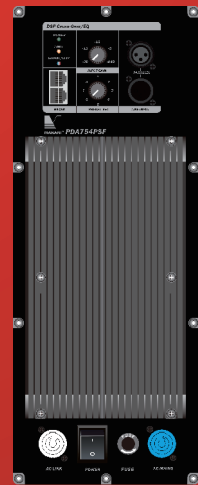


# Plate Amplifiers

## for Active Speakers - PDA754PS

**PDA754PS** is a complete solution dedicated to 4-way self-powered loudspeakers. Designed to meet different applications, it provides 4 channels with output power of 4x750W@4 Ohm. Furthermore, it's possible to bridge



any 2 of them so to get power of 1500W @8ohm to drive sub woofer. 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 PDA754PS output stages use the well-known Class D amplifier module. The **PDA754PS** 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 with Auto Mode and Auto Knee available, 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 each output is also equipped with up to 48dB/Oct HP/LP filter. 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 750W @ 4Ω, or 2x750W@ 4Ω+1500W@8Ω  
 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

5 band parametric equalization per input channel  
 7 band parametric equalization per output channel  
 All PEQ filters could be selected as Bell, Low/High Shelving, LP/HP variable Q and Notch Filter  
 Crossover filters with slopes from 6dB/Octave up to -48dB/Octave including Butterworth, Bessel, Linkwitz-

#### Riley

Input/Output feature a precision dynamic range controller composed of a RMS Compressor and Peak Limiter  
 Adjustable Delay time up to 960.998 ms for input and output channel  
 Input channel includes a Noise Gate function, Pink/White noise generator, RMS Compressor, and up to 48dB/Oct High-Pass filter  
 While Output channel contains up to 48dB/Oct HP/LP filter and Peak Limiter

#### Network Connection and Control

RS485 connection for system setup, monitoring and control via fully manageable remote PC software  
 8 Preset Selection by using rotary encoder switch  
 Security Lockout

# Plate Amplifiers

## for Active Speakers - PDA754PS

### Power & Amplifier Sections

Number of Channels -----	4
Max Output Power -----	4x750W@4ohm 2x750W@4ohm+1500W@8ohm
Output Circuitry -----	Class D - full bandwidth PWM modulator with ultra low distortion
Output Voltage -----	78 V (SE Mode) / 156V(BTL Mode)
THD+N(from 0.1W to 1/2 Power)-----	<0.08% (typical <0.05%)
Signal To Noise Ratio -----	>115 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 -----	>500 @1kHz
Power Supply -----	Integrated power supply and auto voltage sensing
Operating Range -----	Universal Mains, 85 – 264VAC
Protections -----	Over-Current, Over/Under Voltage, Output DC and Over-Temperature
Ground Noise -----	-86dBu
Maximum Input/Output Level -----	+12 dB

### Audio

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

### DSP & Processing

DSP Engine -----	MARANI® DSP
DSP Resolution -----	24bit (data) x 24 bit (coeff.), 54 bit accumulation registers 96 bit precision on intermediate processing data Range from -60dB to +12 dB
Input/Output Gain -----	5 filters per input channel; 7 filters per output channel
Parametric Equalization -----	Bell, Low/High Shelving variable Q, HP/LP and Notch
Filter Type -----	From -15dBu up to +15dBu by 0.5dBu resolution steps
Filter Gain -----	Selectable with a 1Hz resolution step from 20Hz up to 20kHz
Center Frequency -----	Bell: 0.4 up to 12B; Lo/Hi-Shelving, HP/LP:0.1 up to 5.1; Notch: 4 up to 104
Filter Q/BW -----	Pink/White Noise available, level from -40 to -20 dBu
Internal Noise Generator-----	Linkwitz-Riley, Butterworth 6/12/18/24/36/48dB per octave; Bessel 12/24dB per octave; Filter resolution 1Hz
Crossover section IIR-----	HP filter up to 48dB/Oct, selectable as Butterworth, Linkwitz-Riley and Bessel
Input Special Filters-----	Threshold from -18dBu up to +12dBu; Attack time from 5ms up to 200ms; Knee 0~100%; Ratio from 2:1 to 32:1; Release time from 0.1s up to 3s Auto Mode and Auto Knee available
Input RMS Compressor -----	Threshold from -18dBu up to +12dBu Release time from 1ms up to 900ms; Attack time from 0.1s up to 5s;
Output Peak Limiter -----	up to 960.998ms for input and output
Delay -----	

### General

Dimensions -----	155x400x90 (mm)
Weight, Net / Shipping -----	4.7kg/ 5.3kg