

### Professional Series

### Key Features:

- ▶ Consistent 120° broadband pattern control for exceptional coverage.
- ▶ Coaxial design featuring:
  - Kevlar-reinforced 165 mm (6.5 in) woofer
  - 25 mm (1 in) compression driver.
- ▶ Extraordinary clarity for speech and vocals with extended frequency response for music.
- ▶ 150 Watts Power Handling (C).
- ▶ Advanced high-slope crossover network for constant coverage and smooth, natural midrange.
- ▶ Optional back can and contemporary grille available.

### Applications:

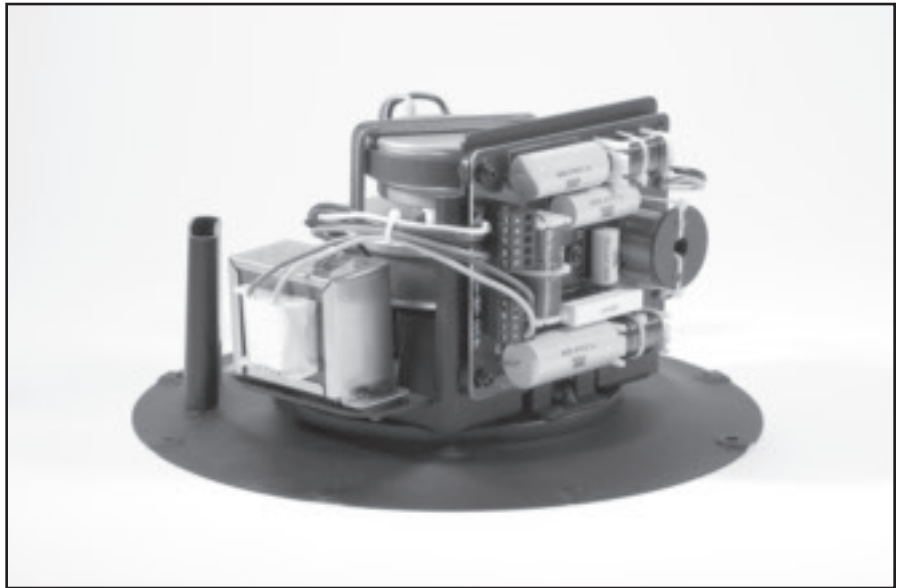
The JBL Professional Control 227C and CT are premium in-ceiling professional loudspeakers designed for applications requiring superior quality sound in ceiling-mount applications. Delivering exceptional next-generation performance in a medium format coaxial point source design, the Control 227C and CT incorporate breakthrough performance features such as best-in-class pattern control to provide a consistent sound throughout the listening area. Especially wide coverage allows fewer speakers to cover the space, reducing both the material and labor cost for the installation.

The Control 227C and CT feature a 165 mm (6.5 in) Kevlar-reinforced low frequency driver coupled with a 25 mm (1 in) exit titanium compression driver for enduring reliability and outstanding performance. An 8 ohm driver is utilized on the Control 227C and offers 150 Watts of continuous power handling capability, while a top quality, low saturation 68 Watt multi-tap transformer comes pre-attached on the Control 227CT enabling the system to be used on 70V or 100V distributed speaker lines.

The Control 227C and CT are easy to install and feature a removable multi-pin locking connector, with secure screw-down terminals. This allows for pre-wiring the input wires for easy clip-on convenience during installation. The optional MTC-200BB6 14 cubic liter (0.5 cubic foot) back can is made of extra-thick 16 guage steel and the top is lined with 1/2" medium density fibreboard.

The clean, contemporary look of the MTC-RG6/8 grille for the Control 227C and CT is designed to suit a variety of settings, offering a simple, elegant appearance that fits into a wide variety of décors.

To ensure long life and reliability, Control 227C and CT pass JBL's 100-hour torture power test. Nobody in the industry has more demanding reliability standards.



### Preliminary Specifications:

|  |   |   |
|--|---|---|
| <b>System:</b>                           | Frequency Range (-10 dB) <sup>1</sup> :   | 43 Hz - 19 kHz  |
|  | Frequency Response (±3 dB) <sup>2</sup> :   | 75 Hz - 17 kHz  |
|  | Coverage Pattern <sup>3</sup> :   | 120° conical, broadband   |
|  | Directivity Factor (Q):   | 7 (1 k - 16 kHz)  |
|  | Directivity Index (DI):   | 8.5 dB (1 k - 16 kHz)   |
|  | Long-Term System Power Rating, IEC <sup>4</sup> :   | 150 W (600 W peak), 2 hrs   |
|  | Power Rating, IEC <sup>5</sup> :  | 100 W (400 W peak), 100 hrs   |
|  | Sensitivity (2.83V @ 1 m):  | 90 dB <sup>6</sup> measured half-space<br>95 dB <sup>6</sup> computed for competitive comparison  |
|  | Maximum SPL <sup>6</sup> :  | 112 dB continuous average (118 dB peak)   |
|  | Crossover Network:  | 2.2 kHz, 3rd order (18 dB/oct) high-pass plus conjugate to HF, 3rd order low-pass to LF.  |
| Nominal Impedance (bypass mode):         | 8 ohms  |   |
| Transformer Taps:                        | 70V: 68W, 34W, 17W & 8.5W   |   |
|  | 100V: 68W, 34W & 17W  |   |
| <b>Transducers:</b>                      | Low Frequency Driver:   | 165 mm (6.5 in) Kevlar reinforced cone  |
|  | High Frequency Driver:  | 25 mm (1 in) exit compression driver  |
| <b>Enclosure:</b>                        | Input Connectors (227C/CT):   | Removable locking connector with screw-down terminals. Max wire 12 AWG (2.5 mm)   |
|  | Input Connectors (227C):  | 1) + in, 2) + loop out, 3) - loop out, 4) - in  |
|  | Tap Connection (227CT):   | A) Common<br>B) 8.5W @ 70V, 17W @ 100V<br>C) 17W @ 70V, 34W @ 100V<br>D) 34W @ 70V, 68W @ 100V<br>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-200BB6 or MTC-300BB8. S7232/UL Listed, Signaling Speaker. Transformer UL registered per UL1876. In accordance with IEC60849/EN60849. |
|  | Baffle:   | Metal, round 305 mm (12.0 in), driver pre-mounted to baffle, ported.  |
| Baffle Attachment to MTC-200BB6 Backbox: | #10 x 19 mm (0.75 in) sheet metal screws.   |   |
| Grille Attachment to Baffle:             | 4 pcs 4 mm machine screws   |   |
| Dimensions (Diameter x Depth):           | Ø 305 mm (12 in) round baffle x depth from back of baffle of 147 mm (5.8 in)  |   |
| Net Weight:                              | 227C: 4.1 kg (9.0 lb) 227CT: 5.2 kg (11.5 lb)   |   |
| Shipping Weight:                         | 227C: 5.4 kg (12.0 lb) 227CT: 6.6 kg (14.5 lb)  |   |
| Included Accessories:                    | Ported baffle pre-attached, transformer on 227CT  |   |
| Optional Accessories:                    | MTC-200BB6 Back Can (0.7 cu ft)<br>MTC-RG6/8 Grille<br>MTC-TB6/8 Tile Bridge<br>Also compatible with MTC-300BB8 backcan (1.0 cu ft) |   |

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

<sup>2</sup>Average 1 kHz to 16 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

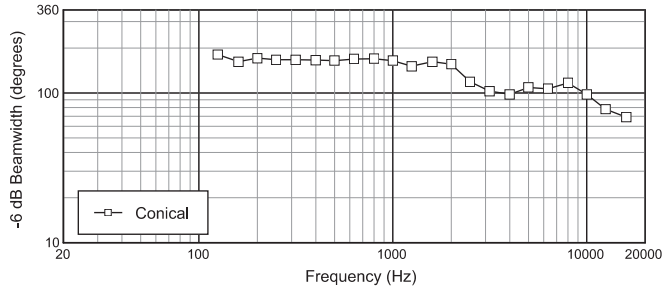
<sup>5</sup>Measured in full space with 6 dB added for half-space calculation. Method used by some European manufacturers, listed for comparison purposes.

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

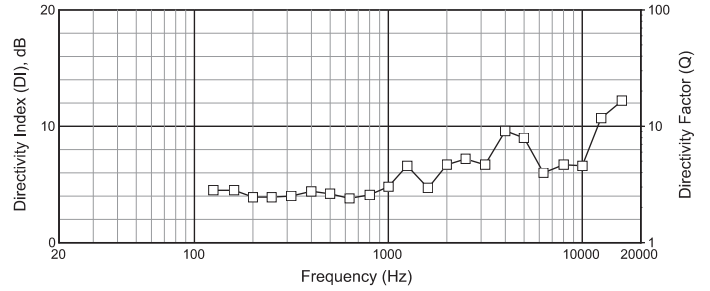
JBL continually engages in research related to product improvement. Some materials, production methods and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published description, but will always equal or exceed the original design specifications unless otherwise stated.

# ▶ Control® 227C/CT 6.5" Coaxial Ceiling Loudspeaker

## Beamwidth:

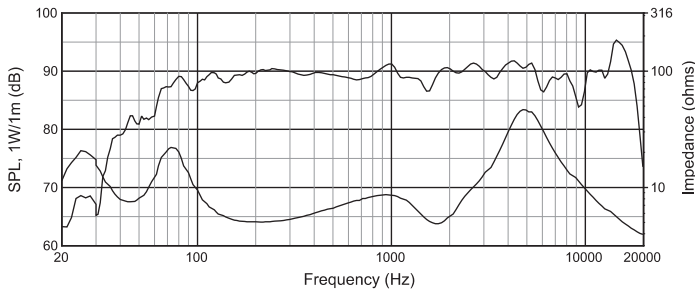


## Directivity Index:

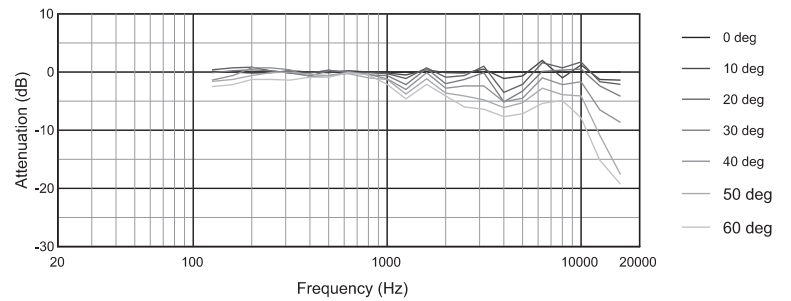


## Frequency Response:

Half-space ( $2\pi$ , mounted in ceiling) in 0.5 cu ft Backbox

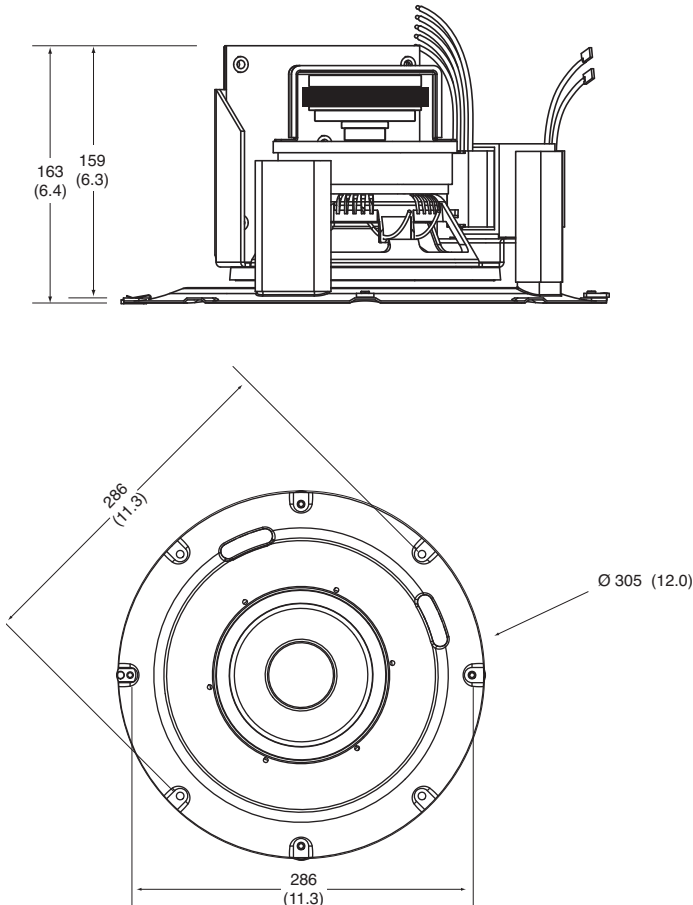


## Horizontal Off-Axis Frequency Response:

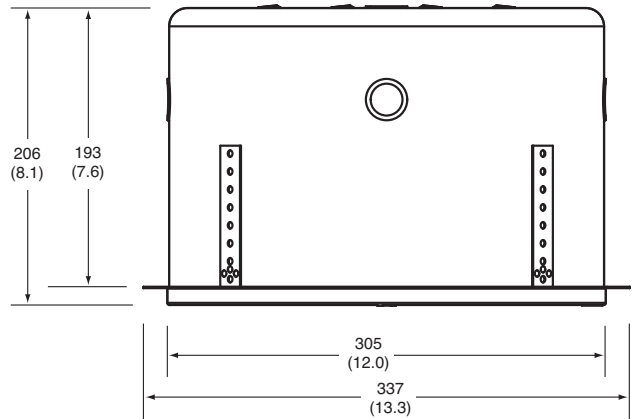


All measurements obtained without signal processing. Graphs are from unaltered measurement data.

## Dimensions:



## MTC-200BB6 (optional):



Dimensions in mm (in)



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