

# PERTRONIC INDUSTRIES LTD

## DATASHEET

### Audio Distribution Module 2-Way



## Overview

The Pertronic Audio Distribution Module (ADM-2-PMB125) creates a pair of independently supervised 100 Vrms 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, output continues on the unaffected channel after a brief interruption. The shorted channel will be disconnected. 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 Vdc supply.

The built-in fault supervision system continuously monitors the 100 V output lines for open-circuit 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) (ADM-2-PMB125)*

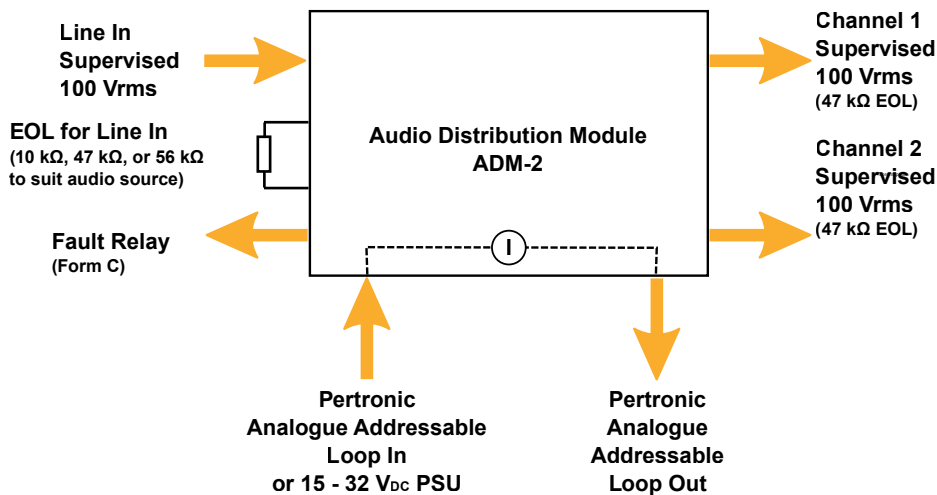
## Features

- » 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 Vdc power supply
- » 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 EVAC 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

<b>Dimensions (H x W x D mm)</b>		125 x 125 x 55 mm
<b>Operating Voltage</b>		15 to 32 Vdc
<b>Current</b>	<b>Quiescent</b>	40 mA @ 24 Vdc
	<b>Maximum Fault</b>	50 mA @ 24 Vdc
<b>Power per Channel</b>		80 W, Supervised 100 Vrms Line
<b>Maximum Total Power</b>		160 W, Per ADM-2 Module
<b>Input End of Line</b>		10 k $\Omega$ , 1 W EOL Resistor, Easily changed to suit audio source
<b>Fault Relay</b>		2 A @ 30 Vdc Form C Clean Contact, Resistive Load
<b>Fault Signal</b>		Input EOL resistor increased by 150 k $\Omega$
<b>100 V Supervised Channel</b>	<b>Maximum Voltage</b>	100 Vrms
	<b>Output End of Line</b>	47 k $\Omega$ , 0.5 W EOL/Channel
	<b>Maximum Shunt Capacitance</b>	270 $\mu$ F
	<b>Supervision</b>	Continuously supervised for open-circuit (O/C) and short-circuit (S/C) conditions
<b>Operating Temperature</b>		- 10 $^{\circ}$ C to +50 $^{\circ}$ C
<b>Operating Environment</b>		$\leq$ 95 % RH ( non-condensing)

## Application Diagram



Typical connections for duplicate evacuation system



AMB-2-PMB125 Interior

## Ordering Information & Notes

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

The information in this document 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, this document provides typical specifications and nominal dimensions. Actual product performance and dimensions may vary.

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