SPECSHEET

Control® 12C/T

Professional Series – Compact Ceiling Loudspeaker

Key Features:

- 76 mm (3 in) full-range driver
- Blind-mount backcan for quick and easy install
- Dual conduit/cable clamps
- Combined 70V/100V and low impedance direct operation:
  - 20W at 8Ω nominal setting
  - 15W multi-tap at 70V/100V
- 68 Hz – 17 kHz bandwidth with wide 130° coverage
- White or black (-BK)



Included grille not shown

Description:

Control 12C/T is a full-range ceiling speaker consisting of a 76 mm (3 inch) wide-bandwidth cone driver mounted in a vented, paintable baffle made of UV resistant UL94-V0 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 low to medium 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 130° coverage is especially wide, delivering consistent sound quality for listeners located both off and on axis.

The high-technology cone driver is designed with a lightweight high-temperature Kapton™ voice coil former and aluminum coupling ring to reduce distortion and extend the high frequency response of the system. The FEA-optimized motor construction and cone geometry allow for smooth frequency response and improved off-axis performance. A high-temperature-grade voice coil ensures stable performance under long-term/high-power working conditions. The butyl rubber surround provides long-term durability and good sonic damping, and the polypropylene cone is water and humidity resistant.

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.

The compact backcan extends only 138 mm (5.4 inches) behind the baffle, allowing the speaker to fit into more shallow ceiling areas.

Ideal for a wide variety of projects, the Control 12C/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 15W 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).

Specifications:

System	
Frequency Range (-10 dB)[1]	68 Hz – 17 kHz
Frequency Response (±3 dB)[1]	95 Hz – 15 kHz
Power Capacity (at low-Z)[2]	40W Continuous Program Power 20W Continuous Pink Noise
Nominal Sensitivity[3]	84 dB
Nominal Coverage Angle[3]	130° conical coverage
Directivity Factor (Q)[3]	9.8
Directivity Index (DI)[3]	7.4 dB
Rated Maximum SPL	97 dB @ 1 m (3.3 ft) average, 103 dB peak
Nominal Impedance	8 ohms (in direct/bypass 8Ω setting)
Transformer Taps	15 W, 7.5 W, 3.8 W @ 70V and 100V (& 1.9 W @ 70V only)
Transducers	
Full-Range Driver	76 mm (3 inch) with polypropylene cone, butyl rubber surround, Kapton™ voice coil former, high-temperature voice coil, aluminum coupling ring for low distortion and HF extension
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	196 mm diameter x 138 mm depth from back of baffle (7.7 in diameter x 5.4 in depth)
Ceiling Cutout Size	Circular cutout with 170 mm (6.7 in) diameter (cardboard cutout template included)
Ceiling Thickness Range	Up to 35 mm (1.4 in) with stock dogears; MTC-TCD thick-ceiling dogears available for up to 55 mm (2.2 in) ceiling thicknesses
Safety Seismic Attachment	One point, top surface
Net Weight	1.6 kg (3.5 lbs, one speaker)
Shipping Weight	6.7 kg (14.7 lbs, pair in master carton)

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Specifications (Continued):

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-24NC new construction bracket » MTC-24MR mud-ring construction bracket » MTC-TCD thick-ceiling dogears for ceiling thicknesses up to 55 mm (2.2 in, ordering one set = 24 dogears for 8 speakers) » MTC-48TR tile rail for 1200 mm (4 ft) tile spans » MTC-14WG (& 14WG-BK) high-humidity grille

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

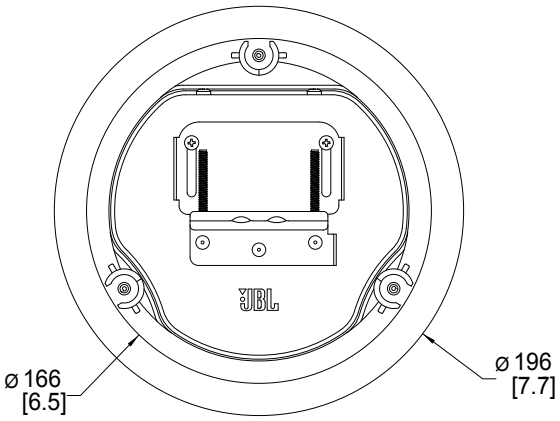
[2] Continuous Pink Noise Rating is IEC-shaped pink noise with a 6 dB crest factor for 100 hours continuously. Continuous Program Power is a conservative expression of the system's ability to handle normal speech and music program material, and is defined as 3 dB above the Continuous Pink Noise Rating.

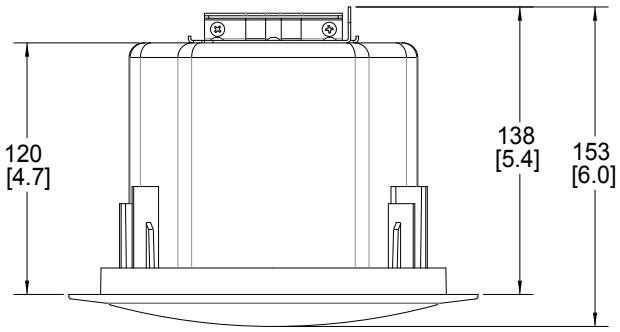
[3] Half-space (in ceiling) average 1 kHz to 16 kHz

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

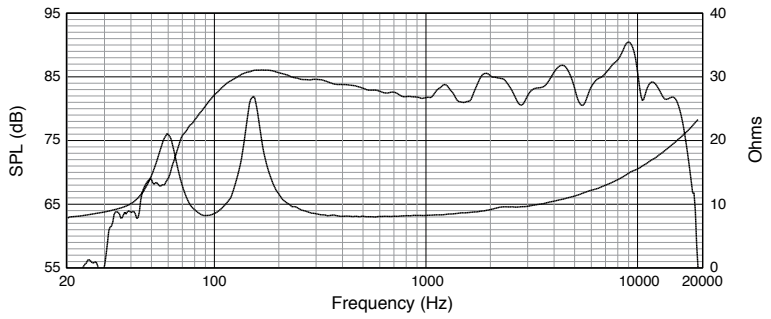
Mounting Dimensions:

Dimensions in mm (inches)





Frequency Response, Impedance:



Frequency response in half-space (2pi, mounted in ceiling), impedance at 8Ω (low-impedance) setting