

Product Guide**C 2157** 100mm (4") 100V EWIS 10W One-Shot® Ceiling Speaker

C 2157 High Power One-Shot® EWIS Ceiling Speaker

- ✓ High power output.
- ✓ Excellent speech intelligibility.
- ✓ High quality speaker driver developed for BGM, paging and emergency warning applications.
- ✓ Patented 2 way latching ensures a neat, sag free installation.
- ✓ Fitted with 4 way wire protect terminal block for loop in, loop out wiring as required by Australian Standards.
- ✓ Fitted with cable restraint plate and transformer safety cover as required by Australian Standards.
- ✓ Fitted with supervisory capacitor for line monitoring.
- ✓ High impact styrene grille.
- ✓ 5 year warranty.



Application

The C 2157 is a high power PA speaker designed for general paging & EWIS (fire & evacuation) installations where high SPL is required.

Emergency Warning & Intercommunications Systems (EWIS)

This speaker and transformer combination is designed for both paging announcements and emergency tones in EWIS systems.

It is fitted with cable restraint plate, line monitoring capacitor and 4 way wire protect terminal connection.

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.

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.

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.

A neutral white RAL colour provides an architecturally unobtrusive finish to virtually any installation.

Installation Guidelines

The C 2157 is fitted with a 4 way wire protect screw terminal block. This is suitable for loop in, loop out cabling. The cable can be secured to the in-built restraint plate with 100mm cable ties.

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 a range of optional tile supports to minimise sag and vibration.

Ceiling support pans: 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.

Ceiling support ring: This plastic 'split-ring' offers the same protection for soft tiles. With the added benefit of being lightweight and compact.

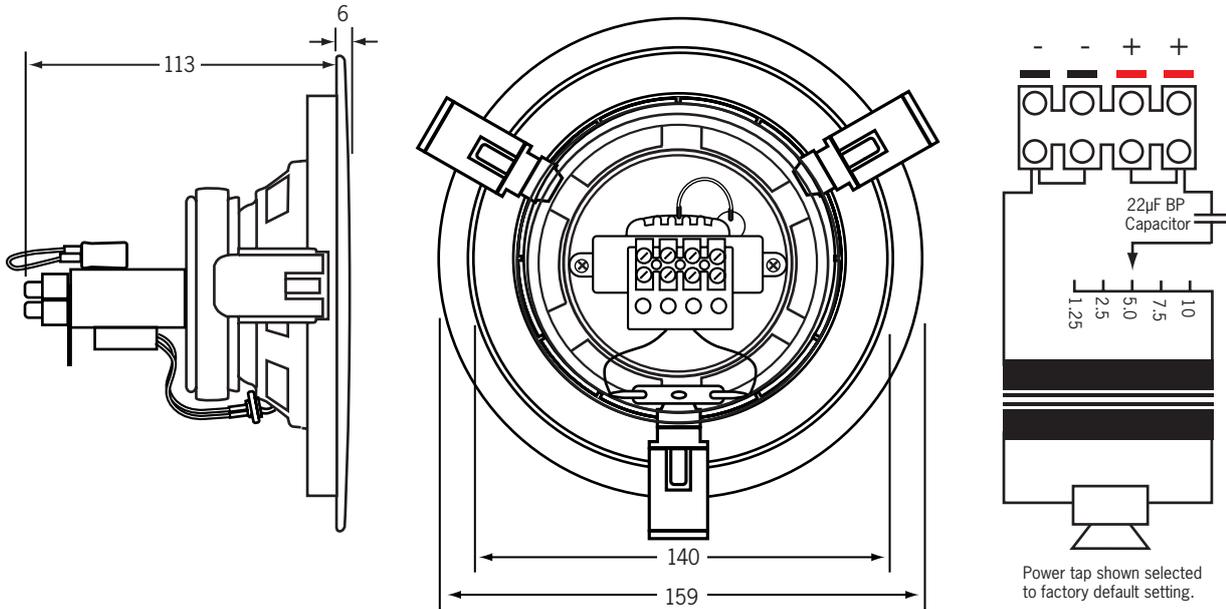
For 100mm (4") models we recommend a speaker hole of 140mm. This is easily cut using the T 2312A holesaw.

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Dimensions & Transformer Detail



Specifications

Electrical

Power taps:	1.25, 2.5, 5, 7.5, 10W
SPL 1W @ 1m:	94dB @ 1kHz (+/- 2dB)
Frequency response:	100Hz-15kHz
Connection:	4 way terminal block + 22uF bipolar capacitor

Mechanical

Grille material:	High impact styrene
Driver construction:	Paper twin cone
Ceiling cutout:	140mmØ
Grille diameter:	159mmØ
Mounting depth:	113mm (including ceiling tile thickness)
Overall weight:	750g
Colour:	White

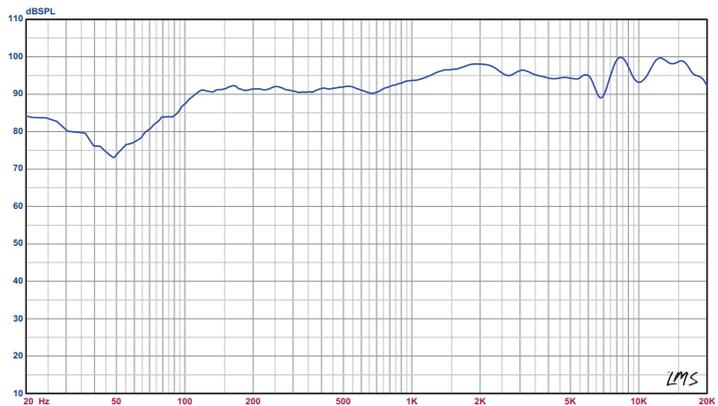
Environmental

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

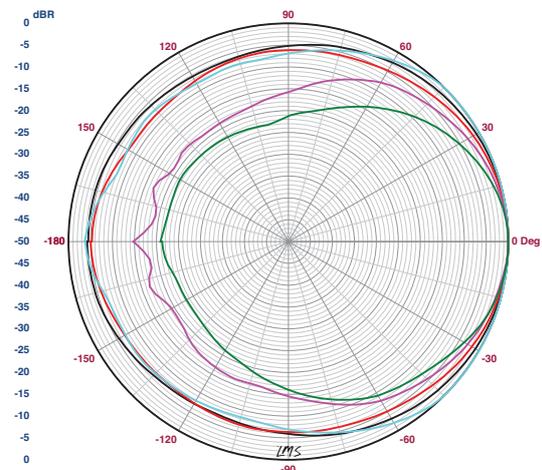
Additional Installation Accessories

- C 2164** Ceiling tile support split ring
- C 2143** Steel ceiling tile support pan
- T 2312A** 140mm holesaw

Frequency Response (SPL 1W @ 1m)



Polar Plot (Ratio vs Angle)



	500Hz	1kHz	2kHz	4kHz	6kHz
Beam Width (BW)	189	156	164	91	69
Q-Factor	1.9	2.3	2.2	4.0	5.2
Directivity Index (DI)	2.8	3.6	3.4	6.0	7.2

Architectural Specifications

The speaker shall be of 100mm diameter and be fitted with a 100V transformer with power taps of 10W, 7.5W, 5W, 2.5W and 1.25W. It shall have a SPL of 94dB. The transformer shall have a cable restraint mechanism (conforming to the relevant Australian Standard). It shall be fitted with a 4 way wire protect terminal block for cable connection and 22uf bipolar capacitor for line monitoring. 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 2157.