Our multi-channel **ne (Networked-Enabled) Series Amplifiers** are uniquely designed around an energy efficient Class-D platform with a switching power supply.

Connecting and controlling an amplifier for networked systems has now been simplified with **ne Amplifiers**. This line offers ease of use, setup and control using standard 10/100 Ethernet protocol and Protea™ ne Software. No special outboard control units are needed.

Choose either the **ne4250** (4-channel) or **ne8250** (8-channel) packages rated at 250W per channel, with separate Hi-Z and Low-Z models. **ne Series Amplifiers** are offered in two separate platforms—the standard network amplifier or a network amplifier with an on-board Protea™ DSP Processor. Each can be customized for any installation by adding your choice of AES3 inputs, mic pre inputs*, CobraNet® or Dante® modules.

**ne4250 & ne8250 Features:**

- 10/100 Ethernet comes standard for remote control and monitoring
- FIR Filter capable (with DSP)
- Low-Z, 25V, 70V, 100V models
- Protea DSP, AES3, CobraNet® and Dante® input options
- DC voltage remote gain control
- Switched-mode power supply, Class-D output
- Stepped, calibrated input attenuators
- Remote power standby
- Disable all front panel controls via software
- Temperature sensitive variable speed fan with side-to-front airflow
- Selectable HPF frequencies (80Hz, 400Hz, off) on 25V, 70V, and 100V models
- 4-stage level meters
- Output current and temp indicators
- Safety/Compliance: cTUVus, CE, FCC, RoHS

**Remote Accessory**

<table>
<thead>
<tr>
<th>WR-1</th>
<th>2-Channel Level Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>WR-1.5</td>
<td>Level and Preset Recall</td>
</tr>
<tr>
<td>WR-2</td>
<td>Four-Position Switch</td>
</tr>
<tr>
<td>WR-5*</td>
<td>Programmable Button Controller</td>
</tr>
<tr>
<td>neWR-5*</td>
<td>Programmable Network Remote</td>
</tr>
<tr>
<td>FR-8*</td>
<td>8-Channel Network Fader Remote</td>
</tr>
<tr>
<td>FR-16*</td>
<td>16-Channel Network Fader Remote</td>
</tr>
<tr>
<td>RD/RW-8C*</td>
<td>Serial Data Fader Remote</td>
</tr>
<tr>
<td>Ashly Remote*</td>
<td>Remote Control Application for Apple® iPad®</td>
</tr>
</tbody>
</table>

**LED Indicators: Each Channel**

<table>
<thead>
<tr>
<th>SIGNAL LEVEL</th>
<th>RED</th>
<th>Clip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow</td>
<td>-6dB</td>
<td></td>
</tr>
<tr>
<td>Green</td>
<td>-18dB, -12dB</td>
<td></td>
</tr>
<tr>
<td>BRIDGE</td>
<td>Green</td>
<td>Per Channel Pair</td>
</tr>
<tr>
<td>TEMP</td>
<td>Yellow</td>
<td>Per Channel</td>
</tr>
<tr>
<td>CURRENT</td>
<td>Green</td>
<td>Per Channel: Proportional to output</td>
</tr>
</tbody>
</table>

**ne Models**

<table>
<thead>
<tr>
<th>Channels</th>
<th>ne4250</th>
<th>ne8250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Channels</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Continuous Average Power Output: Per Channel, Low Z models, Stereo Mode, All Channels Driven</td>
<td>8 Ohms</td>
<td>150W</td>
</tr>
<tr>
<td>4 Ohms</td>
<td>250W</td>
<td>250W</td>
</tr>
<tr>
<td>Low Z Output: Bridge Mode, All Channels Driven</td>
<td>8 Ohms</td>
<td>500W</td>
</tr>
<tr>
<td>25V, 70V, 100V Distributed Output Models: 20Hz–20kHz 1% THD</td>
<td>25V (per channel)</td>
<td>250W</td>
</tr>
<tr>
<td>70V (per channel)</td>
<td>250W</td>
<td>250W</td>
</tr>
<tr>
<td>100V (per channel)</td>
<td>250W</td>
<td>250W</td>
</tr>
<tr>
<td>Line Current Draw: 120VAC Mains (divide in half for 230V)</td>
<td>Standby Mode</td>
<td>190mA</td>
</tr>
<tr>
<td>Idle (no signal)</td>
<td>540mA</td>
<td>565mA</td>
</tr>
<tr>
<td>Typical (1/8 power pink noise)</td>
<td>2.85A</td>
<td>5.00A</td>
</tr>
<tr>
<td>Maximum (1/3 power pink noise)</td>
<td>6.00A</td>
<td>11.0A</td>
</tr>
<tr>
<td>Thermal Dissipation: BTU/hr, All Channels Driven</td>
<td>Standby mode</td>
<td>46.7</td>
</tr>
<tr>
<td>Idle (no signal)</td>
<td>123</td>
<td>187</td>
</tr>
<tr>
<td>Typical (1/8 power pink noise)</td>
<td>341</td>
<td>700</td>
</tr>
<tr>
<td>Maximum (1/3 power pink noise)</td>
<td>378</td>
<td>775</td>
</tr>
</tbody>
</table>

*Remote control function is limited without Protea DSP installed in amplifier. See product manual for details. ©2015 All features, specifications and graphical representations are subject to change without notice.
specifications

<table>
<thead>
<tr>
<th>Note: 0dBu = 0.775 VRMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Response</td>
</tr>
<tr>
<td>Input Impedance</td>
</tr>
<tr>
<td>Voltage Gain</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Input Sensitivity</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Maximum Input Level</td>
</tr>
<tr>
<td>Software Controlled Internal HPF (25V, 70V, 100V models)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Signal to Noise (20–20kHz, Unweighted)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Distortion (8 Ohm load)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Damping Factor (8 Ohms, 1kHz)</td>
</tr>
<tr>
<td>Output Circuitry</td>
</tr>
<tr>
<td>Amplifier/Load Protection</td>
</tr>
</tbody>
</table>

rear panel

Controls

Ethernet, Channel bridge switch (Low-Z only), Remote standby, Preset recall (4), Remote Level (8), Remote Data

Connectors (each channel)

Input: Euroblock |

Output: Euroblock |

power requirements

AC Main

120VAC or 240VAC ±10% (factory set), 50–60Hz

Power Cable Connector

15A Edison, 3-Prong IEC

weights and dimensions

Dimensions

19” W x 3.50” H x 16.84” D |

(483mm x 89mm x 428mm)

Airflow

IN through sides, OUT through front

Unit Weight

4250: 23 lbs (10.4 kg) |

8250: 24.7 lbs (11.2 kg)

Shipping Weight

4250: 29.1 lbs (13.2 kg) |

8250: 30.8 lbs (13.9 kg)

Environmental

40-120° F, (4-49° C) noncondensing

Safety/Compliance

TUV, CE, FCC, RoHS

*8 Ohm load, 10dB below rated power. *8 Ohm load, 10dB below rated power, 20Hz–20kHz. ©2015 All features, specifications and graphical representations are subject to change without notice.
Protēa™ DSP Specifications

### Input Source Selection
- Analog, Auto (Net, AES3, Analog)

### Brick Wall Limiter
- **Threshold**: -20dBu to +20dBu
- **Ratio**: Infinite
- **Attack**: 0.2ms to 50ms
- **Release**: 5ms to 1000ms

### Compressor
- **Threshold**: -20dBu to +20dBu
- **Ratio**: 1.2:1 to Infinite
- **Attack**: 0.2 to 50ms
- **Release**: 5ms to 1000ms

### Detector
- **Type**: Peak/Average

### Metering Bus
- 2 available

### Autoleveler Controls
- **Target Level**: -40dBu to +20dBu
- **Gain**: 0 to 60dB
- **Hold Time**: 0.1 to 4 sec

### Delay:
- **Input Time, Distance & Temperature**
- **Speaker Delay**: 0-21ms
- **Delay**: 0-682ms
- **Input Time, Distance & Temperature**
- **Speaker Delay**: 0-10.6ms
- **Delay**: 0-341ms

### Audio Metering Tool
- **Range**: -60dBu to +20dBu
- **Increments**: 1dB
- **Peak Hold Indicator**: Yes

### Signal Generator Tool:
- **Pink noise, White noise, Sine wave**

### Matrix Mixer
- **Gain**: 0.5dB to -∞
- **Mute**: Per channel

### Processors
- **Input A/D, Output D/A**: 24 bit
- **DSP Processors**: 32-bit floating point
- **Sample Rates**: 48kHz, 96kHz

### Propagation Delay:
- **48kHz**: 1.42ms
- **96kHz**: 0.71ms

---

### Advanced Gate Controls
- **Key Engage Enable**: Yes
- **Key Frequency**: 20Hz to 20kHz
- **Key Bandwidth**: 0.016 to 3.995 Octave
- **Gain**: -50dB to +12dB
- **Ratio**: 1.2:1 to Infinite
- **Attack**: 0.2ms to 50ms
- **Release**: 5ms to 1000ms
- **Detector**: Peak/Average
- **Attenuation Bus**: 2 available
- **Metering**: In, Out, Attenuation, Graphical

---

### Digital Signal Processing for NE Multi-Channel

Audio professionals find our Protēa™ DSP to be very intuitive and easy to navigate—and you will too. No need to attend a one-week training class away from home to learn our software. Common sense layout of controls and features, on-line help, or a visit to the Technical Support page on our website provides answers to all of your questions.

---

### Protēa™ DSP Features
- All DSP functions can be linked to 1 of 16 link groups
- Input Select Options: Analog, Auto (Net, AES3, Analog)
- Brick Wall Limiter: Threshold, Ratio, Attack, Release
- Compressor: Threshold, Ratio, Attack, Release
- Detector: Peak/Average
- Attenuation Bus: 2 available
- Metering: In, Out, Attenuation, Graphical
- Autoleveler Controls: Target Level, Gain, Hold Time
- Delay: @ 48kHz Sampling Rate, Speaker Delay, Delay
- Audio Metering Tool: Range, Increments, Peak Hold Indicator
- Signal Generator Tool: Pink noise, White noise, Sine wave
- Matrix Mixer: Gain, Mute, Enable Ducking at Mixer
- Processors: Input A/D, Output D/A, DSP Processors, Sample Rates, Propagation Delay
The power amplifier shall be an Ashly model ne4250.

**ne4250 with DSP Option**

The four-channel power amplifier shall deliver a minimum power of 250 Watts RMS per channel into 70V loads and 250 Watts RMS per channel into 4 Ohm loads with all channels operating. When switched into bridged-mono mode, channels 1+2 or 3+4 of the amplifier shall deliver at least 500 Watts RMS into an 8 Ohm load. The power amplifier shall include Euroblock input connectors and Euroblock output connectors. It shall have balanced analog inputs. The power amplifier shall have remote standby for power up, DC remote level control and contact closure preset recall. It shall have Ethernet control and monitoring of power functions, level, mute, polarity, temperature, current, and amplifier fault conditions. Frequency response shall be 20Hz to 20kHz ±0.1dB. Signal-to-Noise shall be greater than 105dB unweighted and SMPTE intermodulation distortion shall be less than 0.5% into an 8 Ohm load, 10dB below rated output. The front panel shall provide the status of power, standby, protect, power switch disable, signal level, bridge, over-temperature, over-current, and Ethernet communication. The power amplifier shall have an internal factory installed digital signal processing (DSP) option controlled using Protea (network enabled) software. Each amplifier input channel shall be configured with pluggable DSP blocks to have its own dynamics control, gain functions, graphic and/or parametric EQ, Hi-pass/Lo-pass filters, time delay, metering, and test signal generator. A mixer section with assignable routing shall allow any input to drive any or all amplifier outputs. Outputs shall have the same DSP functions as inputs, with the addition of FIR filters, and a fast, automated crossover setup. Both inputs and outputs shall copy/paste their settings to other channels, or link with one or more other channels to track their settings. Presets shall be used to store and retrieve global parameters of an amplifier’s control surface and DSP section from a file. Sub-Presets shall allow for a collection of individual DSP function parameters within and across both channels of an amplifier to be stored and recalled as a set, affecting only those parameters which have been tagged. Up to 35 presets/sub-presets shall be stored within the amplifier, and shall be recalled in real time via Ethernet from a computer using Protea software. The power amplifier will be capable of having factory installed AES3, CobraNet®, or Dante® interface options. The power amplifier shall mount in a standard 19 inch rack using two spaces (3.5. high) and weigh 23 pounds (10.4kg) or less.

The power amplifier shall be an Ashly model ne4250pe

**ne4250.70 with DSP Option**

The four-channel power amplifier shall deliver a minimum power of 250 Watts RMS per channel into 70V loads with all channels operating. When switched into bridged-mono mode, channels 1+2 or 3+4 of the amplifier shall deliver at least 500 Watts RMS into an 140V load. The power amplifier shall include Euroblock input connectors and Euroblock output connectors. It shall have balanced analog inputs. The power amplifier shall have remote standby for power up, DC remote level control and contact closure preset recall. It shall have Ethernet control and monitoring of power functions, level, mute, polarity, temperature, current, and amplifier fault conditions. Frequency response shall be 20Hz to 20kHz ±0.1dB. Signal-to-Noise shall be greater than 105dB unweighted and SMPTE intermodulation distortion shall be less than 0.5% into an 8 Ohm load, 10dB below rated output. The front panel shall provide the status of power, standby, protect, power switch disable, signal level, bridge, over-temperature, over-current, and Ethernet communication. The power amplifier shall have an internal factory installed digital signal processing (DSP) option controlled using Protea (network enabled) software. Each amplifier input channel shall be configured with pluggable DSP blocks to have its own dynamics control, gain functions, graphic and/or parametric EQ, Hi-pass/Lo-pass filters, time delay, metering, and test signal generator. A mixer section with assignable routing shall allow any input to drive any or all amplifier outputs. Outputs shall have the same DSP functions as inputs, with the addition of FIR filters, and a fast, automated crossover setup. Both inputs and outputs shall copy/paste their settings to other channels, or link with one or more other channels to track their settings. Presets shall be used to store and retrieve global parameters of an amplifier’s control surface and DSP section from a file. Sub-Presets shall allow for a collection of individual DSP function parameters within and across both channels of an amplifier to be stored and recalled as a set, affecting only those parameters which have been tagged. Up to 35 presets/sub-presets shall be stored within the amplifier, and shall be recalled in real time via Ethernet from a computer using Protea software. The power amplifier will be capable of having factory installed AES3, CobraNet®, or Dante® interface options. The power amplifier shall mount in a standard 19 inch rack using two spaces (3.5. high) and weigh 23 pounds (10.4kg) or less.

The power amplifier shall be an Ashly model ne4250.70pe
The eight-channel power amplifier shall deliver a minimum power of 150 Watts RMS per channel into 8 Ohm loads and 250 Watts RMS per channel into 4 Ohm loads with all channels operating. When switched into bridged-mono mode, channels 1+2 or 3+4 or 5+6 or 7+8 of the amplifier shall deliver at least 500 Watts RMS into an 8 Ohm load. The power amplifier shall include Euroblock input connectors and Euroblock output connectors. It shall have balanced analog inputs. The power amplifier shall have remote standby for power up, DC remote level control and contact closure preset recall. It shall have Ethernet control and monitoring of power functions, level, mute, polarity, temperature, current, and amplifier fault conditions. Frequency response shall be 20Hz to 20KHz ±1.0dB. Signal-to-Noise shall be greater than 70dB unweighted and SMPTE intermodulation distortion shall be less than 0.5% into an 8 Ohm load, 10dB below rated output. The front panel shall provide the status of power, standby, protect, power switch disable, signal level, current, over-temperature, and Ethernet communication. The power amplifier will be capable of having factory installed AES3, CobraNet®, or Dante® interface options with the addition of two 4-Channel DAC cards. The amplifier shall mount in a standard 19 inch rack using two spaces (3.5 high) and weigh 24.7 pounds (11.2kg) or less.

The power amplifier shall be an Ashly model ne8250

ne8250 with DSP Option

The eight-channel power amplifier shall deliver a minimum power of 150 Watts RMS per channel into 8 Ohm loads and 250 Watts RMS per channel into 4 Ohm loads with all channels operating. When switched into bridged-mono mode, channels 1+2 or 3+4 or 5+6 or 7+8 of the amplifier shall deliver at least 500 Watts RMS into an 8 Ohm load. The power amplifier shall include Euroblock input connectors and Euroblock output connectors. It shall have balanced analog inputs. The power amplifier shall have remote standby for power up, DC remote level control and contact closure preset recall. It shall have Ethernet control and monitoring of power functions, level, mute, polarity, temperature, current, and amplifier fault conditions. Frequency response shall be 20Hz to 20KHz ±1.0dB. Signal-to-Noise shall be greater than 70dB unweighted and SMPTE intermodulation distortion shall be less than 0.5% into an 8 Ohm load, 10dB below rated output. The front panel shall provide the status of power, standby, protect, power switch disable, signal level, current, over-temperature, and Ethernet communication. The power amplifier shall have an internal factory installed digital signal processing (DSP) option controlled using Protea (network-enabled) software. Each amplifier input channel shall be configured with pluggable DSP blocks to have its own dynamics control, gain functions, graphic and/or parametric EQ, Hi-pass/Lo-pass filters, time delay, metering, and test signal generator. A mixer section with assignable routing shall allow any input to drive any or all amplifier outputs. Outputs shall have the same DSP functions as inputs, with the addition of FIR filters, and a fast, automated crossover setup. Both inputs and outputs shall copy/paste their settings to other channels, or link with one or more other channels to track their settings. Presets shall be used to store and retrieve global parameters of an amplifier’s control surface and DSP section from a file. Sub-Presets shall allow for a collection of individual DSP function parameters within and across both channels of an amplifier to be stored and recalled as a set, affecting only those parameters which have been tagged. Up to 35 presets/sub-presets shall be stored within the amplifier, and shall be recalled in real time via Ethernet from a computer using Protea software. The power amplifier will be capable of having factory installed AES3, CobraNet®, or Dante® interface options with the addition of two 4-Channel DAC cards. The amplifier shall mount in a standard 19 inch rack using two spaces (3.5 high) and weigh 24.7 pounds (11.2kg) or less.

The power amplifier shall be an Ashly model ne8250pe

ne8250.70

The eight-channel power amplifier shall deliver a minimum power of 250 Watts RMS per channel into 70V loads with all channels operating. When switched into bridged-mono mode, channels 1+2 or 3+4 or 5+6 or 7+8 of the amplifier shall deliver at least 500 Watts RMS into a 140V load. The power amplifier shall include Euroblock input connectors and Euroblock output connectors. It shall have balanced analog inputs. The power amplifier shall have remote standby for power up, DC remote level control and contact closure preset recall. It shall have Ethernet control and monitoring of power functions, level, mute, polarity, temperature, current, and amplifier fault conditions. Frequency response shall be 20Hz to 20KHz ±1.0dB. Signal-to-Noise shall be greater than 70dB unweighted and SMPTE intermodulation distortion shall be less than 0.5% into an 8 Ohm load, 10dB below rated output. The front panel shall provide the status of power, standby, protect, power switch disable, signal level, bridge, over-temperature, over-current, and Ethernet communication. The power amplifier shall be capable of having factory installed AES3, CobraNet®, or Dante® interface options. The amplifier shall mount in a standard 19 inch rack using two spaces (3.5 high) and weigh 24.7 pounds (11.2kg) or less.

The power amplifier shall be an Ashly model ne8250.70

ne8250.70 with DSP Option

The eight-channel power amplifier shall deliver a minimum power of 250 Watts RMS per channel into 70V loads with all channels operating. When switched into bridged-mono mode, channels 1+2 or 3+4 or 5+6 or 7+8 of the amplifier shall deliver at least 500 Watts RMS into a 140V load. The power amplifier shall include Euroblock input connectors and Euroblock output connectors. It shall have balanced analog inputs. The power amplifier shall have remote standby for power up, DC remote level control and contact closure preset recall. It shall have Ethernet control and monitoring of power functions, level, mute, polarity, temperature, current, and amplifier fault conditions. Frequency response shall be 20Hz to 20KHz ±1.0dB. Signal-to-Noise shall be greater than 70dB unweighted and SMPTE intermodulation distortion shall be less than 0.5% into an 8 Ohm load, 10dB below rated output. The front panel shall provide the status of power, standby, protect, power switch disable, signal level, bridge, over-temperature, over-current, and Ethernet communication. The power amplifier shall have an internal factory installed digital signal processing (DSP) option controlled using Protea (network-enabled) software. Each amplifier input channel shall be configured with pluggable DSP blocks to have its own dynamics control, gain functions, graphic and/or parametric EQ, Hi-pass/Lo-pass filters, time delay, metering, and test signal generator. A mixer section with assignable routing shall allow any input to drive any or all amplifier outputs. Outputs shall have the same DSP functions as inputs, with the addition of FIR filters, and a fast, automated crossover setup. Both inputs and outputs shall copy/paste their settings to other channels, or link with one or more other channels to track their settings. Presets shall be used to store and retrieve global parameters of an amplifier’s control surface and DSP section from a file. Sub-Presets shall allow for a collection of individual DSP function parameters within and across both channels of an amplifier to be stored and recalled as a set, affecting only those parameters which have been tagged. Up to 35 presets/sub-presets shall be stored within the amplifier, and shall be recalled in real time via Ethernet from a computer using Protea software. The power amplifier will be capable of having factory installed AES3, CobraNet®, or Dante® interface options with the addition of two 4-Channel DAC cards. The amplifier shall mount in a standard 19 inch rack using two spaces (3.5 high) and weigh 24.7 pounds (11.2kg) or less.

The power amplifier shall be an Ashly model ne8250.70pe