SPECSHEET

Control® 45C/T

Professional Series – Two-Way 5.25” Coaxial Ceiling Loudspeaker

Key Features:

- Extremely consistent 120° broadband pattern control featuring JBL’s exclusive conical Radiation Boundary Integrator® (RBI™) technology:
  - Very consistent, full-range coverage of listening area while providing a small ceiling footprint
  - Wide, consistent coverage requires fewer speakers, reducing the cost of the installed system without sacrificing performance
- Coaxial design featuring:
  - 130 mm (5.25 in) polypropylene-coated paper cone with butyl rubber surround
  - 20 mm (.75 in) soft-dome tweeter on 210 mm (8.25 in) diameter wave guide
- Bass extension down to 55 Hz
- 8 ohm and 70V/100V operation
- Integrated backcan for easy “blind-mount” install
- Packaged with grille and tile rails for easy installation



Included grille not shown

Description:

The Control 45C/T is a premium in-ceiling professional loudspeaker designed for applications that can benefit from extremely wide bandwidth and very consistent coverage with a small footprint.

Featuring JBL’s exclusive conical Radiation Boundary Integrator® (RBI™), the tweeter sound is controlled by a large waveguide while low-frequency sound projects through specially designed apertures in the RBI. This design allows for a seamless integration of coverage over a wide bandwidth from coaxially-mounted drivers. The result is that the sound character is extremely consistent throughout the listening space with little variation from location to location. In addition to providing better coverage of the listening area, the constant directivity character of the coverage allows for the use of fewer loudspeakers compared to speakers that have less consistent coverage control.

The large backcan on the Control 45C/T, along with the LF driver design, provides extended bass response for a warm full-bodied tone. The system’s 130mm (5.25 in) woofer features a polypropylene cone and pure butyl rubber surround for long life. The coaxially mounted 20 mm (0.75 in) soft dome features ferrofluid cooling for enhanced power handling and reduced power compression.

Ideal for small and large projects alike, the Control 45C/T is switchable for use as either an 8-ohm low-impedance speaker, or as part of a 70V/100V distributed loudspeaker system.

Specifications:

System:	
Frequency Range (-10 dB)[1]	55 Hz – 20 kHz
Frequency Response (+/-3 dB)[1]	80 Hz – 17 kHz
Power Capacity[2]	150W Continuous Program Power 75W Continuous Pink Noise
Nominal Sensitivity (2.83V/1m)	88 dB
Nominal Coverage Angle[3]	120° conical coverage
Directivity Factor (Q)[3]	5.6
Directivity Index[3]	7.3 dB
Rated Maximum SPL	107 dB @ 1 m (3.3 ft) average, 113 dB peak
Rated Impedance	8 ohms (in bypass mode)
Transformer Taps	60W, 30W, 15W, (& 7.5 W@70V)
Transformer Insertion Loss	0.76 dB @ 60W, 0.70 dB @ 30W, 0.61 dB @ 15W, 0.58 dB @ 7.5W
Transducers	
LF Driver	130 mm (5.25 in) polypropylene-coated paper cone with butyl rubber surround, 25 mm (1 in) copper voice coil, vented fiberglass resin voice coil former
HF Driver	20 mm (0.75 in) soft-dome, neodymium magnet assembly, ferro-fluid cooling, aluminum voice coil former

Enclosure:	
Input Connectors	Two removable locking 2-pin connectors with screw-down terminals; max wire size 12 AWG (2.5 mm); Key: 1) + in, 2) - in, A)+ loop thru, B) - loop thru
Knockouts	Two (top, and side)
Safety Agency:	Suitable for use in air handling spaces per UL1480 Speakers for Fire Alarm, Emergency and Commercial and Professional Use; complies with UL-2043 Fire Tests for Heat and Visible Smoke Release for Discrete Products, CUL, NFPA-70, NFPA- 90A Installation of Air Conditioning and Ventilation Systems; in accordance with the requirements of IEC60849/EN60849
Dimensions	250 mm (9.9 in) diameter, 239 mm (9.4 in) mounting depth
Cutout Size	220 mm (8.75 in)
Ceiling Thickness Range	Accommodates tiles / drywall up to 70 mm (2.75 in) thick
Net Weight	3.9 kg (8.6 lb)
Shipping Weight	8.6 kg (19.0 lb), pair pack

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Specifications (Continued):

Included Accessories	» C-ring support backing plate » 2 tile support rails (fits both 2 x 4 ft or 600 x 1200 mm tiles) » Press-in grille » Knockout strain relief » Cutout template » Paint shield » 2 removable locking multi-pin connectors
Optional Accessories	» MTC-26NC new construction bracket » MTC-26MR mud-ring construction bracket

[1] Half-space (flush mounted in ceiling)

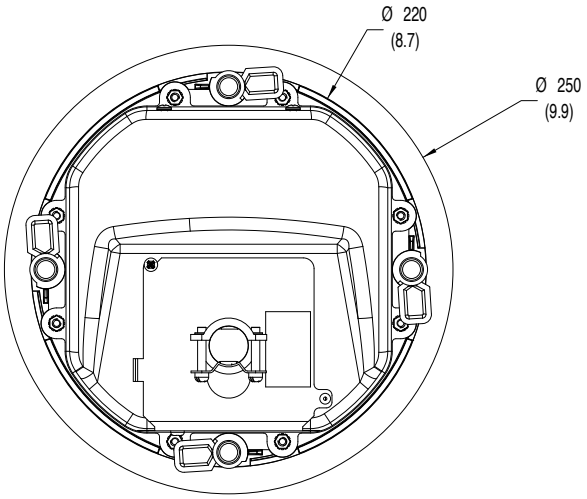
[2] Continuous Pink Noise rating is IEC-shaped pink noise with a 6 dB crest factor for 100 hours continuously. Continuous Program power is a conservative expression of the system’s ability to handle normal speech and music program material, and is defined as 3 dB above the Continuous Pink Noise Rating.

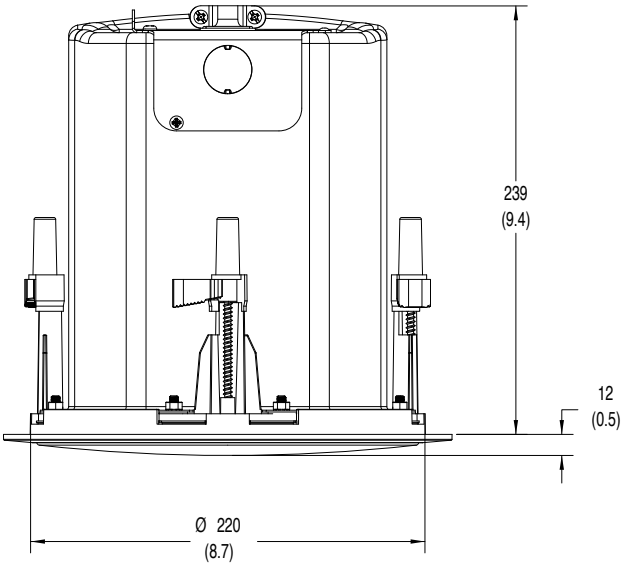
[3] Half-space (in ceiling) average 1 kHz to 16 kHz

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

Mounting Dimensions:

Dimensions in mm (inches)



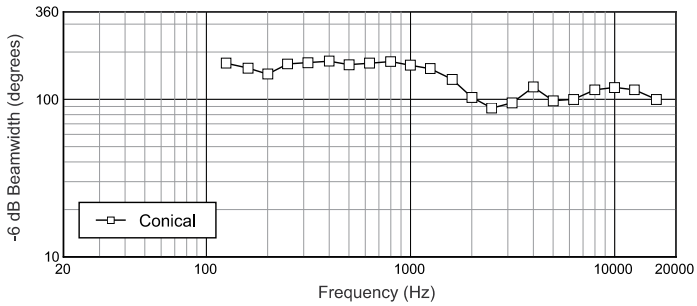


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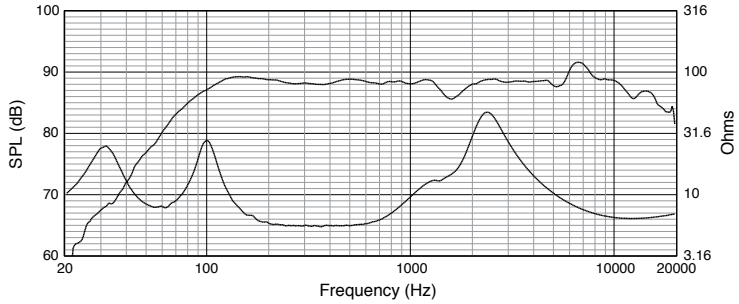
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Beamwidth:

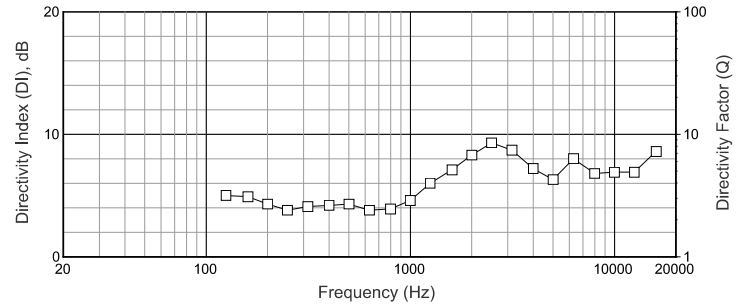


Frequency Response:

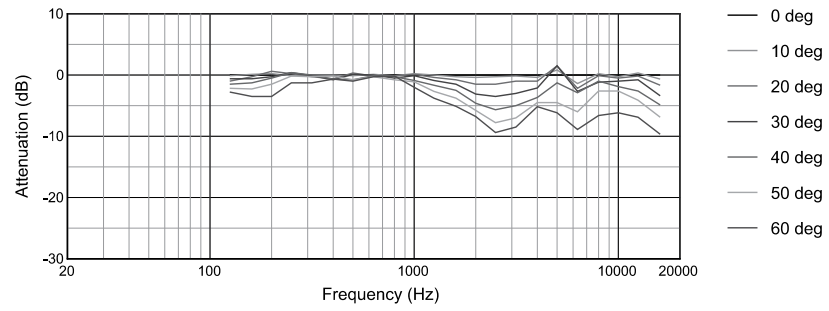


Half-space (2pi, mounted in ceiling)

Directivity Index:



Off-Axis Frequency Response:



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