Control 16C/T Two-Way 6.5" Coaxial Ceiling Loudspeaker

Professional Series

Key Features:

- Components:
  - 165 mm (6.5 in) high output driver with polypropylene cone and butyl rubber surround
  - 19 mm (0.75 in) soft-dome liquid-cooled tweeter
- Blind-mount backcan for quick and easy install
- Dual conduit/cable clamps
- Combined 70V/100V and low impedance direct operation
  - 50 Watts at 8Ω nominal setting
  - 30W multi-tap at 70V/100V
- 62 Hz – 20 kHz bandwidth with wide 110° coverage
- High 91 dB sensitivity for high maximum SPL
- White or black (-BK)

Applications:

Control 16C/T is a full-range ceiling speaker consisting of a 165 mm (6.5 inch) high tech cone driver and a 19mm soft-dome liquid cooled tweeter mounted in a vented, paintable baffle made of UV resistant UL94-V0 and UL94-5HB material, with a pre-attached blind-mount backcan for quick and easy installation. The speaker is designed to provide excellent sound quality for a wide variety of medium to high volume applications such as music cafes, business music systems, retail stores, music/paging systems, airports, reception/waiting rooms, lounges, courtrooms, convention centers, hotels, educational facilities, and more.

The speaker delivers consistent sound quality for listeners located both off and on axis.

The high technology 165 mm (6.5 in) low-frequency driver is designed with a lightweight, high temperature anodized aluminum voice coil former and high temperature grade voice coil for stable performance and reliability under long-term high power working conditions. The butyl rubber surround provides long-term durability and excellent sonic damping while the polypropylene cone is water and humidity resistant. The FEA-optimized motor construction and cone geometry, along with linear suspension spider design, allow for a smooth frequency response and more consistent off-axis performance. The 19 mm (3/4 in) high frequency driver features a highly damped treated silk dome for clear and warm sound, a lightweight Kapton™ voice coil for better high frequency response and excellent reliability, low viscosity liquid cooling for power handling and reliability, and a wide dispersion waveguide design to produce wide coverage and smooth frequency response.

The removable locking connector has screw terminals for secure wire termination and "loop through" terminals. A dual strain relief assembly provides clamping for use with cable or flex conduit.

Ideal for a wide variety of projects, the Control 16C/T is switchable for use as either an 8 ohm low-impedance speaker or as part of a 70V or 100V distributed loudspeaker system with a 30 Watt multi-tap transformer. The speaker comes complete with two tile rail supports, one C-ring support backing plate, cutout template, paint shield and grille. A safety seismic attachment ring is provided on the top surface. Available in white or black (-BK).



Included grille not shown.

Preliminary Specifications:

System:	Frequency Range (-10 dB)[1]:	62 Hz – 20 kHz
	Frequency Response (±3 dB)[1]:	96 Hz – 15 kHz
	Power Capacity (at low-Z)[2]:	100 Watts Continuous Program Power 50 Watts Continuous Pink Noise
	Nominal Sensitivity[3]:	91 dB
	Nominal Coverage Angle[3]:	110° conical coverage
	Directivity Factor (Q)[3]:	7.8
	Directivity Index (DI)[3]:	8.2 dB
	Rated Maximum SPL:	108 dB @ 1 m (3.3 ft) average, 116 dB peak
	Nominal Impedance:	8 ohms (in direct/bypass 8Ω setting)
	Transformer Taps:	30 W, 15 W, 7.5 W @ 70V or 100V (plus 3.8 W @ 70V only)
	Crossover Network:	12 dB/oct (2nd order) low-pass to LF driver, 12 dB/oct (2nd order) high-pass to HF driver
Transducers:	LF Driver:	165 mm (6.5 inch) with polypropylene cone, butyl rubber surround, anodized aluminum voice coil former, high temperature voice coil
	HF Driver:	19 mm (3/4 in), highly-damped treated-silk dome, Kapton™ voice coil, liquid cooling, wide dispersion waveguide
Enclosure:	Input Connector:	Removable locking 4-pin connector with screw-down terminals. Max wire size 12 AWG (2.5 mm²)
	Connector Wiring:	Pin 1 = + In; Pin 2 = - In; Pin 3 = + Loop Thru; Pin 4 = - Loop Thru
	Strain Reliefs:	Strain relief for two cables or two flex conduits via coupled clamping mechanism
	Materials:	ABS baffle with UL94-V0 and UL94-5VB flame class fire rating; Zinc-plated steel backcan
	Safety Agency:	UL1480, UL2043, NFPA90 & NFPA70; S7232/UL Listed, Suitable for use in air handling spaces, Signaling Speaker; Transformer UL registered per UL1876; ROHS, C-tick N108, CE compliant; Baffle meets UL94-V0 and UL94-5VB flammability rating; In accordance with IEC60849/EN60849 systems
	Dimensions:	253 mm diameter x 225 mm depth from back of baffle (10.0 in diameter x 8.8 in depth)
	Ceiling Cutout Size:	Circular cutout with 223 mm (8.8 in) diameter (cardboard cutout template included)
	Ceiling Thickness Range:	Up to 38 mm (1.5 in) with stock dog-ears. MTC-TCD thick-ceiling dog-ears available for up to 60 mm (2.4 in) ceiling thicknesses
	Safety Seismic Attachment:	One point, top surface
	Net Weight:	3.4 kg (7.4 lbs, one speaker)
	Shipping Weight:	11.2 kg (24.7 lbs, pair in master carton)
	Included Accessories:	C-ring support backing plate, 2 tile support rails (for 2 ft or 600 mm tile spans; optional MTC-48TR extension available for larger 4 ft or 1200 mm tile spans), cutout template, paint shield, removable locking multi-pin connector, grille
	Optional Accessories:	MTC-26NC new construction bracket MTC-26MR mud-ring construction bracket MTC-TCD thick-ceiling dog-ears for ceiling thicknesses up to 60 mm (2.4 in, ordering one set = 24 dogears for 6 speakers) MTC-48TR tile rail for 1200 mm (4 ft) tile spans MTC-16WG (& 16WG-BK) high humidity grille

[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.

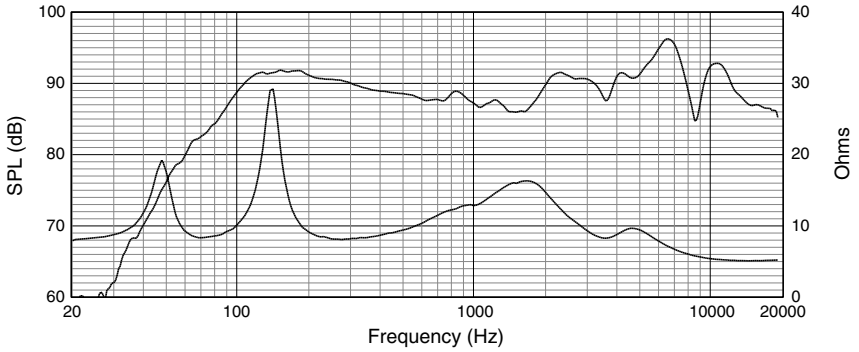
[3] Half-space (in ceiling) average 1 kHz to 16 kHz.

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

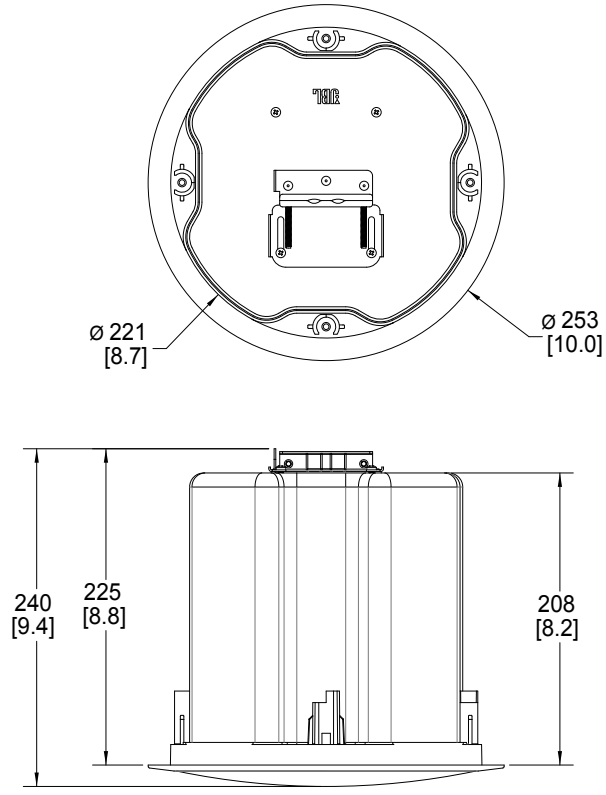
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Frequency Response, Impedance:

Frequency Response in Half-Space (2π, mounted in ceiling)
Impedance at 8Ω (low-impedance) setting



Dimensions:



Dimensions in mm (inches)

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