

PDA350I is a complete solution dedicated to 2-way self-powered loudspeakers. Designed to meet different applications, it provides 2 channels, composed of one way for powering the Woofer (Low Freq.) and one for powering the Tweeter (High Freq.), with output power of 300W @ 4ohm or 150W @ 8ohm(CH1) + 50W(CH2) @8ohm. In addition it offers a full set of value adding features such as on board DSP. To guarantee maximum reliability, the **PDA350I** includes a highly efficient switch mode power supply, which provides power to the 2 output channels. The woofer output stage uses the Class D module - full bandwidth PWM modulator obtaining ultra low distortion, high dynamic range and also equipped with a full set of circuit protections, the Tweeter output stage, is instead powered by a Linear 50W Amp. The **PDA350I** 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]. Processes as Noise Gate, crossover filters, parametric EQs per input and output sections, RMS compressor, alignment delay and All-Pass filters are available, all in all everything needed to optimize a self-powered loudspeaker. Moreover the Clip/Limiter function per channel provides output monitoring to prevent speaker damage with gentle gain reduction at clip threshold, in addition to the efficient heat dissipation system and Over-Heat protection which themselves ensure uncompromised reliability. Furthermore the **PDA350I** is also equipped with a Dynamic Boost 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: 150W(CH1)+50W(CH2) @ 8ohms; 300W(CH1) @ 4ohms
 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

3 band equalization on input channel 1st Lo-Shelv, 2nd Bell, 3th Hi-Shelving
 5 band parametric equalization on output channel
 Input High-Pass filter up to -12dB/Octave
 Crossover filters with slopes from 6dB/Octave up to 24dB/Octave including Butterworth, Bessel,

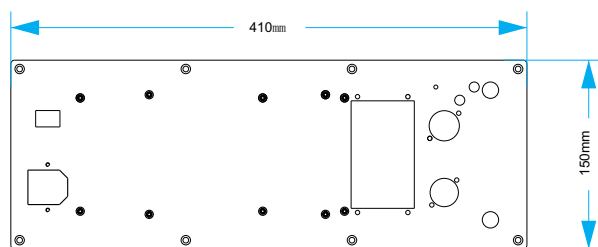
Linkwitz-Riley Output channel features a precision dynamic range controller
 Adjustable Delay time up to 7 ms for input and 2 ms for woofer output. Input channel includes a Noise Gate function
 Dynamic Boost Filter function
 Output Peak Limiter

Direct PC/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 Function

Number of Channels	2(CH1=Woofers; CH2=Tweeter)
Max Output Power @ 8 ohms	150W(CH1) @ 1%; 50W(CH2) @ 2%
Max Output Power @ 4 ohms	300W(CH1) @ 1%
Output Circuitry	CH1: Class D - full bandwidth PWM modulator with ultra low distortion CH2: Class AB
Output Voltage	48.6 Vp / 97 Vpp (unload)
THD +N	<0.01%
Signal To Noise Ratio	> 102 dB (A-weighted, 20 Hz - 20 kHz, 8Ω load)
Frequency Response	CH1: 20 Hz - 20 kHz , -0.3dB ~ -0.5dB; CH2: 100 Hz - 20 kHz , -0.5dB ~ -0.5dB;
Damping Factor	> 1000 (8Ω load, 1kHz and below)
Power Supply	Switch mode power supply
Operating Range	Universal Mains, 85-268V (dual voltage auto selection)
Consumption / Current draw	13W / -A / 78.4 BTU/h (Idle) and Thermal dissipation @ 230 V 15W / -A / ----- 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(MUSIC), -30dB(MIC)
Analog Output	1 x XLR electronically balanced (Link)
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
Parametric Equalization	3 filters on input channel LoShelving, Bell and HI-Shelving 5 filters on output channel only one selected as Bell or Shelving
Filter Type	Bell, Low/High Shelving variable Q
Filter Gain	Input from -6dBu up to +6dBu by 0.5dBu resolution steps Output from -12dBu up to +12dBu by 0.5dBu resolution steps
Center Frequency	Selectable with a 1HZ resolution step from 20 Hz up to 20 kHz
Filter Q/BW	Bell: Q from 0.4 up to 8 by 0.1 resolution steps Hi/Lo Shelv: Q from 0.4 up to 5 by 0.1 resolution steps
Crossover section HPF/LPF	Butterworth 6/12/18/24dB per octave Bessel and Linkwitz-Riley 12/24dB per octave Filter resolution 1Hz
Peak Limiter	Threshold from -18dBu up to +12dBu Release time from 25ms up to 350ms (1ms resolution up to 200ms, 5ms res. up to 350ms) Attack time from 1ms up to 50ms(1ms resolution)
Delay	7ms for input channel and 2ms for output woofer 10.4us/Adj 1 ms per channel
Ground Noise	-86dBu

General

User Preset	8
Panel	GAIN pot. -30dBu ~ 0dBu PRESET EQ 8 Positions Rotary encoder switch Green LED (Power); Red LED (Limit) 1 x volume potentiometer 1 x XLR female connector (Input) 1 x XLR male connector (Link Output) 1 x MIC/MUSIC Switch 1 x Ground-lift toggle Switch 2 x Locking PowerCON® 20A: AC Mains (blue) - AC Link (white) On/Off Power Switch
Dimensions	410mmX150mmX65mm
Weight, Net / Shipping	6.03 lbs(2.76kg)/ 8.83 lbs (4kg)