JBL

# Control<sup>®</sup> 24

# Shielded Indoor/Outdoor **Monitor Speaker**

#### **Professional Series**

### **Key Features:**

- Video shielded for use near video monitors.
- Extremely smooth frequency response.
- Stainless steel grille for harsh environments.
- 60 Watt transformer for 70V or 100V lines, with  $8\Omega$  bypass.
- SonicGuard<sup>™</sup> overload protection.
- ▶ 130 mm (5¼") polypropylene coated woofer, 10 mm (34") titanium coated horn-loaded tweeter.
- ▶ Includes InvisiBall<sup>™</sup> mounting hardware and sealed input panel cover
- Screw-down input terminals.

The Control® 25AV utilizes an extended cabinet, high power components and complex network to achieve extremely smooth high fidelity performance from a compact 2-way loudspeaker.

Premium performance capability and even coverage ensures excellent sound character throughout the listening area.

Magnetic shielding allows use of the speaker in close proximity to video monitors.

The top-quality transformer, with reduced saturation, allows use on either 70 volt or 100 volt distributed speaker lines, with similar performance fidelity. In the bypass position, the high  $8\Omega$  impedance allows use of more speakers on a loudspeaker line.

The unique, global patent pending InvisiBall<sup>TM</sup> mounting method is simple to install, aims easily, and provides a high degree of theft deterrence.

The cabinet accepts a variety of paints to match any décor.

Weather resistance is maximized by a stainless steel grille, which is paintable. Coating the woofer in polypropylene and terminating its circumference in JBL's WeatherEdge<sup>™</sup>, a seamless, butyl rubber extension of the woofer surround, protects critical transducer elements. The polycarbonate tweeter diaphragm is reinforced with a thin film of titanium for added rigidity and endurance. Nickel/zinc rust-resistant terminals ensure a secure input connection.

IBL's exclusive SonicGuard overload protection is virtually inaudible to the listener, ensuring reliability while providing full fidelity sound.

The Control 25AV can be used full range or low frequencies can be further augmented with the addition of one of the Control Contractor subwoofer models.

Available in black or white (-WH)

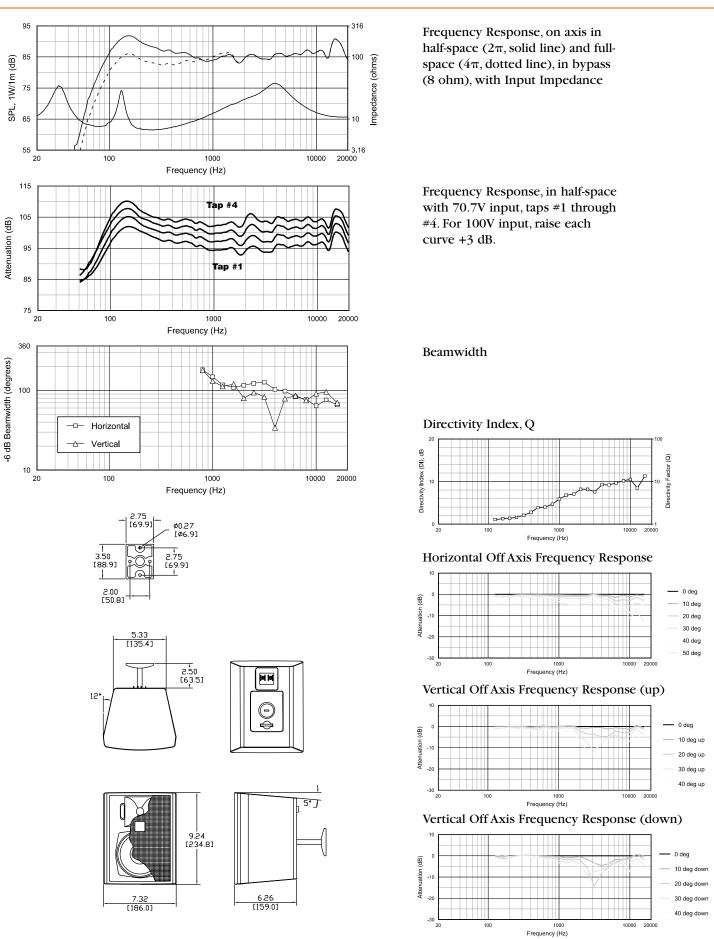


## **Preliminary Specifications:**

Freq. Range (-10 dB) <sup>1</sup> :	70 Hz - 23 kHz
Midrange (±1.5 dB, typical) <sup>2</sup> :	130 Hz - 14 kHz
100 Hr Power Capacity <sup>3</sup> :	200 Watts Continuous Program Power 100 Watts Continuous Pink Noise
Nominal Sensitivity4:	87 dB SPL, 1W @ 1 m (3.3ft)
Maximum SPL @ 1m:	113 dB continuous peak pink noise 107 dB continuous average pink noise 103 dB continuous average music or speech
Directivity Factor (Q):	4.9, averaged 500 Hz to 4 kHz
Directivity Index (DI):	
Nominal Impedance:	8 ohms
Minimum Impedance:	6.7 ohms at 230 Hz
Crossover Type:	Second Order Lowpass, Second Order Highpass, Complex Optimization for Maximally Flat Response
Transformer Taps (24CT):	70V: 60W, 30W, 15W, 7.5W taps (Taps #4,#3, #2 & #1) 100V: 60W, 30W, 15W taps (Taps #3, #2, & #1) Bypass position: 8Ω nominal
Transducers:	
Low-Frequency:	130 mm (5.25 in) polypropylene-coated paper with WeatherEdge surround, 25 mm (1 in) voicecoil on kapton former
High-Frequency:	20 mm (.75 in) titanium coated PEI
Physical:	
Enclosure Material:	High Impact polystyrene
Grille:	Painted stainless steel, black or white to match cabinet, paintable
Overload Protection	Full-range power limiting to protect network and transducers. Internal fuse to protect during exceptional overload condition
Environmental:	Exceeds MilSpec 810 for humidity, salt spray, temperature & UV. IEC 529 IP-X4 splashproof rating
Termination:	Screw-down terminal strip, zinc-plated copper base, nickel plat- ed metal screws/washers, accepts up to 9 mm outside 4 mm inside open lug (#6, #8 or #10), plus bare wire. (up to 12 AWG)
Safety Agency Rating:	Transformer is listed per UL1876
Colors:	Black and white (-WH)
Rotation:	Against wall on InvisiBall Base: 37° vertical 44° horizontal On bracket: 44° all directions
Dimensions (H x W x D):	236 x 186 x 159 mm (9.3 x 7.4 x 6.3 in)
Net Weight (ea):	4.0 kg (9 lb)
Shipping Weight (pair):	9.0 kg (20 lb) per pair
Included Accessories:	1 Pr MTC-PC input panel cover, InvisiBall mounting base, 6 mm x 100 mm InvisiBall hex wrench
Optional Accessories:	MTC-25V for vertical columnar mounting of up to 3 speakers MTC-25/23H for horizontal splaying of 2 speakers. Three brack- ets array either 3 or 6 speakers in a hanging array module for 360° horizontal coverage. MTC-28/25CM to install speaker down from the ceiling. Check [BL Control Contractor Bracket and Adapter Handbook.

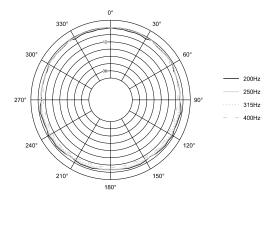
<sup>1</sup>In half-space (on wall). <sup>2</sup>In full-space <sup>3</sup>Continuous Pink Noise rating is IEC-shaped pink noise with a 6 dB crest factor for 100 hours continuously. Continuous program power is a conservative expression of the system's ability to handle normal speech and music program material and is defined as 3 dB above the Continuous Pink Noise Rating. <sup>3</sup>Half-space (on wall) averaged 100 Hz to 10 kHz.

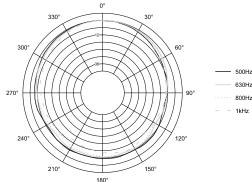
JBL continually engages in research related to product improvement. Changes introduced into existing products with-out notice are an expression of that philosophy.

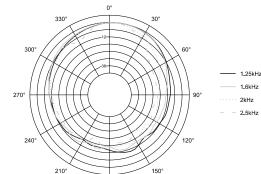


## Control® 25AV Shielded Indoor/Outdoor Monitor

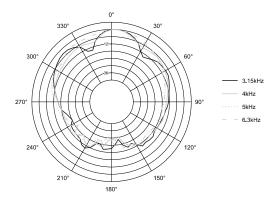
#### Horizontal 1/3 Octave Polars

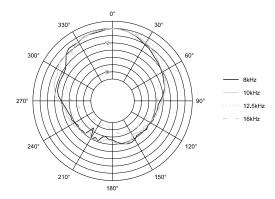






180





## Architectural Specifications:

The loudspeaker shall consist of a 135 mm (5-1/4 in) low frequency transducer, 20 mm (3/4 in) high frequency transducer, and frequency dividing network installed in ported enclosure. The low frequency voice coil shall be 25 mm (1 in) in diameter.

Performance specifications of a typical unit shall be as follows: Usable frequency response shall extend from 70 Hz to 23 kHz (10 dB below rated sensitivity, in half-space, with no external equalization) and the speaker shall be flat from 130 Hz to 14 kHz (typically  $\pm$ 1.5 dB). Rated power shall be at least 200 watts continuous program power for 100 continuous hours duration (defined a 3 dB above a test signal of filtered random pink noise conforming to international standard IEC268-5). Measured sensitivity shall be at least 87 dB-SPL (at 1m [3.3ft] with 2.83V input, averaged from 100 Hz to 10 kHz).

The input shall be switchable for use either at nominal 8 ohms, or on a 70.7V or 100V distributed speaker line via a built-in 60W transformer. Selectable taps shall allow operation nominally at 15W, 30W or 60W from either a 70.7V or 100V distributed speaker line, plus 7.5W from a 70.7V line only.

The system shall be protected against damage from occasional overpowering via full range limiting that limits the power to the network and transducers. The limiting system shall be inaudible during activation. The high frequency transducer shall be horn-loaded to more evenly cover a nominal 90° horizontal by 90° vertical area.

The enclosure shall be constructed of high-impact polystyrene and the grille shall be made of treated stainless steel for protection against the elements in outdoor applications, and for easy paintability of both cabinet and grille. The grille shall be secured via screws to keep it in place when facing downward.

The low frequency transducer shall have a polypropylene-coated cone and a butyl rubber surround which shall extend seamlessly over the edge of the speaker frame to protect against the elements. The high frequency transducer shall be constructed of polycarbonate, reinforced with a titanium film for additional weather resistance. The system shall withstand Mil Spec 810 testing with specified durations for exposure to the following environments with no effect on its acoustical performance or structural integrity: salt spray (method 509.3), temperature (method 501.3 and 502.3), humidity (method 507.3) and ultra-violet (method 505.3). The system shall have an IEC 529 splashproof rating of IP-X4.

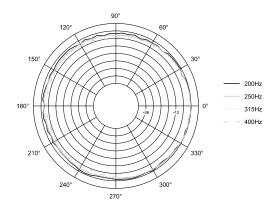
For theft deterrence, the installation access area shall be hidden behind a snap-out cover, and the access area shall be on the front of the loudspeaker for ease of installation and adjustment. The loudspeaker shall be rotatable over a minimum of  $\pm 35^{\circ}$  in all directions via a balltype mounting system. The ball mechanism shall be internal to the cabinet to allow low-profile mounting and better stability via short moment arm. The logo shall be rotatable for proper orientation when the loudspeaker is mounted horizontally or vertically.

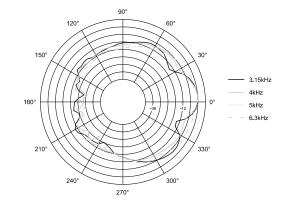
The external wiring connectors shall be screw-down terminals. Overall cabinet dimensions shall be no greater than 236 high x 186 wide x 159 mm deep  $(9.3 \times 7.4 \times 6.3 \text{ in})$ . and shall weigh no more than 4.0 kg (9 lb). The finish shall be lightly textured black or white.

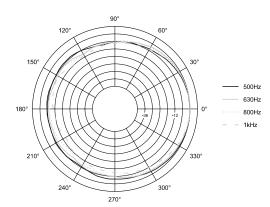
The system shall be the JBL Model Control 25AV (or Control 25AV-WH) with included InvisiBall<sup>™</sup> mounting system.

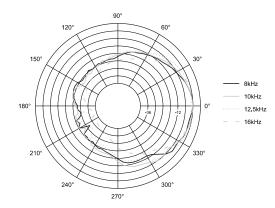
► Control<sup>®</sup> 25AV

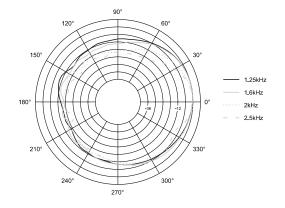
#### Vertical 1/3 Octave Polars













SS Control 25AV CRP 10M 12/99