

VERTEC® DP Series

Application:

The VT4881ADP Compact Powered 18" 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, corporate A/V and theatrical presentations of all types. Ideal companion to VT4887ADP compact three-way systems.

Key Features:

- ▶ New 2269G Advanced Technology Component: Differential Drive® Neodymium Magnet, Dual Voice Coil, Direct Cooled™ cone transducer with Ultra-Long Excursion capabilities
- ▶ JBL DrivePack® technology delivers superb audio quality and robust high efficiency Class-I power, perfectly matched to the enclosure, with comprehensive digital signal processing. Modular bay accepts standard dbx, or optional Crown, networked input modules.
- ▶ World-wide AC line voltages are automatically selected for 50 or 60 Hz.
- ▶ Advanced construction techniques using JBL PlyMax™ provide exceptionally rigid, lightweight enclosure
- ▶ Rugged DuraFlex™ exterior finish; Weatherized loudspeaker cone.
- ▶ Integrated S.A.F.E™ suspension system: premium heat-treated alloys provide rigid, reliable hanging arrays designed for vertical orientation at various angles.

The VT4881ADP is a lightweight, vented sub-woofer enclosure housing one Ultra-Long Excursion 18" woofer and a JBL DrivePack DP1 fully integrated power and DSP electronics package. The JBL DrivePack, developed in cooperation with Crown and dbx, brings leading-edge technology to the VERTEC DP Series including patented high efficiency Class-I power amplifier technology and onboard digital signal processing. This provides not only unmatched audio quality and performance but also onboard DSP functionality that communicates readiness and operational status to the user, and monitors fault detection of components and electronics.

A new Ultra Long Excursion 18" VLF component, fitted with dual voice coils, and Ultra Robust composite cone provides high output capabilities with an advantageous power-to-weight ratio. Enclosure features: foam-back perforated steel grille; speaker cone treated with weather-resistant compound; rigging tubes and hinge bars made from premium-grade alloy aluminum; plated hinge pins; stainless steel quick-release pin restraining lanyards; and inter-locking



rubber feet which allow vertical stacking of multiple inter-locking units, including reverse ground-stacking for cardioid subwoofer array applications if desired. VT4881ADP rigging hardware (same as in the companion VT4887ADP compact full-range system) relies on quick-release pins and end-mounted metal frames to couple adjacent units together in rigid but flexible arrays.

Specifications:

Frequency Response (-3 dB):	34 Hz - 125 Hz
Frequency Range (-10 dB):	25 Hz - 160 Hz
Maximum Peak Output ¹ :	131 dB SPL, 1m
Transducers	
Low Frequency:	One 2269G, 457 mm (18 in) dia., 100 mm (4 in) Dual Coil, Differential Drive®, Direct Cooled
Nominal Impedance:	4 Ohms
Power Handling:	2000W Continuous/8000W Peak (AES/2 hours) 1200W Continuous/4800W Peak (100 hrs)
System	
Internal Amplification Output (at load):	3600W Peak, 1800W Continuous
DP1 Output Topology	1-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 0.5 dB increment Detented 16 dB input attenuator
AC Power Operating Range:	Auto Select 90-132VAC/216-264VAC, 50/60Hz
AC Line Voltage:	50/60 Hz, Auto-Detect; 100V/220V, 120V/240V (±10%)
AC Input Connector:	Neutrik PowerCon
AC Power Loop-thru:	Neutrik Powercon
AC Current Requirement:	5A per system at 120V, 3.2A per system at 240V
Enclosure	
Box Construction:	Rectangular enclosure. PlyMax™ engineered wood composite structure. DuraFlex™ finish, 6 handles
Suspension System:	S.A.F.E. hardware, integral hinge bars nest in rigging tubes on box ends. Quick release pins with restraining lanyards. Suspend with VT4887-AF Array Frame. Set of 4 hinge bars included with VT4881ADP system.
Grille:	Black perforated steel, Foam backed
Dimensions (W x H x D):	787 mm X 569 mm X 800 mm (31 in X 22.4 in X 31.5 in)
Net Weight:	62.2 kg (137 lb)

¹Measured maximum SPL in Free Field conditions with IEC shaped 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.

▶ VT4881ADP Compact Powered Arrayable Subwoofer Module, Integrated Audio System

Input module characteristics and options

Features

Description	DPIP (standard input module)	DPAN (optional HiQnet network input module)	DPCN (optional HiQnet network 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™ digital audio over ethernet	No	No	Yes
Level Controls	Attenuator, 16dB 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	Continuous, 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

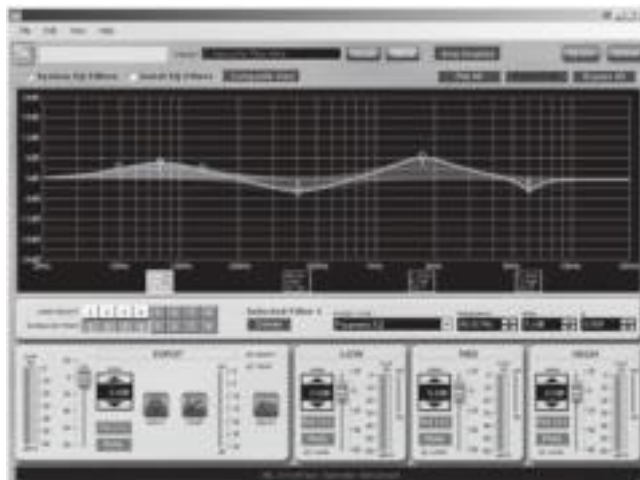
Analog Audio Input Connectors	XLR, female	XLR, female	XLR, female
Input Type	Electronically Balanced, RF Filtered		
Signal Loop-through	XLR, male, passive pass-through		
Input Impedance	20K Ohms Balanced		
Polarity	(+) voltage on XLR pin 2 yields (+) LF pressure		
Max Input Level	+23 dBu		
Frequency Response	20 Hz – 20K Hz ± 0.5 dB		
DSP Processing	dbx Type IV analog-to-digital conversion circuitry	24 Bit conversion, 32 bit floating point processing	24 Bit conversion, 32 bit 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
Front Panel Controls	Gain, Sub Filter Enable	Enable ALT Preset	Enable ALT Preset
Front Panel Indicators	Signal/clip, ready, thermal, fault, sub filter on/off	Signal/clip, ready, thermal, fault, alt. preset select, Network: activity, link	Signal/clip, ready, thermal, fault, alt. preset select, 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 harmanpro.com.



JBL DrivePack® input modules are used to implement crossovers, equalization, time alignment, and protection for the attached speaker system. Speaker-dependent settings are not user-configurable from any version of the input module. The following options are available for connectivity, audio signal path and control functionality.

DPIP (Standard dbx Input Module)

JBL DrivePacks are equipped with a modular input bay and are available in several versions. The standard DPIP input module features analog audio inputs and sophisticated onboard digital signal processing technology. Precision bandpass limiting, pre-equalization filters and automatic self-test functions ensure optimized performance. Front panel controls include a 32-position detented rotary attenuator calibrated in 0.5 dB steps which provides a 16 dB range of control. This can be useful for setting up downfill shading or overall system gain structuring. Another feature is the “Enable Subwoofer Filter” button. This is a momentary-contact type switch which enables or disables the selected function. On subwoofer applications, the low-pass frequency is set to 80 Hz. For full-range systems used with subwoofers, the high-pass is raised to 80 Hz.



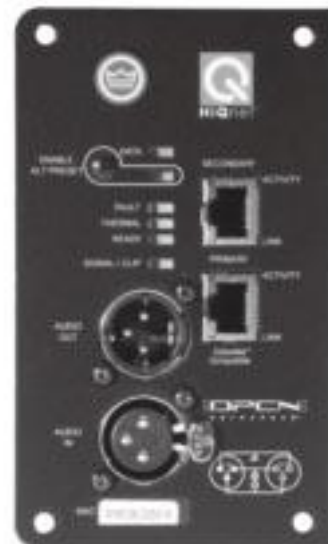
DPAN (Optional HiQnet Network Input Module with Analog Audio)

In addition to all of the features included on the standard input module, the DPAN adds 100 Mb Ethernet networking functionality and HiQnet compatibility. It enables remote control and monitoring via HiQnet System Architect™ software. Network Control and Monitoring is enabled by the DrivePack Software Device Panel supplied within HiQnet System Architect. Network capabilities include monitoring of status, input and output levels, clipping, temperature, load faults and gain reduction. Additional control features available in software include load supervision, dynamic processing, ten internal pre-e.q.filter presets, delays, onboard noise and sine-wave generators, network device event logging, and user alert messaging.



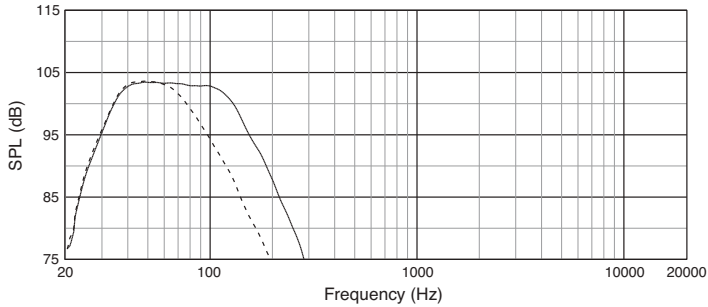
DPCN (Optional HiQnet Network Input Module with Digital Audio)

In addition to all of the features included on the DPAN, the DPCN input module adds CobraNet™ to the mix and offers the ability to direct up to 64 audio channels on one network, with digital audio and remote control and monitoring via Ethernet combined on a single cable. DPCN includes the option to use an analog input as a backup audio source providing you complete reliability and flexibility to cover any situation. With HiQnet System Architect providing the software user interface, the HiQnet communications protocol provides remote access to digital speaker preset files in the JBL DrivePack. As with the DPAN, user-addressable features include ten internal pre-e.q. filter presets, up to 2 seconds of delay per channel, onboard noise and sine-wave generators, network device event logging, and user alert messaging.



▶ VT4881ADP Compact Powered Arrayable Subwoofer Module, Integrated Audio System

Frequency Response:



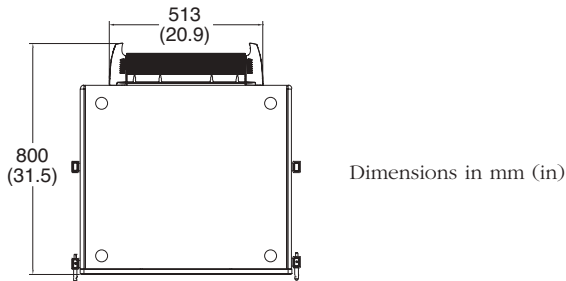
Frequency Response (solid line) of a single VT4881ADP with 80 Hz Subwoofer Filter Enabled (dashed line)



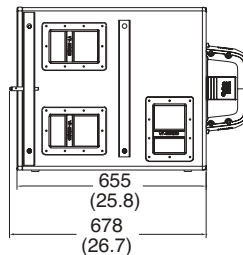
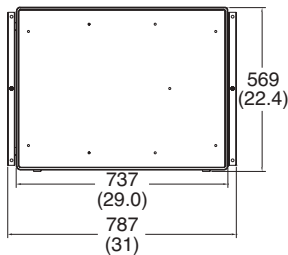
The JBL DrivePack® DP1 is attached to the back panel of the subwoofer enclosure, creating the model VT4881ADP. Robust Crown amplification and onboard digital signal processing are combined to create a compact, powerful, integrated audio system.

VT4881ADP-ACC:

The VT4881ADP-ACC includes items necessary for the proper transport and protection of the VT4881ADP. This accessory kit includes: (1) VT4881-DOLLY & (1) VT4881ADP-COVER.



Dimensions in mm (in)



System Dimensions (WxHxD):

787 mm x 569 mm x 800 mm including attached suspension hardware



Important Note: The VT4881ADP-ACC is sold as a separate item. One VT4881ADP kit should be ordered with each VT4881ADP system to ensure safe and reliable transport of each system in portable use. The VT4881ADP-ACC does not include hinge bars for box inter-connection; these are integral to, and ship with, the VT-4881ADP system enclosure. The VT4881ADP uses either the VT4887-AF or VT4887-SF for array suspension.



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

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