



# 1 Watt, 100VRMS Speaker

## with Isolator and Analogue Addressable Base (PSSB524IEFT)

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ISO 9001: 2008

International Standards  
Certifications  
QAC/R64/0012

### Product Overview:

The Pertronic PSSB524IEFT Speaker is one of a range of 100VRMS Line speakers (1.1W max) manufactured by Pertronic Industries Ltd:

- ▶ Used in conjunction with Pertronic 20W and 50W, 100VRMS Line Amplifiers, the PSSB524IEFT provides a cost effective solution for speaker-based building evacuation systems that must comply with the NZS4512:2010/NZS4512:2003 and AS2220 Standards.
- ▶ Integrates a 1W speaker; tapped line transformer and DC blocking capacitor mounted in an aesthetically pleasing acoustic enclosure, which includes a System Sensor B524IEFT Analogue Addressable detector base with integral Isolator.
- ▶ The PSSB524IEFT has mini-jumpers for selecting one of 0.2W, 0.7W, or 1.1W power outputs.
- ▶ At 1.1W the PSSB524IEFT can reproduce the 'Evacuation' tone at a sound pressure level of 98dBA at 1 metre, when used with Pertronic 100VRMS amplifiers

### Operation:

- ▶ The panel loop output and amplifier line output are connected to the PSSB524IEFT Speaker as shown in Figure 1.
- ▶ Terminals are provided for both analogue loop and 100VRMS line connections and LED output connections.
- ▶ The Loop '+' and '-' terminals are connected to the corresponding PSSB524IEFT Loop '+' and '-' terminals.
- ▶ If the loop develops a short-circuit, the isolator base opens the circuit allowing the loop analogue loop to operate under fault conditions and automatically restore when the fault is removed
- ▶ The amplifier's line terminals '+' and '-' are connected to the corresponding PSSB524IEFT Line '+' and '-' terminals.
- ▶ If the amplifier is not active, the 100VRMS line is monitored by the application of an inverted DC voltage to the PSSB524IEFT Line '+' terminal.
- ▶ The PSSB524IEFT consumes no power in monitor mode.
- ▶ A 10kΩ, 1W monitor resistor is placed at the last PSSB524IEFT.
- ▶ When the Amplifier is active, the monitoring DC voltage is removed from the line output and the 100VRMS signal is applied, causing the PSSB524IEFT to operate.

### Specifications:

#### Dimensions:

When recessed:

Height below ceiling  
Height above ceiling

38mm (including B501 base)  
35mm

With Surface Mount Extension Cover

Diameter of Mounting Flange

73mm  
122mm.

#### Colour Options:

White.

#### Sound Level Output:

Sound pressure level at 1.1W, 1m (peak ± 3dB)

Power Tap selected:	0.2W	0.7W	1.1W
Evacuation:	77.8dBA	98.7dBA	98.9dBA
Alert:	64dBA	83.5dBA	85.3dBA

#### Frequency Response:

400Hz – 10kHz

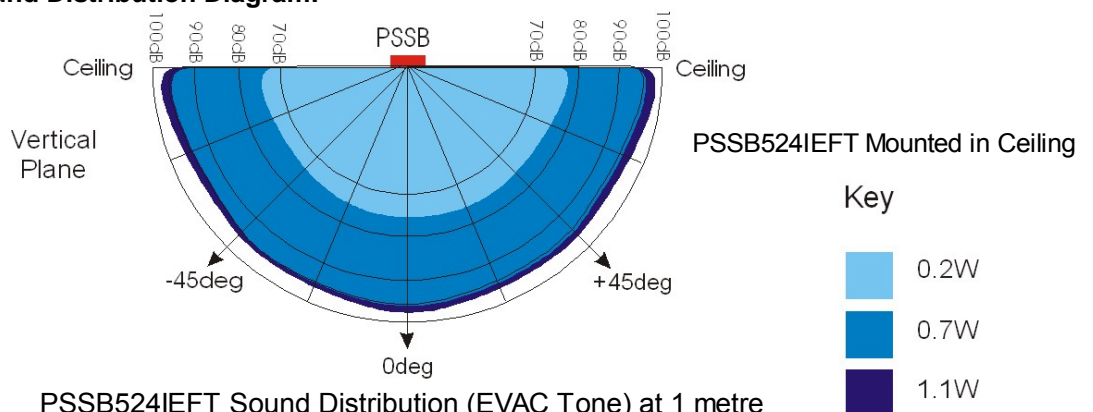
#### Input Capacitor:

2µ2F, 100V Bipolar Electrolytic ELCO

#### Maximum Line Voltage:

100VRMS

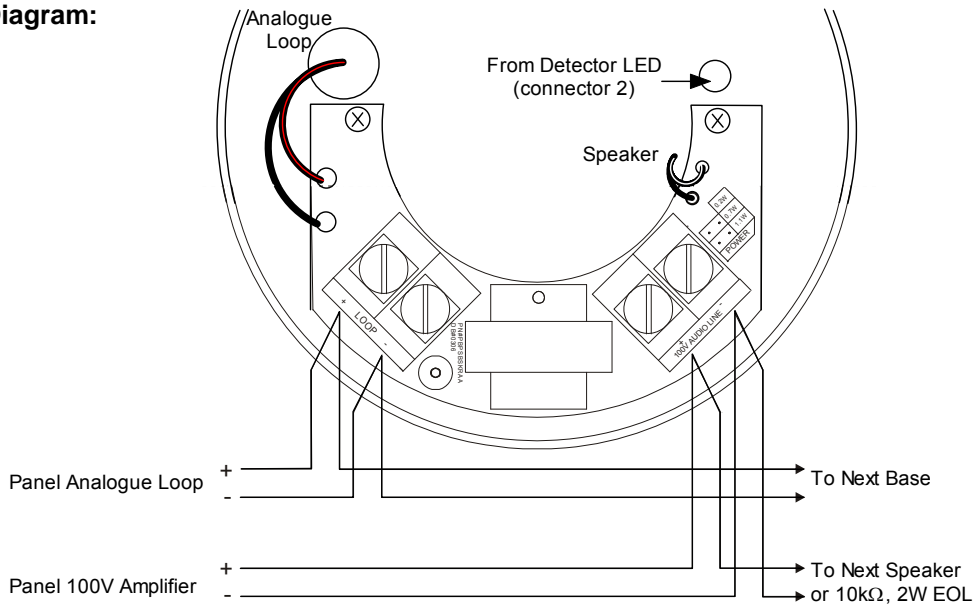
### Sound Distribution Diagram:



Access hole to LED output.

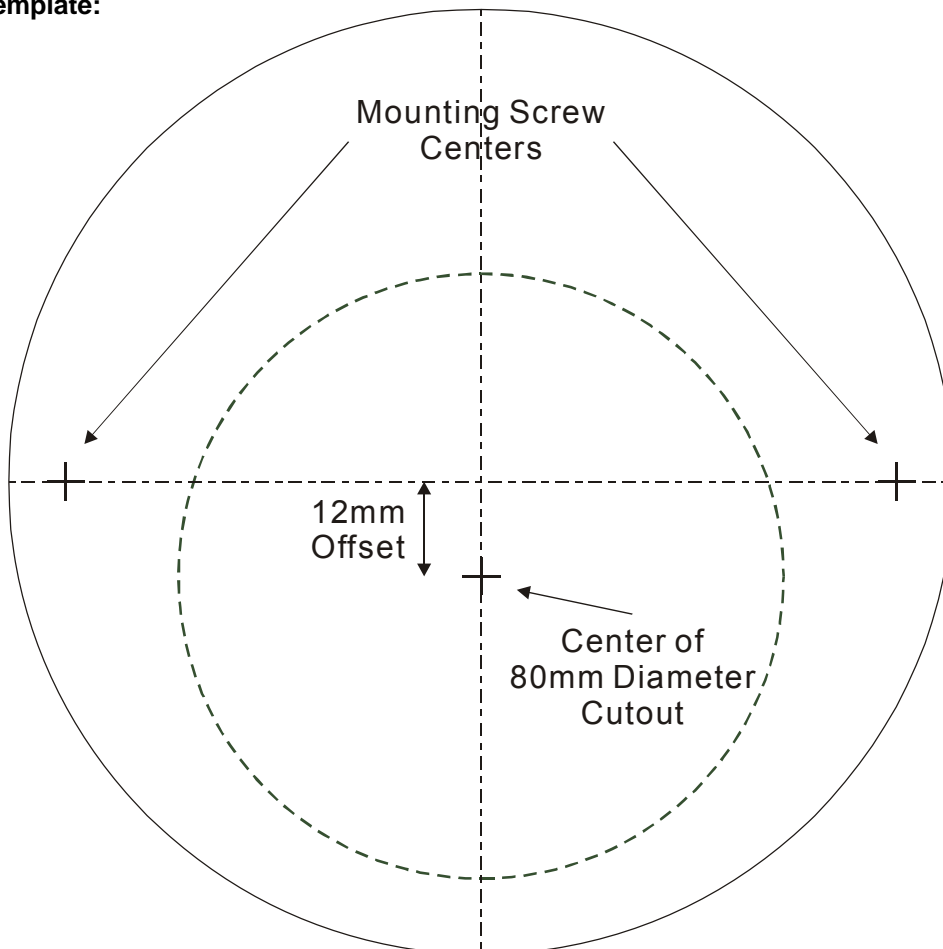


**Connection Diagram:**



**Figure 1**

**PSSB Drilling Template:**



**Figure 2**

**Product Codes:**

NZS Code	Description	NZFPA Listing No
PSSB524IEFT	Pertronic Speaker with B524IEFT Isolator Base	PI/641
PSSB501	Pertronic Speaker with B501 Analogue Base	PI/641

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