VHD2.16 Technical Data Sheet

Introduction

The VHD2.16 double 15" subwoofer is a development of KV2 Audio's ES 2.5 design that has become a standard for compact, high output subwoofer devices. Acoustical design is based on extreme loading of asymmetrical chambers delivering exceptional output and control. The cabinet is built to the same robust standards as the VHD4.18 and delivers output in excess of 140dB when configured in a pair. It also functions as a very effective upper bass cabinet when used alongside the ultra low frequency VHD1.21 or 2.21 subwoofers as part of a five way active system.

Features

- Professional, Baltic birch construction with highly resistant polymer coating
- Four full length pieces of fly-track (two per side) and one five point pull back piece on the rear of the cabinet
- Very High Definition low frequency reproduction
- 143dB sustained output / 146dB peak (using 4 units of VHD 2.16)
- High acoustic loading via twin asymmetrical chambers
- Two 15" low frequency drivers with 4" (100 mm) inside/outside, epoxy baked, high temperature voice coil assembly and neodymium magnetic structures
- Proprietary side handles (6) for simplified handling and carrying
- High impact low friction feet, allowing lock- in to other VHD cabinets and easy cabinet movement
- Front locking aluminium VHD wheel boards with wraparound hardwood bumpers
- Weather proofing option and special paint finishes available on request

Application

Specifically designed to accompany the VHD2.0 and VHD1.0 as a true full range high output system for live performance and music

- Hire and Production
- Concert venues
- Large Theatres
- Scalable into multiple large systems
- Fixed installation

System Acoustic Perfomance	
Max SPL Long-term	143dB (4x VHD2.16)
Max SPL Peak	147dB (4x VHD2.16)
-3dB Response	37Hz to 130Hz
-10dB Response	32Hz to 130Hz
Impedance	8Ω
Crossover Point	100 to 130Hz
Low Frequency Section	
Acoustic Design	Twin Asymmetrical loading
Subwoofer Amplifier Requirement	1600W /2x VDH2.16 (VHD3200 amp.)
Woofer Size / Voice Coil Diameter / Design	2x 15" / 4" / Inside Outside
Diaphragm Material	Epoxy Reinforced Cellulose
Magnet Type	Advanced ventilated neodymium

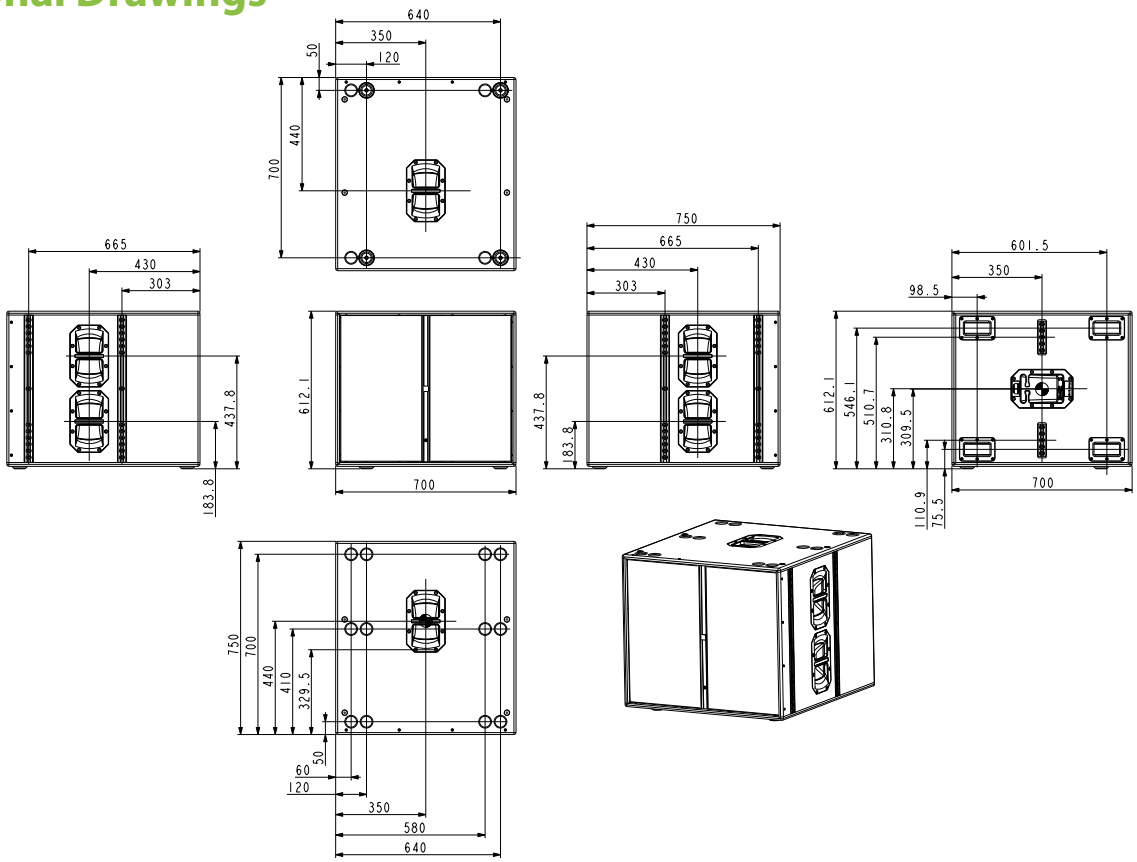
Speaker Input	
Speaker Input	AP4 male
Speaker Output	
Speaker Output	AP4 female
Cabinet	
Cabinet Material	Baltic birch
Handles	6
Color	"Orange peeled" Matt Black or any RAL
Physical Dimensions	
Height	600 mm (23.62")
Width	700 mm (27.55")
Depth	750 mm (29.52")
Weight	65 kg (143lbs)

VHD2.16 Technical Data Sheet

Architectural Specifications

The Loudspeaker shall be a Twin Asymmetric loaded-chamber 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 two 15" Neodymium magnet structure Low Frequency-high definition-output drivers.
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 full size transparent rigid metal grille supported by absorbent rubber seals.
The enclosure shall incorporate two ergonomically designed recessed handles in each side panel and shall incorporate an additional single handle on the top and bottom panels. The enclosure shall incorporate two Aeroquip fly track rails on each side panel, and two short fly track rails centrally on the rear panel to facilitate overhead vertical enclosure suspension and connection to other VHD enclosures, by employment of a dedicated FLYBAR System. The enclosure shall incorporate four corner recessed wheel troughs on the rear panel to facilitate stacking for wheeled movement and transportation. 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 enclosure shall incorporate a recessed connection panel with integral cable secure point and will be fitted with a single input Amphenol AP4 locking connector and a corresponding thru/output for connection to other VHD subwoofers. The enclosure shall include four recessed Butterfly clip receptacles on each side panel for attachment of a protective Wheel board.
The Loudspeaker shall have a maximum long term pressure level of 134dB, (2 x VHD2.16), with a total peak power handling capacity of 800W, a measured frequency response of 37Hz to 130Hz (-3dB), 32Hz to 130Hz (-10dB).
The Nominal Impedance shall be 8 ohm.
The Enclosure dimensions shall be: 600 mm / 23.62" x 700 mm / 27.55" x 750 mm / 29.52"
The Enclosure shall not exceed a weight of 65 kg / 143lbs
The Loudspeaker shall be the KV2 Audio VHD2.16. The dedicated Amplifier/controller shall be the KV2 Audio VHD3200.
The dedicated fly ware shall be the VHD FLYBAR System.

Dimensional Drawings



The future of sound. Made perfectly clear.

KV2 Audio International, Nádražní 936, Milevsko 399 01, Czech Republic
Tel.: +420 383 809 320
Email: info@kv2audio.com | Web: www.kv2audio.com