SPECSHEET

Control® 25AV-LS

Professional Series – Two-Way Professional Compact Loudspeaker for Life/Safety Applications

Key Features:

- UL 1480 UUMW listed for use in fire alarm and/or emergency communication systems (file S7232); EN54-24 certified
- Extremely smooth frequency response
- Aluminum grille with polyester powder coating for enhanced durability
- 60W transformer for 70V or 100V lines, with 8 ohm bypass
- SonicGuard™ overload protection
- 130 mm (5¼") polypropylene-coated woofer, 20 mm (¾") titanium-coated horn-loaded tweeter
- Includes InvisiBall® mounting hardware and sealed input panel cover
- Captive screw-down input terminals
- 110° x 85° high frequency horn



Description:

The Control 25AV-LS is built on the same platform as our popular Control 25AV and is UL 1480 UUMW listed for use in fire alarm and/or emergency communication systems. The Control 25AV-LS utilizes a deep 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 quality throughout the listening area.

A top-quality, low saturation transformer, enables the loudspeaker to be used on either 70 volt or 100 volt distributed speaker lines, with similar fidelity performance to the 8 ohm bypass position.

The patented InvisiBall® 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 utilizing an aluminum grille featuring polyester powder coating and liquid-tight MTC-PC2 terminal covers.

Coating the woofer cone in polypropylene and terminating its circumference in JBL's WeatherEdge™, 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.

Specifications:

System	
Frequency Range (-10 dB)[1]	90 Hz – 20 kHz
Power Capacity[2]	200W Continuous Program Power (at 8 ohm bypass mode) 100W Continuous Pink Noise (at 8 ohm bypass mode) 60W (at 60W tap setting)
Nominal Sensitivity	88 dB, 1W at 1m (1 kHz – 10 kHz, ave., at 8 ohm bypass mode); 73 dB, 1W at 4m per EN54-24 (100 Hz – 10 kHz, ave., at 166 ohm Tap 3)
Nominal Coverage Angle	110° x 85° (1 kHz to 16 kHz, ave.)
Typical Horizontal	360° at 0.5kHz, 149° at 1kHz, 112° at 2kHz, 122° at 4kHz
Typical Vertical	360° at 0.5kHz, 139° at 1kHz, 101° at 2kHz, 78° at 4kHz
Directivity Factor (Q)	4.8 (500 Hz to 4kHz)
Directivity Index (DI)	6.5 dB (500 Hz to 4kHz)
Rated Maximum SPL	107 dB @ 1 m (3.3 ft) average, 113 dB peak, at 8 ohm bypass mode3; 87 dB at 4 m (13.2 ft) average, at 60W tap setting, measured.
Rated Impedance	8 ohms (in bypass, position 5, mode) - tap 1: 667 ohms; tap 2: 333 ohms; tap 3: 166 ohms, tap 4: 82 ohms (typical)
Transformer Taps*	60W 30W, 15W, (& 7.5W @ 70V)
Transducers	
Low Frequency	130 mm (5.25 in) with polypropylene coated paper cone with WeatherEdge surround, 25 mm (1 in) voicecoil on kapton former
High Frequency	20 mm (0.75 in) titanium coated PEI
Enclosure	
Input Connectors	Captive screw-down terminals, zinc-plated copper base, nickel plated metal screws/washers, accepts up to 9 mm outside 4 mm inside open lug, plus bare wire up to 12 AWG (2.5 mm)
Cabinet Material	ABS, (materials rated UL94-5VA)
Grille	Aluminum with polyester powder coating
Safety Agency	UL1480-UUMW listed (S7232), EN54-24:2008 certified, NFPA90, NFPA70A, and in accordance with the requirements of IEC60849/EN60849
Dimensions (H x W x D)	236 x 186 x 159 mm (9.3 x 7.4 x 6.3 in)
Net Weight (each)	3.8 kg (8.4 lbs)
Shipping Weight (pair)	8.6 kg (19 lbs)
Included Accessories	» 1 pc MTC-PC2 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 brackets 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. See JBL Control Contractor Bracket and Adapter Handbook.

* 70V: 7.5W, 15W, 30W and 60W taps ("rated voltage" power testing performed with 6dB crest-factor IEC pink noise at 50V RMS, 100V peak)

100V: 15W, 30W and 60W taps ("rated voltage" power testing performed with 6dB crest-factor IEC pink noise at 70V RMS, 140V peak)

[1] Free field

[2] 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.

[3] Calculated based on power rating and measured sensitivity, exclusive of power compression

Note (Relative to center of cabinet): Reference Axis=0 degrees/on axis, Reference Plane=on axis, Horizontal Plane=on axis.

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

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Safety and Regulatory Information:

The Control 25AV-LS has passed extensive testing and is in compliance with the following specifications and uses:

- Listed UL-1480, category UUMW when installed with a junction box (on-wall or in-wall). For use with non-DC supervised systems.
- General Purpose Use Listed UL-1480, Category UEAY
- Control 25AV-LS is suitable for use outdoors in wet locations
- Control 25AV-LS is suitable for use indoors in damp locations
- Suitable for installation using Class 1, Class 2 or Class 3 wiring methods in accordance with NFPA 70, National Electric Code, 2002, Article 640, and with NFPA 72 for use with non-DC supervised control panels / amplifiers.
- Suitable with fire alarm circuit wiring methods in accordance with NFPA 70, National Electric Code, 2002, Article 760, and with NFPA 72 for use with non-DC supervised control panels/amplifiers.
- EMC Directive 89/336/EEC and Article 10 (1) of the directive EN50081-1 and EN50082-1
- Tested to IEC 60268-5
- EN54-24 certified (Type B)

Measured audibility for the Control 25AV-LS at 10 feet (3.1 meters):

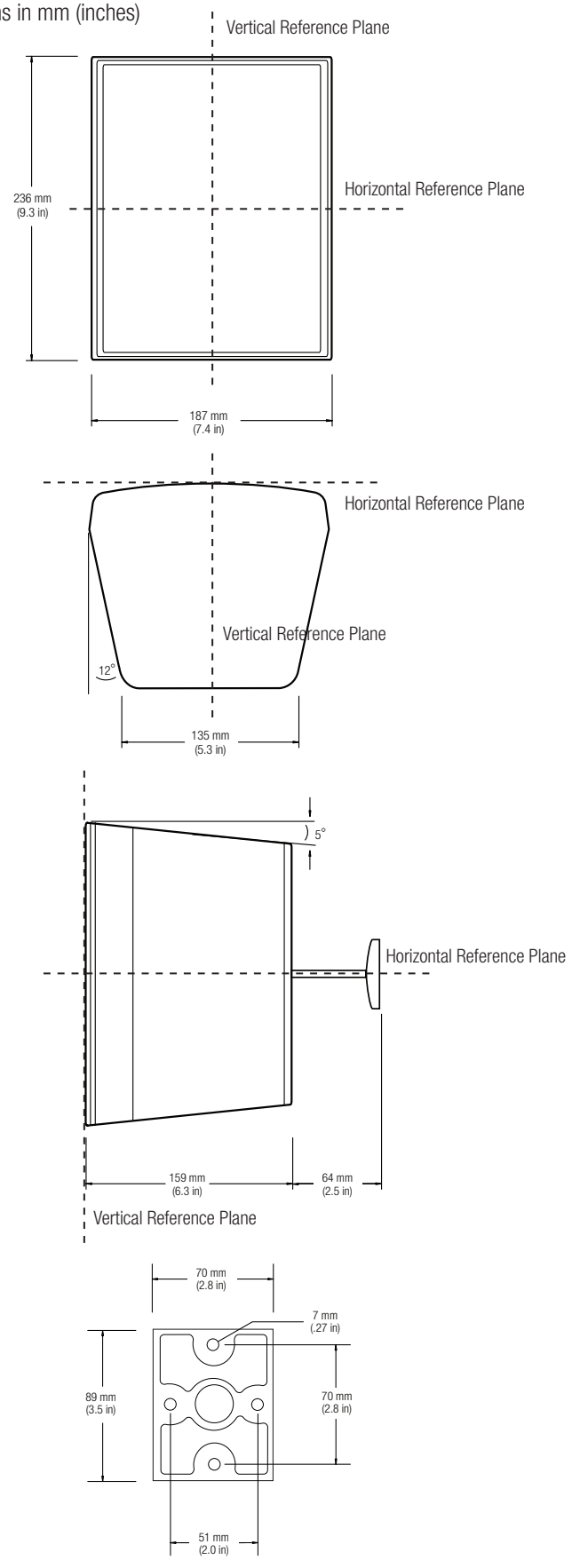
Tap	Sound Pressure Level dB(A)
70V, 7.5W	80 dB
70V, 15W	83 dB
70V, 30W	86 dB
70V, 60W	88 dB
100V, 15W	83 dB
100V, 30W	86 dB
100V, 60W	88 dB
8 ohm	90 dB

Measured 1/3 Octave Contributions to Frequency Response:

Frequency (Hz)	SPL, 1W/4m (dB)
500	61 dB
630	63 dB
800	61 dB
1000	62 dB
1250	65 dB
1600	63 dB
2000	62 dB
2500	64 dB
3150	63 dB
4000	62 dB

Mounting Dimensions:

Dimensions in mm (inches)

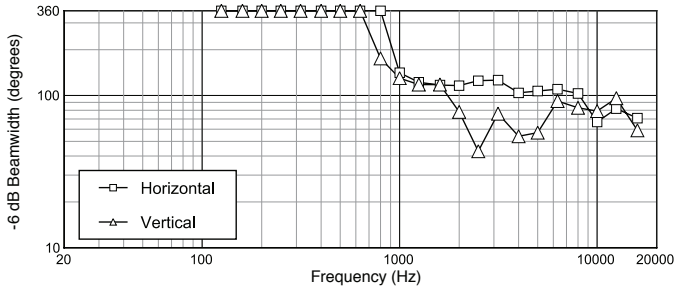


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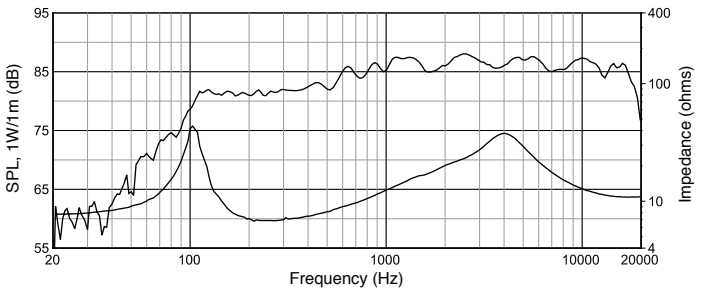
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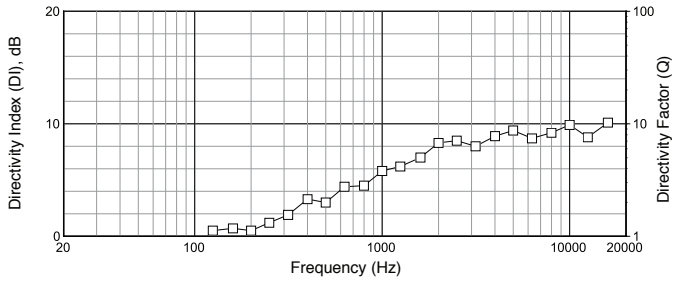
Beamwidth vs. Frequency:



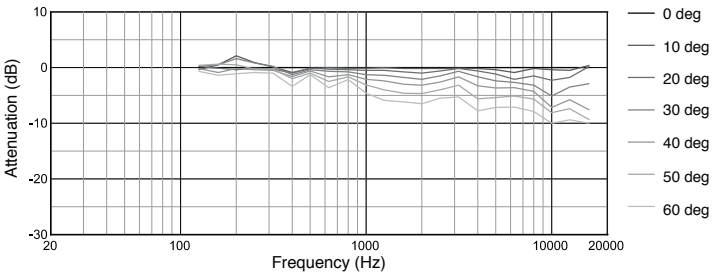
Frequency Response:



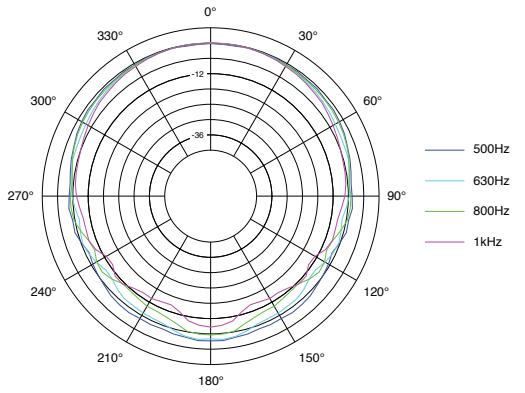
Directivity Index:

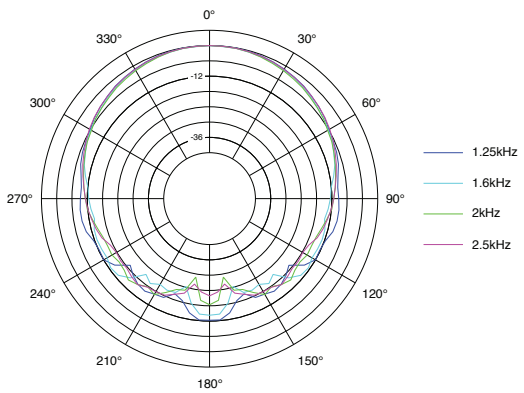


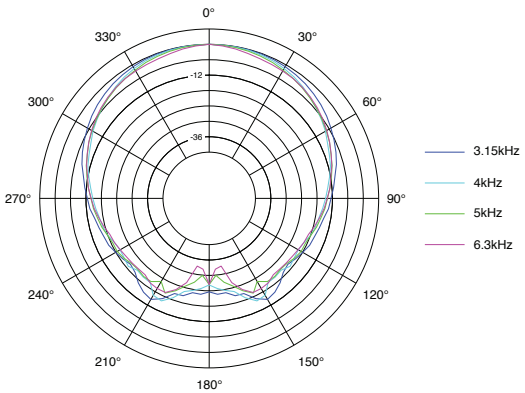
Horizontal Off-Axis Frequency Response:

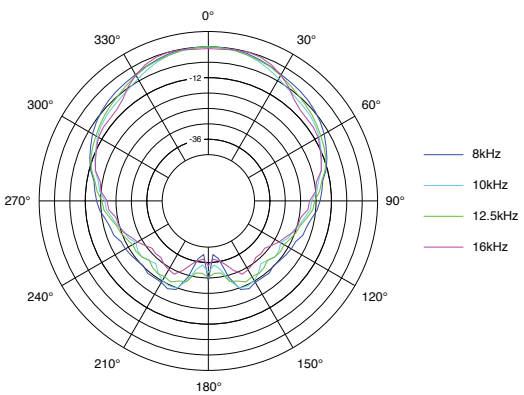


Horizontal 1/3 Octave Polars:







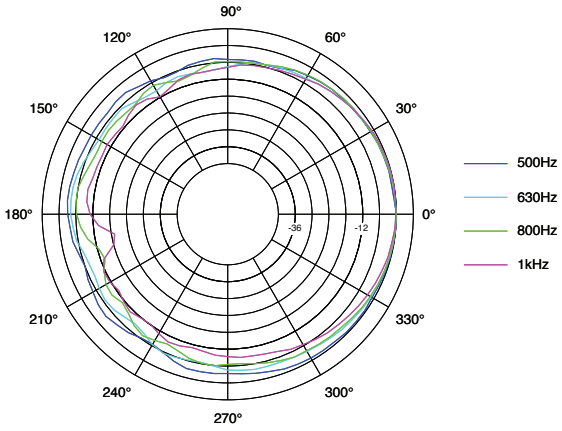


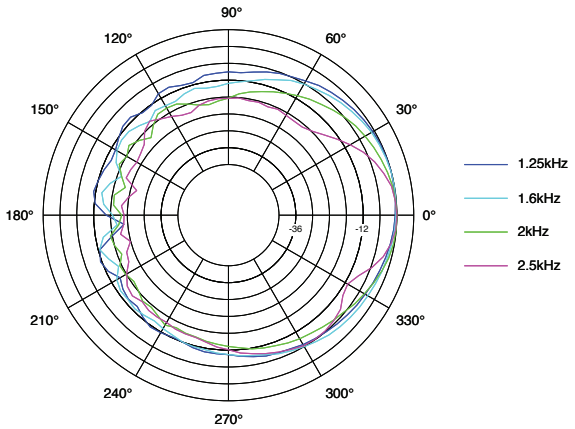
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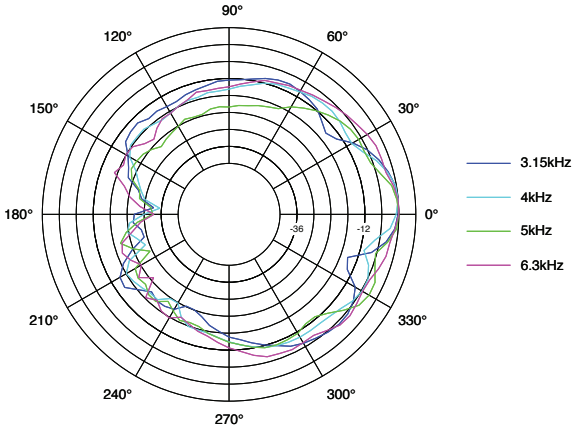
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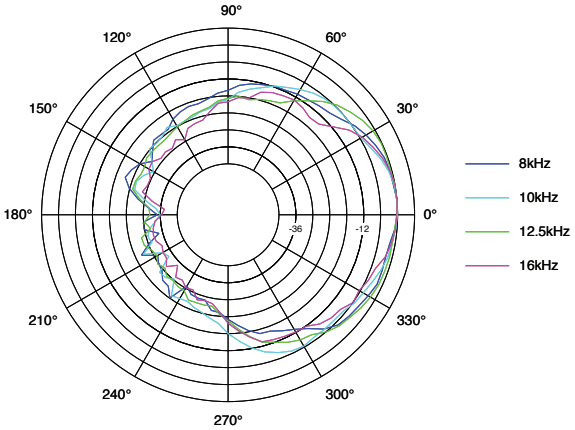
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Vertical 1/3 Octave Polars:

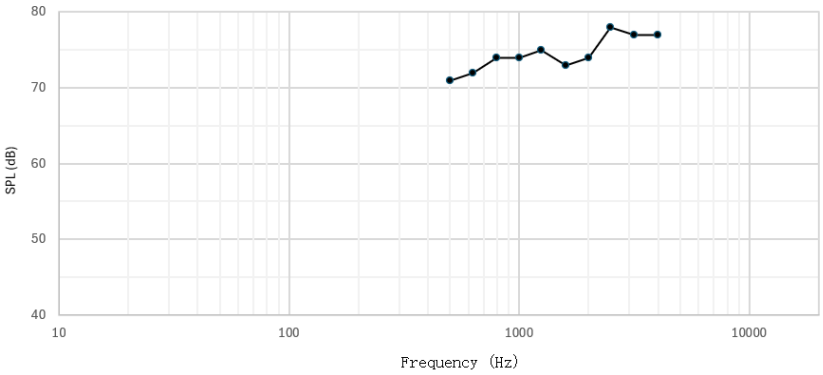








One-Third Octave Contributions to Maximum SPL (per EN54-24):



Contribution of each mid-range one-third-octave frequency band to the SPL (per EN54-24) when system is driven to Rated Maximum SPL (92 dB @ 4m; 101 dB @ 1m) using specified broadband pink-noise signal, 60W tap setting, 4m (Contribution figures: 500 Hz = 78.16 dB; 630 Hz = 78.59 dB; 800 Hz = 76.65 dB; 1000 Hz =77.97 dB; 1250 Hz = 82.76 dB; 1600 Hz =79.41 dB; 2000 Hz =80.48 dB; 2500 Hz =82.88 dB; 3150 Hz =81.62 dB; 4000 Hz = 76.67 dB).

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Issued: 11/2024