



PS1 Sounder (AS2220 Sounder)

Head Office

Wellington

PO Box 35-063
Naenae
17 Eastern Hutt Rd
Wingate
Lower Hutt
Tel (04) 567-3229
Fax (04) 567-3644

www.pertronic.co.nz

sales@pertronic.co.nz
tech@pertronic.co.nz

Auckland Office

PO Box 15-867
New Lynn 0640
359 Onehunga Mall
Onehunga
Auckland
Tel (09) 633-0226
Fax (09) 633-0228



ISO 9001: 2000

International Standards
Certifications
QAC/R61/0051

Product Overview:

The Pertronic PS1 Sounder:

- Generates the Evacuation and Alert Tones to NZS4512:1997, as specified by AS2220.
- Generates an Alert signal compliant with NZS4512:1997, by generating an Evacuation tone sweep every 15 seconds.
- Is normally connected to the monitored Bell or Sounder output of a Fire Alarm panel and is activated when the output circuit voltage polarity is reversed to the Alarm state.
- May be mounted in standard single-gang flush or surface-mount electrical fittings and is supplied with a protective plastic cover for installation during building construction.
- The **PS1** Evacuation tone does NOT comply with NZS4512:2003 for general Evacuation purposes, because it has no voice component.

Features:

- Evacuation and Alert Tones as specified by AS2220.
- 95dBA @ 1m output sound level with 20dB adjustable volume control.
- Available in two colours : Red or White

Specifications:

Dimensions:

117 x 74 x 12mm (H x W x D - depth above flush box)
Designed to fit into a standard, single flush box.

Sound Level Output:

Alert, Evacuation 12 Volt: High Volume - 95dBA ± 3dBA at 1 metre
Alert, Evacuation 24 Volt: High Volume - 98dBA ± 3dBA at 1 metre

Power Requirements:

Operating Voltage 9.5 to 30 Vdc
Quiescent Current: Non-Alarm 0.2µA @ 12Vdc 0.4µA @ 24Vdc
Operating Current: Alarm State 8mA average, 12mA peak @ 12Vdc
 14mA average, 22mA peak @ 24Vdc

Controls:

Third wire for Alert tone - connected to 0V for Alert tone operation.

Operation:

When the panel Bell circuit is inactive (OFF), the status of the Bell circuit is monitored by applying a negative voltage to the PS1 '+' terminal and a positive voltage to the PS1 '-' terminal and reading the current for presence of the 10kΩ EOL resistor.

When the panel Bell circuit is active (ON), the Bell circuit voltage reverses applying a positive voltage to the PS1 '+' terminal and a negative voltage to the PS1 '-' terminal, triggering the PS1 to operate.

The Evacuation tone will be generated if the Alert terminal is open.

The Alert tone is generated by connecting the Alert terminal of the PS1 to 0V (negative).



PS1 Operation

Panel Bell Circuit	Alert Terminal	Tone Generated
Inactive (Monitor Mode)	Don't care	None
Active	Open	Evacuate
Active	0V	Alert

Some Bell driver circuits can provide a pulsed signal to the tone.
The sequence (repeated) is:

3.5 secs – evacuation tone (one cycle), 12 secs – silence

This alternative Alert signal complies with NZ4512:1997, Amendment 2.

