VHD4.21 Technical Data Sheet

Introduction

What is Power without Control. In developing one of the most powerful subwoofer solutions in the world today, our already successful VHD2.21 2x21" subwoofer has evolved to incorporate a revolutionary new Subwoofer Amplifier design, unique to KV2 and featuring Ultra High Current delivery, Immense Power, Exceptional Control, coupled with a class leading 'Green Efficiency' low consumption power supply. Housing two newly developed large format 21" Woofers the VHD4.21 Active can power an additional Passive VHD4.21 and deliver up to 14,000 Watts of peak power whilst being plugged in to a standard 16A wall socket. The VHD4.21 is a truly Amazing product and demonstrates the Pinnacle of KV2's Pioneering Subwoofer technologies.

Features

- The VHD4.21 Active Subwoofer Module consists of two purpose designed 'Low Loss-Band Pass' enclosures, one Active and one Passive, with each enclosure containing two specific custom designed large format 21" woofers.
- The Low Q design has been applied to attain the optimum Loudspeaker loading, enabling a high sensitivity of 109dB 1w/1m. The design of our unique and innovative new power management system enables the Active Power Amplifier to deliver peak output levels of 14kW, whilst operating at a modest constant consumption of 3.6 kW from a 16A circuit.
- An impressive maximum 320V supplied (limited) peak to peak at 100A from the VHD4.21 Active Module represents a bullet- proof technology that has been fully developed and refined over 12 years of active operation in real life applications, providing maximum control over movement of the large mass of the speaker.

Application

The Ultimate seismic Subwoofer to add to any KV2 Audio or third party manufacturers system.

- Large scale live music and playback performance
- Dance Clubs and Nightclubs where Music comes first
- Hire and Production
- Large Concert venues
- Cinema
- Fixed installation
- Easily incorporated into multiple system projects with VHD, SL, ES and ESR

System Acoustic Perfomance	
Max SPL Long-term	147dB
Max SPL Peak	150dB
-3dB Response	34Hz to 180Hz
-10dB Response	28Hz to 240Hz
Crossover Point	70Hz
Low Frequency Section	
Acoustic Design	Bandpass with low port losses
Woofer Size / Voice Coil Diameter	4x 21" / 5.3"
Diaphragm Material	Epoxy Reinforced Cellulose with Carbon Fiber and Double Surround
Magnet Type	Neodymium Advanced Ventilated
Low Frequency Amplifier Specification	
Type	Direct power switching amplifier
Rated Continuous Power	3500W
Short Term Power	14000W
Distortion	<0.05%

Signal Input	
Input Sensitivity	1.55V RMS
Input Impedance	20 kΩ
Power Requirements	
Power Connector	Neutrik PowerCon® 32A
Operating Voltage	180V to 260V @ 50Hz | 60Hz
Recommended Amperage	16A
Cabinet	
Cabinet Material	Baltic Birch
Handles	12
Color	Black or any RAL
Physical Dimensions	
Height	700 mm (27.56")
Width	1080 mm (42.52")
Depth	1200 mm (47.24")
Weight (Active)	175 kg (386lbs)
Weight (Passive)	155 kg (342lbs)

VHD4.21 Technical Data Sheet

Architectural Specifications

The Loudspeaker system shall consist of two enclosures, one active driven and one attached passive, each with a large chamber-Twin Asymmetric VLF Low port- loss design, using SLA Technology - (Super Live Audio), and shall only be driven and controlled by a dedicated – matched Active Driven Amplifier Controller.

The Active and Passive Loudspeaker enclosures each shall consist of two 21" Neodymium magnet structure Low Frequency-high definitionoutput drivers.

The cabinet enclosure shall be made from re-enforced Baltic Birch Ply, internal aluminum bar tensioners with toughened impact and wear resistant paint finish. The Loudspeaker woofer components shall be protected by acoustically transparent rigid metal grilles supported by absorbent rubber seals. The enclosures shall incorporate four ergonomically designed recessed handles in each side panel and shall incorporate an additional two rear handles on the top and bottom panels. The enclosures shall include multiple high impact, low friction feet on the bottom and side panels to allow enclosure locking into other VHD cabinets and easy movement. The enclosures shall include four attached heavy duty wheels for transportation.

The Active enclosure shall incorporate a full heatsink panel and will be fitted with a single input Neutrik PowerCon 32A mains connector, Isolated speaker output Cliffcon locking connector, XLR input and through connectors and a thermal mains breaker switch. The passive enclosure shall incorporate an isolated speaker input Cliffcon locking connector.

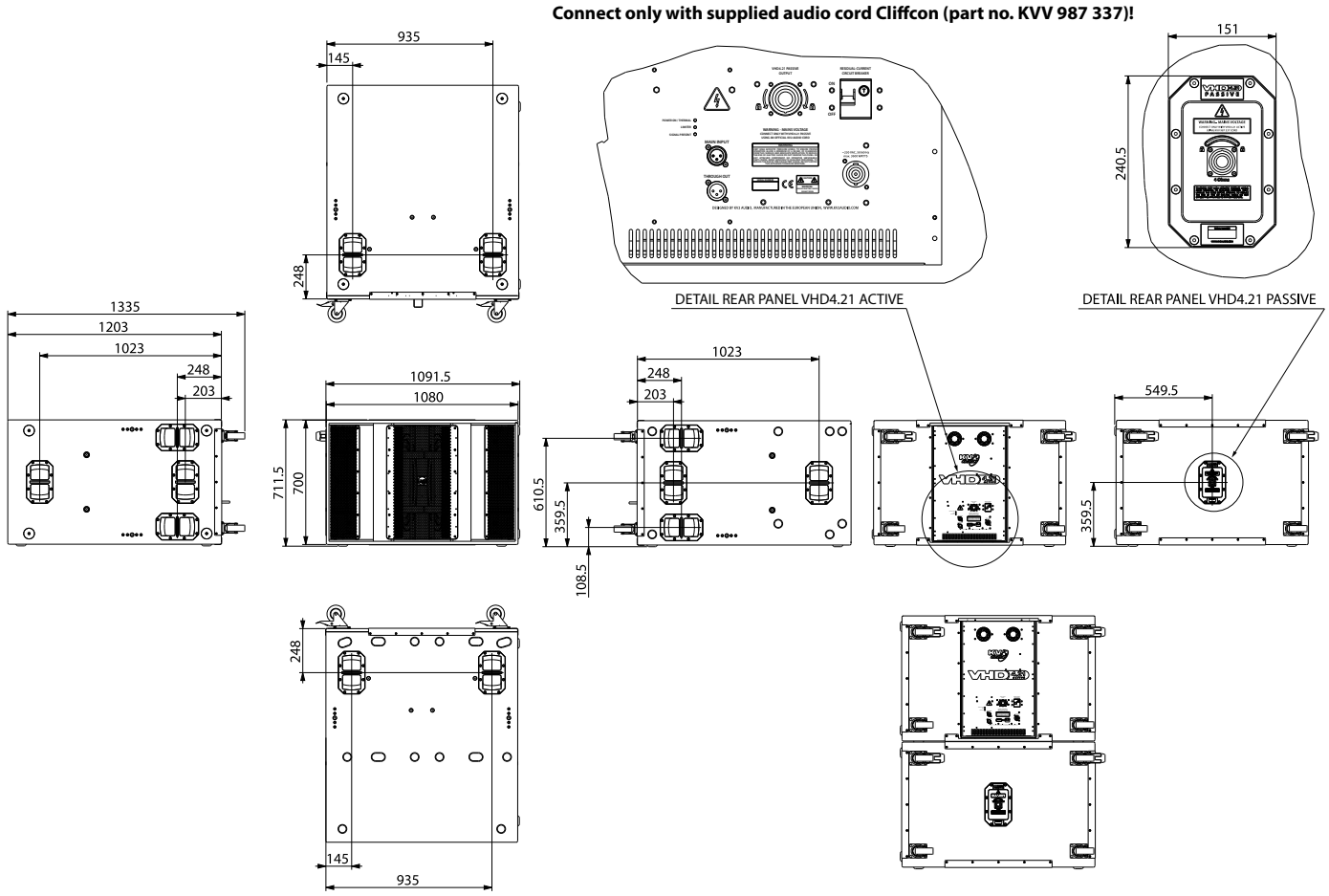
The Loudspeaker system shall have a maximum long term pressure level of 147dB, a Max spl peak of 150dB, with a total peak power handling capacity of 3200W, with a measured frequency response of 34Hz to 180Hz (-3dB), 28Hz to 240Hz (-10dB).

Each enclosure dimensions shall be: 700 mm / 27.56" x 1080 mm / 42.52" x 1200 mm / 47.24".

The Active Enclosure shall not exceed a weight of 175kg / 386lbs. The Passive enclosure shall not exceed a weight of 155kg / 342lbs.

The Loudspeaker system shall be the KV2 Audio VHD4.21.

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