

VERTEC® Series

### Application:

The VT4883 Subcompact Dual 12" Cardioid-Arrayable Subwoofer Line Array Element is a companion low frequency extension for the VT4886 subcompact 3-way enclosure. 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®, technology, Dual Neodymium Magnets, Dual Voice Coils, Direct Cooled™
- ▶ Reverse-arrayable for implementation of gradient cardioid subwoofer configurations
- ▶ JBL PlyMax® engineered wood materials provide rigid, yet lightweight enclosure
- ▶ Rugged DuraFlex™ exterior finish; weather-resistant components
- ▶ Patented, integrated S.A.F.E.™ suspension system with premium heat-treated alloys

The VT4883 is a subcompact subwoofer housing two 12" long-excursion, Differential Drive® low-frequency transducers. These advanced components, each fitted with dual voice coils and dual magnets, provide an exceptionally high output power-to-weight ratio.

The PlyMax® enclosure features: unique vented bandpass topology with optimized component density and minimal footprint; large area corner ports with laminar flow design for reduced turbulence noise and optimized linearity; integral rubber feet, keyed for aligning surfaces and preventing slippage of stacked systems; pole mount socket for use with optional extension rod.

VERTEC suspension systems are engineered for maximum support strength and flexibility. The VT4883's suspension hardware relies on quick-release pins and side-mounted suspension tubes to couple units together in rigid arrays, either front-firing or rear-firing for implementation of gradient cardioid configurations.

Suspension tubes are made from premium-grade heat-treated aluminum, hinge bars are plated high tensile steel and quick-release pin restraining lanyards are plastic-coated stainless steel to resist corrosion.

### Subwoofer Line Arrays:

The low-frequency capabilities of a multi-enclosure VT4883 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:

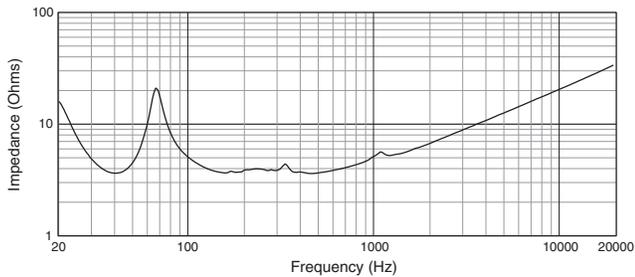
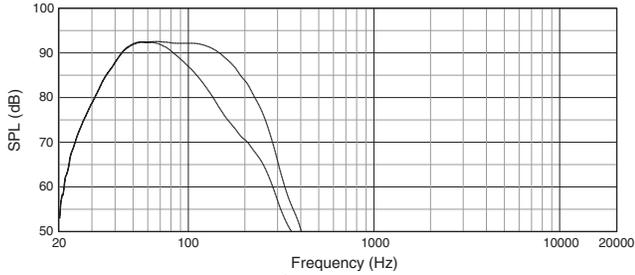
System	
Frequency Range (-10 dB):	35 Hz - 300 Hz
Frequency Response (±3 dB):	40 Hz - 300 Hz
Recommended Bandpass:	35 Hz - 200 Hz
System Input Power Rating:	2000 W Continuous, 8000 W Peak (AES / 2 hour) 1600 W Continuous, 6400 W Peak (100 hr)
System Sensitivity:	95 dB, 1 W (per driver) @ 1m (averaged 40 - 140 Hz)
Maximum Peak Output <sup>1</sup> :	139 dB SPL, 1m (2π, half-space, ground-based application) 133 dB SPL, 1m (4π, 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:	Crown® I-Tech HD, Crown I-Tech, dbx® DriveRack® 4800, BSS Audio™ FDS-366T Omnidrive™, BSS Audio Soundweb™ London
Transducers	
Low Frequency:	2 x 2263H-1, 305 mm (12 in) dia., 75 mm (3 in) Dual Coil, Dual Magnet, neodymium Differential Drive®, Direct Cooled™
Nominal Impedance:	2 x 8 ohms
Input Power Rating (each transducer):	1000 W Continuous, 4000 W Peak (AES / 2 hour) 800 W Continuous, 3200 W Peak (100 hour)
Enclosure	
Cabinet Construction:	Rectangular enclosure. PlyMax™ engineered wood composite structure, DuraFlex™ finish, 4 handles, integral pole mount adapter (M20 thread)
Suspension System:	Patented S.A.F.E.™ hardware, integral hinge bars nest in suspension tubes on enclosure sides. Quick release pins with restraining lanyards. Set of 4 hinge bars included. Reverse-arrayable for gradient cardioid configurations. Suspend with VT4886-AF Array Frame.
Grille:	Black perforated steel, foam backed
Input Connectors:	Rear panel: Neutrik® Speakon® NL-4 and NL-8 (2x each) Front panel: Neutrik® Speakon® NL-4 (1x) for gradient cardioid configurations. All connectors in parallel, internal wiring; transducers circuited individually 1±, 2± (2 x 8 ohm) (NL4 and NL8)
Dimensions (H x W x D):	398 mm x 579 mm x 643 mm (15.7 in x 22.8 in x 25.3 in)
Net Weight:	29.5 kg (65 lbs)
Shipping Dimensions (W x H x D):	584 mm x 457 mm x 699 mm (23" x 18" x 27.5")
Shipping Weight:	35.4 kg (78 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
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

<sup>1</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.

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.

# ▶ VT4883 Subcompact Dual 12" Cardioid-Arrayable Subwoofer

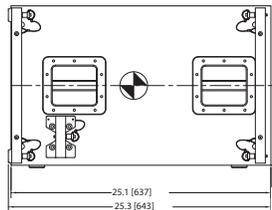
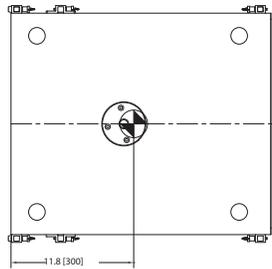
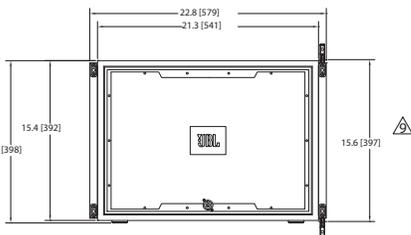
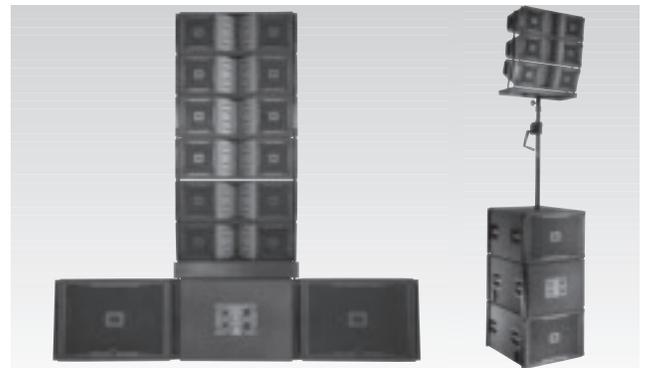


## 2263H-1 Long Excursion 305 mm (12") Transducer

- Dual Neodymium Magnets
- Dual 75 mm (3") diameter, 1.1" winding length voice coils
- Vented Gap Cooling™
- Ultra Robust Composite Cone
- Thermoset Fiberglass Composite Voice Coil Former
- Edgewound Aluminum Voice Coils
- Heavy Duty Suspension for High Excursion and Enhanced Durability
- 25 mm (1") Peak-to-Peak Maximum Excursion
- 1000 W cont, 4000 W peak (AES) Power Handling, each transducer

## Flown cardioid configurations (3x VT4883 + 6x VT4886)

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. Ground stacked configurations are shown below



Dimensions in inches (mm)



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

A Harman International Company  
© Copyright 2010 JBL Professional  
[www.jblpro.com](http://www.jblpro.com)

SSVT4883  
CRP  
01/10