



VT4886

Subcompact Passive Three-Way High Directivity Line Array Element



VERTEC® Series

Application:

The VT4886 Subcompact Passive Three-Way Line Array Element is designed to deliver high-quality reinforcement of music and speech in a wide variety of applications including concert audio and corporate A/V presentations of all types for both portable users and fixed venue installations.

Key Features:

- ▶ A true 3-way system, unique to the subcompact category
- ▶ Highest component density and highest SPL output in its class
- ▶ Variable curvature vertical (0-15 degrees) or modular, constant curvature horizontal line array
- ▶ Integrated Mid/High waveguide provides precise vertical wavefront control and optimized 110 degree horizontal dispersion
- ▶ Four midrange transducers with Thermomaster® cooling and Radiation Boundary Integrator® technology
- ▶ Low frequency diffraction absorber eliminates cavity resonance and cabinet edge diffraction effects
- ▶ Flexible installation accessories and dedicated OEM factory presets provide unparalleled application versatility

The VT4886 is a very compact, lightweight enclosure housing two 6.5" low frequency transducers, four 2.5" midrange components and two 1" high frequency compression drivers. Advanced component design and density provide an extremely high power-to-weight ratio with more SPL output than other systems in its class.

A proprietary waveguide seamlessly integrates MF and HF section output in a next-generation implementation of JBL's patented R.B.I. (Radiation Boundary Integrator®) technology, providing precise wavefront control and optimum inter-enclosure coupling. JBL Thermomaster® technology improves heat transfer while reducing mid section power compression. LF transducers feature patented Differential Drive® technology and are matched to a low-frequency diffraction absorber with a tuned resonant-chamber that reduces cavity resonance and cabinet edge diffraction effects. A highly refined passive network minimizes insertion loss while ensuring precise impedance matching between LF, MF and HF sections.

Application flexibility was a key design criterion. Possible uses include: suspended or ground-stacked (standalone or with the companion VT4883 subcompact subwoofer) for FOH, offstage fill, stereo in-fill, center cluster or delay cluster use; suspended with VT4883 enclosures and additional ground-stacked VERTEC subwoofers for 4-way FOH use; underbalcony (1-4 enclosures); distributed front fill (1-2 enclosures); modular, constant curvature horizontal line array; downfill use with mid- or full-sized VERTEC models; pole mounting (tripod-mounted or with optional extension rod for the VT4883). For optimum performance, DSP presets have been specifically engineered for the above-mentioned configurations.



Specifications:

System	
Frequency Range (-10 dB):	65 Hz - 20 kHz
Frequency Response (±3 dB):	75 Hz - 18 kHz
Horizontal Coverage Angle (-6 dB):	110 degrees nominal (averaged 250 Hz - 16 kHz)
Vertical Coverage Angle (-6 dB):	Varies with array size and configuration
System Input Power Rating ¹ :	900 W Continuous, 3600 W Peak (AES / 2 hour) 700 W Continuous, 2800 W Peak (100 hour)
Bandpass Nominal Impedance:	12 ohms (drivers wired in series-parallel, passive network)
Bandpass Sensitivity ² :	101 dB, 1W / 1m
Maximum Peak Output ³ :	136 dB SPL, 1m
Recommended Amplification:	1400-1800 W at 12 ohms (single enclosure) 2800-3600 W at 6 ohms (two enclosures in parallel) 4200-5400 W at 4 ohms (three enclosures in parallel) 5600-7200 W at 3 ohms (four enclosures in parallel)
Recommended Signal Processing:	Crown® I-Tech HD, Crown I-Tech, dbx® DriveRack® 4800, BSS Audio™ FDS-366T Omnidrive™, BSS Audio Soundweb™ London
Transducers	
Low Frequency:	Two 2166H-1, 165 mm (6.5 in) dia., 50 mm (2 in) Dual Coil, Dual Magnet Neodymium Differential Drive®, Direct Cooled™
Mid Frequency:	Four 2103G, 101 mm (2.5 in) with 25.4 mm (1 in) dia. voice coil and Neodymium magnet
High Frequency:	Two 2414H, 25 mm (1 in) exit compression driver, Neodymium magnet, 38 mm (1.5 in) voice coil
Enclosure	
Box Construction:	Wedge frustum 7.5 degree side angle enclosure, PlyMax™ engineered wood composite structure, DuraFlex™ finish, 2 handles
Suspension System:	S.A.F.E. hardware, integral hinge bars nest in suspension tubes on box ends. Quick release pins with restraining lanyards. Set of 4 hinge bars included. Suspend with VT4886-AF Array Frame.
Grille:	Black perforated steel, foam backed
Input Connectors:	Neutrik® Speakon® NL-8 and NL-4 (2x each)
Input Selection (Slide Switch):	Pins 3+/3- (NL8) and 1+/1- (NL4) or, Pins 4+/4- (NL8) and 2+/2- (NL4)
Dimensions (H x W x D):	197 mm x 579 mm x 261 mm (7.8 in x 22.8 in x 10.3 in)
Net Weight:	15.4 kg (34 lb)
Shipping Weight:	17.5 kg (38.5 lbs)
Optional Accessories	
VT4886-AF	Array frame for suspension of VT4883, VT4886, or mixed VT4883/VT4886 arrays. Can also be used for ground stacking.
VT4886-AB	Adapter bar for attachment of multiple VT4886-AF array frames
VT4886-UB	Under-balcony adapter plate, supplied with bolt-on pole mount adapter. Can also be used as a stacking platform for distributed front fill applications.
VT4886-UB2	Basic 2 point U Bracket adapter for suspension of smaller arrays
SS4-BK2	Adjustable extension rod with M20 thread for attachment to VT4883, hand crank height adjustment and patented expanding mandrel system for secure, vibration-free attachment of optional VT4886-UB accessory and up to 3x VT4886
VT4886-HB	Horizontal bracket for arraying VT4886 enclosures as a constant curvature horizontal line array
VT4886-DF88	Downfill Adapter for suspending VT4886 under VT4888
VT4886-DF89	Downfill Adapter for suspending VT4886 under VT4889

¹ Specified JBL factory-engineered Digital Signal Processing (DSP) is required to achieve specified performance.

² Power rating with shaped pink noise per IEC 268-5 filtered by specified DSP, and calculated based on minimum impedance 60 Hz - 6 kHz.

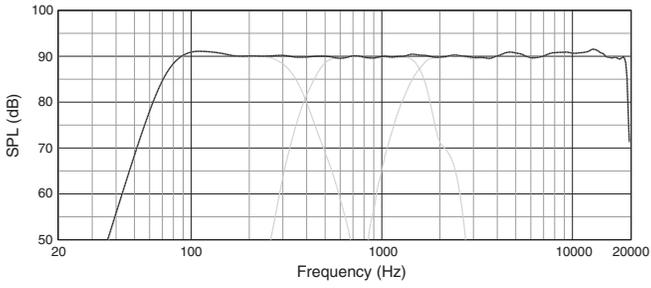
³ Anechoic sensitivity of one enclosure in free-field. Measured with 3.64 Vrms pink noise filtered by specified DSP.

⁴ Calculated maximum SPL based on rated peak power and measured sensitivity

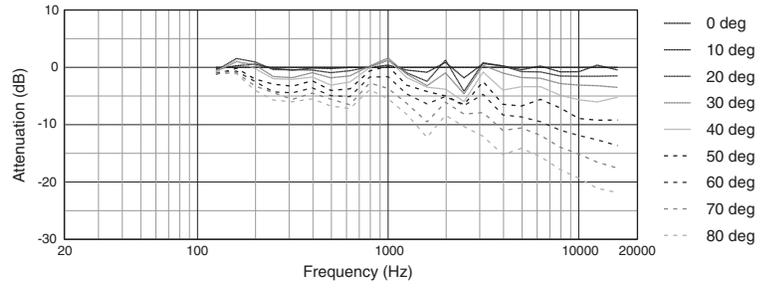
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▶ VT4886 Subcompact Passive Three-Way High Directivity Line Array Element

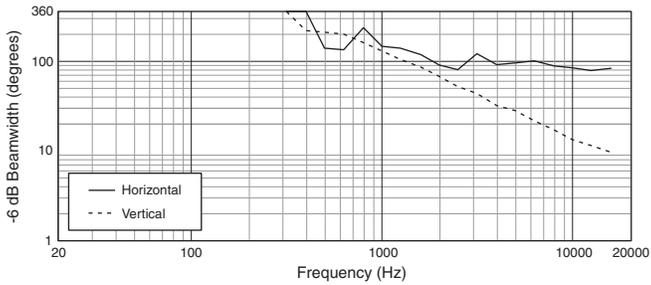
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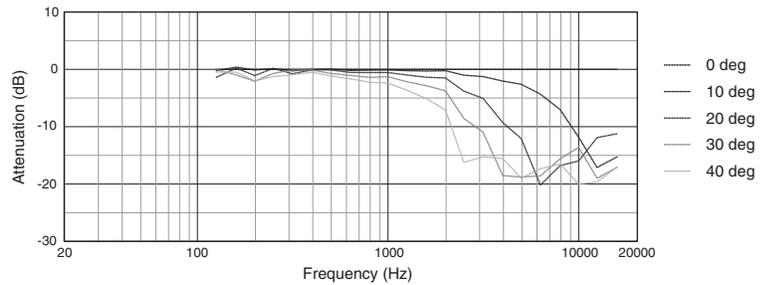
Horizontal Off-Axis:



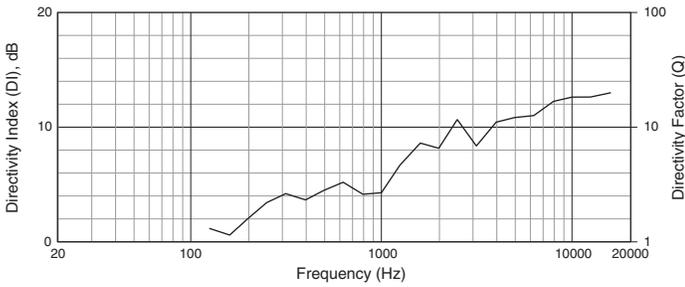
Beamwidth:



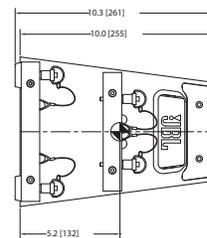
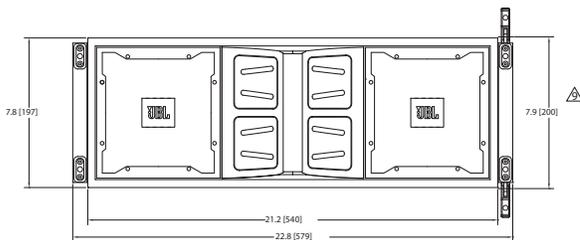
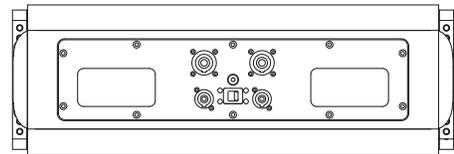
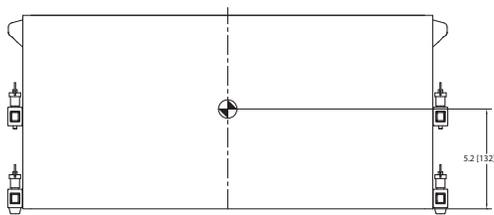
Vertical Off-Axis:



Directivity Index:



Measured response of single enclosure at 4m.
Frequency response shown with short throw (ST)
preset providing nominal flat high frequency response.



Dimensions in inches (mm)

VERTEC Subcompact System Arrays

The VT4886 is an Articulating Line Array designed for use in vertically-oriented, multi-box systems or as a horizontal, constant curvature line array. Alternatively, the VT4886 can be used individually or in smaller quantities for fill applications. When arrayed vertically, a nominal horizontal coverage pattern of 110° is maintained, while setting inter-enclosure angles allows for the creation of arrays with varying vertical coverage angles. Vertical coverage of an array is a function of the number of enclosures used and the splay angles chosen. When arrayed horizontally, constant curvature coverage of $N \times 15$ degrees is obtained (where N is the number of enclosures) with 110 degree coverage in the vertical plane.

VT4886 enclosures can be suspended in standalone applications or combined with VT4883 subwoofers using the VT4886-AF array frame. 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 fifteen degrees between adjacent enclosures.

Accessories

VT4886-AF (Array Frame)

Array frame for suspension of VT4883, VT4886, or mixed VT4883/VT4886 arrays. Can also be used for ground stacking. Crafted from structural grades of heat-treated aluminum and high tensile strength steel. Includes 9 (nine) attachment holes to accept standard $5/8$ " forged shackles, each hole fitted with bronze bushings for long life. Attachment holes are set on 2.67 " centers. Fitted with 6 (six) heat-treated steel quick release pins captively attached by stainless steel lanyards.

VT4886-AB

Adapter bar for attachment of multiple VT4886-AF array frames

VT4886-UB

Under-balcony mount plate, supplied with bolt-on pole mount adapter. Can also be used as a stacking platform for distributed front fill applications or for suspension of smaller arrays.

VT4886-UB2

Basic 2 point U bracket adapter for suspension of smaller arrays.

SS4-BK2

Adjustable extension rod with M20 thread for attachment to VT4883, hand crank height adjustment and patented expanding mandrel system for secure, vibration-free attachment of optional VT4886-UB accessory and up to 3x VT4886

VT4886-HB

Horizontal bracket for arraying VT4886 enclosures as a constant curvature horizontal line array

VT4886-DF88

Downfill Adapter for suspending VT4886 under VT4888

VT4886-DF89

Downfill Adapter for suspending VT4886 under VT4889



The VT4883 can be used in suspended arrays of multiple units or combined with VT4886 line array elements in the same array. Pictured above is a VT4886-AF supporting three VT4883 subwoofers in a gradient cardioid configuration over six VT4886 subcompact line array elements.



Horizontal constant curvature array using VT4886-HB accessory



Pole mounted (standalone) or with VT4883 using SS4-BK2 extension rod and VT4886-UB accessory

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