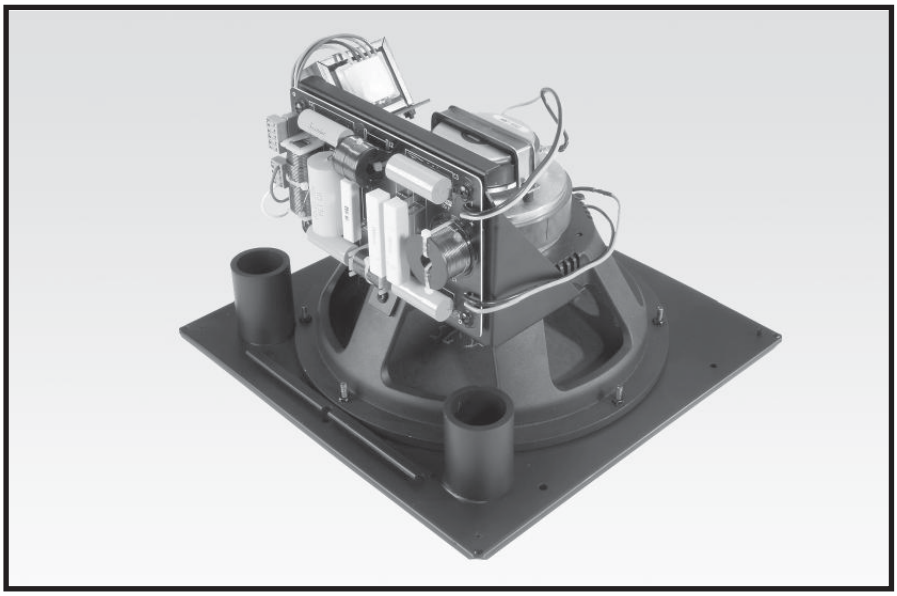
JBL Control® 321C/CT 12″ Coaxial Ceiling Loudspeaker with HF Compression Driver

Professional Series

Key Features:

- Consistent 90° broadband pattern control.
- Components
  - 300 mm (12 in) woofer with Kevlar-reinforced cone with 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 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 321C and Control 321CT have been engineered from the ground up to deliver exceptional next-generation performance in a coaxial point source design ceiling loudspeaker. The low frequency cone performs as a true 12 inch (300 mm) diameter waveguide for the high frequencies. A unique metal throat transitions seemlessly to the horn to eliminate high frequency beaming which is common among this category of speaker. The result is a coaxial speaker with extremely consistent 90º 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 321C and Control 321CT are easy to install. The innovative EZRail™ feature built into the metal baffle temporarily holds one side of the speaker baffle in place until the installer can affix the baffle to the backcan with screws. 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-300SG12 square grille is designed to suit high-end venues, offering a simple, elegant appearance that fits into a wide variety of décors.

The optional, best-in-class, MTC-300BB12 three cubic foot backcan is made of extra-thick 16 gauge steel and lined with ½" medium density fiberboard to provide the performance of a top quality wood loudspeaker cabinet in a metal backbox form factor.

The transformer version Control 321CT comes with a pre-attached top quality, low saturation 68 Watt multi-tap transformer for use on 70V or 100V distributed speaker lines.

To ensure long life and reliability, Control 321C/CT passes JBL's 100-hour torture power test. Nobody in the industry has more demanding reliability standards.

Specifications:

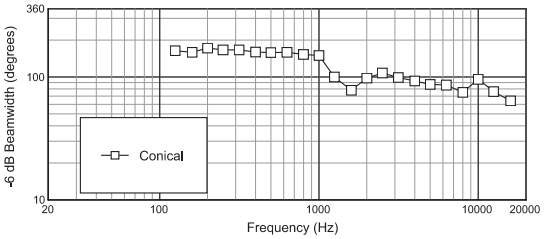
System:	Frequency Range (-10 dB)[1]:	34 Hz – 18 kHz	
	Frequency Response (±3 dB)[1]:	47 Hz – 16 kHz	
	Coverage Pattern[2]:	90° conical, broadband (Avg 1k - 16kHz)	
	Directivity Factor (Q):	8.7 (1k - 16kHz)	
	Directivity Index (DI):	9.4 dB (1k - 16kHz)	
	Long-Term System	250 W (1000 W peak), 2 hrs	
	Power Rating, IEC[3]:	200 W (800 W peak), 100 hrs	
	Sensitivity (2.83V@ 1m):	94 dB[4] measured half-space 99 dB[5] computed for competitive comparison	
	Maximum SPL[6]:	118 dB cont ave (124 dB peak)	
	Crossover Network:	1.8 kHz, 3rd order (18 dB/oct) high-pass plus conjugate to HF, 2nd order low-pass to LF.	
	Nominal Impedance:	5.6 ohms	
	Transformer Taps (321CT):	70V: 68W, 34W, 17W, 8.5W 100V: 68W, 34W, 17W	
	Transformer Insertion Loss (CT):	0.9 dB typ.	
Transducers:	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.	
Physical:	Input Connector (321C):	Removable locking connector with screw-down terminals. Max wire 12 AWG (2.5 mm²)	
		321C:	1) + in 2) + loop out 3) – loop out 4) – in
	Tap Connection (321CT):	321CT:	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 UL1480, UL2043, NFPA90 & NFPA 70 when installed with UL listed backcan such as JBL MTC-300BB12. S7232/UL Listed, Signaling Speaker. Transformer UL registered per UL1876. In accordance with IEC60849/EN60849.	
	Baffle:	Metal, 366 x 366 mm (14.4 x 14.4 in), driver pre-mounted to baffle, ported, EZRail™ for easier installation to backbox.	
	Baffle Attachment to MTC-300BB12 Backbox:	Attach via either 4 corner holes M4 x 14 mm machine screws, or 6 side/end holes #10 x .75 in (19 mm) sheet metal screws.	
	Grille Attachment to Baffle:	4 pcs 4 mm machine screws in corners.	
	Dimensions (H x W x D):	366 x 366 mm (14.4 x 14.4 in) square baffle x depth from back of baffle of 223 mm (8.8 in) on 321C & 240 mm (9.5 in) on 321CT.	
	Net Weight:	321C: 7.3 kg (16.0 lbs) 321CT: 8.2 kg (18.0 lbs)	
	Shipping Weight:	321C: 8.8 lbs (19.4 lbs) 321CT: 9.8 kg (21.6 lbs)	
	Included Accessories:	Ported baffle pre-attached, transformer on 321CT.	
	Optional Accessories:	MTC-300SG12 Grille, square contoured, white. MTC-300BB12 Backbox, 80 liters (3 cubic feet) MTC-300T150 Transformer, 150 W for use with 321C.	

[1] In half space (in ceiling)
[2] Average 1 kHz to 10 kHz
[3] IEC standard, full bandwidth pink noise with 6 dB crest factor.
[4] Measured in half space (in ceiling), ave 100 Hz – 10 kHz.
[5] Measured in full space with 6 dB added for half-space calculation. Method used by some European manufacturers, for comparison purposes.
[6] Calculated based on power rating and measured half-space sensitivity, exclusive of power compression.

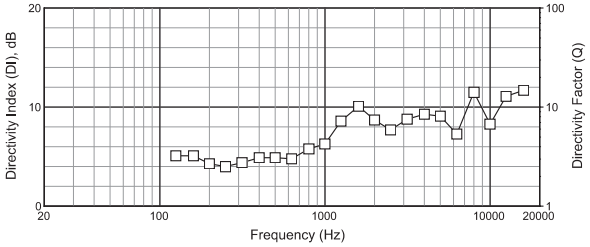
JBL continually engages in research related to product improvement. Changes introduced into existing products without notice are an expression of that philosophy.

Control® 321C/CT 12" Coaxial Ceiling Loudspeaker

Beamwidth:

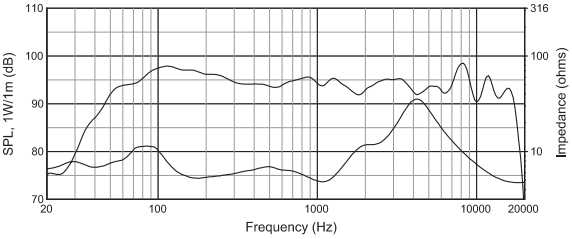


Directivity Index:

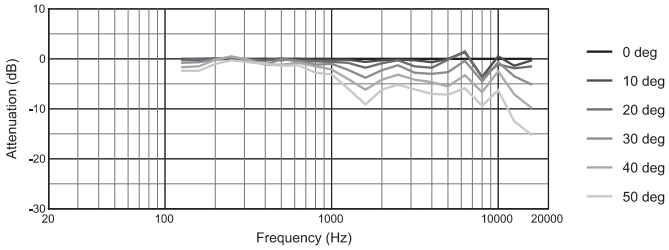


Frequency Response:

Half-space (2π, mounted in ceiling) in 3 cu. ft. Backbox

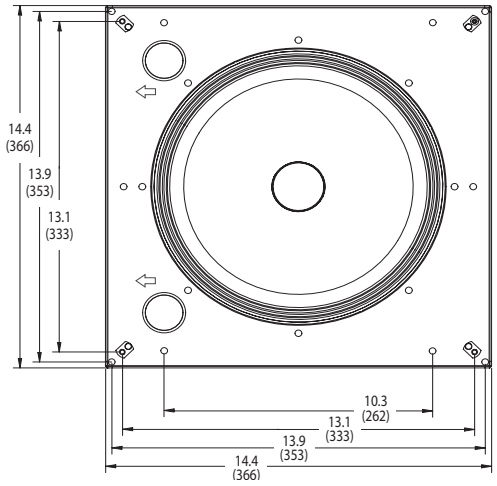


Conical Off-Axis Frequency Response:

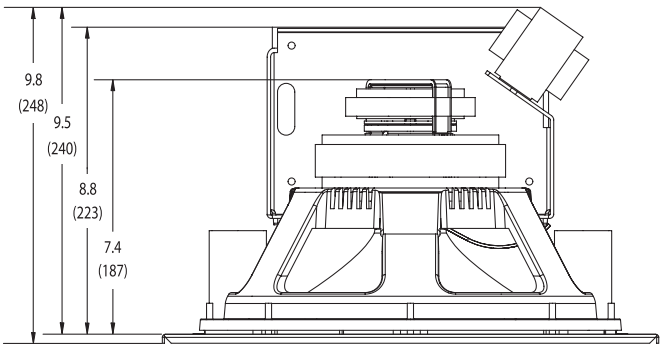


All measurements obtained with no signal processing.
Graphs are from unaltered measurement data.

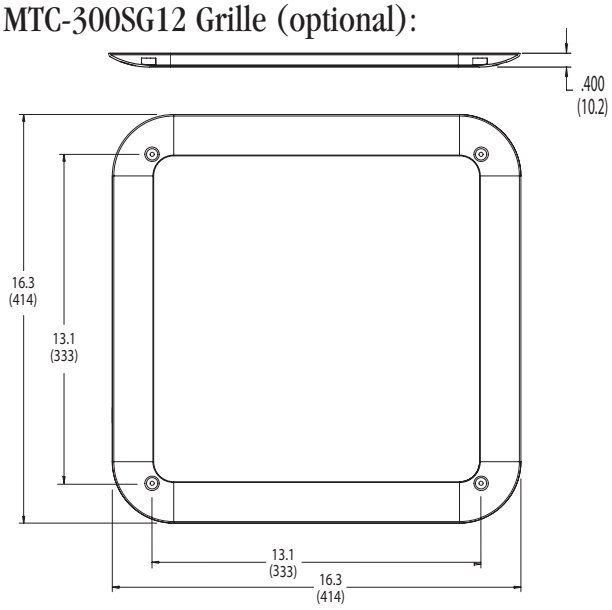
Dimensions:



Transformer on
CT Model Only



MTC-300SG12 Grille (optional):



Dimensions in inches (mm)

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