

PERTRONIC INDUSTRIES LTD

PSSB B501 100V SPEAKER INSTALLATION NOTE



Overview

The **PSSB B501** is a 100V line (1.1W max) speaker and line transformer mounted in an aesthetically pleasing acoustic enclosure. The enclosure is designed to support a System Sensor B501 Analogue addressable base and detector.

When used in conjunction with the Pertronic 20W and 50W 100V line amplifiers, it provides a cost effective solution for speaker-based building evacuation systems that must comply with the NZS4512: 2003 and AS2220 standards.

The **PSSB B501** has Links for selecting the 0.2W, the 0.7W, or the 1.1W power outputs. At 1.1W and with Pertronic's 100V amplifiers, the **PSSB B501** can reproduce the evacuation tone at a sound pressure level of 97dBA.

Operation

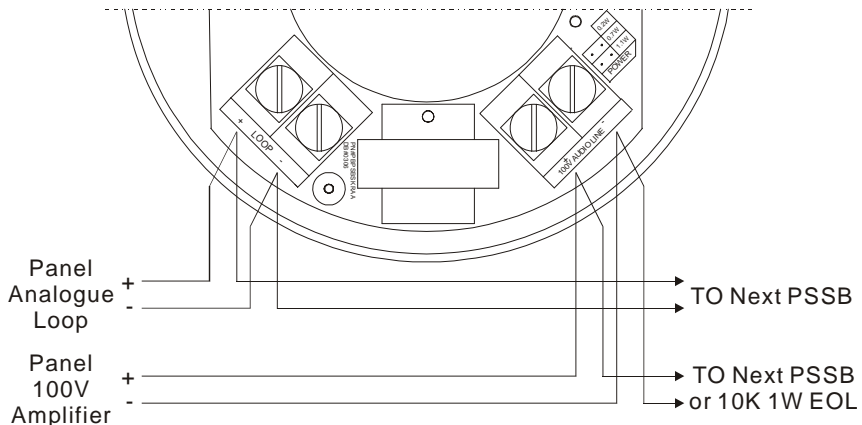
The panel loop output and amplifier line output are connected to the **PSSB B501** Speaker as shown below. Terminals are provided for both analogue loop and 100V line connections.

The Loop '+' and '-' terminals are connected to the corresponding PSSB B501 Loop '+' and '-' terminals. Similarly, the amplifier's line terminals '+' and '-' are connected to the corresponding **PSSB B501** Line '+' and '-' terminals.

If the amplifier is not active, the 100V line is monitored by the application of a negative dc voltage to the **PSSB B501** Line '+' terminal. The **PSSB B501** consumes no power in monitor mode. A 10K 1W monitor resistor is placed at the last **PSSB B501**.

When the Amplifier is active, the monitoring dc is removed from the line output, and the 100Vrms signal is applied, causing the **PSSB B501** to operate.

Connection Diagram



Specification

| | | | | |
|-----------------------|---|-------|-------|-------|
| Dimensions: | 117mm (height) x 74mm (width), 12mm (depth above flush-box) Designed to fit into a standard flush-box fitting. | | | |
| Colour Options: | White. | | | |
| Sound Level Output: | Sound pressure level (peak \pm 3dB) | | | |
| | Power tap Selected: | 0.2W | 0.7W | 1.1W |
| | Evacuation: | 75dBA | 96dBA | 97dBA |
| | Alert: | 65dBA | 83dBA | 85dBA |
| Frequency Response: | 400Hz – 10Khz | | | |
| Input Capacitor: | 2.2uF 100V RMS Bi Polar Electrolytic | | | |
| Maximum Line Voltage: | 100Vrms | | | |

PSSB B501 Drilling Template

