



VT4888

Midsize Tri-Amplified Three-Way High Directivity Line Array Element



VERTEC® Series

Application:

The VT4888 Three-Way Line Array Element is designed to deliver high-quality reinforcement of music and speech in a variety of applications including concert audio and corporate A/V presentations of all types for both portable users and fixed venue installations.

Key Features:

- ▶ Advanced technology components: Differential Drive®, neodymium magnet, dual voice coil, Direct Cooled™ cone transducers for low weight and high output
- ▶ Proprietary waveguide units couple to create precision HF vertical slot aperture
- ▶ Radiation Boundary Integrator® (RBI): Patented technology integrates output of individual bandpass elements
- ▶ Advanced construction techniques using PlyMax® provide exceptionally rigid, lightweight enclosure construction
- ▶ Rugged DuraFlex™ exterior finish; weatherized components
- ▶ Integrated S.A.F.E.™ suspension system: premium heat-treated alloys provide rigid, reliable hanging arrays
- ▶ Pre-engineered to accept optional JBL DrivePack® electronics package. Rear-panel mechanical attachments and electrical connections ensure upgrade path for self-powered system modules with integral signal processing
- ▶ For use in stand-alone arrays or in combination with other VERTEC system models

The VT4888 is a rugged, lightweight enclosure housing two 12" woofers, four 5.5" midrange radiators, and two high frequency compression drivers. Advanced components provide a high power-to-weight ratio.

Enclosure features foam-backed low frequency grilles, dense protective foam inserts for midrange apertures, and fine steel mesh grille to protect high-frequency apertures. Speaker cones are treated with weather-resistant compounds. Rigging tubes made of hard-black anodized 6061-T6 Aluminum. Hinge bars made from premium-grade chromoly alloy steel, with epoxy powder coating over plated surfaces. Hinge pins are plated and quick release pin restraining lanyards are stainless steel to resist corrosion and weather damage.

VERTEC arrays are rigid for maximum support strength, yet flexible in design and application. The VT4888's suspension hardware relies on quick-release pins and end-mounted metal tubes to couple adjacent VT4888's together. Enclosure ships with integral front and rear hinge bar set. Available protective grille cover/wheel board and soft cover ensure handy transport for rough road conditions, purchased separately as VT4888-ACC.



Specifications:

Line Array Element

Frequency Range (-10 dB):	48 Hz – 18 kHz
Frequency Response (±3 dB):	60 Hz – 16 kHz
Horizontal Coverage Angle (-6 dB):	90 deg. nominal (250 Hz – 16 kHz)
Vertical Coverage Angle (-6 dB):	Varies with array size and configuration
System Input Power Rating:	LF: 2000 W Continuous, 8000 W Peak (AES / 2 hour) MF: 600 W Continuous, 2400 W Peak (AES / 2 hour) HF: 150 W Continuous, 600 W Peak (AES / 2 hour)
Maximum Peak Output ¹ :	136 dB to 146 dB, 1m (frequency/bandpass dependent)
Recommended Amplification:	LF: 2 x 1000-2000 W into 8 ohms (2 x LF transducers powered independently) MF: 600 - 1200 W into 8 ohms HF: 300 - 600 W into 16 ohms
Recommended Signal Processing:	dbx® 4800, Crown® I-Tech, BSS FDS-366T and other Digital System Controllers supported

Transducer Sections

Low Frequency:	Two 2262H, 304 mm (12 in) dia., 76 mm (3 in) dual coil, neodymium Differential Drive®, Direct Cooled™
Bandpass Nominal Impedance:	2 x 8 ohms (LF transducers wired individually)
Input Power Rating ² :	2 x 1000 W Continuous, 2 x 4000 W Peak (AES / 2 hour) 2 x 700 W Continuous, 2 x 2800 W Peak (100 hour)
Bandpass Sensitivity:	98 dB, 1W/1M (2.83 Vrms at 3.3 ft)
Mid Frequency:	Four 2106HPL 138 mm (5.5 in) with 50 mm (2 in) dia. voice coil
Bandpass Nominal Impedance:	8 ohm (MF transducers wired in series parallel)
Input Power Rating ² :	600 W Continuous, 2400 W Peak (AES / 2 hour) 400 W Continuous, 1600 W Peak (100 hour)
Bandpass Sensitivity:	102 dB, 1W/1m (2.83 Vrms at 3.3 ft)
High Frequency:	Two 2431H, 76 mm (3 in) diameter aluminum diaphragm, 38 mm (1.5 in) throat diameter neodymium compression drivers
Bandpass Nominal Impedance:	16 ohms (HF drivers wired in series)
Input Power Rating ² :	150 W Continuous, 600 W Peak (AES / 2 hour)
Bandpass Sensitivity:	114 dB, 1W/1m (2.83 Vrms at 3.3 ft)

Enclosure

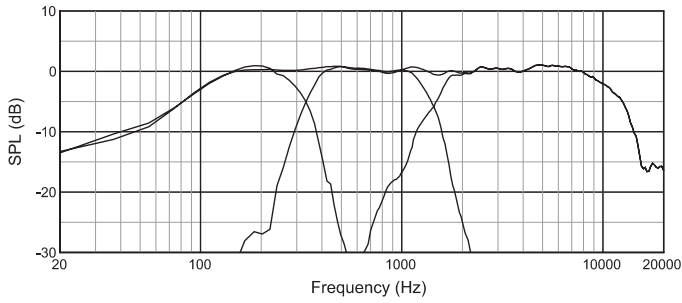
Box Construction:	Wedge frustum 5 degree side angle enclosure. PlyMax® engineered wood composite structure, DuraFlex™ finish, 6 handles
Suspension System:	S.A.F.E. hardware, integral hinge bars nest in rigging tubes on box ends. Quick release pins with restraining lanyards. Set of 4 hinge bars included. Suspend with VT4888-AF or VT4888-SF Array Frame.
Grille:	Separate LF and HF, black perforated steel, LF grilles foam backed.
Input Connectors:	Neutrik® Speakon® NL-8 (2x) Pins 1 +/- & 2 +/- for Lows, Pin 3+/- for Mids, Pin 4+/- for Highs
Dimensions (W x H x D):	990.6 mm x 355.6 mm x 508 mm (39 in x 14 in x 20 in)
Net Weight:	51 kg (113 lb)
Shipping Weight:	59 kg (130 lb)

¹Calculated maximum SPL based on rated peak power and measured sensitivity

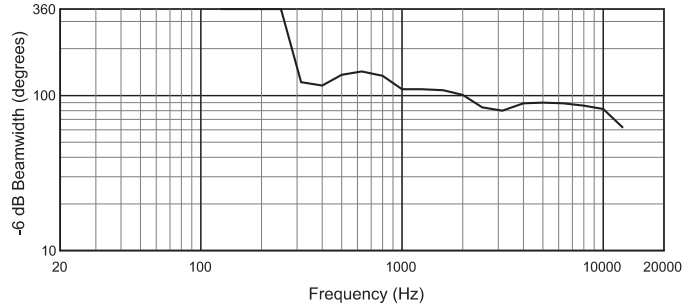
²AES Standard one decade pink noise with 6 dB crest factor within device's operational band, free air. Standard AES 2 hr rating plus long term 100 hr rating are specified for cone transducers.

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.

▶ VT4888 Midsize Tri-Amplified Three-Way High Directivity Line Array Element



Normalized Frequency Response
(Individual bandpasses with composite overlay)



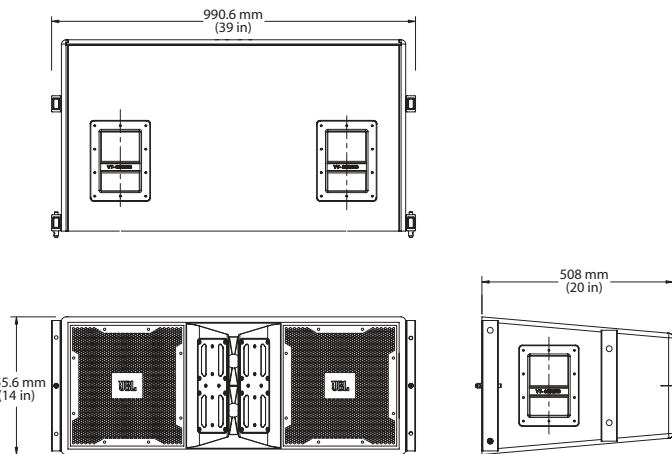
Horizontal Beamwidth, Single Element and Typical Array

VT4888 Acoustical Measurements

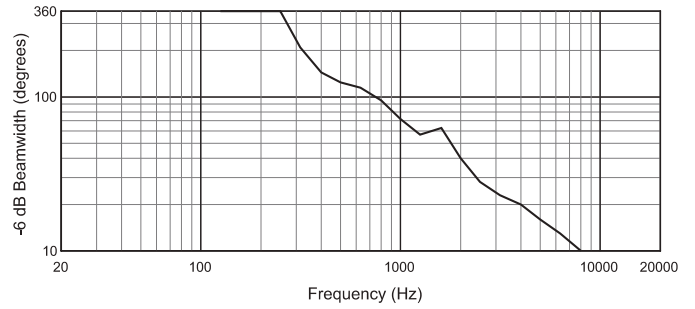
The frequency response measurement shows individual band-pass responses with composite response overlay. The Vertical Beamwidth results range from a single box up to an 8-box array with 10° spay angles between adjacent array elements.

All measurements provided herewith are derived from data gathered with a calibrated measurement microphone centered on-axis of the box or array, with polar data points taken symmetrically around the measurement axis.

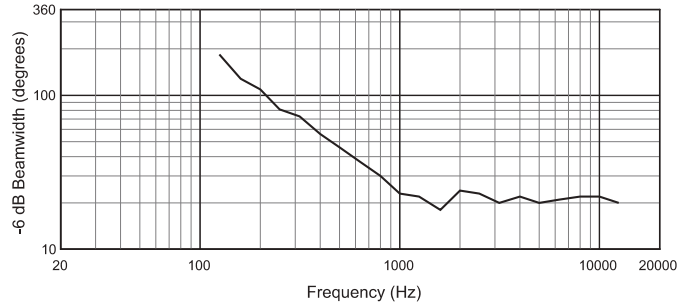
All polars were taken as groundplane measurements at a distance of 10 meters, with data gathered on 5-degree intervals from 0-355° using the MLSSA measurement system.



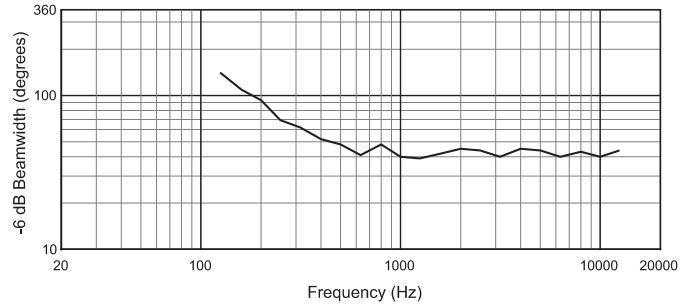
System Dimensions (WxHxD):
990.6 mm x 355.6 mm x 508 mm including attached suspension hardware



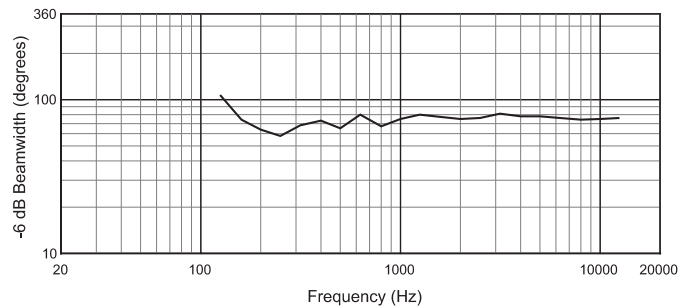
Vertical Beamwidth, Single Line Array Element



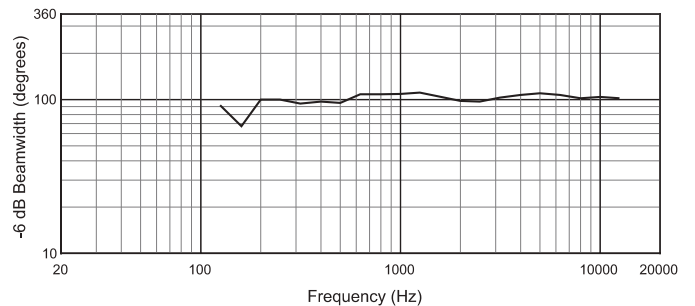
Vertical Beamwidth, Two Element Array
(10° spay between cabinets)



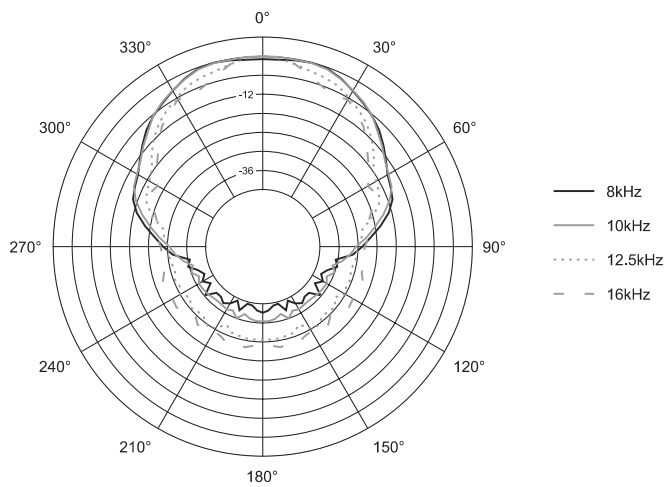
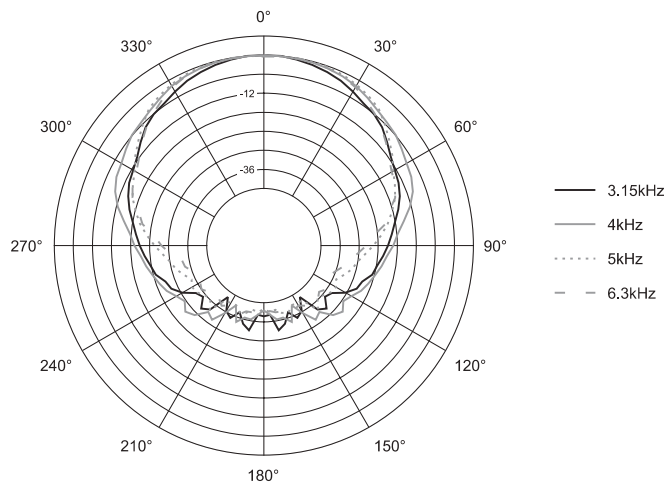
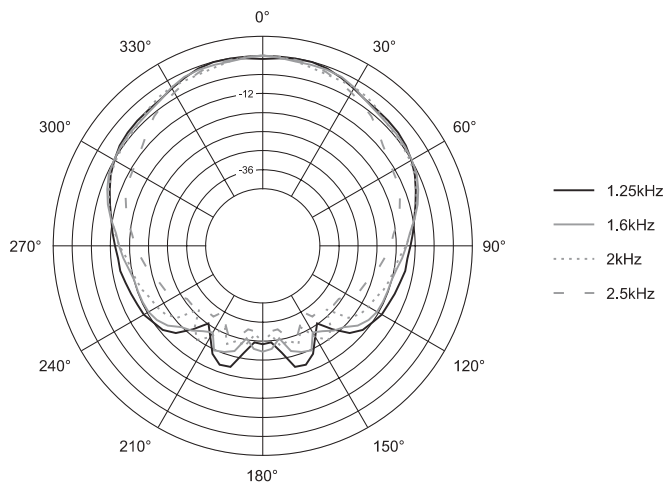
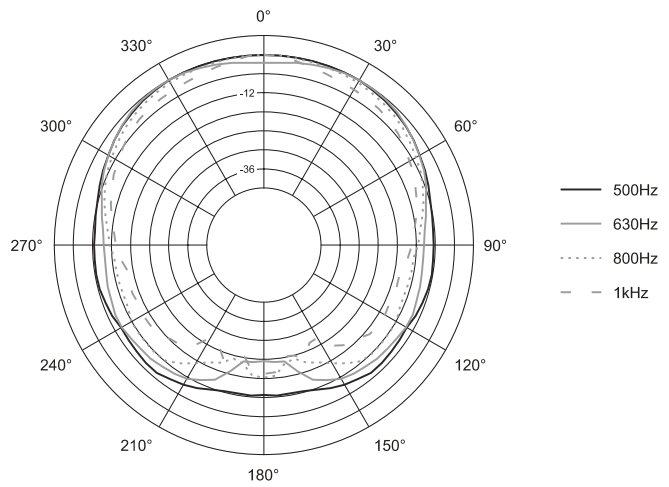
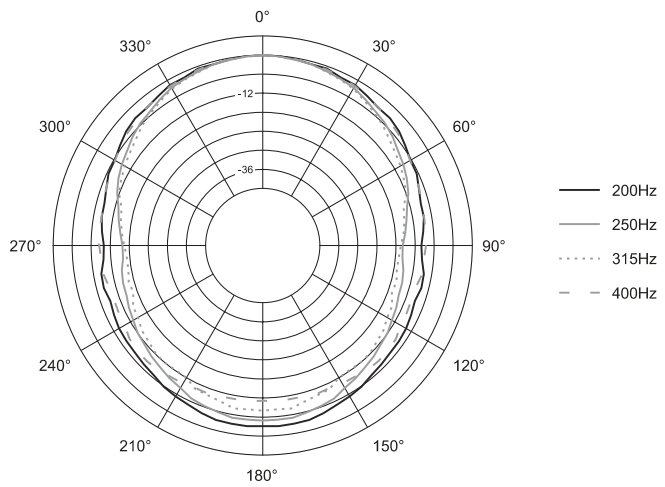
Vertical Beamwidth, Four Element Array
(10° spay between cabinets)



Vertical Beamwidth, Six Element Array
(10° spay between cabinets)



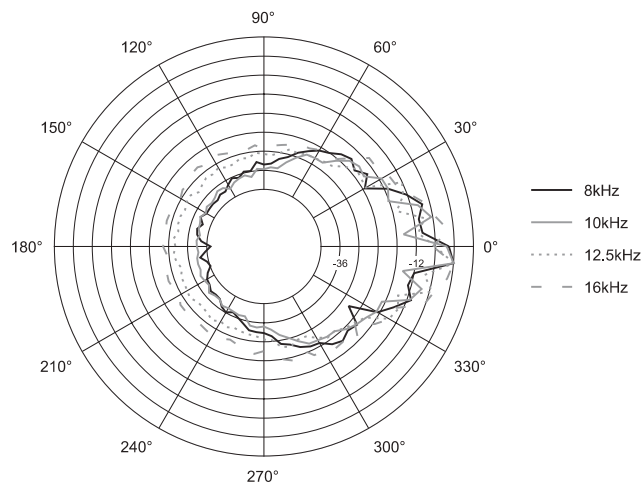
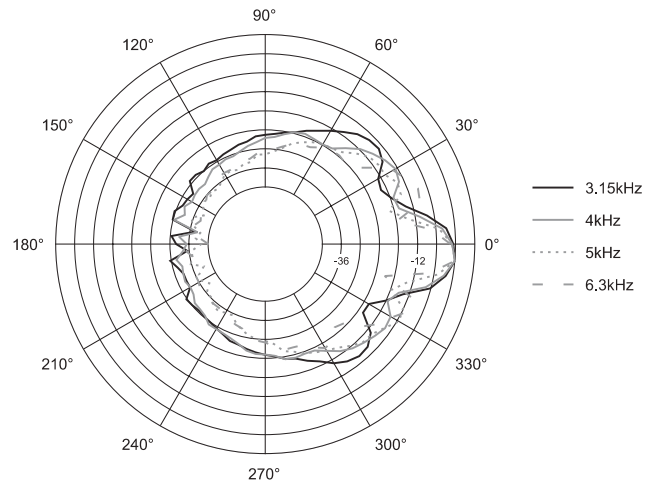
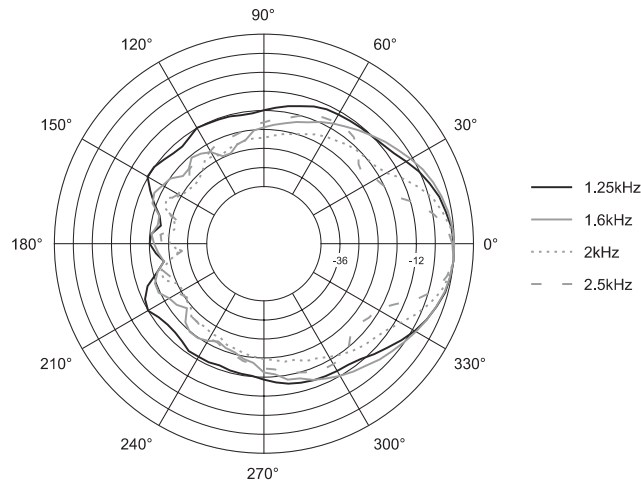
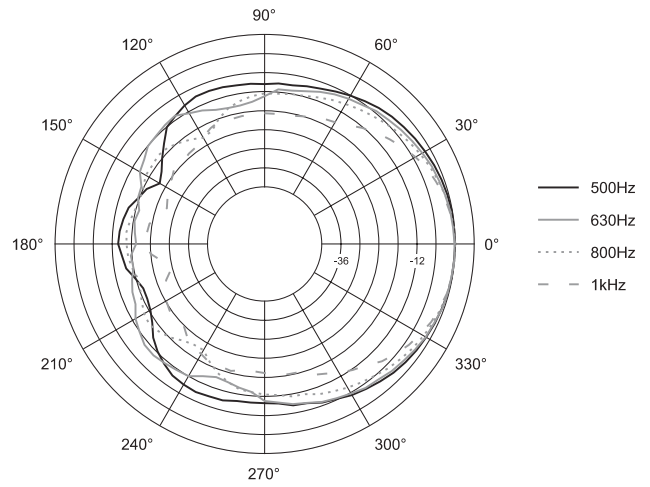
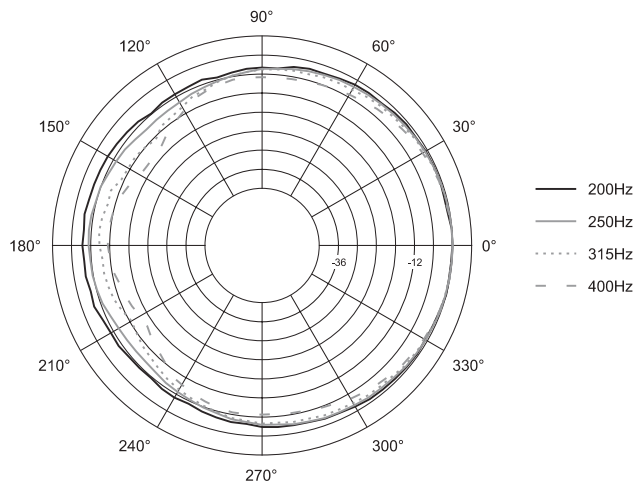
Vertical Beamwidth, Eight Element Array
(10° spay between cabinets)



Horizontal 1/3 Octave Polars (Single VT4888 Array Element)

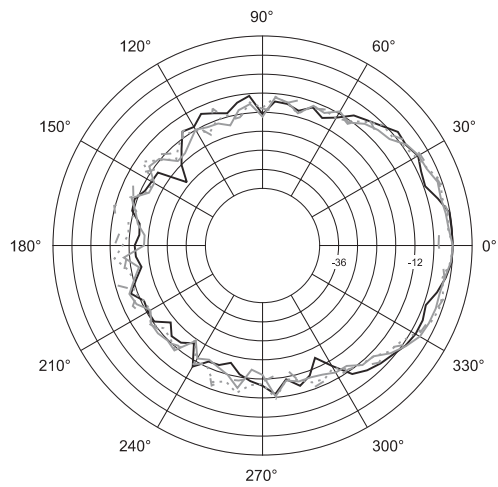
Data taken as groundplane measurements at a distance of 10 meters, gathered on 5-degree intervals from 0-355° using the MLSSA measurement system.

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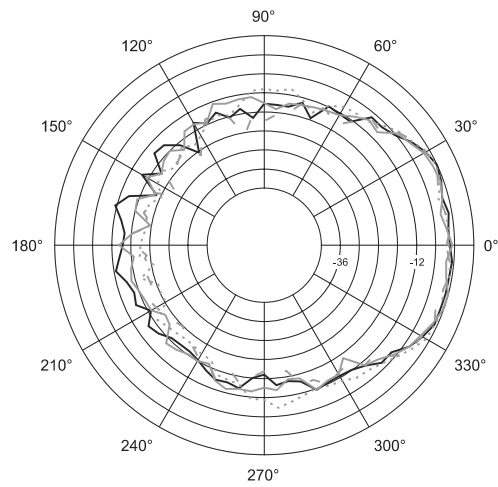


Vertical 1/3 Octave Polars (Single VT4888 Array Element)

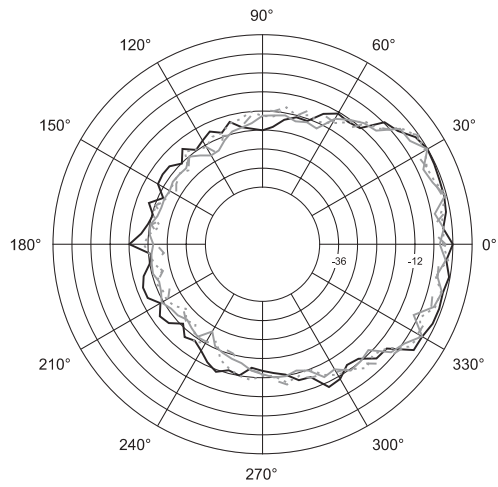
Data taken as groundplane measurements at a distance of 10 meters, gathered on 5-degree intervals from 0-355° using the MLSSA measurement system.



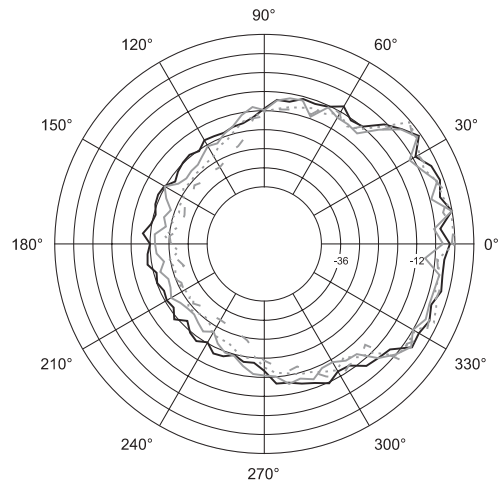
- 200Hz
- 250Hz
- 315Hz
- - 400Hz



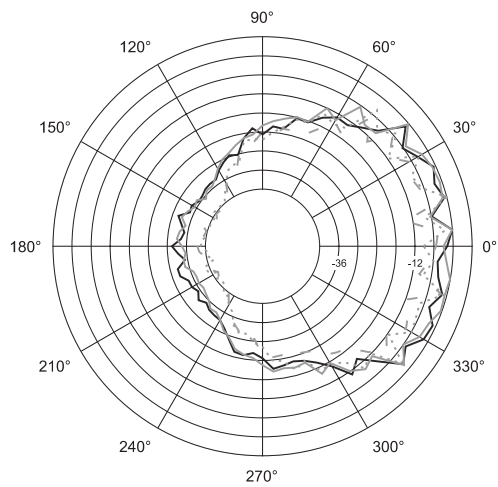
- 500Hz
- 630Hz
- 800Hz
- - 1kHz



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



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



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

Vertical 1/3 Octave Polars (8-Box Array of VT4888 Array Elements)

Data taken as groundplane measurements at a distance of 10 meters, gathered on 5-degree intervals from 0-355° using the MLSSA measurement system.

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VERTEC System Arrays

The VT4888 is an articulating line array element designed for use in vertically oriented, multi-box systems. A nominal horizontal coverage pattern of 90° is maintained, while setting the individual box angles allows the creation of arrays with varying vertical coverage angles. Vertical coverage of an array is a function of the number of boxes used and the splay angles chosen.

VT4888 enclosures can be suspended from the available VT4888-AF or VT4888-SF array frames. Due to the use of JBL's S.A.F.E. suspension hardware system, rigid arrays can be constructed that can be tilted either upwards or downwards at radical angles. Front hinge bars are tightly coupled, while rear hinge bars are used to set angles from zero to ten degrees for adjacent enclosures.

VT4888-AF (Array Frame)

This array suspension frame is crafted of 6061 heat-treated aluminum. It includes 11 (eleven) attachment holes for shackles, each fitted with bronze bushings for long life. These holes are set on approx. 4" centers. Each hole has an I.D. (inner diameter) of 25.4 mm (1 in). Array frames are fitted with SAE Grade 8 bolts, 7075 Grade aluminum receiver blocks and steel quick release pins with stainless steel restraining lanyards. The VT4888-AF can also be used to groundstack up to 6 enclosures. Also used with VT4882 subwoofers. Weight: 38 kg (83 lb).

VT4888-SF (Short Frame)

This array suspension frame is crafted in similar fashion to the VT4888-AF. The VT4888-SF is primarily intended for use with smaller clusters or distributed satellite arrays. Optional anchor for use on bottom of large arrays. Can also be used to groundstack up to 4 enclosures. Also used with VT4882 subwoofers. Weight: 19 kg (42 lb).

VT4888-ACC

The VT4888-ACC includes items necessary for the proper transport and protection of one VT4888. This accessory kit includes: (1) VT4888DOLLY (P/N 350519-002) & (1) VT4888COVER (P/N 350520-001).

Important Note: The VT4888-ACC is sold as a separate item. One kit should be ordered for each VT4888 to ensure safe and reliable transport.



6-element array, VT4888, suspended application with VT4888-AF array frame



JBL Professional
8500 Balboa Boulevard, P.O. Box 2200
Northridge, California 91329 U.S.A.

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