



VT4880 Dual 18" Subwoofer Line Array Element



VERTEC™ Series

Application:

The VT4880 Dual 18" Subwoofer Line Array Element is designed to deliver high quality sound reinforcement of sub-low frequencies for live music and a variety of 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
- ▶ Advanced Construction Techniques and Hybrid Materials provide exceptionally rigid, lightweight enclosure
- ▶ Rugged DuraFlex™ exterior finish; Weatherized components
- ▶ Integrated Suspension System: premium heat-treated alloys provide rigid, reliable hanging arrays designed for vertical orientation at various angles

The above features come together in a line array element with true subwoofer performance advantages. It offers benefits for both portable system users and fixed-venue installations. The VT4880 combines time-tested acoustical physics with JBL's innovative transducer research and design in a premium-grade system package.

The VT4880 is a rugged, lightweight centrally vented enclosure housing two 18" woofers. These advanced components, each fitted with dual voice coils, provide the highest output power-to-weight ratio of any speaker system in its class.

The enclosure features: foam-backed perforated steel grille; speaker cones treated with weather-resistant compounds; rigging frames and hinge bars made from premium-grade chromemoly alloy steel; cadmium-plated hinge pins, stainless steel quick-release pin restraining lanyards; and protective end-caps which safeguard the rigging frames while allowing vertical stacking of multiple interlocking units.

VERTEC line array suspension systems are engineered for maximum support strength, and flexible in design and application. The VT4880's rigging hardware (same as in the full range VT4889) relies on quick-release pins and end-mounted metal frames to couple adjacent units together in rigid arrays. The enclosures can also be stacked vertically using the integral end-mounted pads. Made of nylon-filled glass fiber, these pads are highly scuff-resistant. They are keyed for aligning the end surfaces and preventing slippage.

Subwoofer Line Arrays:

The VT4880 can be oriented vertically in suspended arrays or it can be ground-stacked in horizontal arrays.

The low-frequency capabilities of the multi-enclosure VT4880 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 20-80 Hz for subwoofer applications.

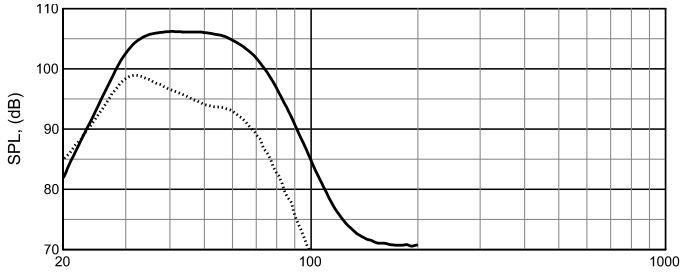
In summary, the more subwoofer elements that are used in the array the greater directivity will be at lower frequencies, enabling better pattern control. Because of line array summation, medium to large arrays can generate extreme amounts of sub-low frequency energy. (For more information refer to JBL Technical Note Vol. 1, No. 27)

Specifications:

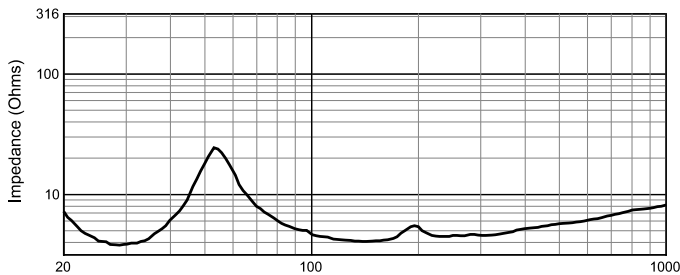
Line Array Element	
Frequency Response:	28 Hz – 75 Hz (±3 dB)
Frequency Range:	26 Hz – 80 Hz (-10 dB)
Maximum Peak Output:	138 dB, 1m
Recommended Bandpass:	26 Hz – 80 Hz
Input Power Rating:	4800 W Peak (1200-2400 W recommended amplifier power)
Recommended Signal Processing:	dbx Drive Rack, BSS FDS-366, XTA DP-226 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:	8 Ohms each transducer
Sensitivity:	98 dB, 1 W, @ 1 m (35-120 Hz)
Enclosure	
Box Construction:	Wedge frustrum 5 degree side angle enclosure. Engineered wood composite structure, DuraFlex™ finish
Suspension System:	Rigid hardware, integral hinge bars nest in rigging frames on box ends. Quick release pins with restraining lanyards. When used in arrays made exclusively of VT4880's, up to 20 enclosures may be suspended with a greater than 7:1 Design Factor. Suspend with VT4889-AF Array Frame.
Grille:	Black perforated steel, Foam backed
Input Connectors:	NL4, 2 each. Wired in parallel, speakers individually circuited.
Dimensions (H x W x D):	493 mm x 1229 mm x 860 mm (19.42 in x 48.38 in x 33.85 in)
Net Weight:	59.9 kg (132 lbs)
Shipping Weight:	68.5 kg (151 lbs)
VT4880-ACC (Available Accessory Kit)	
Contents:	(1) Dolly with heavy duty castors, (1) Rugged Soft Cover Padded Bag, and VT4880-RIG (complete front and rear hinge bar set with instructions for using VT4880 in VerTec arrays with VT4889 full range elements. 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)
Net Weight:	19.9 kg (44 lbs)
Shipping Weight:	23.1 kg (51 lbs)

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.

▶ VT4880 Dual 18" Subwoofer Line Array Element



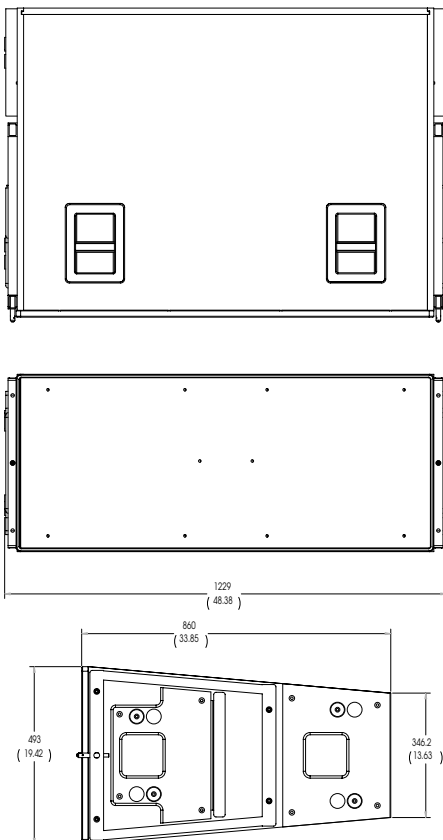
Frequency Response (solid line) of a single VT4880 with Recommended Signal Processing (dashed line)



VT4880 Impedance

VT4880-ACC

The VT4880-ACC Accessory kit includes all items necessary for the proper transport and rigging of the VT4880. This accessories kit includes: (1) VT4880-DOLLY, (1) VT4880-RIG (all required hinge bars for suspension of a single enclosure) & (1) VT4880-COVER. *Important note:* the VT4880-ACC is sold as a separate item. One VT4880-ACC should be ordered with each VT4880 to ensure proper rigging materials and the safe, reliable transport of each system in portable use.



VT4880 enclosures can be suspended vertically in hung arrays, or ground-stacked in horizontal arrays. (Shown with grilles removed).



The VT4880-ACC includes hinge bars, used for suspension in VERTEC arrays. A locking storage location for rear hinge bars is fitted to both cabinet ends to minimize mechanical noise from vibration during non-hanging use.



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



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