PERTRONIC INDUSTRIES LTD

DATASHEET

Zonal Sounder Board (Bell Monitor Board)



Overview

The Zonal Bell Monitor Board (ZMB24V) allows independent activation of one or more supervised bell circuits, for either evacuation or alert tones.

Single-way and four-way bell driver boards are available. Other combinations may be constructed by connecting the externally accessible bussed control signals.

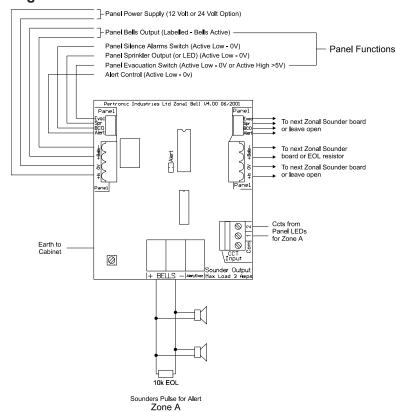


Pertronic Zonal Sounder Board

Specification

Operating Voltage		12 or 24 Vdc	
Quiescent Current (Sounder Circuit Inactive)	1-Way Board	< 35 mA	Add up to 3 A per sounder circuit when active
	4-Way Board	< 140 mA	
Dimensions (L x W x D mm)	1-Way Board	95 x 85 x 30	
	4-Way Board	320 x 96 x 30	
Operating Temperature		0 to 40 °C	
Operating Humidity		10 to 90% RH (non-condensing)	
Weight		100 g	

Connection Diagram: Single Unit



Bussed Control Signals:

Panel Bells

- » Connected to the panel's monitored Bell output
- » Action depends on the state of other control signals
- » Active when the panel bell circuit is operated

Evacuation

- » Usually connected to the panel Evacuation switch
- » Always activates the Sounder Circuit
- » Active when pulled low (0 V), or taken high (≥5 V)

Sprinkler

- » Follows the panel sprinkler input
- » Activates the Sounder Circuit if Panel Bells is active
- » Active when pulled low (0 V)

Bell Silence

- » Disables the Sounder Circuit
- » Is overridden by Evacuation or Sprinkler
- » Active when pulled low (0 V)

Alert Control

- » Used to generate a global alert signal
- » Action depends on the state of other control signals
- » Active when pulled low (0 V)

Independent Control Signals:

Circuit 1.2

- » Activated by zones or one member of a group of detectors or Call-Points being in alarm
- » Action depends on the state of other control signals
- » Active when pulled low (0 V)

Alert Link

» When inserted, disables the Alert Control signal the global Alert state is disabled

Output Functions:

Sounder Circuit

- » 3 A (fused) drive capability, 12 Vdc or 24 Vdc
- » Monitored with 10 k Ω , 0,5 W, 5 % EOL Resistor (single spur)
- » Evacuation: Continual activation
- » Alert: 4 seconds ON, 12 seconds OFF

Evac/Alert Control

- » 'Third wire' for sounder Evacuation or Alert control
- » Pulled low (0V) for Alert

Bells Defect

- » The Sounder Circuit is monitored for a 10 k Ω EOL resistor by applying reverse supply voltage to the circuit
- » Defects in the Sounder circuit are sent to the panel by unbalancing the Panel Bells circuit

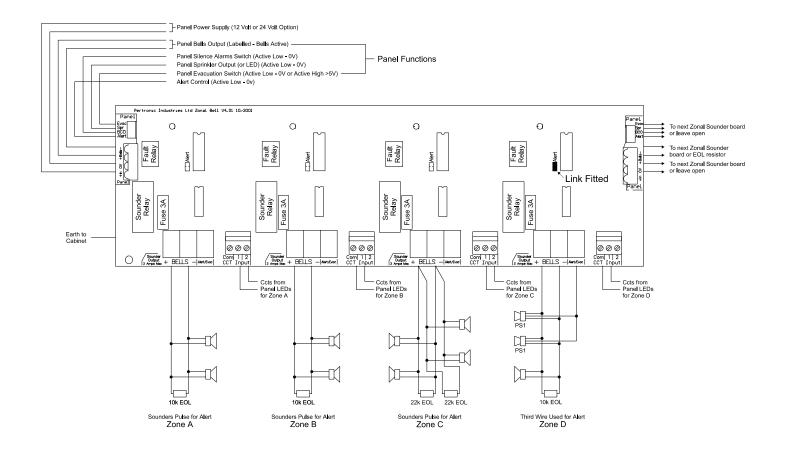
fault

LED Indication

» ON steady» FlashingLat

Sounder Circuit relay ON Latched fault ON: Sounder Circuit, Low battery or Bell circuit

Connection Diagram: Quad Unit



Ordering Information & Notes

Product Code	Description	
F16ZBB	F16 Zonal Bell Monitor Board, 12V Version	
ZMB24V	Zone Bell Monitor Board 24V	
F16ZBB4WAY	F16 Zonal Bell Printbd Assy 4 Way, 12V Version	
ZMB24V4WAY	Zonal Bell Monitor Board, 24V 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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