



PERTRONIC INDUSTRIES LTD

PS1400 Sounder - Installation Instructions

Overview

The PS1400 Sounder is one of a range of sounders manufactured by Pertronic Industries. The PS1400 Sounder is a modified PS1 sounder and generates tones equivalent to the System Sensor PA400 sounder. The PS1400 is NOT AS2220 compliant.

The PS1400 Sounders have a maximum sound pressure level of 76dBA. The sound level may be adjusted by a Volume control. PS1400 Sounders are normally connected to the monitored Bell or sounder circuit of a Fire Alarm Panel and are activated when the sounder circuit voltage polarity is reversed in the 'Alarm' state.

The PS1400 Sounders may be mounted in a standard single-gang electrical flush-box fitting, and are supplied with a protective plastic cover for installation and building construction use.

Specifications

Dimensions:	117 x 74 x 12	H x W x D mm	Depth above flush-box.
	Designed to fit into a standard electrical flush-box fitting.		
Colour Options:	Red or White.		
Sound Level Output:	Sound pressure level at 1m (peak \pm 3dB)		
	Tone:	74dBA (min)	(@24Vdc)
Power Requirements:	BELL IN terminal (Supplied from the Bell circuit):		
Operating Voltage	9.5Vdc to 30Vdc		
Quiescent current (Non-Alarm state)	0.2 μ A		(@12Vdc)
	0.4 μ A		(@24Vdc)
Operating current (Alarm state)	8mA average, 12mA peak		(@12Vdc)
	14mA average, 22mA peak		(@24Vdc)
Volume Control:	Potentiometer to adjust sound output level – range = 20dB.		

Table 1: PS1400 Specifications

PS1400 Sound Distribution

PS1400 Tone Characteristics

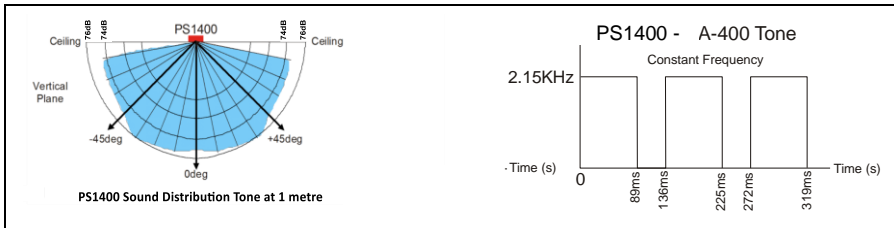


Figure 1: PS1400 Sound Distribution and Tone Characteristics

PS1400 Connector

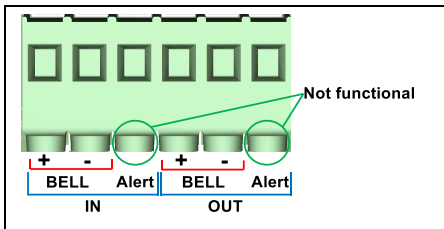


Figure 2: PS1400 Connector

Operation

The panel Bell circuit connects to the PS1400 Sounder as shown below. Bell terminals '+' and '-' connect to the corresponding Sounder '+' and '-' terminals.

If the Bells are not active, the panel monitors the Bell circuit by applying a negative voltage to the PS1400 '+' terminal. The quiescent current drawn by the PS1400 under this condition is less than 0.4µA.

When the panel Bell circuit activates, the panel Bell circuit voltage reverses (applying positive voltage to the PS1400 '+' terminal), sounding the PS1400.

NOTE: The 'Alert' terminal has no effect on a PS1400.

Panel	PS1400 Operation
Bell Inactive	No tone
Bell Active	Tone

Table 2: PS1400 Operation

Connection Diagram

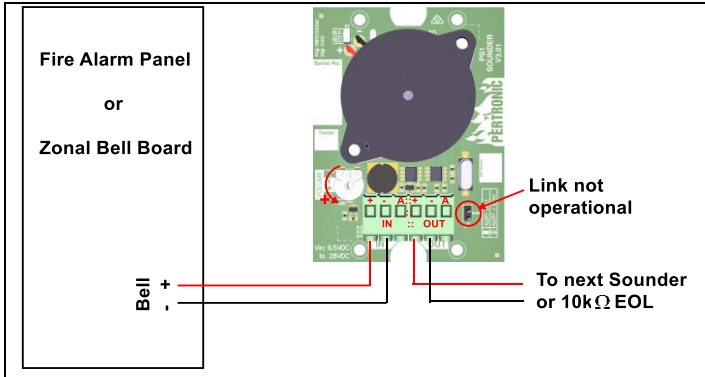


Figure 3: Basic Connection. Tone only on Bell Circuit Reversal

Product Codes

Description	Red	White
PS1400	PS1400-R	PS1400-W

Document Change History

Issue Number/date	Change Description	Change Note	Author
4.0 March 2022	New PCB v3.01	CN3164	RJK
5.0 June 2023	Updated specs, reformat	CN3331	RJK