# HBI

Dual 18" Arrayable Subwoofer



#### **Professional Series**

Application: The VT4880 Dual 18" Subwoofer Line Array Element is designed to deliver high quality sound reinforcement of sub-low frequencies for a wide variety of live music and A/V support applications. Typical uses include concert audio and multi-media presentations of all types.

### Key Features:

- Advanced Technology Components: Differential Drive® Neodymium Magnet, Dual Voice Coil, Direct Cooled™ cone transducers
- ▶ JBL PlyMax<sup>®</sup> engineered wood materials provide rigid, yet lightweight enclosure
- ▶ Rugged DuraFlex<sup>™</sup> exterior finish; weather-resistant components
- ▶ Patented, integrated S.A.F.E.™ suspension system with premium heat-treated alloys

The VT4880 is a rugged, lightweight, centrally-vented enclosure housing two 18" woofers. These advanced components, each fitted with dual voice coils, provide a high output power-to-weight ratio.

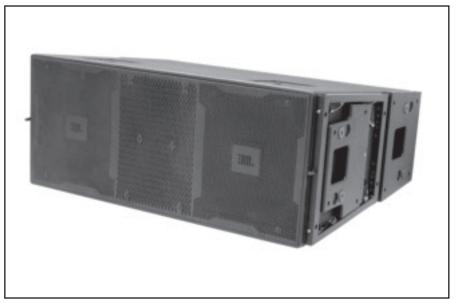
The PlyMax® enclosure features: foambacked perforated steel grille; speaker cones treated with weather-resistant compounds. Protective end-caps safeguard the suspension hardware while allowing vertical stacking of multiple enclosures on end using integral end-mounted, scuffresistant pads, keyed for aligning surfaces and preventing slippage.

VERTEC suspension systems are engineered for maximum support strength, and flexibility. The VT4880's suspension hardware (same as the full range VT4889) relies on quick-release pins and endmounted metal frames to couple adjacent units together in rigid arrays. Suspension frames are made from premium-grade chromoly alloy steel with plated surfaces; hinge bars are plated and quick-release pin restraining lanyards are stainless steel to resist corrosion.

## Subwoofer Line Arrays:

The low-frequency capabilities of a multienclosure VT4880 array will be determined by the total number of units coupled. The directivity of a subwoofer 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 20-80 Hz for subwoofer applications.

The more subwoofer elements that are used in the array, the greater directivity will be at lower frequencies, enabling better pattern control. Medium to large arrays can generate extreme amounts of sub-low frequency energy.



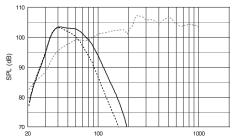
# Specifications:

System	
Frequency Range (-10 dB):	26 Hz - 160 Hz
Frequency Response (±3 dB):	29 Hz - 120 Hz
Recommended Bandpass:	26 Hz - 80 Hz
Input Power Rating:	2000 W Continuous, 8000 W Peak (AES / 2 hour)
Sensitivity:	98 dB, 1W @ 1m (35-120 Hz)
Maximum Peak Output <sup>1</sup> :	143 dB SPL, 1m ( $2\pi$ , half-space, ground-based application) 137 dB SPL, 1m ( $4\pi$ , free-space, suspended application)
Recommended Amplification:	2 x 1600 - 2000 W into 8 ohms (transducers powered individually) 3200 - 4000 W into 4 ohms (transducers powered in parallel)
Recommended Signal Processing:	dbx <sup>®</sup> DriveRack <sup>®</sup> 4800, Crown <sup>®</sup> I-Tech, BSS Audio <sup>™</sup> FDS-366T Omnidrive <sup>™</sup> , BSS Audio Soundweb <sup>™</sup> London and other Digital System Controllers supported
Transducers	
Low Frequency:	Two 2258H, 457 mm (18 in) dia., 100 mm (4 in) Dual Coil, neodymium Differential Drive®, Direct Cooled™
Nominal Impedance (each transducer):	8 ohms
Input Power Rating (each transducer) <sup>2</sup> :	
Enclosure	
Cabinet Construction:	Wedge frustrum 5 degree side angle enclosure. PlyMax <sup>™</sup> engineered wood composite structure, DuraFlex <sup>™</sup> finish, 10 handles
Suspension System:	Patented S.A.F.E. <sup>™</sup> hardware, integral hinge bars (available with optional VT4880-ACC accessory kit) nest in suspension frames on enclosure sides (ends). Quick release pins with restraining lanyards. Suspend with VT4889-AF or VT4889-SF Array Frame.
Grille:	Black perforated steel, foam backed
Input Connectors:	2 x Neutrik* Speakon ® NL-4, transducers circuited individually $(1\pm,2\pm)$
Dimensions (H x W x D):	493 mm x 1229 mm x 860 mm (19.4 in x 48.4 in x 33.9 in)
Net Weight:	71 kg (157 lb) - including front and rear hinge bars
Shipping Weight:	77.6 kg (171 lb) - does not include front and rear hinge bars
VT4880-ACC (Accessory Kit)	
Contents:	(1) Dolly with heavy duty castors, (1) Rugged Soft Cover Paddec Bag, (2) front hinge bars, (2) rear hinge bars. Order separately. Ships separately.
Dimensions (H x W x D):	127 mm x 1346.2 mm x 609.6 mm (5 in x 53 in x 24 in)
Shipping Weight	22.7 kg (50 lb)
<sup>1</sup> Calculated maximum SPL based on rate	d peak power and measured sensitivity

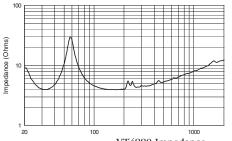
<sup>4</sup>Calculated maximum SPL based on rated peak power and measured sensitivity <sup>2</sup> AES Standard, one decade pink noise with 6 dB crest factor within device's operational band, free air. Standard AES 2 hr rating plus long term 100 hr rating are specified for cone transducers

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.

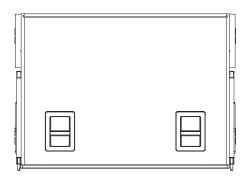
## ► VT4880 Dual 18" Arrayable Subwoofer

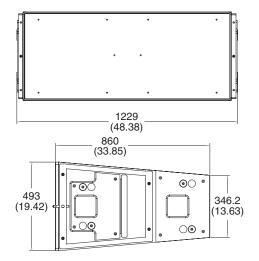


Unprocessed (light dashed) and processed frequency response (80 Hz, solid and 60 Hz, dashed)

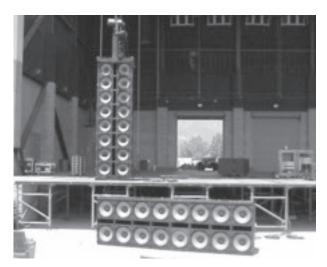


VT4880 Impedance





(W x H x D): 1229 mm x 493 mm x 860 mm (48.38 in x 19.42 in x 33.85 in)



VT4880 enclosures can be suspended vertically, or groundstacked in horizontal arrays. (Shown with grilles removed).



The VT4880 dolly, included in the VT4880-ACC Accessory Kit, is engineered to stack for easy system handling during portable use.

#### VT4880-ACC

VT4880-ACC Accessory kit includes all items necessary for the proper transport and suspension of the VT4880. Kit includes: (1) VT4880-DOLLY, (1) VT4880-COVER, (2) front hinge bars, (2) rear hinge bars. *Important note:* VT4880-ACC is sold as a separate item. One VT4880-ACC should be ordered with each VT4880 to ensure safe, reliable transport for portable use.



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