

# Control 14C/T Two-Way 4" Coaxial Ceiling Loudspeaker

#### **Professional Series**

### **Key Features:**

- Components:
- 100 mm (4.0 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
  - 30 Watts at 8 $\Omega$  nominal setting
  - 25W multi-tap at 70V/100V
- ► 74 Hz 20 kHz bandwidth with wide 120° coverage
- ▶ White or black (-BK)

## **Applications:**

Control 14C/T is a full-range ceiling speaker consisting of a 100 mm (4 inch) high tech cone driver and a 19 mm 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 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 120° coverage delivers consistent sound quality for listeners located both off and on axis.

The high technology 100 mm (4.0 in) lowfrequency 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 longterm 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, allows 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<sup>™</sup> 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 14C/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 25 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).



# **Preliminary Specifications:**

System:	Frequency Range (-10 dB)1:	74 Hz – 20 kHz
	Frequency Response (±3 dB)1:	100 Hz – 20 kHz
	Power Capacity (at low-Z) <sup>2</sup> :	60 Watts Continuous Program Power 30 Watts Continuous Pink Noise
	Nominal Sensitivity3:	87 dB
	Nominal Coverage Angle3:	120° conical coverage
	Directivity Factor (Q)3:	7.6
	Directivity Index (DI)3:	8.1 dB
	Rated Maximum SPL:	102 dB @ 1 m (3.3 ft) average, 108 dB peak
	Nominal Impedance:	8 ohms (in direct/bypass 8Ω setting)
	Transformer Taps:	25 W, 12.5 W, 6.3 W @ 70V or 100V (plus 3.2 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:	100 mm (4.0 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 mm <sup>2</sup> )
	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 181 mm depth from back of baffle (7.7 in diameter x 7.1 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 dog-ears. MTC-TCD thick-ceiling dog-ears available for up to 55 mm (2.2 in) ceiling thicknesses
	Safety Seismic Attachment:	One point, top surface
	Net Weight:	2.2 kg (4.8 lbs, one speaker)
	Shipping Weight:	8.2 kg (17.9 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-24NC new construction bracket MTC-24MR mud-ring construction bracket MTC-TCD thick-ceiling dog-ears 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

<sup>1</sup> Half-space (flush mounted in ceiling)

<sup>2</sup> 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.

<sup>3</sup> 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.

# Control 14C/T Two-Way 4" Coaxial Ceiling Loudspeaker

Frequency Response, Impedance: Frequency Response in Half-Space  $(2\pi, mounted in ceiling)$ Impedance at  $8\Omega$  (low-impedance) setting



#### **Dimensions:**





Dimensions in mm (inches)



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