

**Premium Coverage Series** – Two-way 6.5" Coaxial Ceiling Loudspeaker with RBI for High Ceilings



#### **KEY FEATURES** ■

- Coaxially mounted 165 mm (6.5 in) woofer and 25 mm (1 in) soft-dome tweeter
- Stylish Bezel-less grille that blends elegantly into any room design
- Focused 85° narrow pattern control featuring JBL's Radiation Boundary Integrator® (RBI™) technology
- 55 Hz 20 kHz Frequency Range
- 75W (300W peak) Power Handling with 60W multi-tap transformer for use with 70V/100V distributed systems

#### **HIGHLIGHTS** ■

Part of the Control 400 collection's Premium Coverage Series, the JBL Control 447HC is a professional in-ceiling loudspeaker designed for applications that require a focused

beamwidth pattern along with very consistent coverage. The Control 447HC features a narrow 85° coverage pattern that helps minimize sound reflecting off of room surfaces making it ideal for use in highly reverberant spaces and high ceiling applications. It shares its sonic character with Control 447C/T which allows intermixing of the two models into systems as needed.

It features JBL's exclusive conical Radiation Boundary Integrator® (RBITM), the RBI provides a large waveguide for the tweeter while low-frequency sound projects through specially designed apertures in the RBI, allowing for a seamless integration of coverage between the two coaxially mounted drivers. The result is extremely consistent sound character with very little variation throughout the listening space. The wide coverage allows for the use of fewer loudspeakers compared to speakers with less consistent coverage control, while at the same time providing better coverage of the area.

The system's 165 mm (6.5 in) woofer features a treated paper cone and high-performance magnet offering extended bass response for a warm full-bodied tone. The copper-clad aluminum voice coil wound on an aluminum former offers low distortion and high-sensitivity.

Coaxially mounted 25 mm (1 in) cloth soft-dome tweeter with neodymium magnet assembly and aluminum voice coil former provides crisp and clear highs with enhanced power handling.

Control 400 collection's Premium Coverage Series is designed for applications where wide frequency response, superior clarity and high-power handling are required. For applications where more bass is desired, the Control 447HC is tuned to pair well with the Premium Coverage Series Control 440CS/T subwoofer.

The  $8\Omega$  impedance allows paralleling up to 2 speakers on a  $4\Omega$  capable amplifier. For distributed systems, the UL-registered transformer is designed for exceptionally low-saturation, even at high drive levels, providing top quality, low distortion distributed sound character.

The stylish bezel-less grille fits seamlessly into a variety of architectural aesthetics. The integrated backcan on the Control 447HC combined with the C-ring support backing plate allows for quick and easy installation of the unit. The included white grille is paintable (grille backing is removeable and re-applicable for painting), and optional accessory grilles are available in black (JBL-MTC-440BG) and in square (JBL-MTC-440SG, white only).

The Control 447HC is UL 1480A and UL 2043 listed.



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## **SPEC SHEET**

## **SPECIFICATIONS** ■

SYSTEM	
Frequency Range (-10 dB) <sup>1</sup> :	55 Hz – 20 kHz
Frequency Response (±3 dB) <sup>1</sup> :	72 Hz – 14 kHz
Power Capacity <sup>2</sup> :	224 W Continuous Program (2 hrs.) 112 W (448 W Peak), Continuous Pink Noise (2 hrs.) 75 W (300 W Peak) Continuous Pink Noise Power (100 hrs.)
Sensitivity:	93 dB
Nominal Coverage Angle <sup>3</sup> :	85° conical
Directivity (Q)3:	8.9
Directivity Index (DI)3:	9.5 dB
Rated Maximum SPL @ 1m4:	113.5 dB continuous pink noise (119.5 dB peak)
Nominal Impedance:	$8\Omega$
Minimum Impedance:	6.7Ω at 800 Hz
Transformer Taps:	70 V: 60 W, 30 W, 15 W & 7.5 W 100 V: 60 W, 30 W, 15 W
Recommended Protective High-Pass Filter Frequency:	60 Hz (24 dB/oct LR)
Transformer Insertion Loss:	0.6 dB @ 7.5 W; 0.8 dB @ 15 W; 0.9 dB @ 30 W; 0.9 dB @ 60 W
Maximum Input Voltage:	29.7 V RMS (2 hrs), 59.5 V peak (at $8\Omega$ input)
Overload Protection:	PTC power limiting to protect network and transducers from occasional overload.
RBI Driver Integrator:	LF acoustic loading, tapered apertures. Back of loading plate functions as LF waveguide, foam-lined for smooth midrange frequency response. Provides smooth, consistent coverage of listening space. Horn-loaded HF driver integrated into front of RBI for maximum coherence.
Safety Agency Ratings:	Suitable for use in air handling spaces per UL 2043, NFPA 90A & NFPA 70. S7232/UL Listing per UL 1480A Speakers for Commercial and Professional Use. Listed per CSA C22.2, no. 205 Signal Equipment. Transformer UL registered.
Environmental:	IP rating: IP33 per EN/IEC 60529.  RoHS: Per EU RoHS Directive 2011/65/EU, as amended by EU Delegated Directive (EU) 2015/863.  Operating temperature: 0° C to 45 °C.
TRANSDUCERS:	
LF Driver:	165 mm (6.5 in) treated paper cone, high-performance magnet, 38 mm (1.5 in) SV voice coil on aluminum voice coil former.
HF Driver:	25 mm (1 in) cloth soft-dome, neodymium magnet assembly, CCAW wire on Polyimide voice coil former.
ENCLOSURE	
Enclosure Material	Backcan: Powder-coated formed steel Baffle: PC/ABS, flammability rated UL 94 5VB
Grille:	Bezel-less, SPCC grille with powder-coat finish, decorative minimal-edge trim, flammability-rated backing (removable and re-applicable for painting). Stock grille is white (RAL9003), round. Black (RAL9004) round and white square available as optional accessories. Safety tether with tether stake pre-attached to grille.
Termination:	Two removable locking euro-block 2-pin connectors with screw-down terminals for bare wire. Connectors paralleled for input and loop-thru. Min. wire 20 AWG (0.5 mm²); Max. wire 12 AWG (3.3 mm²). Terminal cover hinged with 1 captive screws for attachment (no loose hardware).
Wire Entrance/Exit Location:	Multi-use strain relief (for wires or flex conduit) provided. Optional positioning on either top panel (for easiest installation through ceiling cutout) or side of backcan (for lowest depth profile above ceiling).
Attachment Fastening:	4 dog-ear attachment tabs for ceiling thicknesses between 1 mm and 70 mm ceiling board thickness.

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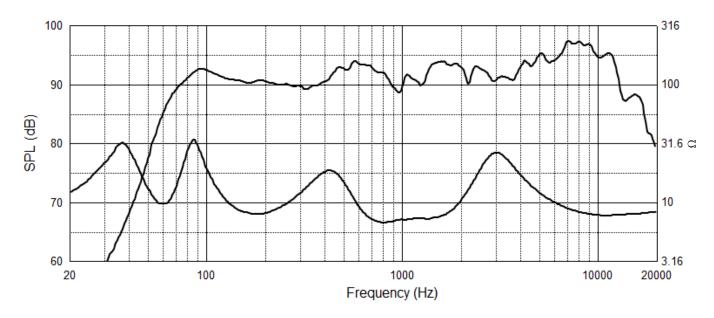
#### **SPEC SHEET**

## **SPECIFICATIONS (Cont.)** ■

ENCLOSURE (Cont.)	
Reinforcing Brackets:	Zinc-plated C-ring and 2 tile rails included for additional support above ceiling. Additional safety tab on backcan for secondary safety cable.
Dimensions (H x Dia):	351mm (13.8 in) H x 342 mm (13.5 in) dia. $337$ mm (13.3 in) from bottom of ceiling tile to top of backcan (with wire exit positioned on side of backcan).
Ceiling Cutout Size:	307 mm (12.1 in)
Net Weight (each):	7.33 kg (16.16 lbs)
Shipping Weight (pair-packed in carton):	22.33 kg (49.23 lbs)
Included Accessories (per speaker):	Two 2-pin removable locking euro-block connectors, 1 cable strain relief, white round bezel-less grille (with pre-attached safety tether and tether clip), cutout template (labeled part of the packaging), C-ring, 2 tile rails (fits both 2 x 4 ft and 600 x 1200 mm tiles), C-ring/tile-rail screws, 1 seal cover, 2 rubber boots.
Optional Accessories:	JBL-MTC-440BG black (RAL9004) round grille JBL-MTC-440SG white (RAL9003) square grille JBL-MTC-419NC new construction bracket JBL-MTC-419MR mud-ring construction bracket JBL-MTC-48TRX4 tile rail for 4' x 4' ceiling tiles
Colors:	Stock grille is white (RAL9003), paintable.
SKII #:	.IBI -C447HC

#### FREQUENCY RESPONSE & IMPEDANCE ■

Half-space,  $8\Omega$ , on-axis (typical for coverage area)



<sup>1</sup> Half-space (mounted in ceiling, 2π, half-space of free-field), with no high-pass filter.

2 Continuous Pink Noise rating is IEC-shaped pink noise with a 6 dB crest factor for 100 hours and 2 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>&</sup>lt;sup>3</sup> Half-Space (mounted in ceiling, 2rr, half-space of free field), average 1 kHz to 6 kHz.

<sup>4</sup> 8Ω mode, calculated from sensitivity and 2 hr power handling, exclusive of power compression.

For additional information, see Control Contractor 440 Series Ceiling Loudspeakers Owner's Manual, C440\_CLGSPKIMAN.

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

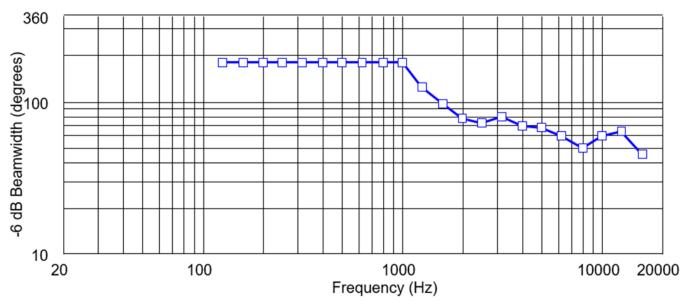


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#### **BEAMWIDTH**

-6 dB coverage by frequency



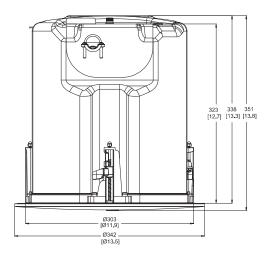


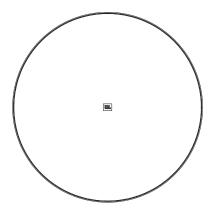
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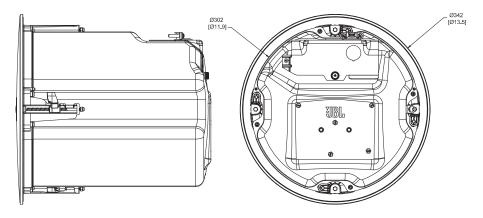
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#### **DIMENSIONS**

Dimensions in mm (in)









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