

PDAXPRO2 is a complete solution dedicated to 1-way or 2-way self-powered loudspeakers. Designed to meet different applications, it provides 2 channels with output power of 800W+2000W @4 Ohm. Moreover the 2 channels can be bridged into a powerful single channel in order to drive i.e. Subwoofers or Multiple Ways Cabinets with Passive Xovers. In addition it offers a full set of added value features such as on board DSP and RS485 connection for monitoring and control via dedicated PC software. To guarantee maximum reliability, the PDAXPRO2 includes a highly efficient universal switch mode power supply with PFC (Power Factor Correction) which provides power to the 2 output channels. The 2

output stages use the Class D module. The PDAXPRO2 includes a set of sophisticated processes for loudspeaker, implemented by the powerful MARANI® DSP running 96kHz/24bit [96 bits precision for the internal intermediate processes] and high performance 24bit AD/DA Converters. Processes as Noise Gate, crossover filters, parametric EQs per input and output sections, RMS compressor, Peak Limiter, alignment delay, all in all everything needed to optimize a self-powered loudspeaker. Moreover the efficient heat dissipation system and Over-Heat protection ensure uncompromised reliability. Furthermore the PDAXPRO2 is also equipped with an useful Pink/White noise generator. All setup parameters for input mixing, DSP features and the limiter setting are accessible by using the remote PC software.



Features

Outstanding Performance

- High power output: 800W+2000W@4Ω
- Switched-Mode Power Supply with PFC and auto voltage sensing
- Class D Amp Module - full bandwidth PWM modulator with ultra low distortion
- Full protection circuitry including Over-Current, Over/Under-Voltage, Output DC and Over-Temperature
- Excellent sonic performance with 24bit high end converters coupled with 96kHz sample rate

Top-grade DSP Engine

- 10 Bell + 2 Shelving per input channel
- 5 band parametric equalization per output channel, selected as Bell, Low/High Shelving variable Q
- Output features a precision dynamic range controller composed of a RMS Compressor with selectable ratio and variable knee and Peak Limiter

Adjustable Delay time up to 600ms for input channels, and up to 10ms for output channels

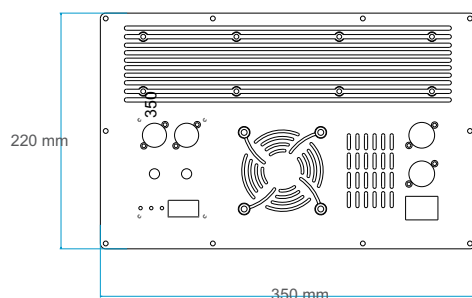
Input channel includes a Noise Gate function, RMS Compressor Pink/White noise generator, sophisticated Dynamic Loudness function

Network Connection

Rs485 connection for system setup, monitoring and control via fully manageable remote PC software

Control

- Simultaneous control up to 32 units via PC software
- 4 Preset Selection by using rotary encoder switch
- Security Lockout



Power & Amplifier Sections

Number of Channels	----- 2
Max Output Power @ 4 ohms	----- 800W+2000W@ 4Ω
Output Circuitry	----- Class D - full bandwidth PWM modulator with ultra low distortion
Output Voltage	----- 70 Vp / 140 Vpp(unloaded)
THD @ Rated power 4Ω (1kHz)	----- <0.005% (20 Hz - 20 kHz, 8Ω load, 3dB below rated power)
Signal To Noise Ratio	----- >120 dB (A-weighted, 20 Hz - 20 kHz, 8Ω load)
Frequency Response	----- 20 Hz - 20 kHz ± 0,15 dB (8Ω load, 1 dB below rated power)
Damping Factor	----- >1000 (8Ω load, 1kHz and below)
Power Supply	----- Switch mode power supply with PFC (Power Factor Correction) and integral standby converter
Operating Range	----- Universal Mains, 85-265V
Consumption / Current draw and	--- 27 W / -A / ---- BTU/h (Idle)
Thermal dissipation @ 230 V	1849 W / -A / ---- BTU/h (1/8 max. power@4Ω)
Protections	----- Over-Current, Over/Under Voltage, Output DC and Over-Temperature
Maximum Input/Output Level	----- +12 dB

Audio

Analog Input	----- 1 x XLR electronically balanced, +12dB
Analog Output	----- 1 x XLR electronically balanced (Link)
AD & DA Converters	----- 24bit

DSP & Processing

DSP Engine	----- MARANI® DSP, 24bit (data) x 24bit (coeff.),
DSP Resolution	----- 54bit accumulation registers, 96 bit precision on intermediate processing data
Parametric Equalization	----- 10 Bell + 2 Shelving per input channel 5 band parametric equalization per output channel, selected as Bell, Low/High Shelving variable Q
Filter Type	----- Bell, Low/High Shelving variable Q
Filter Gain	----- From -24dBu up to +12dBu; by 0.5dBu resolution steps
Center Frequency	----- Selectable with a 1Hz resolution step from 20Hz up to 20kHz
Bell Filter Q/BW	----- Q from 0.5 up to 10 by 0.1 resolution steps
Low/High ShelvingFilter Q	----- Q from 0.5 up to 3 by 0.1 resolution steps
Crossover section HPF/LPF	----- Butterworth 6/12/18/24/48dB per octave; Linkwitz-Riley 12/24/36/48dB per octave; Bessel 12/24dB per octave. Filter resolution 1Hz
	----- Sophisticated Dynamic Loudness function
Input Noise Generator	----- White/Pink Noise, from -40dB to 0dB
Input RMS Compressor	----- Make up from -6dB to +6dB; Threshold from -18dB up to +12dBu; Knee 0~100%; Ratio 2:1~100:1; Attack time from 5ms up to 100ms; Release time from 40ms up to 1000ms Hold-Time up to 10sec
Out Put RMS Compressor	----- Make up from -6dB to +6dB; Threshold from -18dB up to +12dBu; Knee 0~100%; Ratio 2:1~100:1; Attack time from 5ms up to 500ms; Release time from 40ms up to 1000ms (10ms resolution).
DLF	----- Input: On/Off + Amount % Output: On/Off, attenuation from -6dB to 0dB, Q from 0.1 to 10 by 0.1dB resolution steps
Delay	----- up to 600ms for each input, up to 10ms for each output, with min step=20.8us
Ground Noise	----- -86 dBu

General

User Preset	----- 4
Panel	----- GAIN pot. -30dBu ~ 0dBu PRESET EQ 8 positions Rotary encoder switch Red LED (Power); Yellow LED (Link); Green LED (Signal presence) 1 x FAN 1 x XLR female connector (Input) 1 x XLR male connector (Link Output) 2 x RJ45 connector (M-LAN Rs485) 2 X Locking PowerCON® 20A: AC Mains (blue) - AC Link (white) IEC C13 16A connector; Power on/off switch
Dimensions	----- 350x95x220mm
Weight, Net / Shipping	----- 5.1 Kg / 6.3 Kg

Specifications subject to change without notice

Designed in Italy Assembled in China