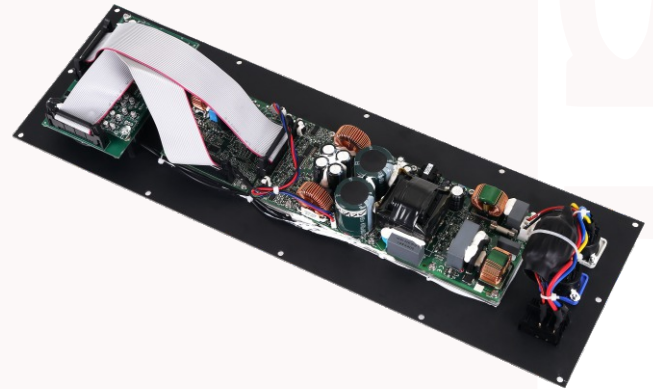


PDA540P provides 4 channels with output power of 4x500W @4 Ohm. Moreover the low and mid channels can be bridged into a powerful configuration allowing 1kW@4/8ohm +2x500W@4ohm in order to drive i.e. Subwoofers and satellites. In addition it offers a full set of added value features such as on board DSP and RS485 connection for monitoring and control via dedicated PC software. The 4 output stages use the Class D module. The **PDA540P** includes a set of sophisticated processes for loudspeaker, implemented by the powerful MARANI® DSP running 48kHz/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 **PDA540P** is also equipped with a 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: 4 x 500W @ 4ohm
or 1kW@4/8ohm +2x500W@4ohm

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 48kHz sample rate

Top-grade DSP Engine

5 band parametric equalization per input channel, selected as Bell, Low/High Shelving Q, HP/LP and Notch Filter

7 band parametric equalization per output channel, selected as Bell, Low/High Shelving Q, HP/LP and Notch Filter

Input HP and Output HP/LP filters with slopes from 6dB/Octave up to

-48dB/Octave including Butterworth, Bessel, Linkwitz-Riley

Output features a precision dynamic range controller composed of a Peak Limiter

Adjustable Delay time up to 960.998 ms for input and output channels

Input channel includes a Noise Gate function, Pink/White noise generator, and RMS Compressor with adjustable knee and ration

Network Connection

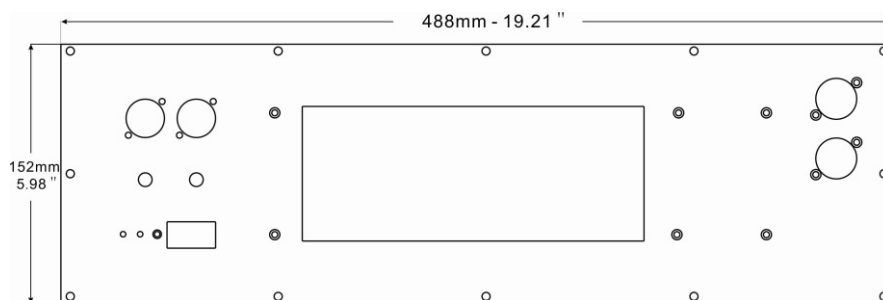
Rs485 connection for system setup, monitoring and control via fully manageable remote PC software

Control

Simultaneous control up to 32 units via PC software

8 Preset Selection by using rotary encoder switch

Security Lockout



Power & Amplifier Sections

Number of Channels	4 or 1+2
Max Output Power @ 4 ohms	4 x 500W @ 4ohm, or 1kW@4/8ohm+2x500W@4ohm
Output Circuitry	Class D - full bandwidth PWM modulator with ultra low distortion
Output Voltage	+/-70 V (SE Mode unloaded) / Bridged +/-140V(BTL Mode unloaded)
THD+N	<0.01% (20 Hz - 20 kHz, 8Ω load, 3dB below rated power)
Signal To Noise Ratio	>102 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	13W / -A / 44.3 BTU/h (Idle)
Thermal dissipation @ 230 V	173W / -A / 143.4 BTU/h (1/8 max. power@4Ω)
Protections	Over-Current, Over/Under Voltage, Output DC and Over-Temperature
Maximum Input/Output Level	+12dB

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	5 filters per input channel; 7 filters per output channel
Filter Type	Bell, Low/High Shelving Q, HP/LP and Notch Filter
Input/Output Filter Gain	From -15dBu up to +15dBu; by 0.5dBu resolution steps
Center Frequency	Selectable with a 1Hz resolution step from 20Hz up to 20kHz
Filter Q/BW	Bell Type: 0.4~128 Lo/Hi-Shelving /HP/LP Q Type: 0.1~5.1 Notch Type: 4~104
Input HPF & Output HPF/LPF	Butterworth 6/12/18/24/36/48 dB/oct; Linkwitz-Riley 12/24/36/48 dB/oct; Bessel 12/24 dB/oct and custom
Input Noise Generator	White/Pink Noise, from -40dB to 0dB
Input RMS Compressor (AUTO Mode Selectable)	Threshold from -18dB up to +12dBu; Knee 0~100%; Ratio from 2:1 to 32:1; Attack time from 5ms up to 200ms; Release time from 0.1s up to 3s
Output Peak Limiter	Threshold from -18dBu up to +12dBu; Attack time from 1ms up to 900ms; Release time from 0.1s up to 5s Make up: 0~+12 dB
Delay	up to 960.998ms for each input and output channel, with min step=20.8us
Ground Noise	-86dBu

General

Panel	GAIN pot. -30dBu ~ 0dBu PRESET EQ 8 positions Rotary encoder switch Red LED (Power); Yellow LED (Link); Green LED (Signal presence) 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)
Dimensions	19.21" x 3.15" x 5.98"(488x80x152mm)
Weight, Net / Shipping	6.09 lbs (2.76 Kg) / 8.83 lb (4 Kg)