

### Full-Size Powered Ultra Long Excursion Dual 18" Arrayable Subwoofer, Integrated Audio System



VT4880ADP-AN (Optional network input module)
VT4880ADP-CN (Optional network input module with digital audio)

VerTec® DP Series

## **Application:**

The VT4880ADP Full Size Powered Dual 18" Arrayable Subwoofer is designed to deliver high-quality reinforcement of VLF (Very Low Frequency) musical information for a variety of applications including concert audio, corporate A/V and theatrical presentations of all types for both portable users and performance-venue applications. Ideal companion to VT4889ADP full size powered three-way systems.

## **Key Features:**

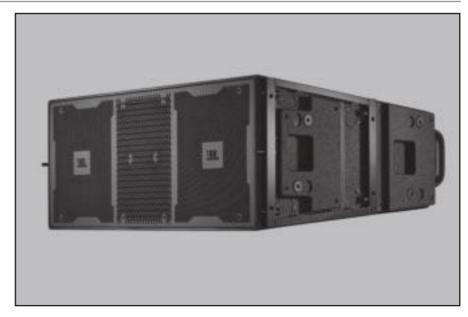
- ▶ JBL DrivePack® DP3-electronics package with robust high efficiency Class-I power
- ► Modular bay accepts standard dbx, or optional Crown networked input modules
- ▶ World-wide AC line voltages automatically selected for 50 or 60 Hz
- New 2269G Advanced Technology Components: Differential Drive® Neodymium Magnet, Dual Voice Coil, Direct Cooled™ cone transducers with Ultra-Long Excursion canabilities
- ▶ JBL PlyMax® engineered wood materials provide rigid, yet lightweight enclosure
- ▶ Rugged DuraFlex™ exterior finish; weatherized loudspeaker cones
- ▶ Patented, integrated S.A.F.E. suspension system with premium heat-treated alloys
- ► For use in stand alone arrays or in combination with other VerTec system models

The VT4880ADP is a versatile, powered integrated audio system with a centrally-vented enclosure housing two 2269G Ultra Long Excursion 18" woofers. JBL DrivePack DP-3 power and DSP electronics package, developed in cooperation with Crown and dbx, includes patented high efficiency Class-I power amplifier technology and onboard digital signal processing that communicates readiness and operational status to the user, while monitoring fault detection of components and electronics. New Ultra Long Excursion 18" VLF (Very Low Frequency) components, fitted with dual voice coils and robust composite cones, provide high output capabilities and a high power-to-weight ratio.

The PlyMax\* enclosure features foam-backed perforated steel grille, rugged DuraFlex™ exterior finish, and weather resistant speaker cones. Protective end-caps safeguard the suspension hardware while allowing vertical stacking of multiple enclosures on end using integral endmounted, scuff-resistant pads, keyed for aligning surfaces and preventing slippage.

VerTec suspension systems are engineered for maximum support strength and flexibility. The VT4880ADP's suspension hardware (same as used in the powered full-range VT4889ADP) relies on quick-release pins and end-mounted metal frames to couple adjacent units together in rigid arrays. Suspension frames are made from premium-grade chromoly alloy steel, with plated surfaces; hinge pins are plated and quick-release pin restraining lanyards are stainless steel to resist corrosion. Enclosure ships with integral front and rear hinge bar set (VT4889-RIG).

Available protective grille cover/wheel board and padded soft cover to ensure handy transport for rough road conditions, purchased separately as VT4880ADP-ACC.



# Subwoofer Line Arrays:

The low-frequency capabilities of the multi-enclosure VT4880ADP 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.

In summary, 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:**

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Frequency Range (-10 dB):	25 Hz – 160 Hz		
Frequency Response (±3 dB):	29 Hz – 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-field, suspended application)		
Transducer Sections			
Low Frequency:	Two 2269G, 457 mm (18 in) dia., 100 mm (4 in) Dual Coil, Differential Drive®, Direct Cooled™		
Bandpass Nominal Impedance:	4 ohms (each driver)		
System			
DP3 Internal Amplification Output (at load):	6900 W Peak, 3500 W Continuous		
DP3 Output Topology:	2-Channel, Class-I		
Signal Processing:	dbx Type IV Conversion System, precision bandpass filters, limiting, pre- equalization filters and automatic self-test functions		
System Management:	DSP based limiters for mechanical and thermal protection		
Signal Input:	F-XLR Active 20k Ohms Balanced, 10k Ohms Unbalanced		
Signal Loop-Through:	M-XLR (passive pass-through)		
Controls:	Precision 0.5dB increment 16 dB input attenuator (DPIP only)		
AC Power Operating Range:	Auto Select 90-132/VAC 50/60 Hz		
AC Line Voltage:	50/60 Hz, Auto-Detect; 120V/240V (-15%, +10%)		
AC Input Connector: AC Power Loop-thru:	Neutrik PowerCon (NAC3MPA) Neutrik PowerCon (NAC3MPB)		
AC Current Requirement:	15A per system at 120V, 7.5A per system at 240V		
Enclosure			
Box Construction:	<ul> <li>Wedge frustum 5 degree side angle enclosure. PlyMax™ engineered woo composite structure, DuraFlex finish, 8 handles</li> </ul>		
Suspension System:	Patented S.A.F.E.™ hardware, integral hinge bars nest in suspension frames on enclosure sides (ends). Quick release pins with restraining lanyards. Set of 4 hinge bars included. Suspend with VT4889-AF or VT4889-SF Array Frame.		
Grille:	Black perforated steel, foam backed		
Dimensions (W x H x D):	1229 mm X 493 mm X 1011 mm (48.4 in x 19.4 in x 39.8 in)		
Net Weight:	99.4 kg (219 lb)		

Maximum SPL measured in Free-Field  $(4\pi)$  and half-space  $(2\pi)$  conditions with pink noise.

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.

### INPUT MODULE CHARACTERISTICS AND OPTIONS

#### **Features**

Description	DPIP	DPAN	DPCN
	(standard input module)	(optional HiQnet network	(optional HiQnet network
		input module)	input module; digital audio)
HiQNet Compliant	No	Yes	Yes
Network Communication	No	100MB Ethernet	100MB Ethernet
Network Connections	N/A	RJ-45, CAT5	RJ-45, CAT5
Supported Audio format	Analog	Analog	Digital with analog backup
CobraNet <sup>™</sup> digital audio over ethernet	No	No	Yes
Level Controls	Attenuator, 16 dB range	Network Controllable	Network Controllable
Remote Load Monitoring	No	Yes	Yes
User Assignable Filters	No	16	16
User Assignable Filter Types	None	9	9
User Accessible Delays	No	Yes	Yes
Noise Generator	No	Pink, White	Pink, White
Sine Wave Generator	No	Continous, Burst	Continuous, Burst
Error Reporting	No	Yes, via software	Yes, via software
Digital Speaker Setting Presets	2, fixed	10, user assignable	10, user assignable
Polarity Reverse	No	Yes, via software	Yes, via software
Listen Bus line level remote monitor	No	No	Yes
Firmware upgrades via network	No	Yes	Yes
Mute	No	Remote via network	Remote via Network

### **Specifications**

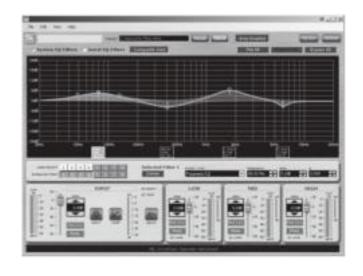
Analog Audio Input Connectors	XLR, female	XLR, female	XLR, female	
Input Type	Electronically Balanced, RF Filtered			
Signal Loop-through	XLR, male, passive pass-through			
Input Impedance	20k Ohms Balanced			
Polarity	(+) voltage on XLR pin 2 yields (+) LF pressure			
Max Input Level	+23 dBu			
Frequency Response	20 Hz – 20k Hz ± 0.5 dB			
DSP Processing	dbx Type IV analog-to-	24 Bit conversion, 32 bit	24 Bit conversion, 32 bit	
	digital conversion circuitry	floating point processing	floating point processing	
Latency	n/a	0.625 mS	0.625 mS + 5.333 mS	
Dynamic Range (20-20 KHz)	> 107 dB (A Weighted)	> 105 dB (A Weighted)	> 103 dB (A Weighted)	
THD+N (20-20 KHz), rated power	< 0.05%			
Crosstalk	> 110 dB, 120 dB typical	> 60 dB @ 1 kHz	> 60 dB @ 1 kHz	
User Programmable Signal Delay	N/A	> 2 seconds	> 2 seconds	
Rear Panel Controls	Gain, Sub Filter Enable	Enable ALT Preset	Enable ALT Preset	
Rear Panel Indicators	Signal/clip, ready, thermal,	Signal/clip, ready, thermal,	Signal/clip, ready, thermal,	
	fault, sub filter on/off	fault, alt. preset select,	fault, alt. preset select,	
		Network: activity, link	Network: activity, link,	
			CobraNet™ conductor	

#### JBL DrivePack® Software Device Panel

With optional HiQnet-compatible input modules installed, JBL DrivePack systems can be remotely controlled and monitored using HiQnet System Architect™ software. A Windows-based application, it provides an intuitive, unified platform for system configuration and operation of not only JBL DrivePack-equipped systems, but any other HiQnet-compliant audio devices in the signal chain, like the VP (Venue Performance) Series. HiQnet System Architect enables the unified layout of on-screen product control surfaces, and simple preset configuration of an entire system made up of HiQnet-compliant products across multiple brands and product classes.

Advanced remote control and diagnostic capabilities, custom control panel creation, unified event logging and error reporting for the entire system, and the recall of presets on all connected HiQnet devices are included. In addition, the application enables a user to copy / paste like parameter values from, and to, multiple products across the HiQnet network

Use with current version of *HiQnet System Architect* network configuration and control software, available for download at www.harmanpro.com.



JBL DrivePack® enclosures are equipped with a modular input bay that accepts either DPIP, DPAN or DPCN input modules. Speaker-dependent processing such as crossover filtering and component equalization, time alignment and protection are not user-configurable, however, the following options are available for connectivity, audio signal path and control functionality for respective input modules:

**DPIP** (Standard dbx Input Module)

The standard DPIP input module features analog audio inputs and sophisticated onboard digital signal processing technology. Precision bandpass filtering, limiting, time alignment, component equalization and automatic self-test functions ensure optimized performance. Rear panel controls include a 32-position detented rotary attenuator calibrated in 0.5 dB steps, providing a 16 dB range of control. The "Enable Subwoofer Filter" button is a momentary-contact switch that enables or disables an 80 Hz filter. For subwoofer systems, the low-pass frequency is set to 80 Hz when selected or 100 Hz when deselected. For full-range systems, the high-pass frequency is raised to 80 Hz when the "Enable Subwoofer Filter" button is selected.



DPAN (Optional HiQnet Network Input Module with Analog Audio)

In addition to features included on the standard DPIP input module, the optional DPAN module adds 100 Mb Ethernet networking functionality, thus allowing for Remote Control and Monitoring via HiQnet System Architect™ software. Available monitoring functions include: input signal level, clip and gain reduction; ready / temp status; individual channel load status, signal level, clip and gain reduction; event logging and user alert messaging. Available remote control functions include: input level, polarity and mute; input compressor attack/release, ratio and makeup gain; individual channel gain and mute. Sixteen, type-selectable input filters (8 System and 8 Guest filters) are available for system equalization along with user-adjustable input delay of up to 2 seconds and sub filter access (user-adjustable low pass filter for subwoofer systems; high pass filter for full-range systems). Signal generator functions (sine wave, pink noise) are available to facilitate system testing and up to ten presets can be stored internally. In addition, Master Control Panels and Master Monitor Panels allow for convenient grouping of control and monitoring functions for multiple DPANequipped DrivePack enclosures, providing a powerful control/monitoring interface for large format line array or subwoofer systems.

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DPCN (Optional HiQnet Network Input Module with Analog Audio)

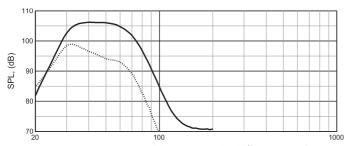
In addition to features included on the DPAN input module, the optional DPCN module adds CobraNet™ digital audio input capability. The DPCN module provides the ability to direct up to 64 digital audio channels on one network with digital audio plus remote control and monitoring combined on a single Ethernet cable. Flexible input source selection via HiQnet System Architect allows for operation using either Analog, CobraNet, CobraNet with Analog Backup or CobraNet with Analog Override input signals, providing complete reliability and flexibility to cover any situation. HiQnet System Architect provides the software user interface with the same powerful, networked Remote Control and Monitoring functionality as described above for the DPAN input module.

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# ▶ VT4880ADP Full-Size Powered Ultra Long Excursion Dual 18" Arrayable Subwoofer



Frequency Response (solid line) of a single VT4880ADP with 80 Hz Subwoofer Filter Enabled (dashed line). Additional presets available for DP-AN, DP-CN models.



The JBL DrivePack\* DP-3 is attached to the back panel of a modified VT4880A, creating the model VT4880ADP. Robust Crown amplification and onboard digital signal processing are combined to create a compact, powerful, integrated audio system.

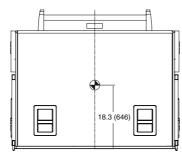


2269G Ultra Long Excursion 460 mm (18") Transducer

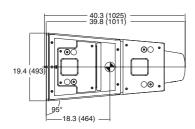


#### VT4880ADP-ACC

The VT4880ADP-ACC Accessory kit includes items necessary for proper transport of the VT4880ADP. The accessory kit includes: (1) VT4880-DOLLY, & (1) VT4880ADP-COVER with rigid foam blocks and protective metal plates for DrivePack. *Important note*: the VT4880ADP-ACC is sold as a separate item. One VT4880ADP-ACC should be ordered with each VT4880ADP to ensure safe, reliable transport of each system in portable use.







(W x H x D): 1229 mm x 493 mm x 1011 mm (48.4 in x 19.4 in x 39.8 in)









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