

VS3218-6 Three-Way Full Range Loudspeaker System For Permanent Installation

Venue Series

Key Features:

- ▶ Horn-loaded midrange for 60° x 50° pattern control to 500 Hz
- ▶ SVG (Super Vented Gap Cooled™) LF transducers
- ▶ Trapezoidal enclosure for arraying
- ▶ DuraFlex finish, tough, weather resistant and paintable
- ▶ 12 Suspension points (M10 Thread)

The model VS3218-6 provides unprecedented bandwidth and maximum SPL, all in a single system package. With nominal 60° coverage pattern, systems can be splayed together for increased coverage and/or SPL requirements. The powerful 18" Super Vented Gap LF transducer provides powerful bass without the need for additional subwoofers, with useable response to 35 Hz. A newly designed 10" cone midrange driver loads the waveguide midrange horn, extending pattern control and giving exceptional clarity and projection. The proven Optimized Aperture™ HF horn completes this unique design.

The VS3218-6 is designed for tri-amplified use only, utilizing the DSC260 digital controller for crossover, signal alignment and equalization functions, provides optimum system performance.

The VS3218-6 is part of the JBL Venue Series, a family of modular loudspeaker systems designed for fixed installation applications ranging from speech reinforcement to large scale music productions. All models are fitted with suspension points that accept M10 threads. The enclosures are coated with a hard wearing, weather resistant, textured finish DuraFlex. Premium 13 ply wood and an 18 gauge steel, foam backed grille enable the Venue Series system to comply with environmental test specifications.

Components:

The VS3218-6 utilizes one of JBL's finest cone transducers, the 2242H. The 18" 2242H is part of JBL's family of Super Vented Gap™ woofers and carries an AES power rating of 800 watts with minimal power compression. The cone has been treated for weather resistance.

The 2012H is a new 10" cone driver designed specifically for loading into the midrange horn, covering the mid-frequency range. The transducer is rear loaded with Thermal Transfer™ chamber for maximum efficiency.

The 38mm (1.5 in) exit 2447J large format compression driver is coupled to an Optimized Aperture Bi-Radial® horn providing smooth even coverage. The Optimized Aperture horn provides lower throat distortion than its earlier predecessors while extending frequency response to nearly 20 kHz.



Specifications:

System:

Freq. Range (-10 dB):	33 Hz - 18 kHz
Freq. Response (-3 dB):	38 Hz - 16 kHz
Horz. Coverage Angle (-6 dB):	65° averaged 500 Hz to 16 kHz
Vert. Coverage Angle (-6 dB):	50° averaged 500 Hz to 16 kHz
Directivity Factor (Q):	15 averaged 500 Hz to 16 kHz
Directivity Index (DI):	11.8 dB averaged 500 Hz to 16 kHz
Recommended Controller:	DSC260

Transducers:

Low Frequency:	2242H; 460 mm (18 in) dia., 100 mm (4 in) edgewound ribbon voice coil
Nominal Impedance:	8 Ohms
Input Power Rating:	800 W, AES; 3200 W Peak
Sensitivity ¹ :	99 dB, 1 W @ 1 m (3.3 ft)
Calculated Maximum SPL:	134 dB, @ 1 m (3.3 ft)
Recommended Amplifier ² :	1200 W
Mid-Frequency:	2012H; 254 mm (10 in) dia., 76 mm (3 in) edgewound ribbon voice coil
Nominal Impedance:	8 Ohms
Input Power Rating:	250 W, AES; 1000 W Peak
Sensitivity ¹ :	108 dB, 1 W @ 1 m (3.3 ft)
Calculated Maximum SPL:	138 dB, @ 1 m (3.3 ft)
Recommended Amplifier ² :	600 W
High-Frequency:	2447J; 100 mm (4") diaphragm and voice coil dia., 38 mm (1.5") throat dia.
Nominal Impedance:	16 Ohms
Input Power Rating:	75 W, AES; 300 W Peak
Sensitivity ¹ :	114 dB, 1 W, @ 1 m (3.3 ft)
Calculated Maximum SPL:	139 dB, @ 1 m (3.3 ft)
Recommended Amplifier ² :	200 W

Physical:

Enclosure:	Trapezoidal, 22.5° side angles, birch plywood
Environmental Specifications:	Mil-Std 810, IPX4 per IEC 529
Suspension Attachment:	12 points; accepts M10 threaded hardware
Finish:	Black DuraFlex coating
Grille:	Black powder coated zinc treated 18 gauge perforated steel grille with foam backing
Input Connectors:	2 x NL8 Neutrik Speakon connectors
Dimensions:	1213 mm x 572 mm x 572 mm (47.75 in x 22.50 in x 22.50 in)
Net Weight:	74.8 kg (165 lbs.)

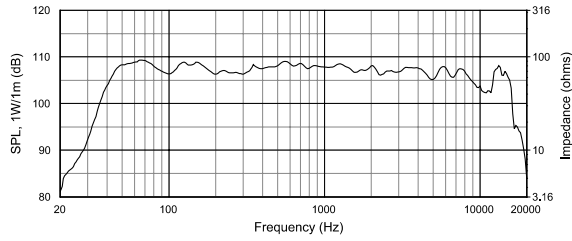
¹Measured on-axis in the far field with 1 watt (2.83 V RMS @ 8 ohms or 4.0 V RMS @ 16 ohms) input and referenced to 1 meter distance using the inverse square law. Listed sound pressure represents an average from 300 Hz to 16 kHz.

²Recommended Amplifier is a power capability value that should be taken as a guide.

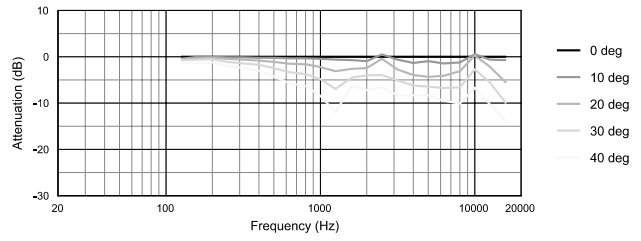
JBL continually engages in research related to product improvement. New materials, production methods, and design refinements are introduced into existing products without notice as a routine expression of that philosophy. For this reason, any current JBL product may differ in some respect from its published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

VS3218-6 3 way System

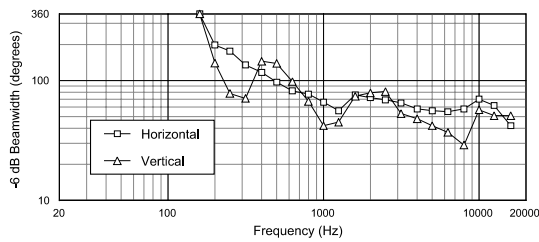
Frequency response is measured on-axis at a distance referenced to 1 meter at 1 watt using a recommended controller, shown as a half-space (2π) environment.



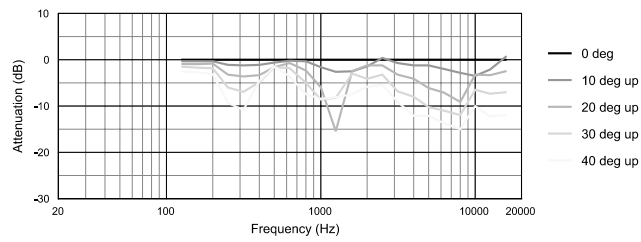
Horizontal Off-Axis Frequency Response



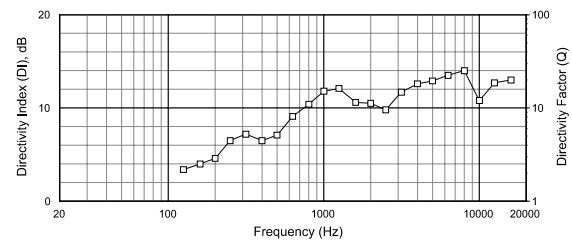
Beamwidth vs. Frequency



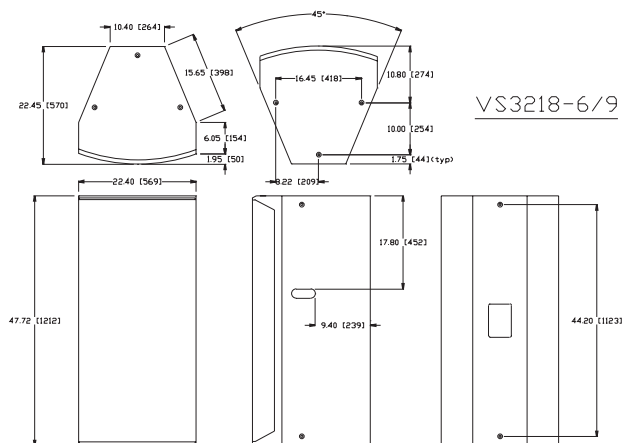
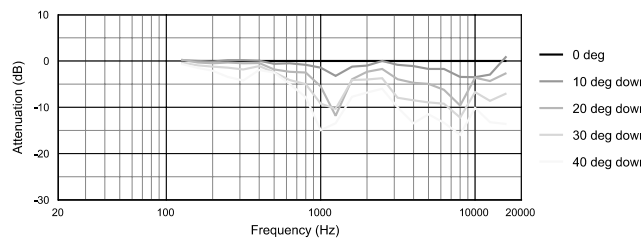
Vertical Off-Axis Frequency Response (up)



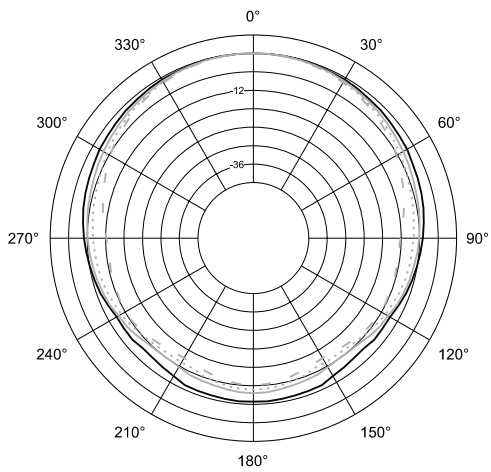
Directivity vs. Frequency



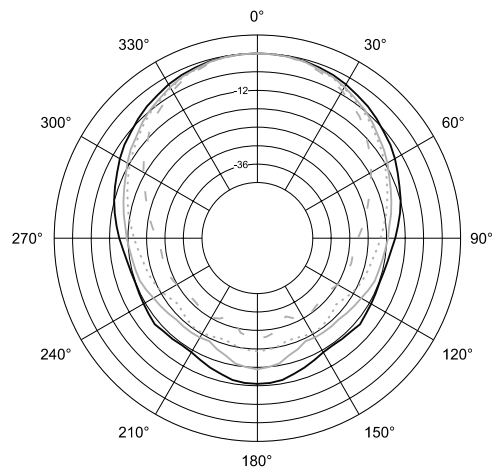
Vertical Off-Axis Frequency Response (down)



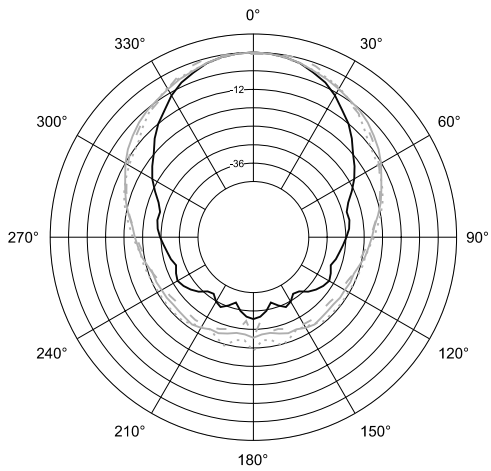
Horizontal 1/3 Octave Polars



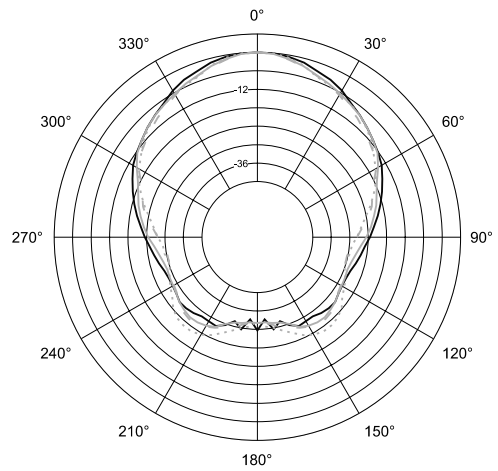
— 200Hz
— 250Hz
- - - 315Hz
- - - 400Hz



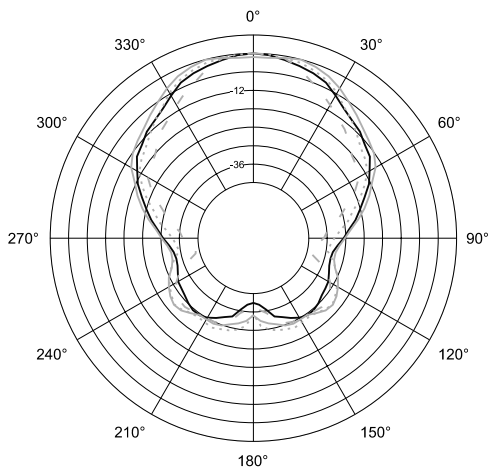
— 500Hz
— 630Hz
- - - 800Hz
- - - 1kHz



— 1.25kHz
— 1.6kHz
- - - 2kHz
- - - 2.5kHz



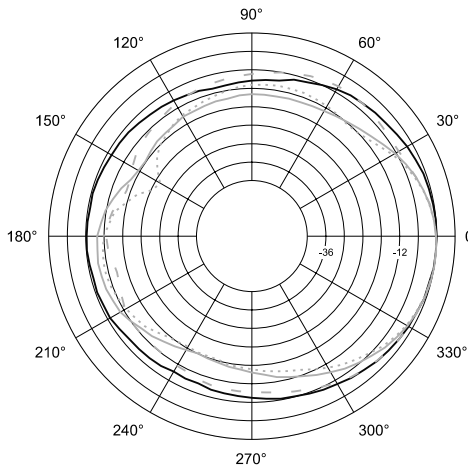
— 3.15kHz
— 4kHz
- - - 5kHz
- - - 6.3kHz



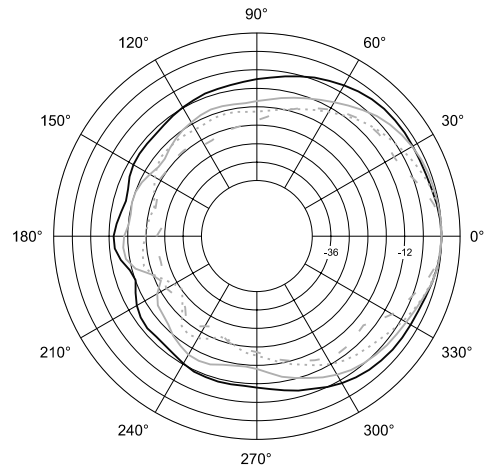
— 8kHz
— 10kHz
- - - 12.5kHz
- - - 16kHz

▶ VS3218-6 3 way System

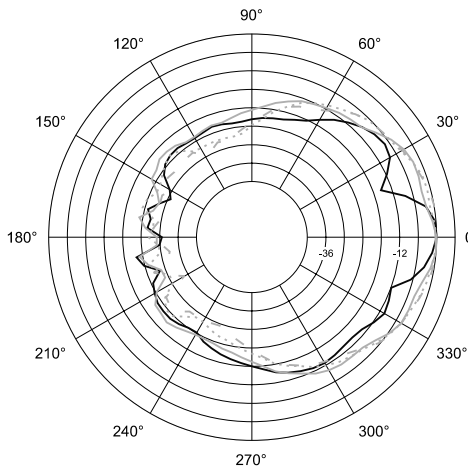
Vertical 1/3 Octave Polars



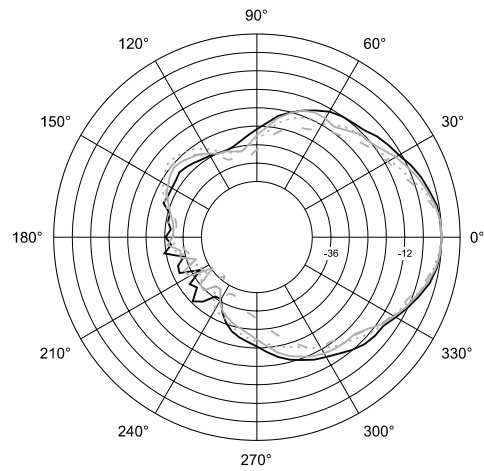
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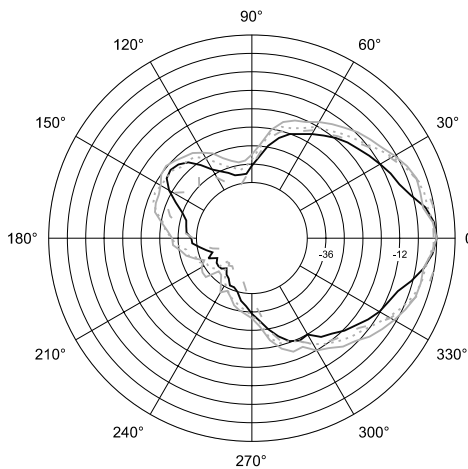
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