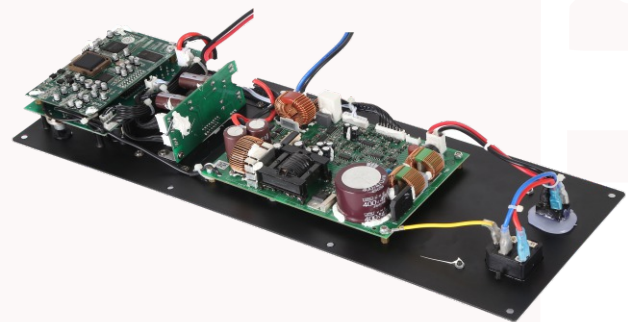


PDA350I is a complete solution dedicated to 2-way self-powered loudspeakers. Designed to meet different applications, it provides 2 channels, composed of one way for powering the Woofer (Low Freq.) and one for powering the Tweeter (High Freq.), with output power of 300W @ 4ohm or 150W @ 8ohm(CH1) + 50W(CH2) @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 with PFC (Power Factor Correction) which provides power to the 2 output channels. The woofer output stage uses the well-known ICEPower 300ASC 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 M504 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

Switched-Mode Power Supply with auto voltage sensing

ICEPower 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

On Low Band the 1st PEQ can be switched to Bell, Low Shelving

On High Band the 5th PEQ can be switched to Bell,

High Shelving

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

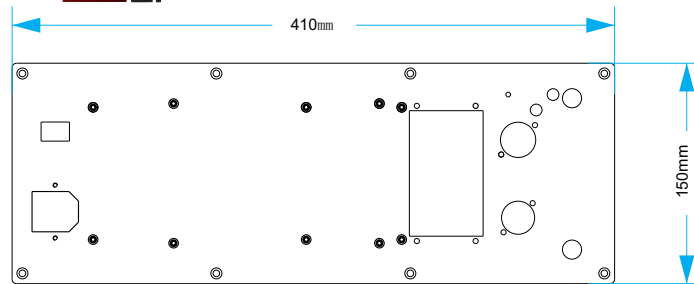
Rs485 connection for system setup, monitoring and control via fully manageable remote PC software

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 @ Rated power 4Ω (1kHz) | <0.005% (CH1) |
| THD @ Rated power 8Ω (1kHz) | <0.01% (CH2) |
| Signal To Noise Ratio | > 120 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 with PFC (Power Factor Correction) and integral standby converter |
| 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 |

Audio

| | |
|--------------------------|---|
| Analog Input | 1 x XLR electronically balanced, +12dB(MUSIC), -30dB(MIC) |
| Analog Output | 1 x XLR electronically balanced (Link) |
| AD & DA Converters | Cs4272 24bit |
| Frequency Response (DSP) | 20 Hz - 20 KHz; -0.5dBu @ 20 Hz and 20 kHz |

DSP & Processing

| | |
|---------------------------|--|
| DSP Engine | MARANI M504 |
| 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) |
| Delay | Attack time from 1ms up to 50ms(1ms resolution) 7ms for input channel and 2ms for output woofer 10.4us/Adj 1ms per channel |

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) |