

VHD7000D Technical Data Sheet

Introduction

The VHD7000D is a high powered single channel rack-mounted subwoofer amplifier. The unit contains one 3 500 W RMS long-term amplifier with a high current switching mode power supply, housed in a single 4U rack chassis. The design of its unique and innovative power management system enables the amplifier to deliver a short term power of 7 kW, with a peak power output of up to 14 kW, whilst operating at a modest consumption of 3.6 kW from a 16 A circuit.

The unit incorporates an over specified energy reservoir, enabling it to deliver peak output power beyond the capacity of the mains supply, and for longer durations than other comparable subwoofer amplifiers often quoting the same output power or more. The unit acts as a standalone unit, or as a slave for other KV2 audio system and control amplifiers. The VHD7000D powers associated VHD subwoofer systems, as selected and is configurable from either the front panel, a web browser or by using KV2's Control and Diagnostics Tool. The VHD7000D is equipped with variable gain, a low-pass filter, internal delay line, a notch filter and adjustable protection settings.

Features

- One-channel 3 500 W, Control and Amplification System for use specifically with VHD series subwoofers
- Peak output levels of 14 kW, whilst operating at a modest constant consumption of 3.6 kW from a 16 A circuit
- High efficiency, current enhancing switching amplifier
- High power switching mode power supply circuit for improved power delivery
- On board amplifier overdrive protection
- AC soft-start circuitry with ON/OFF AC breaker switches providing thorough power protection
- Comprehensive front-to-back cooling system features chassis sealed pcb's for improved reliability
- Configurable remotely using KV2's Control and Diagnostics Tool

Output Channels	
Number of Channels	1
Voltage Gain	39 dB
Max. Output Voltage	165 V (peak)
Max. Output Current	82 A (peak)
Minimum load impedance	2 Ω
Out. Power 2 Ω	3 500 W long-term / 7 000 W short-term
Out. Power 4 Ω	2 700 W long-term / 3 600 W short-term

Low Frequency Amplifier Specification	
Type	High efficiency, Current-Enhancing, Switched-Rail Amplifier
Rated Continuous Power	3 500 W (RMS)
Peak Power	14 000 W
Distortion	<0.05%
Operating Bandwidth	10 Hz to 500 Hz

Signal Input	
Input Sensitivity	1.55 V RMS
Input Impedance	20 kΩ (balanced)
Signal Output	Through OUT

Product code: KVV 987 545 (230 V)



Application

Specifically designed to drive all VHD, ES and SL subwoofer elements, with high power, exceptional control and advanced setup options utilising KV2's Control and Diagnostics Tool

- Large scale live music and playback performance
- Dance Clubs and Nightclubs
- Hire and Production
- Large Concert venues
- Fixed installation
- Easily incorporated into multiple KV2 audio system projects

Features	
Input Level Control	-24 dB / +6 dB
Delay Range	0 to 109.2 ms, step 0.05 ms
Phase	0° / 180°
Notch Filter	16 to 25 Hz, step 1 Hz
Loudness bass enhancement	SUB EQ (+6 dB @ 30 Hz)
RMS Limiter	FAST / SLOW, 1 000 to 3 000 W, 8 steps
Low Pass Filter	70, 120, 150, 500 Hz
Peak Limiter	80 V, 90 V, OFF

Power Requirements	
Power Connector	1x Neutrik PowerCon® 32A
Operating Voltage	230 V
Operating Voltage Range	200 to 250 V @ 50 Hz 60 Hz
Recommended Amperage	16 A
Soft Start	YES
Protection	Thermal breaker
Cooling	2x temperature controlled fans

Physical Dimensions	
Height	177 mm (6.96"), 4RU
Width	481.4 mm (18.95")
Depth	484.9 mm (19.09")
Weight	26 kg (57.32 lb)

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Dimensional Drawings

