

HPD2004

4-channel digital amplifier



Description

HPD2004 and HPD4004 are 4-channel amplifiers employing PROEL DA modules, a new generation of digitally controlled Class D power amplifiers with Switch Mode Power Supply (SMPS) featuring an innovative technology.

Unlike most of the competitors in this range, which use a fixed switching frequency, the PWM (Pulse Width Modulation) output stage of DA modules uses a variable switching frequency according to the input signal level. Thanks to a sophisticated hardware and software structure, this system offers performances far above most of the products currently available on the market: better sound definition, high-fidelity reproduction of any frequency of the audio range, higher dynamics at any signal level with low distortion even at very high powers. The superior sound quality can be compared with top-of-the-range AB-class analog systems, while DA modules thanks to the use of SMPS and Class D feature very compact size and light weight, efficiency above 90% and negligible heat dissipation.

The very high efficiency levels result also in a significant reduction in the energy waste associated with large installations, a noticeable reduction in operating costs and a direct benefit to the environment. Featuring high power levels in a lightweight and compact chassis, the HPD amplifiers are much easier and more economical to transport than conventional models and this, in turn, makes them even more environmentally friendly.

HPD amplifiers include an input section with the choice of different filtering options (FLAT / BI-AMP / HPF) and feature an ergonomic and functional design with removable dust filters, for an easy maintenance in all conditions of use and therefore extensive durability. The protection system includes thermal protection, short circuit protection, high frequency protection and CLIP LIMITER circuit.

4 x 500W on 4 ohm, 2 x 1000W on 8 ohm

Less than 12kg in 2 rack units for up to 4000W

DA digitally controlled Class D power modules with SWITCH MODE power supply (SMPS)

PWM (Pulse Width Modulation) output stages with variable switching frequency for a superior sound definition and very high dynamics at any signal level

Very efficient Switch Mode Power Supply for a reduced power consumption

Extensive protection system for maximum reliability

Several filtering options available in the amplifier's input section (FLAT/BI-AMP/HPF)

Aluminum front panel with removable dust filters

Made in Italy

Technical Specifications HPD2004



Power 8 ohm*4x250

Power 4 ohm*4x500

Power BRIDGE 8 ohm*2x1000

Frequency Response 20 Hz - 20 kHz

Input Sensitivity 0 dB / 40 x

Voltage Gain 35 dB / 32 dB

Input Impedance 10 k Ω unbalanced - 20 k Ω balanced

Damping Factor >500 @ 8 Ω

S/N Ratio (Unweighted) >105 dB

Input Connectors Combo and XLR M

Output Connectors Speakon

Cooling variable speed DC fan

LED Indicators protect, signal, bridge, limit

Filtering options FLAT, HPF (100 Hz selectable High-Pass Filter), BI-AMP (100 Hz 24 dB/octave Crossover Filter)

Protections DC, thermal, soft start, short circuit, CLIP limiter

Power Supply 230 VAC 50 Hz or 120 VAC 60 Hz

Rated 1/8 power output 800 VA

Max Power Consumption 2450 VA

Dimensions (W x H x D) 483 x 89 x 383

Weight 11 kg (24.3 lb)

**W RMS, all channel driven, 1KHz THD 1%*