



# Control<sup>®</sup> 328C/CT

## 8" Coaxial Ceiling Loudspeaker with HF Compression Driver

### Professional Series

### Key Features:

- ▶ Consistent 120° broadband pattern control covers an extremely large area.
- ▶ Shaped mounting baffle provides the pattern control of a 300 mm (12 in) horn from a 200 mm (8 in) driver.
- ▶ Components
  - 200 mm (8 in) woofer with Kevlar-reinforced cone and 50 mm (2 in) voice-coil.
  - 25 mm (1" exit) compression driver.
- ▶ Extraordinary clarity for speech and vocals with extended frequency response for music.
- ▶ 250 Watt power handling with very high sensitivity provides high SPL capability.
- ▶ Advanced high-slope crossover network for constant coverage and smooth, natural midrange.
- ▶ Clean, contemporary grille and optional backbox available.

### Applications:

Control 328C and Control 328CT have been engineered from the ground up to deliver exceptional next-generation performance in a coaxial point source design ceiling loudspeaker. The combination of the low frequency cone and the shaped mounting baffle performs as a true 12 inch (300 mm) diameter waveguide for the high frequencies. A unique metal throat transitions seamlessly to the horn to eliminate high frequency beaming which is common among this category of speaker. The result is a coaxial speaker with wide, extremely consistent 120° coverage on a broadband basis.

Component features include a Kevlar-reinforced low frequency cone for reliability, well-damped surround for smooth frequency response, high temperature voicecoil and a reduced distortion design through saturated-gap magnet geometry. The high frequency driver features a pure titanium diaphragm for high sensitivity and long life, with diamond surround for resonance control and FerroFluid™ for increased power handling.

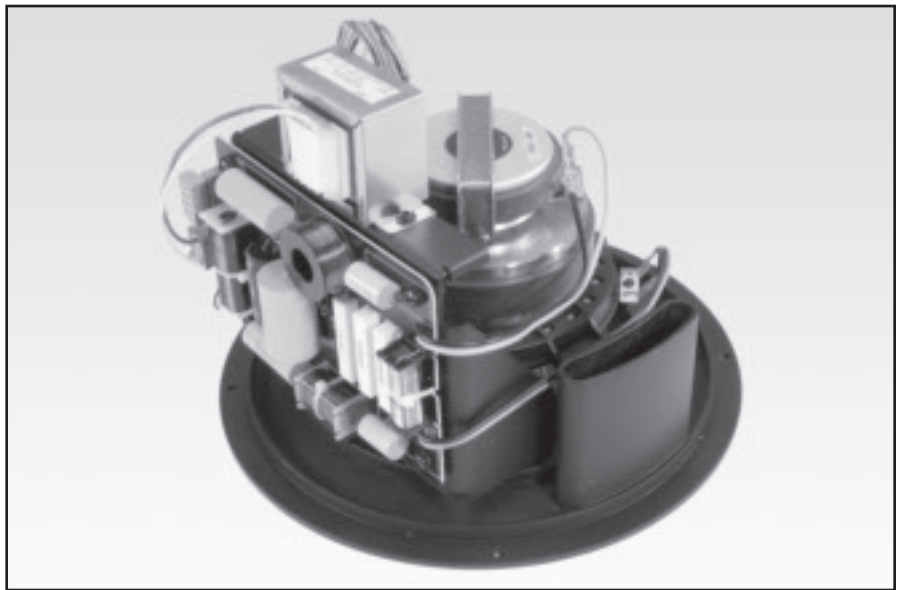
The Control 328C and Control 328CT are easy to install. The removable multi-pin locking connector, with secure screw-down terminals, allows for pre-wiring the input wires for easy clip-on convenience during installation.

The clean, contemporary look of the optional MTC-RG6/8 round grille is designed to suit high-end venues, offering a simple, elegant appearance that fits into a wide variety of décors.

The optional MTC-300BB8 one cubic foot backbox is made of extra-thick 16 gauge steel and the top is lined with ½" medium density fiberboard.

The transformer version Control 328CT comes with a pre-attached top quality, low saturation 68 Watt multi-tap transformer for 70V/100V distributed speaker lines.

To ensure long life and reliability, Control 328C/CT passes JBL's 100-hour torture power test, the toughest standard in the industry.



### Specifications:

<b>System:</b>	Frequency Range (-10 dB):	45 Hz – 18 kHz
	Frequency Response (±3 dB):	60 Hz – 16 kHz
	Coverage Pattern <sup>2</sup> :	120° conical, broadband
	Directivity Factor (Q):	7.0 (Avg 1k - 16kHz)
	Directivity Index (DI):	8.5dB (Avg 1k - 16kHz)
	Long-Term System Power Rating, IEC <sup>3</sup> :	250 W (1000 W peak), 2 hrs
		150 W (600 W peak), 100 hrs
	Sensitivity (2.83V@ 1m):	93 dB <sup>4</sup> measured half-space 98 dB <sup>5</sup> computed for competitive comparison
	Maximum SPL <sup>6</sup> :	118 dB cont ave (124 dB peak)
	Crossover Network:	1.9 kHz, 3rd order (18 dB/oct) high-pass plus conjugate to HF, 2nd order low-pass to LF.
	Nominal Impedance (328C):	8 ohms
	Transformer Taps (328CT):	70V: 68W, 34W, 17W, 8.5W 100V: 68W, 34W, 17W
<b>Transducers:</b>	Low Frequency Driver:	Kevlar reinforced cone, 50 mm (2 in) voice coil.
	High Frequency Driver:	JBL 2412H-1 compression driver, 25 mm (1 in) voice coil.
<b>Physical:</b>	Input Connector (328C):	Removable locking connector with screw-down terminals. Max wire 12 AWG (2.5 mm <sup>2</sup> ) 328C: 1) + in, 2) + loop out, 3) - loop out, 4) - in
	Tap Connection (328CT):	328CT: A) Common B) 8.5W@70V, 17W@100V C) 17W@70V, 34W@100V D) 34W@70V, 68W@100V E) 68W@70V, n/c@100V
	Safety Agency Rating:	Suitable for use in air handling spaces, per U.L. -2043, U.L. 1480, NFPA90 & NFPA70A. In accordance with IEC60849 / EN60849, Transformer in CT model UL Listed per UL1876.
	Baffle:	Metal, round, 305 mm (12.0 in) diamter, driver pre-mounted to baffle, ported.
	Baffle Attachment to MTC-300BB8 Backbox:	Attach via 4 #10 x .75 in (19 mm) sheet metal screws.
	Grille Attachment to Baffle:	4 pcs 4 mm machine screws.
	Dimensions (H x W x D):	305 mm (12.0 in) diameter round baffle x depth from back of baffle of 160 mm (6.3in) on 328C & 218 mm (8.6 in) on 328CT.
	Net Weight:	328C: 4.5 kg (10.0 lbs) 328CT: 5.4 kg (12.0 lbs)
	Shipping Weight:	328C: 5.8 kg (12.7 lbs) 328CT: 6.7 kg (14.7 lbs)
	Included Accessories:	Ported baffle pre-attached, plus transformer on 328CT.
	Optional Accessories:	MTC-RG6/8 Grille, round contoured, white. MTC-300BB8 Backbox, 25 liters (1 cubic feet) MTC-300T150 Transformer, 150 W for use with 328C.

<sup>1</sup> In half space (in ceiling)

<sup>2</sup> Average 1 kHz to 10 kHz

<sup>3</sup> IEC standard, full bandwidth pink noise with 6 dB crest factor.

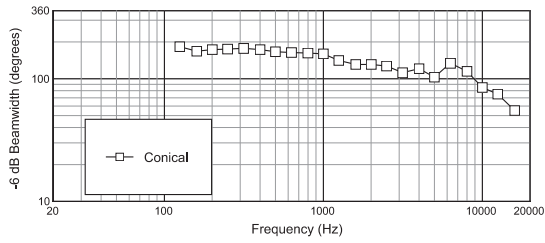
<sup>4</sup> Measured in half space (in ceiling), ave 100 Hz – 10 kHz.

<sup>5</sup> Measured in full space with 6 dB added for half-space calculation. Method used by some European manufacturers, for comparison purposes.

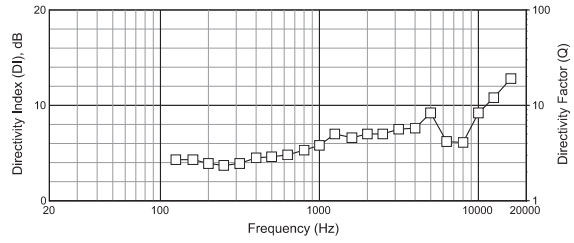
<sup>6</sup> Calculated based on power rating and measured half-space sensitivity, exclusive of power compression.

# ► Control® 328C/CT 8" Coaxial Ceiling Loudspeaker

## Beamwidth:

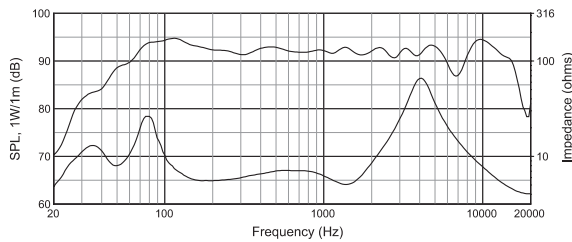


## Directivity Index:

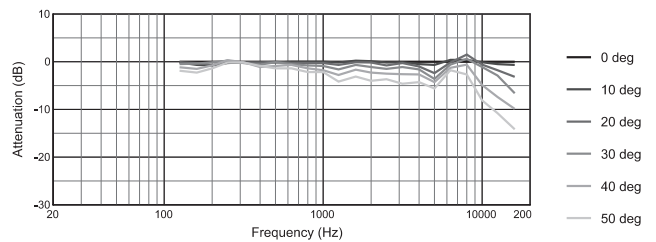


## Frequency Response:

Half-space ( $2\pi$ , mounted in ceiling) in 1 cu ft backbox

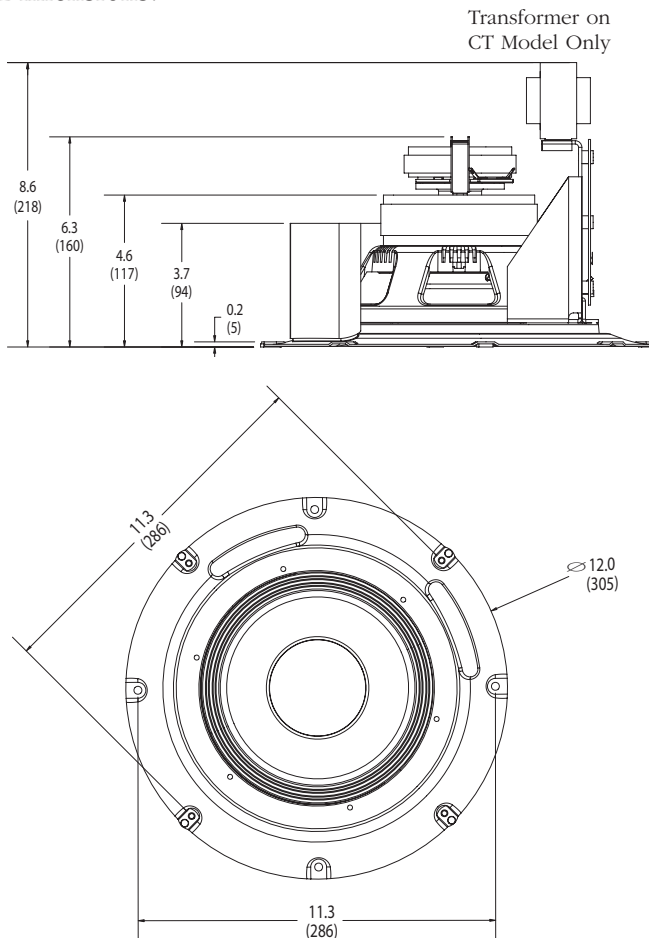


## Conical Off-Axis Frequency Response:

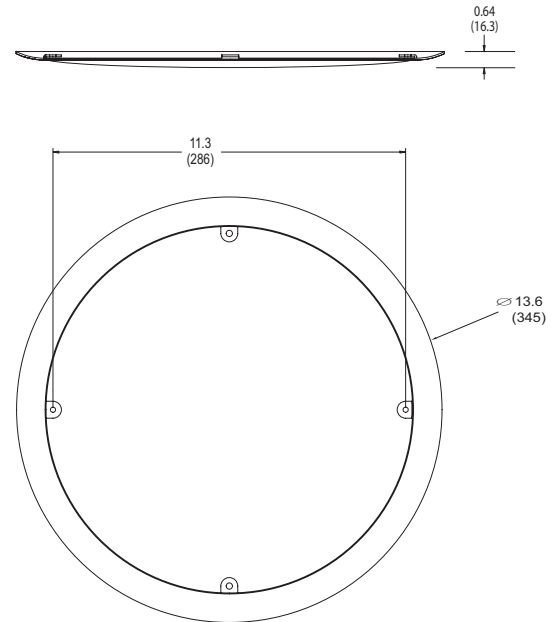


All measurements obtained with no signal processing. Graphics are from unaltered measurement data

## Dimensions:



## MTC-300RG8 Grill (optional):



Dimensions in inches (mm)



JBL Professional  
8500 Balboa Boulevard, P.O. Box 2200  
Northridge, California 91329 U.S.A.

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