PMB125 will continue operating even if one channel develops a fault. This ensures evacuation messages can be broadcast over the other channel. If either channel becomes short circuited, the shorted channel will be disconnected, but the output continues on the unaffected channel after a brief interruption. The module monitors the shorted channel, and it will reconnect the channel if the fault is cleared.

The module can be installed remote from the amplifier. The module can be powered from an analogue addressable loop, or from a separate 24 V dc supply.

The built-in fault supervision system continuously monitors the 100 volt output lines for open circuits or short circuits. In the event of a fault condition, the module signals a fault condition to the amplifier or evacuation generator.



*Pertronic
Audio Distribution Module 2-Way
(ADM-2-PMB125)*

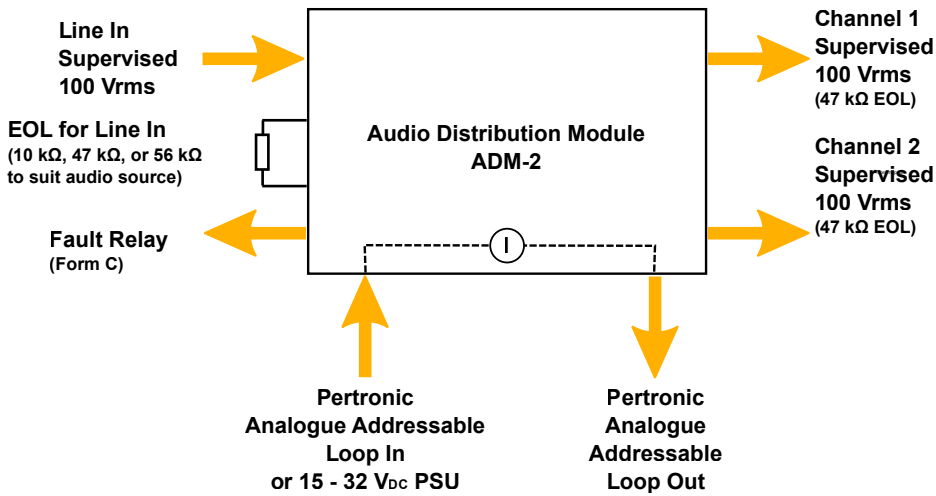
Features

- » Simplifies installation of audio evacuation systems by providing duplicate supervised audio channels
- » A short circuit on one channel will be isolated (after a brief delay) allowing audio transmission over the other channel
- » Superior 80 watt per channel switching capacity
- » Powered from analogue addressable loop or separate 24 V dc power supply
- » Assists compliance with the fault isolation requirements of AS 1670.1: 2018, section 2.6
- » Earth connection for screened cable on the 100 V line
- » Local fault LEDs display existing (steady) or historical (flashing) faults, including separate S/C and O/C indicators for each channel
- » Fault relay with form C clean contact
- » Reset switch allows historical fault indications to be cleared
- » Built-in analogue addressable loop isolator disconnects the loop if it develops a short-circuit
- » User selectable end of line input resistor to suit amplifier specifications
- » Compatible with Pertronic evacuation amplifiers, and amplifiers controlled by the Pertronic EVAC Generator
- » Compatible with third-party equipment including the Tyco QE 90 EWIS and the AMPAC EV3000

Specifications

Operating Voltage		15 to 32 V dc
Current	Quiescent	19 mA @ 27.4 V dc
	Maximum Fault	35 mA @ 27.4 V dc
Power per Channel		80 watt supervised 100 V rms line
Maximum Total Power		160 W per ADM-2 module
Input End of Line		10 kΩ W (Easily changed to suit audio source)
Recovery Time		2 seconds (approximately) To resume broadcast after detecting a short circuit on any channel
Fault Relay		2 A @ 30 Vdc Form C Clean Contact, Resistive Load
Fault Signal		Input EOL resistor increased by 150 kΩ
100 V Supervised Channel	Maximum Voltage	100 V rms
	Output End of Line	47 kΩ, 0.5 W on each channel
	Maximum Shunt Capacitance	270 μF
	Supervision	Continuously supervised for open circuit and short circuit conditions
Dimensions	ADM-2-PMB125	125 H x 125 W x 55 D mm
	ADM-2	108 H x 70 W x 20 mm
Operating Temperature		- 10 °C to +50 °C
Operating Environment		≤ 95 % RH (non-condensing)

Application Diagram



ADM-2-PMB125 Interior

Typical connections for duplicate evacuation system

Ordering Information & Notes

Product Code	Description
ADM-2-PMB125	Audio Distribution Module, 2 Way, Mounted in PMB125 Enclosure
ADM-2	Audio Distribution Module, 2-Way, (Printboard Assembly Only)

This information must not be treated as partial or complete instructions for the design, construction, installation, commissioning, or maintenance of fire detection, fire alarm, or building evacuation systems. Fire and evacuation systems must be designed and installed by properly qualified persons, in accordance with all regulatory requirements. Unless explicitly stated otherwise, typical specifications and nominal dimensions are provided. Actual product performance and dimensions may vary.

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