

PERTRONIC INDUSTRIES LTD

PSS1 100V SPEAKER INSTALLATION NOTE



Overview

The **PSS1** Speaker is one of a range of 100V speakers manufactured by Pertronic Industries.

Used in conjunction with Pertronic 100V Amplifiers, the **PSS1** provides a cost effective solution for speaker-based building evacuation systems that must comply with the NZS 4512:2003 and AS2220 Standards.

The **PSS1** integrates a 1W speaker, tapped line transformer, and blocking capacitor, all within a PDL style flush plate. The **PSS1** may be mounted in a standard single-gang electrical flush-box fitting, and is supplied with a protective plastic cover for installation and building construction use.

The **PSS1** has links for selecting one of the 0.2W, 0.7W, or 1.1W power outputs. At 1.1W and when used with Pertronic 100V amplifiers, the **PSS1** can reproduce the evacuation tone at a sound pressure level of 95dBA.

Specification

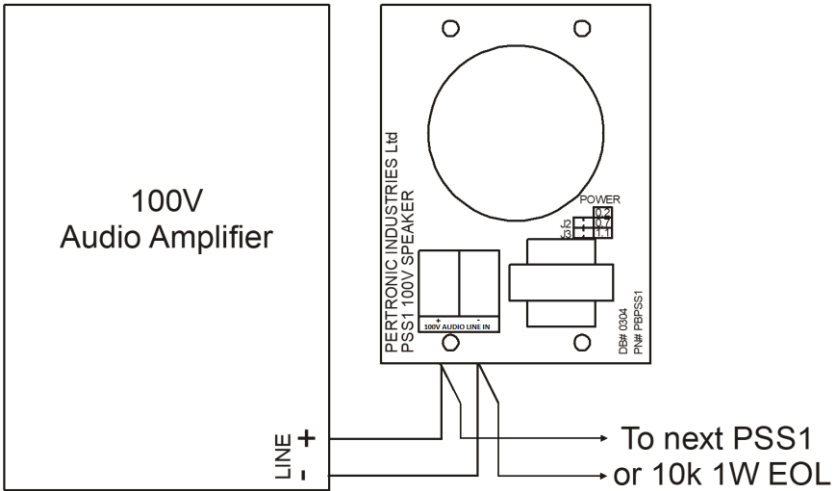
Dimensions:	117mm x 74mm x 12mm	H x W x D (above flush-box)		
Mounting:	Flush Mount / Surface Mount			
Colour Options:	Red or White			
Sound Level Output:	Sound pressure level at 1m (\pm 3dB)			
	Power tap Selected	0.2W	0.7W	1.1W
	Evacuation:	70dBA	85dBA	95dBA
	Alert:	65dBA	85dBA	88dBA
Frequency Response:	400 Hz – 10 KHz			
Input Capacitor:	2.2 μ F 100 Vrms Bi Polar Electrolytic			
Maximum Input Voltage:	100 Vrms			

Operation

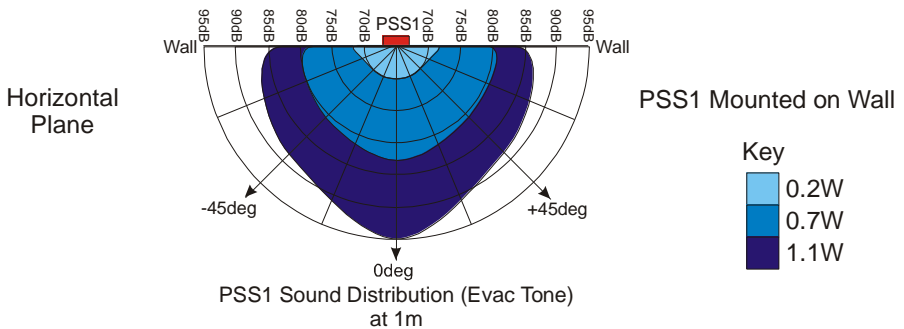
The Amplifier Line output is connected to the **PSS1** Speaker as shown below. The Amplifier Line terminals '+' and '-' are connected to the corresponding **PSS1** '+' and '-' terminals. If the Amplifier is not active, the line is monitored by the application of a negative dc voltage to the **PSS1** '+' terminal. The **PSS1** consumes no power in monitor mode. A 10K 1W End of Line (EOL) monitor resistor is placed at the last **PSS1**.

When the Amplifier is active, the monitoring dc is removed from the line output, and the 100Vrms signal is applied, causing the **PSS1** to operate. A link is used to select the power output required.

Connection Diagram



Sound Distribution Diagram



Code	Description
PSS1-R	Pertronic Sounder Speaker 1W Flush Red
PSS1-W	Pertronic Sounder Speaker 1W Flush White