

VHD5.1 Downfill Technical Data Sheet

Product code: KVV 987 440

Introduction

Continuing KV2 Audio's current technology statement through Constant PowerPoint Source Array design, VHD5.1 is a dedicated downfill performance enclosure and integral to the VHD5.0 system for the largest of events to audiences from 10,000 upwards without requirement for additional delay systems.

A three-way design featuring a 3" high frequency compression driver with NVPD treated dome assembly; one horn loaded 8" mid range woofer featuring AIC technology and six front loaded 10" low mid woofers. All speaker components employ neodymium magnets to increase force, improve control and reduce weight.

Bespoke flyware to facilitate fast attachment and rigging employment.



Application

Designed as a true mid high - downfill enclosure as part of the VHD5 Constant Power Point Source systems for large arenas and stadiums

- Medium to large concert venues
- Hire and Production
- Large Clubs and Arenas

System Acoustic Performance

Max SPL Long-term	135dB
Max SPL Peak	138dB
-3dB Response	55Hz to 20kHz
-10dB Response	45Hz to 22kHz
Impedance	12Ω

High Frequency Section

Acoustic Design	Horn Loaded
High Horn Coverage Horizontal / Vertical	110° x 40°
High Frequency Amplifier Requirement	100W
Throat Exit Diameter / Diaphragm Size	1.4" / 3"
Diaphragm Material	Nitride Titanium
Magnet Type	Neodymium

High Frequency Amplifier Specification

Type	VHD5100
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Mid Range Section

Acoustic Design	Horn Loaded
Mid Horn Coverage Horizontal / Vertical	110° x 40°
Midrange Amplifier Requirement	200W
Woofer Size / Voice Coil Diameter / Design	8" / 3.0" / Trans Coil
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Neodymium

Mid Frequency Amplifier Specification

Type	VHD5100
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Low Frequency Section

Acoustic Design	Bass Reflex
Low Frequency Amplifier Requirement	1000W
Number of Drivers	6
Woofer Size / Voice Coil Diameter / Design	8 x 10" / 2"
Magnet Type	Ferrite
Diaphragm Material	Epoxy Reinforced Cellulose

Low Frequency Amplifier Specification

Type	VHD5100
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Cabinet

Cabinet Material	Baltic birch
Color	Plastic paint

Physical Dimensions

Height	830 mm (32.68")
Width	1110 mm (43.70")
Depth	350 mm (13.78")
Weight	78 kg (171.96lbs)

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Architectural Specifications

The Loudspeaker shall be a 3-way Horn loaded design, using SLA Technology - (Super Live Audio), and shall only be driven and controlled by a dedicated – matched Amplifier Controller. The Loudspeaker enclosure shall consist of one 3" Neodymium magnet structure High Frequency driver mounted on a horn, one horn loaded 8" Neodymium magnet structure Mid-range driver featuring AIC technology and six front loaded 10" Neodymium magnet structure Low Mid woofers.

The cabinet enclosure shall be made from re-enforced Baltic Birch Ply, with toughened impact and wear resistant paint finish.

The Loudspeaker woofer components shall be protected by an acoustically transparent rigid metal grille supported by absorbent rubber seals.

The enclosure shall incorporate one ergonomically designed recessed handle in each side panel and one recessed handle on the rear panel.

The enclosure shall incorporate certified bespoke recessed flyware fittings top of each side panel to facilitate connection to other VHD5.0 system enclosures. A short recessed pull back fly track rail on the center point bottom of the rear panel to facilitate selective angle adjustment via Aeroquip clip on fittings is employed. The enclosure shall incorporate a recessed connection panel with integral cable secure point and will be fitted with a single input Amphenol EP6 locking connector.

The enclosure shall incorporate four corner recessed wheel troughs on the top and bottom panel to facilitate stacking and locking into other VHD5.0 system enclosures for wheeled movement and transportation and shall include four recessed butterfly clip receptacles on each top and bottom panel for attachment of a protective wheel board. The enclosure shall include four high impact low friction feet on the bottom panel to allow enclosure locking into other VHD cabinets and easy movement.

The Loudspeaker shall have a maximum long term pressure level of 135dB, have a total peak power handling capacity of 1200w, with a nominal Horizontal dispersion of 110 deg and a Vertical of 40 deg and have a measured on axis frequency response of 35Hz to 22KHz (-3dB).

The Enclosure dimensions shall be: 830mm / 32.68" x 1110mm / 43.70" x 350mm / 13.78".

The Enclosure shall not exceed a weight of 78kg / 171.96 lbs.

The Loudspeaker shall be the KV2 Audio VHD5.1.

The dedicated Amplifier/controller shall be the KV2 Audio VHD5100.

The dedicated fly ware shall be the integrated.

Dimensional Drawings

