

### VERTEC™ Series

## Application:

The VT4881 Compact Arrayable Subwoofer is designed to deliver high quality sound reinforcement of VLF (Very Low Frequency) musical information for a variety of applications including concert audio and theatrical presentations of all types.

## Key Features:

- ▶ Advanced technology component: Differential Drive®, dual voice coil, Direct Cooled™ cone transducer
- ▶ Independently accessible voice coils, enabling external parallel or series wiring
- ▶ Advanced construction techniques and hybrid materials provide exceptionally rigid, lightweight enclosure
- ▶ 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 ground-stacked or suspended applications in stand-alone arrays or in combination with other VERTEC system products

The VT4881 is a compact, lightweight, vented enclosure housing one 15" woofer. This advanced component is fitted with dual voice coils and a compliance capable of nearly a 3" peak-to-peak cone excursion for exceptional output at very low frequencies.

The enclosure features: a foam-backed grille; speaker cone treated with weather-resistant compounds; hard black anodized 6061-T6 Aluminum rigging tubes, and hinge bars made from premium-grade chromoly alloy steel; cadmium-plated hinge pins and quick-release pin restraining lanyards made of stainless steel; and rubber fittings which allow vertical stacking of multiple interlocking units.

VT4881 arrays are rigid for maximum support strength. The VT4881's integral rigging hardware, same as in the VT4887 Compact Line Array Element, relies on quick-release pins and end-mounted metal tubes to couple adjacent units together.

The enclosures can also be stacked vertically using the integral couplers. Made of vulcanized rubber, these fittings provide surface adhesion and prevent slippage.



## Subwoofer Line Arrays:

The VT4881 can be oriented vertically in suspended arrays or it can be groundstacked in horizontal arrays. The low-frequency capabilities of the multi-enclosure VT4881 array will be determined by the total number of units coupled together. The directivity of a line array at any given frequency is proportional to the product of frequency and length of the array. The beamwidth will be inversely proportional to the product of the array's length and the frequency of interest, typically 20 Hz - 80 Hz for subwoofer applications.

In summary, the more subwoofer elements that are used in the array, the greater directivity will be at lower frequencies, enabling better pattern control. (For more information refer to JBL Technical Note Vol. 1, No. 27)

## Specifications:

Line Array Element	
Frequency Response ( $\pm 3$ dB):	22 Hz – 125 Hz
Frequency Range (-10 dB):	18 Hz – 160 Hz
Maximum Peak Output:	126 dB, 1m
Recommended Bandpass:	22 Hz – 80 Hz
System Input Power Rating <sup>1</sup> :	1000 W (4000 W peak) 2 hours 600 W (2400 W peak) 100 hours
Recommended Signal Processing:	dbx 480, BSS 366, XTA 226 supported
Transducers	
Low Frequency:	One 2256G, 380 mm (15 in) dia., 76 mm (3 in) Dual Coil, with three 60 oz ceramic magnets, Differential Drive
Nominal Impedance:	8 ohms each coil (independently accessible)
Sensitivity:	90 dB, 2.83 Vrms, @ 1 m (25 Hz - 85 Hz)
Enclosure	
Box Construction:	Rectangular parallelepiped enclosure Engineered wood composite structure DuraFlex finish, 6 handles.
Suspension System:	Rigid 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. Each coil wired individually
Dimensions (H x W x D):	566 mm x 787 mm x 655 mm (22.3 in x 31 in x 25.8 in)
Net Weight:	55 kg (120 lb)
Shipping Weight:	64 kg (141 lb)

<sup>1</sup>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 low-frequency transducers.

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