

Product Guide

PA8100 200mm (8") 100V 5W Ceiling Speaker White



200mm (8") One-Shot® Ceiling Speakers

- ✓ Excellent speech intelligibility.
- ✓ High quality speaker driver developed for BGM and paging applications.
- ✓ Patented 6 way latching ensures a neat, sag free installation.
- ✓ Standard 2 way terminal block connection for 100V systems.
- ✓ High impact styrene grille.
- ✓ 5 year warranty.



Application

PA8100 is a standard 100V line speaker & transformer combination designed for general public address, BGM & paging installations. The offset transformer mounting allows mounting in ceilings with limited recess space.

About Redback® Speaker Drivers

Each custom designed speaker and transformer combination has been specifically engineered to ensure a wide frequency range and dispersion angle, plus a high sound pressure level (SPL) ensuring excellent music and speech intelligibility; which is critical for emergency paging applications.

Each transformer is fitted with multiple power settings which are user selectable via taps on the transformer.

Manufacturing & Performance

Redback® drivers are engineered and manufactured to stringent specifications ensuring maximum reliability under all operating conditions. Each driver has a power rating well above the max tapping of the transformer, ensuring reliable operation and excellent longevity. A strict quality control procedure is employed during every step of the manufacturing process. Finally, every finished speaker is 100% QC checked prior to shipping.

The Labour Saving One-Shot® Mounting System

Redback® "One-Shot®" speaker units install in seconds providing substantial labour cost savings for the professional installer compared to traditional mounting methods.

They simply snap fit to the ceiling by means of the integral pressure clips. The snap clip material is formulated to retain long service life strength and spring action, ensuring a firm vibration free fit to either gyprock tiles, mineral fibre tiles or fixed gyprock ceilings.

The neutral white RAL colour of PA8100 provides an architecturally unobtrusive finish to virtually any installation.

Installation Guidelines

PA8100 is fitted with a 2 way wire protect screw terminal block.

All One-Shot® speakers are designed for fast installation due to the integral pressure clips which grip to the reverse side of the ceiling tile. They suit any 10-13mm ceiling tile, including gyprock, mineral fibre or fixed gyprock ceilings. Redback provide an optional tile support or 'ceiling pan' to minimise sag and vibration.

These pans fit inside the 't-bar' supports for the tile ceiling and provide a solid surface on which the One-Shot® clips secure to. Once the hole is cut, these simply slide up into the hole, the speaker is then pushed in until the clips release.

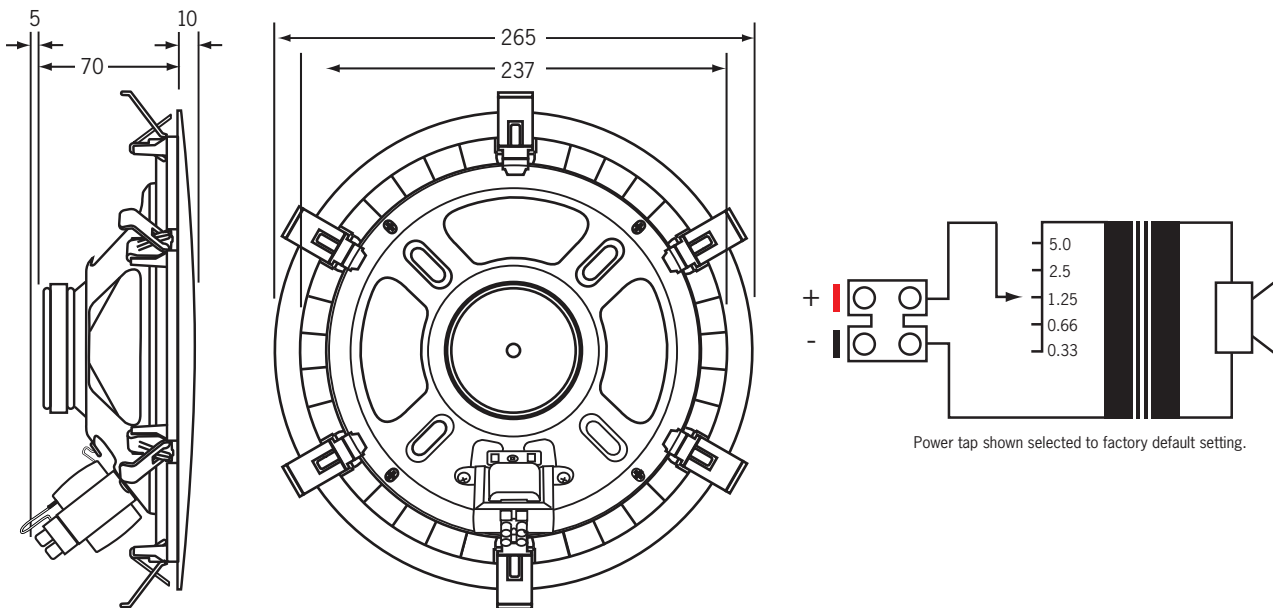
For 200mm (8") models we recommend a speaker hole of 246mm. This is easily cut using a holesaw.

Product Guide

PA8100 200mm (8") 100V 5W Ceiling Speaker White



Dimensions & Transformer Detail



Specifications

Electrical

Power taps:	0.33, 0.66, 1.25, 2.5, 5W
SPL 1W @ 1m:	93.6dB @ 1kHz (+/- 2dB)
Frequency response:	100Hz-15kHz
Connection:	2 way terminal block

Mechanical

Grille material:	High impact styrene
Driver construction:	Paper twin cone
Ceiling cutout:	246mmØ
Grille diameter:	265mmØ
Mounting depth:	105mm (including ceiling tile thickness)
Overall weight:	950g
Colour:	White

Environmental

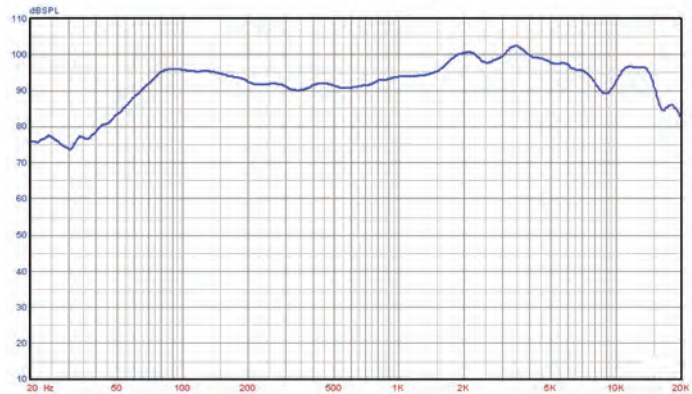
Operating temperature:	-25°C to +55°C
Relative humidity:	< 95%

Architectural Specifications

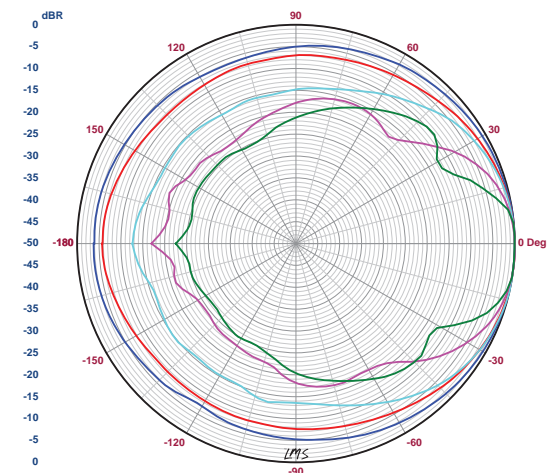
PA8100

The speaker shall be of 200mm diameter and be low profile fitted with a 100V transformer with power taps of 5W, 2.5W, 1.25W, 0.66W and 0.33W. It shall have a SPL of 93.6dB (1W@1m). It shall be fitted with a 2 way wire protect terminal block. The speaker shall be attached to a white ABS grill with One-Shot mounting mechanism. The speaker/grille combination shall be a Redback model C 2132.

Frequency Response (SPL 1W @ 1m)



Polar Plot (Ratio vs Angle)



	500Hz	1kHz	2kHz	4kHz	6kHz
SPL 1W @ 1m (dB)	91.1	93.6	100.3	99.7	91.9
Beam Width (BW)	207	127	91	55	35
Q-Factor	1.7	2.8	4.0	6.6	9.9
Directivity Index (DI)	2.4	4.5	6.0	8.2	10.0