PERTRONIC INDUSTRIES LTD

DATASHEET

**Evacuate Generator Module (EVACGEN-NZ)**

Overview

The Pertronic Evacuate Generator Module extends the F220 and F100A analogue addressable automatic fire alarm system by allowing a fully monitored interface between the control panel and a third party 100 Vrms amplifier.

The Evacuate Generator Module connects to a Pertronic F220 or F100A using four wire RS485 or directly via a monitored bell circuit.

It has four selectable inputs, each of which can be programmed to produce different tones when activated. Two of the tones may include a voice message.

Connection:The Evacuate Generator Module typically connects onto the standard RS485 bus (2-wire data and 24 Vdc power) for communications. An additional 24 Vdc power connection is also required, which may be from an external isolated power supply.
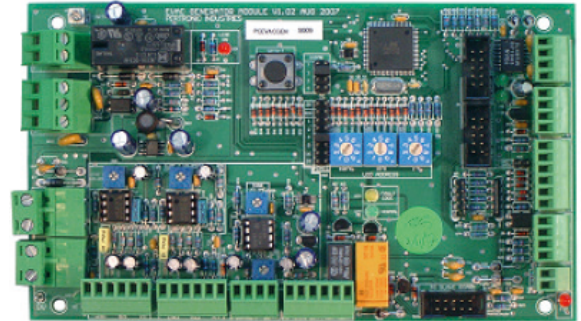
Evacuation Tone Generator

Features

»   Dual microphone / line inputs, with individual volume control and Press to Talk (PTT)
»   Tone and line output volume controls
»   Optional tone selection
»   Four pull down control inputs
»   Bell circuit input and output connections
»   Closed loop Amplifier monitoring 100 Vrms 250 Watt switching capability

»   42 tone / voice combinations available
»   2 voice messages available
»   Configurable on site without tools
»   Monitored Fire Panel input
»   External Fault Input
»   Active and Fault relay outputs

Specification

Dimensions (H x W x D mm)		22 x 97 x 170
Mounting Holes (L x W mm)		152.4 x 89
Weight		200 g
Operating Voltage		19 to 29 Vdc, nominal 27.4 Vdc
Current (Quiescent)	DC	32 mA
	RS485	<30 mA @ 27.4 Vdc
Current (Alarm)		105 mA
Operating Temperature		0 to +30 °C
Operating Environment		10 to 95% RH (non-condensing)
External Power		Electrically isolated from communications power
Quantity		8 fully monitored Evac Generator Modules on the RS485 bus
RS485 Addressing		Each Module uses an RS485 LED Mimic address space. Addresses must exist from 1 and be consecutive to 8 maximum. Not required for Bell or direct Switch Input activation
Mic Inputs	Sensitivity	1.5 mVrms to 15 mVrms
	Input Impedance	680 Ω, balanced
	Frequency Response	100 Hz to 20 kHz
	Balanced Input	Connect Shield to 'Line'
Line Inputs	Sensitivity	100 mV to 1.5 Vrms
	Input Impedance	68 kΩ
	Frequency Response	100 Hz to 20 kHz
100 V Line Output	Relay Switch Rating	5 A at 100 Vrms (resistive)
	Monitoring	Fully monitored for open-circuit or short-circuit (10 kΩ, 2 W EOL resistor)

Tone Characteristics

47 tones are available and include: Evacuation tones, Alert tones; and voice messages as specified by NZS4512:2010. Tones are programmed using the LED Base Address decade switches and program mini-jumpers

- » Tone 01 NZS4512:2010 Evacuation Tone with Voice
- » Tone 02 Evacuation Tone
- » Tone 03 NZS4512:2010 Alert Tone with Voice
- » Tone 04 Alert Tone
- » Tone 05 T3 Cadence with Voice
- » Tone 06 T3 Cadence
- » Tone 07 Simulated Bell Tone
- » Tone 08 PA400 Tone
- » Tone 09 Claxon (Star Trek)
- » Tone 10 400 - 700 Hz 1.5 sec whoop
- » Tone 11 800 / 100 Hz @ 1 Hz sweeping
- » Tone 12 400 / 450 Hz @ 0.5 Hz tone
- » Tone 13 2400 / 2900 Hz 7 Hz - sweeping
- » Tone 14 2400 / 2900 Hz 1 Hz - sweeping
- » Tone 15 500 / 1200 Hz @ 1 Hz - sweeping
- » Tone 16 1200 / 500 Hz @ 1 Hz - DIN / PFEER
- » Tone 17 2400 / 2900 Hz @ 2 Hz alternating
- » Tone 18 1000 Hz @ 1 Hz - intermittent
- » Tone 19 800 / 1000 Hz @ 0.875 Hz - alternating
- » Tone 20 2400 Hz @ 1 Hz intermittent
- » Tone 21 800 Hz 0.25s on, 1s off - intermittent
- » Tone 22 800 Hz - Continuous
- » Tone 23 660 Hz 150 mS on / off - intermittent
- » Tone 24 544 (100 mS) / 440 Hz (400 mS) - NF S 32-001

- » Tone 25 660 Hz 1.5s on, 1.8s off - intermittent
- » Tone 26 1.4 kHz - 1.6 kHz 2 Hz
- » Tone 27 660 Hz - continuous
- » Tone 28 544 Hz / 440 Hz - alternating
- » Tone 29 544 @ 0.875s - intermittent
- » Tone 30 800 Hz @ 2 Hz - intermittent
- » Tone 31 800 / 1000 Hz @ 25 Hz - sweeping
- » Tone 32 2400 / 2900 @ 25 Hz - sweeping
- » Tone 33 554 Hz - continuous
- » Tone 34 440 Hz - continuous
- » Tone 35 800 / 100 Hz @ 7 Hz - sweeping
- » Tone 36 660 / 1200 Hz @ 1 Hz - sweeping
- » Tone 37 2 Tone Chime 1000 / 650 Hz
- » Tone 38 745 Hz @ 1 Hz - intermittent
- » Tone 39 1000 & 2000 Hz @ 0.5s alternating
- » Tone 40 1000 Hz continuous - PEEER Toxix Gas
- » Tone 41 2000 Hz - continuous
- » Tone 42 1200 Hz - continuous
- » Tone 43 800 Hz / 1000 Hz @ 4 HZ alternating
- » Tone 44 RH3 Tone 500 Hz – 1400 Hz @ 5 Hz repetition
- » Tone 45 'SOS' in Morse code
- » Tone 46 T3 Cadence without Voice
- » Tone 47 500 Hz - 1200 Hz @ 186.66 Hz / Sec
- » Tone 48 590 Hz - Continuous

Evacuate Generator Module Connections
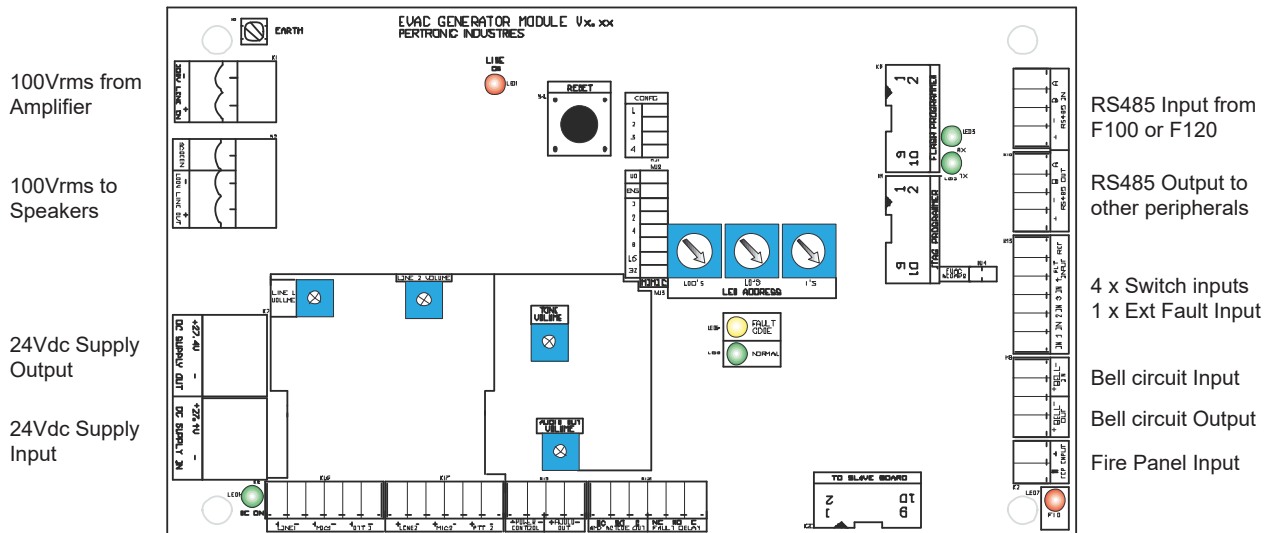
Ordering Information & Notes

Product Code	Description
EVACGEN-NZ	Evac Tone Generator NZS 4512