Professional Series – 8-Inch Ceiling Speaker Transducer Assembly



Key Features:

- Use instead of standard 8-inch driver
- Fits standard backcans for 8-inch speakers
- · Comes complete with transducer, network and transformer
- Advanced crossover network provides natural sound and even coverage throughout listening area
- 60 Watt transformer for 70V or 100V distributed speaker lines
- · Coaxial woofer with long-life butyl rubber surround and titanium-coated tweeter



Description:

The Control 26-DT is a compact ceiling speaker assembly configured to install into standard ceiling backcans designed for 200 mm (8 in) drivers. High power handling, wide frequency response and low distortion make the Control 26-DT ideal for sound systems requiring a higher fidelity sound.

The Control 26-DT includes a low-saturation high-fidelity, low-insertion-loss transformer for use with 70.7 V and 100 V distributed line systems. The transformer has a top tap rating of 60 W.

The Control 26-DT matches industry standard mechanical specifications for 8-inch speakers. The four mounting points, at a diameter of 194 mm (7.625 in), allow mounting either to a grille or a backcan, depending on the equipment used.

The woofer features a polypropylene-coated cone and pure butyl-rubber surround for long life, even in high humidity environments.

The coaxially mounted titanium coated tweeter provides crisp, clear highs. Diffraction-loading of the tweeter provides even coverage of the listening area. The 90° coverage pattern provides excellent projection for use in medium-high ceilings.

Specifications:

Acoustic measurements taken with assembly mounted in backcan enclosure with an internal volume of 0.25 ft³	
System	
Frequency Range (-10 dB) ¹	70 Hz – 20 kHz
Frequency Response (-3 dB) ¹	95 Hz – 18 kHz
Nominal Sensitivity ²	89 dB, 1 m/1W, 60W tap
Nominal Coverage Angle ³	90°
Crossover Frequency	3.5 kHz
Directivity Factor(Q) ³	7.6
Directivity Index ³	8.8 dB
Minimum Impedance	80 ohms @ 247 Hz (60W tap), 159 ohms, (30W tap), 318 ohms, (15W tap), 635 ohms, (7.5W tap)
Rated Maximum SPL ⁴	106 dB SPL @ 1m (3.3 ft)
Transformer Taps	70V: 60W, 30W, 15W, & 7.5W 100V: 60W, 30W, & 15W
Transducers	
Low Frequency	165 mm (6.5 in) polypropylene-coated, 1 in voice coil on aluminum former. Adapter flange to fit standard 8-inch mounting.
High Frequency	19 mm (3/4 in) titanium-coated polyester
Physical	
Mounting Points	4 screw holes at 194 mm (7.625 in) diameter on center
Termination	Screw locking barrier strip
Safety Agency Rating	In accordance with IEC60849 / EN60849.
Dimensions (H x Diameter)	120 mm x 200 mm (4.72 in x 7.87 in)
Net Weight (each)	1.9 kg (4.2 lb)
Shipping Weight (pair)	4 kg (8.8 lb)
·	·

¹ In Half Space (flush mounted in ceiling)

JBL continually engages in research related to product improvement. Changes introduced into existing products without notice are an expression of that philosophy.

² Half-space, averaged 100 Hz to 10 kHz

³ Averaged 1 kHz to 6 kHz

⁴ Calculated from sensitivity and power handling, exclusive of power compression

Professional Series – 8-Inch Ceiling Speaker Transducer Assembly



Architectural Specifications:

The loudspeaker with 200 mm (8 in) compatible mounting shall consist of a 165 mm (6.5 in) low frequency transducer, with a coaxial 19 mm (3/4 in) high frequency transducer. The low frequency driver's voice coil shall be 25 mm (1 in) in diameter.

Performance specifications of a typical unit shall be as follows: Usable frequency response shall extend from 70 Hz to 20 kHz (10 dB below rated sensitivity, half-space, no external equalization—in recommended backcan). Rated power shall be 60 watts continuous pink noise power (conforming to IEC268-5 test parameters) for 100 continuous hours. Measured sensitivity shall be at least 89 dB-SPL (at 1m [3.3 ft] with 60W input, avg. 100 Hz to 10 kHz).

The input shall have an included transformer for a 70.7V or 100V distributed speaker line. Selectable taps shall nominally be 60W, 30W, or 15W on a 70.7V or 100V distributed line, plus 7.5W on 70.7V line only.

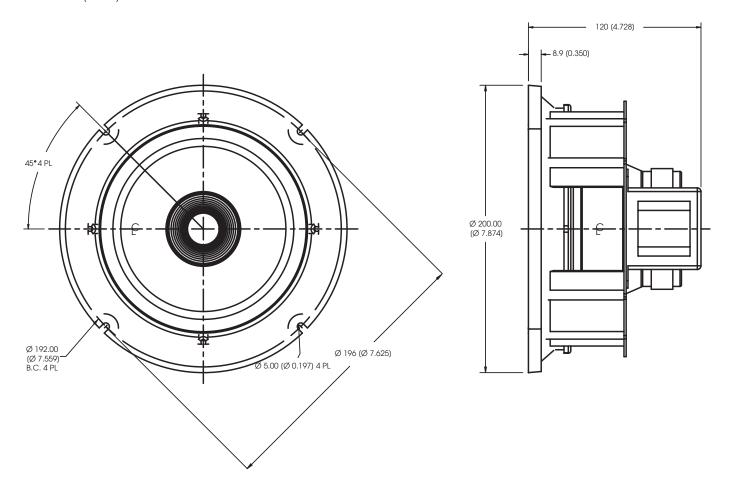
The coaxial high frequency driver shall be diffraction-loaded and cover 90 degrees conically with a high degree of accuracy. The loudspeaker assembly shall be capable of attachment to any backcan that corresponds to a 7.625 in diametric spacing of screw holes. It shall also be capable of attachment to any grille that meets the same hole pattern. The low frequency transducer shall have a polypropylene-coated cone and a pure butyl rubber surround for long life and reliability. The high frequency transducer shall have a polyester diaphragm that is coated with titanium and diffraction loaded. The transducer assembly shall have a barrier strip for both safety and good reliable conductor connection.

Overall assembly dimensions shall be no greater than 120 mm high x 200 mm diameter (4.72 in x 7.87 in) and shall weigh no more than 1.9 kg (4.2 lb).

The system shall be the JBL Model Control 26-DT.

Mounting Dimensions:

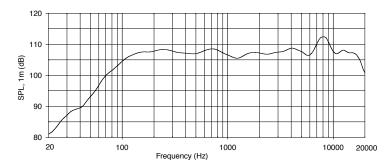
Dimensions in mm (inches)



Professional Series – 8-Inch Ceiling Speaker Transducer Assembly

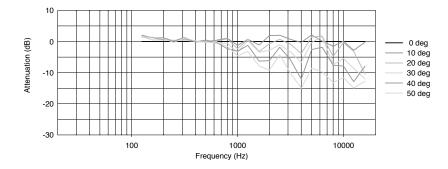


Frequency Response:



On axis in half-space, 70W input to 60W tap

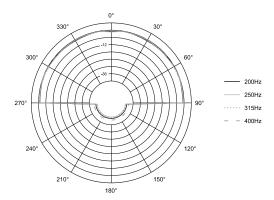
Normalized Off-Axis:

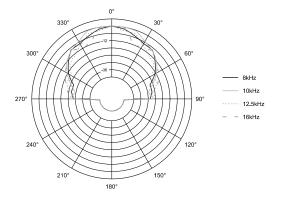


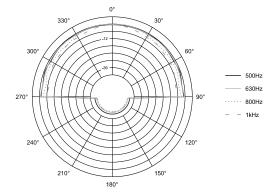
Professional Series – 8-Inch Ceiling Speaker Transducer Assembly

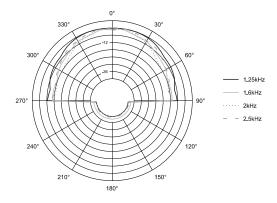


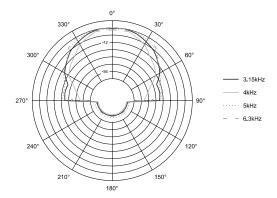
Horizontal 1/3 Octave Polars:











Professional Series – 8-Inch Ceiling Speaker Transducer Assembly



Vertical 1/3 Octave Polars:

