

## **Architects Specifications**

## PE-Series, 2-Channel Amplifiers with Ethernet Control

The power amplifiers shall consist of six separate models (800, 1200, 1800, 2400, 3000, and 3800), being of two channels, and shall deliver a minimum power ranging from 200 to 1100 watts RMS per channel into 8 ohm loads and ranging from 400 to 1900 watts RMS per channel into 4 ohms depending on the model being used. When switched into Bridged-Mono mode, the amplifier in use shall deliver a range from 800 to 3800 watts RMS into 8 ohms. All amplifiers shall have the ability for input attenuation, channel mute, channel polarity, input level, output voltage, output current, clipping, temperature, and power on/off be controlled or monitored through the standard, built-in Ethernet port using Protea<sup>ne</sup> Software<sup>™</sup>.

The amplifiers shall have the capability to replace the input module with either a 32 bit/96kHz, Proteane DSP module featuring both analog and digital (AES3) inputs, two additional processed output channels and extensive digital signal processing or the PNE-C2 CobraNet module.

Dimensions of the amplifiers shall be  $19''W \times 3.5''H \times 15.5''D$ , with a weight range of 22 to 24 pounds. The amplifiers shall utilize a state-of-the-art, efficient, two-stage high speed switched mode power supply. Cooling shall be accomplished by the use of a temperature sensitive variable speed fan with front to back airflow.

The amplifier shall have a selectable input gain of 26dB, 32dB or 1.4V. Frequency response shall be 20 Hz - 20 kHz, +/- 0.15 dB. Hum and noise shall range from >98dB to 112dB below full output (20Hz to 20KHz A-weighted) and SMPTE intermodulation distortion shall be <.01% (8 ohm load, 10dB below rated power). Total Harmonic Distortion (20Hz - 20KHz at 8 ohms) shall be <.01% (8 ohm load, 10dB below rated power, 20Hz-10 kHz).

Each amplifier channel shall be supplied with a calibrated stepped input attenuator located on the front panel with the capability of the attenuators to be disabled. Each pair of inputs shall have a selectable, bypassable high pass filter of 12dB/octave at 30Hz and 50Hz, a switch to select stereo or mono mode and a switch to select dual or bridge mode. There shall be an input ground switch located on the rear panel to select chassis or floating ground operation and a selectable clip limiter with off, slow, and fast settings.

The inputs shall be active balanced design, with an impedance of 20K ohm with a maximum input level of +21dBu. Input connections shall be XLR-1/4" Neutrik combo connectors and 6-pin Euroblock. XLR male connectors shall be provided for looping to additional amplifiers. Output connectors shall be locking Neutrik Speakon. Models 800 and 1200 shall have a 4 position screw terminal strip with safety cover as an additional output.

The amplifiers shall have front panel indicators for power, standby, protect, bridged mono, parallel mono, and data communications. Each channel shall have signal indicators for clip, -6 dB, -12 dB, -18 dB levels, temp, output current.

The amplifier shall have built in protection for inrush current, temperature, output DC, SOA of power transistors, output over-current and mains power.

The amplifiers shall be capable of operation by means of its own built-in power supply connected to 110 - 125VAC, 220 - 250VAC, 50/60Hz.

The amplifier shall be covered under a full limited warranty of not less than five years. The amplifier shall be a PE-Series model, manufactured by Ashly Audio, Inc. of Rochester, New York.

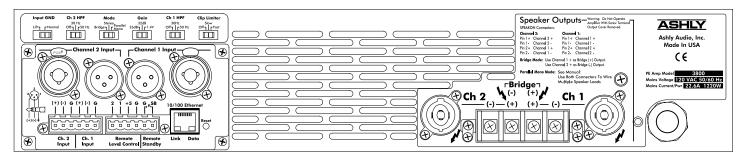
## Features

- Ethernet Remote Control & Monitoring
- 2-Stage High Efficiency Switched Mode Power Supply
- Calibrated, Stepped Input Attenuators
- Input Sensitivity 26dB, 36db or 1.4V
- DC Voltage Control of Input & Remote Power Turn-On/Off
- Temperature Sensitive Variable
   Speed Fan Front to Back Airflow
- Selectable Subsonic Filter
- Selectable Clip-Limiter
- 4-Stage Level Meters
- Amplifier Status Indicators:
   Power, Standby, Bridge Mono,
   Parallel Mono, Protect and
   Communications Enabled
- Output Current & Temp Indicators
- Safety/Compliance: cTUVus/FCC, CE, RoHS

| PE-Series Specifications                 | 800        | 1200    | 1800     | 2400     | 3000          | 3800          |
|--|------------|---------|----------|----------|---------------|---------------|
| Power Output                             |            |         |          |          |               |               |
| Stereo Mode, both channels driven        |            |         |          |          |               |               |
| 8 ohms, 20 Hz - 20 kHz, 1% THD           | 200W       | 300W    | 500W     | 700W     | 900W          | 1100W         |
| 4 ohms, 20 Hz - 20 kHz, 1% THD           | 400W       | 600W    | 900W     | 1200W    | 1500W         | 1900W         |
| Bridged Mono Mode                        |            |         |          |          |               |               |
| 8 ohms, 20 Hz - 20 kHz, 1% THD           | 800W       | 1200W   | 1800W    | 2400W    | 3000W         | 3800W         |
| Parallel Mono Mode                       |            |         |          |          |               |               |
| 2 ohms, 20 Hz - 20 kHz, 1% THD           | 800W       | 1300W   | 1800W    | 2400W    | 3000W         | 3800W         |
| 70V                                      | nr         | nr      | nr       | 1200W    | 1500W         | 1700W         |
| Power Requirements (1/8 Power)           | 420W       | 640W    | 6112W    | 790W     | 1010W         | 1220W         |
| Signal to Noise 20 Hz-20 kHz, unweighted | >98 dB     | >105 dB | >108 dB  | >110 dB  | >111 dB       | >112 dB       |
| Output Circuitry [Bipolar] Class         | AB         | AB      | Н        | Н        | Н             | Н             |
| Power Cable Connector                    | 15A Edison | 20A     | 20A      | 20A      | 30A Twistlock | 30A Twistlock |
| Weight lbs./ kg.                         | 22/9.98    | 22/9.98 | 23/10.43 | 23/10.43 | 24/10.89      | 24/10.89      |

| PE-Series Specifications (All)       |  |  |  |
|--------------------------------------|--|--|--|
| Distortion (SMPTE, typical)          | <.01% (8Ω load, 10dB below rated power)  |  |  |
| Distortion (THD+N, typical)          | <.01% (8Ω load, 10dB below rated power, 20Hz-10 kHz)   |  |  |
| Frequency Response                   | 20 Hz - 20 kHz, +/- 0.15 dB  |  |  |
| Damping Factor - 8 ohm load, < 1 kHz | > 400  |  |  |
| Input Impedance                      | 20 kΩ, balanced  |  |  |
| Maximum Input Level:                 | +21 dBu  |  |  |
| Cooling                              | temperature dependent speed-controlled axial fan   |  |  |
| Control Network                      | onboard, compatible with std 100MB Ethernet hardware   |  |  |
| Front Panel Indicators (Per channel) | Clip, -6 dB, -12 dB, -18 dB, Temp, Output current.   |  |  |
| Overall                              | pwr, stdby, protect, bridged mono, parallel mono, comm   |  |  |
| Attenuators                          | Per channel: front panel, software, offset and remote  |  |  |
| Input Connectors, each channel       | XLR female/TRS, Euroblock, XLR male (looping)  |  |  |
| Output connectors, each channel      | Speakon, screw terminals (Model 800 and 1200 only)   |  |  |
| Amplifier Protection                 | inrush current limitation, temperature monitoring heat-sinks, output DC, power transistor, SOA, output over-current, mains fuses |  |  |
| Load Protection                      | Adjustable clip limiter  |  |  |
| Dimensions                           | 19"W x 3.5"H x 15.5"D (483mmW x 88.9mmH x 394mmD)  |  |  |

Rear Panel 800 and 1200 (no screw terminals on 1800, 2400, 3000, 3800)



Ashly manufactures a complete and comprehensive line of Analog and Digital Signal Processors, Power Amplifiers, Mixers, and Amplifier Input Options. Please call, write or visit our web site for information on any of these Ashly Products.