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.

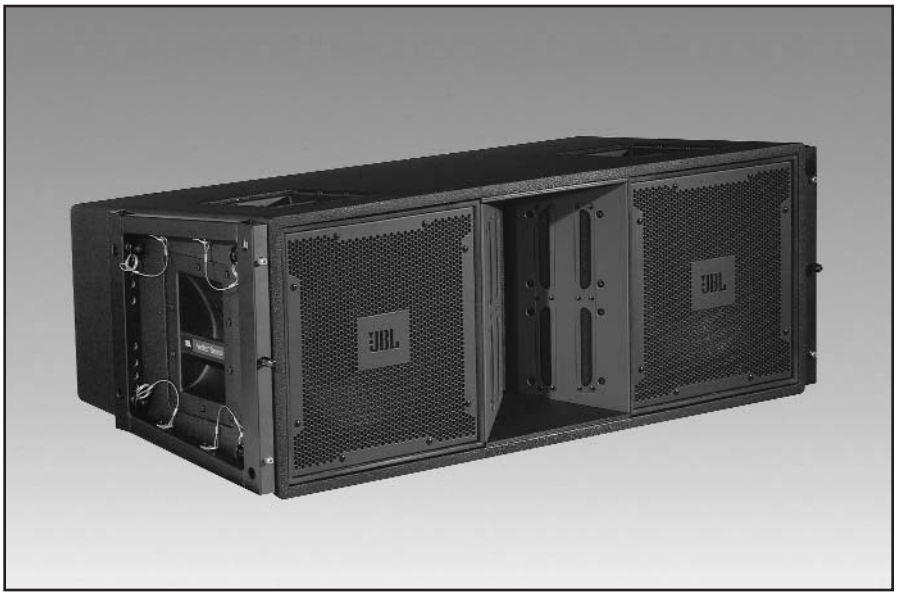
Key Features:

- Advanced technology components: Neodymium Differential Drive®, neodymium magnet, dual voice coil
- Direct Cooled™ cone transducers for low weight and high output
- 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 and hybrid materials 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 amplified electronics package. Rear-panel mechanical attachments and electrical connections ensure upgrade path for DrivePack™ self-powered system modules with integral signal processing
- For use in stand-alone arrays or in combination with other VERTEC system products

The VT4888 is a rugged, lightweight enclosure housing two 12" woofers, four 5" midrange radiators, and two high frequency compression drivers. Advanced components provide the highest power-to-weight ratio of any speaker system in its class.

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 zinc-plated surfaces. Cadmium-plated hinge pins and stainless steel quick-release pin lanyards 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. Protective grille cover/wheel board and soft cover to ensure handy transport for rough road conditions, purchased separately as VT4888-ACC.



Specifications:

Line Array Element	
Frequency Response (±3 dB):	60 Hz – 16 kHz
Frequency Range (-10 dB):	48 Hz – 18 kHz
Horizontal Coverage Angle (-6 dB):	90 deg. nominal (250 Hz – 16 kHz)
Vertical Coverage Angle (-6 dB):	Varies with array size and configuration
Maximum Peak Output:	136 dB to 146 dB, 1m frequency/bandpass dependent
Recommended Signal Processing:	dbx 480, BSS 366, XTA 226 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:	8 ohms each driver (each LF woofer individually wired)
Input Power Rating[1]:	2000 W (8000 W peak) 2 hours 1400 W (5600 W peak) 100 hours
Bandpass Sensitivity:	98 dB, 1 W, @ 1m (3.3 ft)
Mid Frequency:	Four 2106HPL, 50 mm (2 in) dia. voice coil
Bandpass Nominal Impedance:	8 ohm (drivers wired series parallel)
Input Power Rating[1]:	600 W (2400 W peak) 2 hours 400 W (1600 W peak) 100 hours
Bandpass Sensitivity:	102 dB, 1 W, @ 1m (3.3 ft)
High Frequency:	Two 2431H, 76 mm (3 in) aluminum diaphragm, 38 mm (1.5 in) throat diameter Neodymium drivers
Bandpass Nominal Impedance:	16 ohm (drivers wired in series)
Input Power Rating[1]:	150 W (600 W peak)
Bandpass Sensitivity:	114 dB, 1 W, @ 1m (3.3 ft)
Enclosure	
Box Construction:	Wedge frustum 5 degree side angle enclosure 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
Grille:	Black perforated steel, foam backed
Input Connectors:	NL8, 2 each
Dimensions (H x W x D):	355.6 mm x 990.6 mm x 508 mm (14 in x 39 in x 20 in)
Net Weight:	49 kg (108 lb)
Shipping Weight:	59 kg (130 lb)

[1]AES 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.

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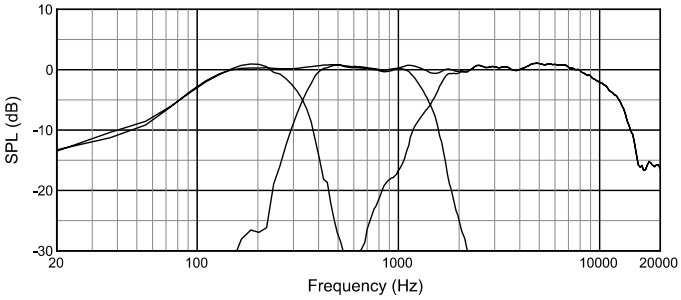
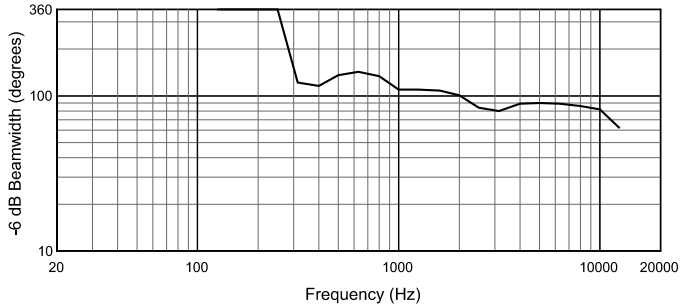


Normalized Frequency Response
(Individual bandpasses with composite overlay)



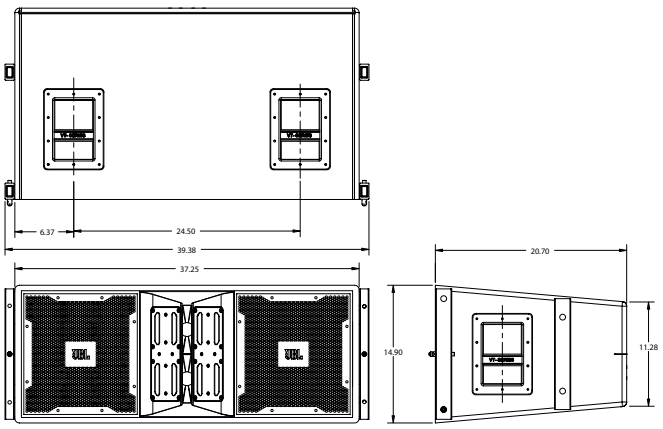
Horizontal Beamwidth, Single Element and Typical Array

VT4888 Acoustical Measurements

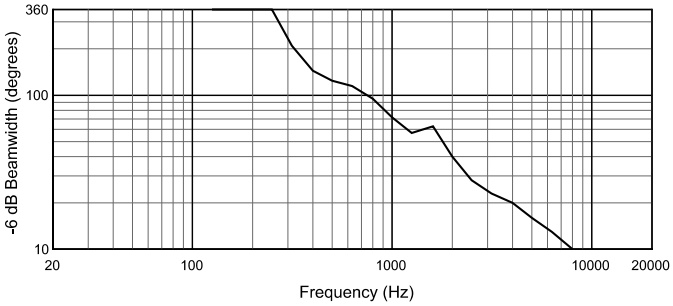
The frequency response measurement shows individual bandpass responses with composite response overlay. The Vertical Beamwidth results range from a single box up to an 8-box array with 10° splay angles between adjacent array elements.

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.

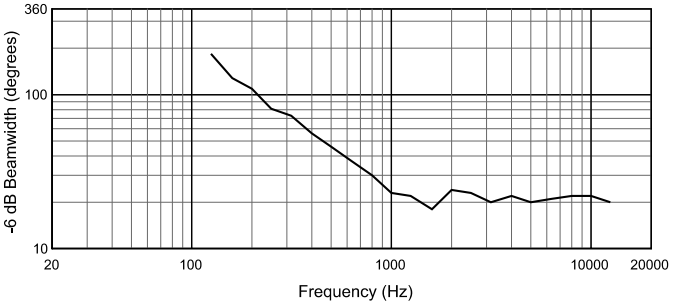
All polars were taken as groundplane measurements at a distance of 10 meters, with data gathered on 5-degree intervals from 0-355° using the MLSSA measurement system.



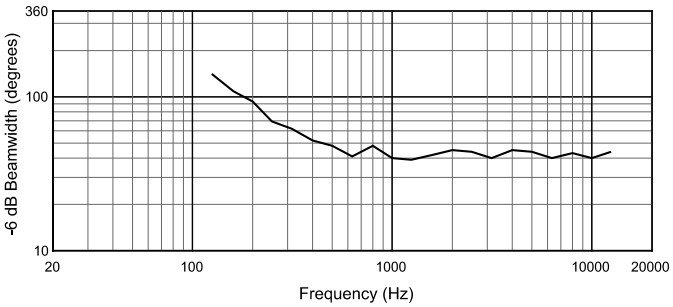
System Dimensions (HxWxD):
355.6 mm x 990.6 mm x 508 mm including attached suspension hardware



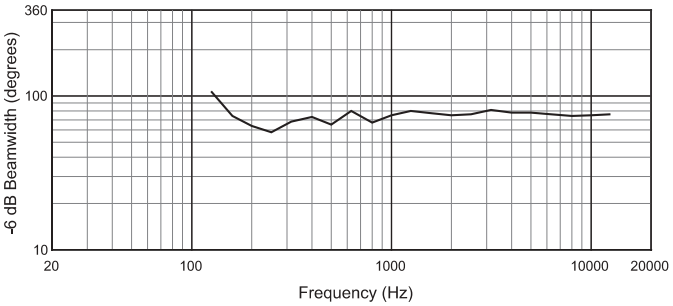
Vertical Beamwidth, Single Line Array Element



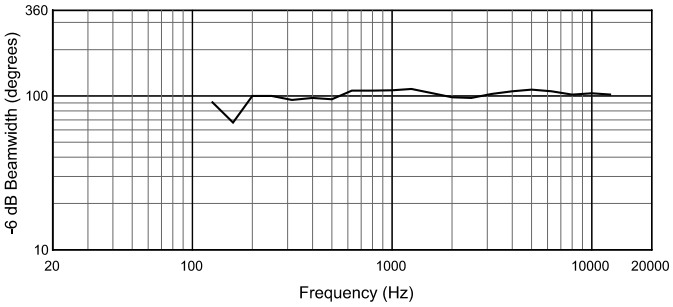
Vertical Beamwidth, Two Element Array
(10° splay between cabinets)



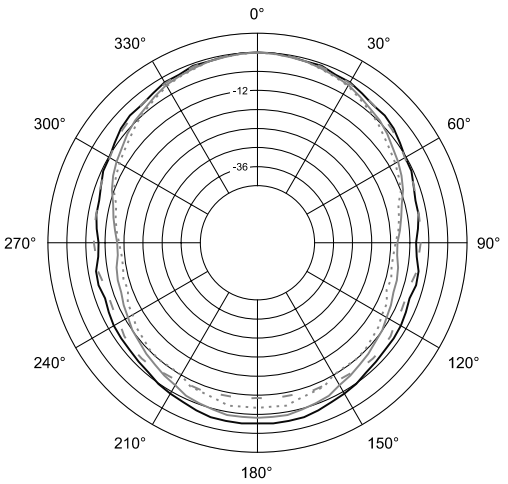
Vertical Beamwidth, Four Element Array
(10° splay between cabinets)

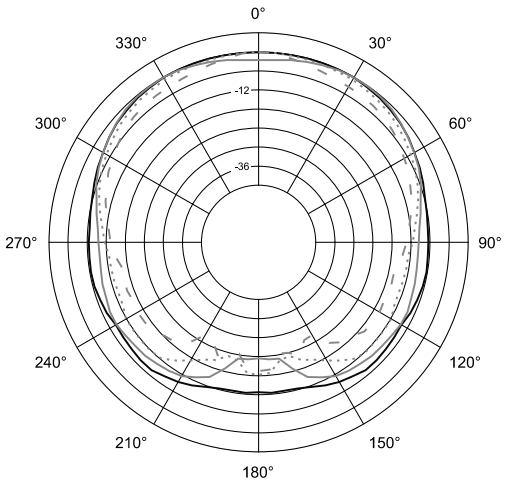


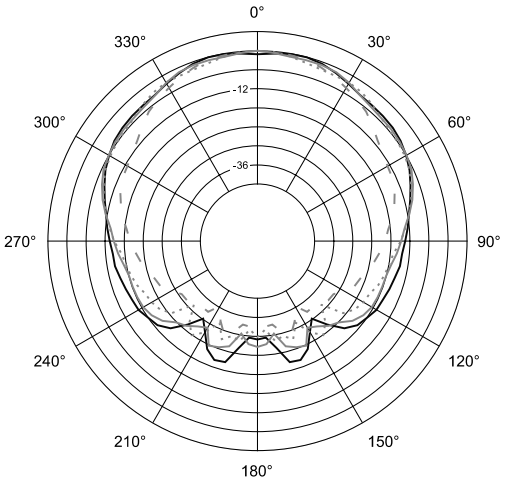
Vertical Beamwidth, Six Element Array
(10° splay between cabinets)

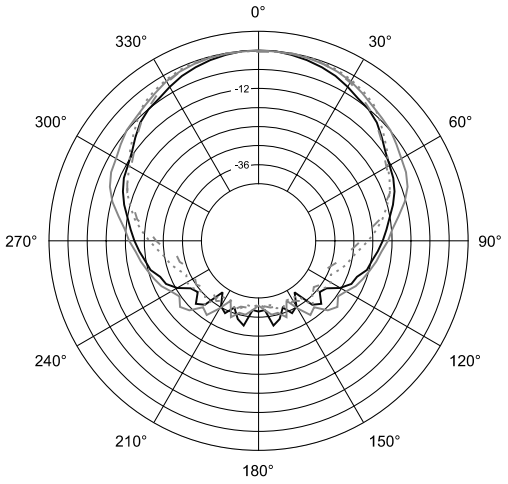


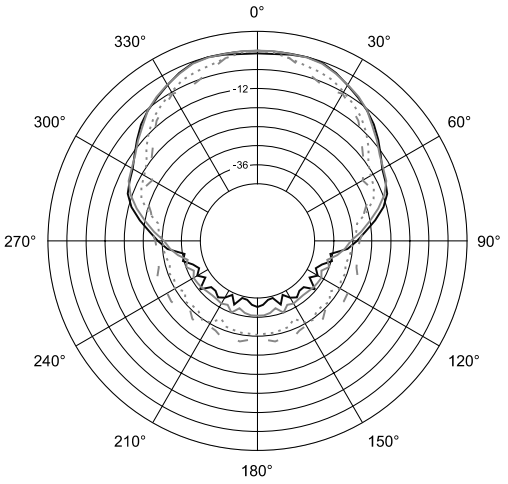
Vertical Beamwidth, Eight Element Array
(10° splay between cabinets)











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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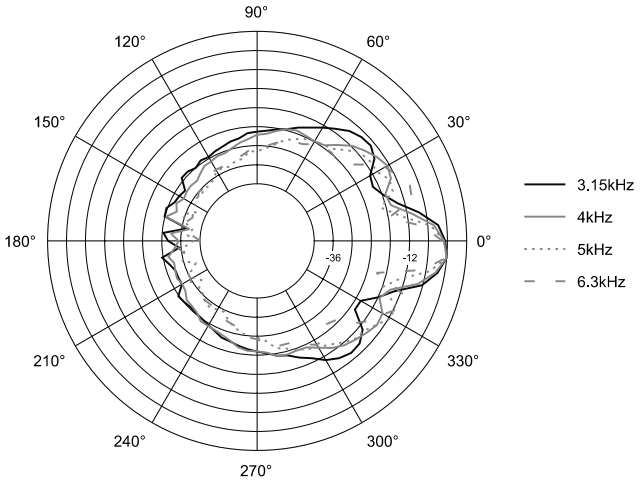
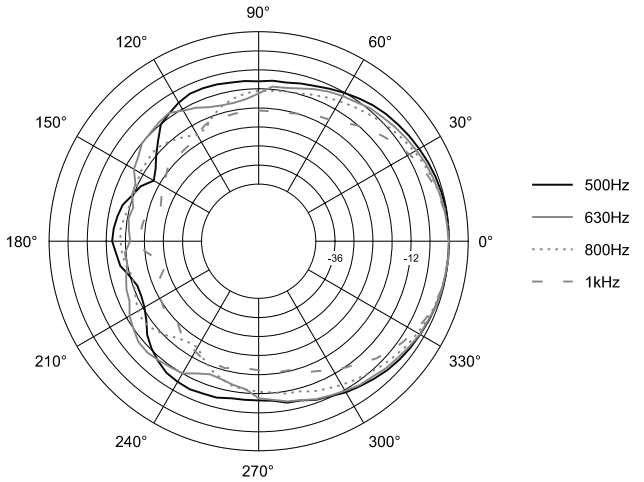
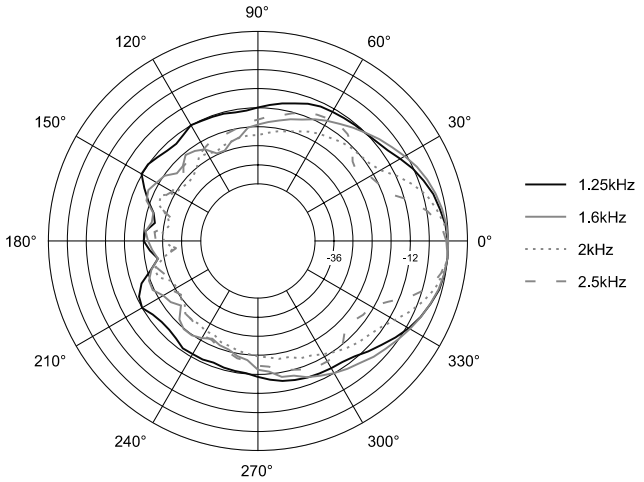
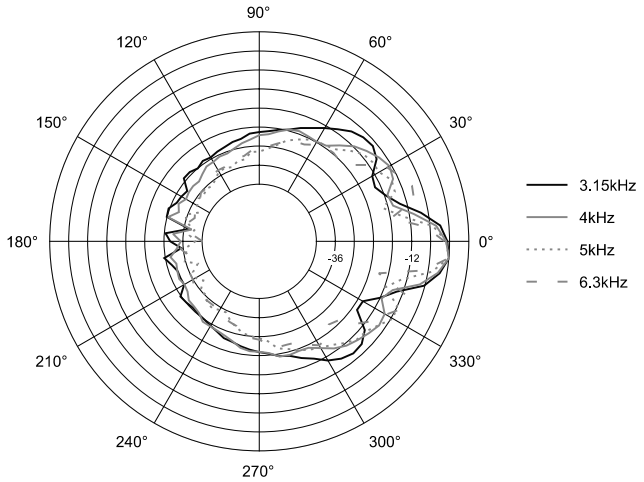
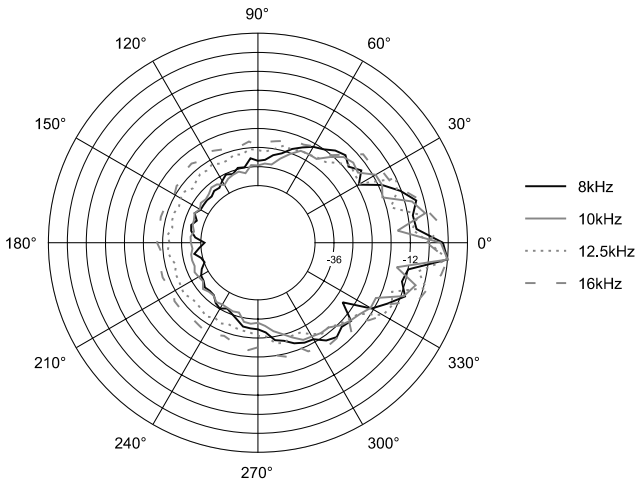




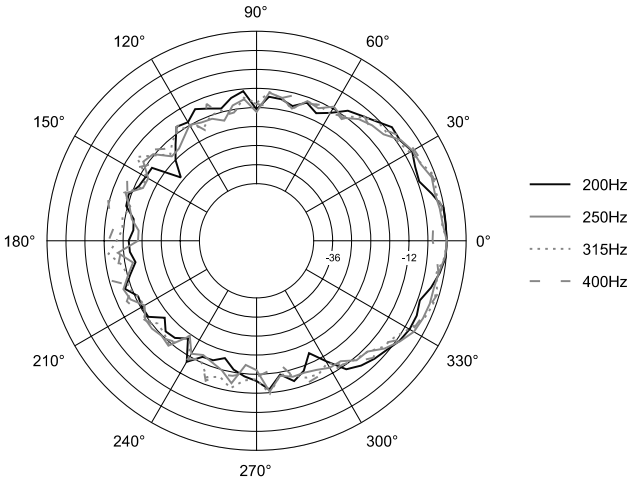


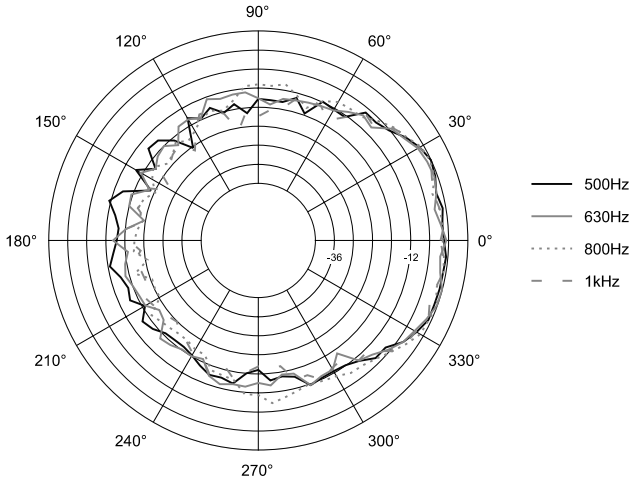


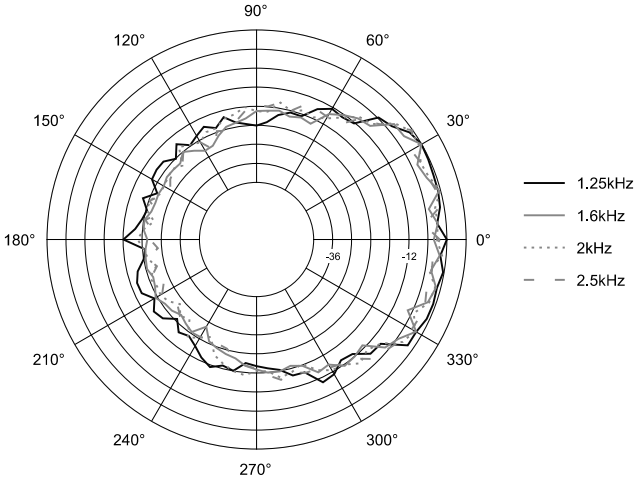


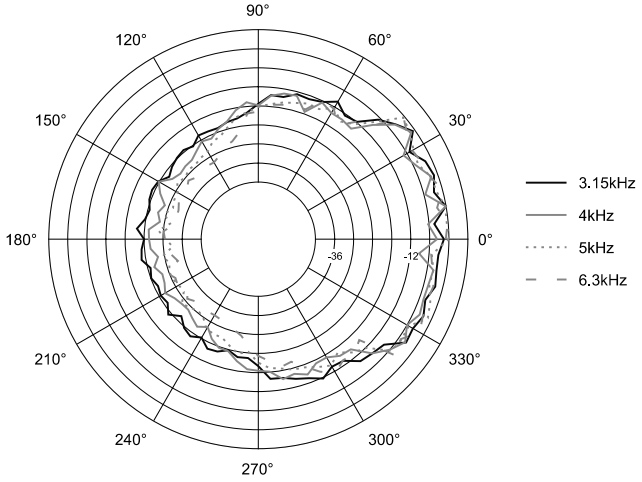
Vertical 1/3 Octave Polars (Single VT4888 Array Element)

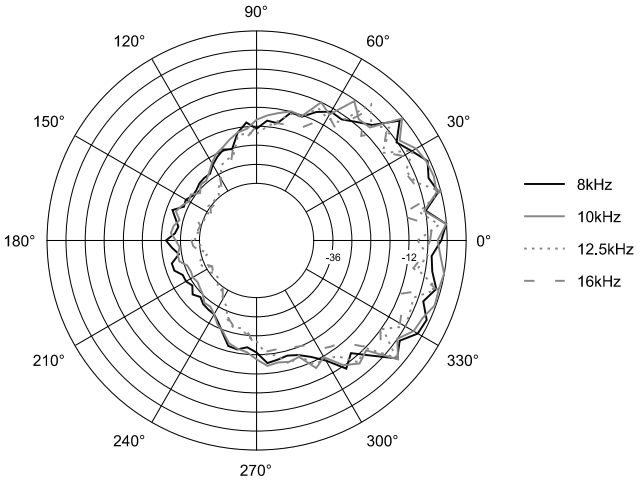
Data taken as groundplane measurements at a distance of 10 meters, gathered on 5-degree intervals from 0-355° using the MLSSA measurement system.











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

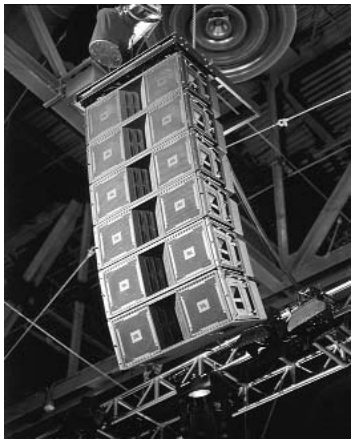
Data taken as groundplane measurements at a distance of 10 meters, gathered on 5-degree intervals from 0-355° using the MLSSA measurement system.

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

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.

Up to 18 of the VT4888 enclosures can be suspended from the available VT4888-AF or VT4888-SF array frames with a 7:1 design factor. 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.



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

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, and are designed to suspend up to 18 VT4888 enclosures at a 7:1 design factor. The VT4888-AC can also be used to groundstack up to 6 enclosures. Weight: 38 kg (83 lb).

VT4888-SF (Short Frame)

This array suspension frame is crafted in similar fashion to the VT4888-AF. Designed to suspend up to 18 VT4888 enclosures at a 7:1 design factor. The VT4888-SF is primarily intended for use with smaller clusters in tight places or distributed satellite arrays. Optional anchor for use on bottom of large arrays. It can also be used to groundstack up to 4 enclosures. Weight: 19 kg (42 lb).

VT4888-ACC

The VT4888-ACC includes items necessary for the proper transport and protection of the VT4888. This accessory kit includes: (1) VT4888-DOLLY & (1) VT4888-COVER.

Important Note: The VT4888-ACC is sold as a separate item. One kit should be ordered with each VT4888 to ensure safe and reliable transport of each system in portable use.

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