

PERTRONIC INDUSTRIES LTD

DATASHEET

Audio Distribution Module

ADM-4



*Distributes one audio line to multiple switchable channels
A short circuit on one channel does not disable the other channels
80 Watt per channel switching capacity*

Overview

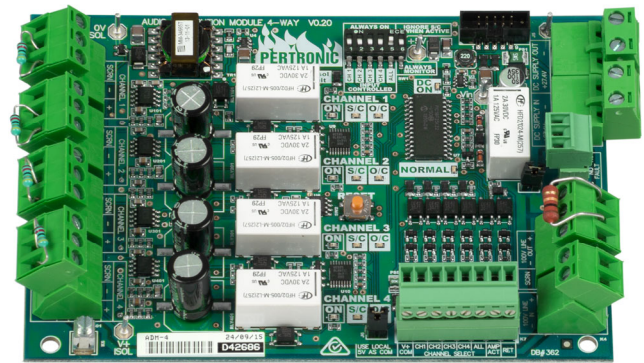
The **Pertronic Audio Distribution Module 4-Way (ADM-4)** provides multiple independently controlled and monitored 100 Vrms audio lines (channels). This simplifies audio system installations by allowing multiple spurs from a single 100 Volt audio line without compromising the fault supervision system.

A system built with ADM-4 modules will continue operating even if some channels develop faults. If any channel becomes short-circuited, output on all channels will be interrupted. After a brief delay (about 20 seconds), the shorted channel will be disconnected. Output will then resume on the unaffected channels. The monitoring system will continue to monitor the shorted channel, and it will automatically reconnect the channel if the fault is cleared.

The built-in supervision system continually monitors the 100V output lines for open-circuit or short-circuit conditions, irrespective of whether the system is broadcasting an evacuation message, broadcasting non-urgent audio such as background music, or idling with no signal.

Each channel may be permanently enabled using the local DIP switch, or enabled/disabled by a remote control signal.

The Audio Distribution Module independently supervises the output channels and signals a fault condition to the amplifier or evacuation generator in the event of a fault condition. The module also includes a Form-C clean contact fault relay for connection to monitoring equipment.



Audio Distribution Module 4-Way (ADM-4)

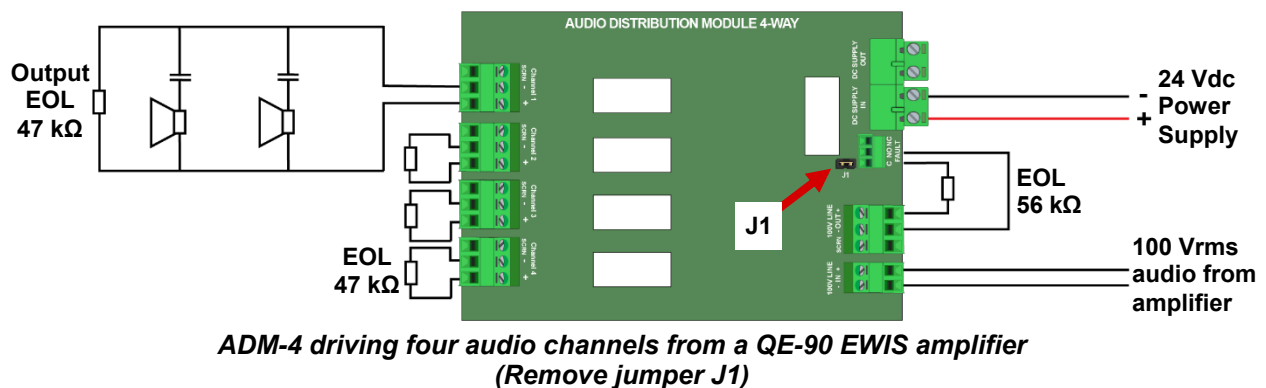
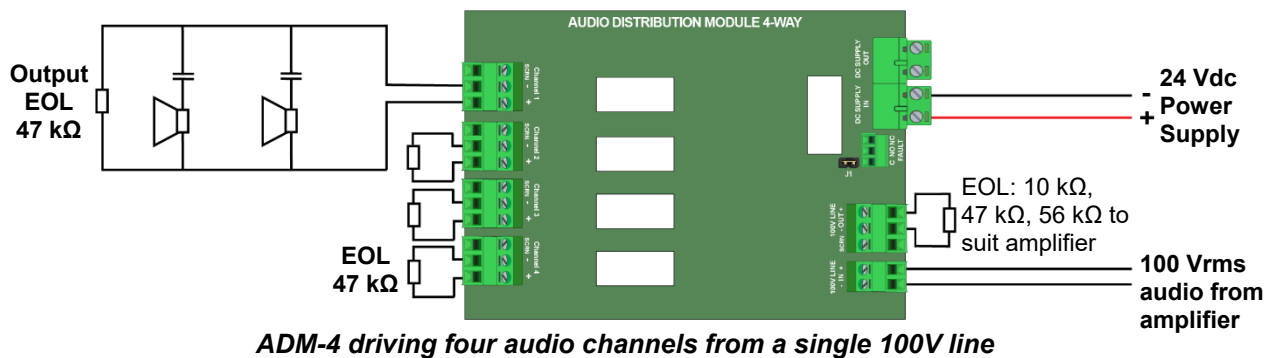
Features

- Simplifies installation of audio evacuation systems by providing multiple monitored audio channels
- A short circuit on one channel will be isolated allowing audio transmission over the other channels
- This product assists compliance with the fault isolation requirements in AS 1670.1: 2018, s. 2.6
- Channel Select input provides individual channel switching
- Superior 80 Watt per channel switching capacity
- On-board DIP switch allows individual channels to be permanently selected
- Separate open-circuit (O/C) and short-circuit (S/C) fault indicators for each channel
- Control inputs can be isolated from the on-board circuitry
- User selectable End of Line input resistor to suit amplifier specifications
- Compatible with Pertronic 20 Watt & 50 Watt amplifiers, and selected third-party amplifiers

Specification

Supply Voltage	18 Vdc to 30 Vdc	Power per Channel	80 W (100 Vrms Line)
Quiescent Current	16 mA @ 27.4 Vdc	Maximum Power	250 W total per ADM-4 module
Maximum Fault Current	25 mA @ 27.4 Vdc	Recovery Time	Approx. 20 sec. after detecting short-circuit on any channel
Fault Relay	2 A @ 30 Vdc Form-C clean contact	Input End of Line	10 kΩ 2 W, 47 kΩ 0.5 W, or 56 kΩ 0.5 W, as required by amplifier
PCB Dimensions	140L x 98W x 27D mm		
Control Inputs		100 V Supervised Output Channel	
External Drive Voltage	5 Vdc to 30 Vdc	Maximum Voltage	100 Vrms
Current Per Input	5 mA to 8 mA	Output End Of Line	47 kΩ, 0.5 W EOL/Channel
		Supervision (Output)	Continuously supervised for open-circuit (O/C) and short-circuit (S/C) conditions

Typical Connections



Ordering Information

Product Code	Description
ADM-4	Audio Distribution Module, 4-Way

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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