The PowerLight 2 Series is a high performance line of amplifiers designed exclusively for the touring and live sound professional. Four models range in power from 900 watts to 1850 watts per channel, all in two-rack space chassis that are only 14" deep and 21 lbs.

Each of these models is available in two versions: a base model and an "A" version. Base models are ideal for systems using external signal processing. For those looking for integrated solutions, "A" versions offer internal analog signal processing. Full DSP capabilities may also be added to any model with the addition of the DSP-3 Module.

With PowerWave™ technology, PowerLight 2 amplifiers take your sound to a whole new level. Not only does it give you tighter bass and clean transparent highs, PowerWave also cuts waste heat, boosts reliability and gets rid of unwanted noise and hum. PowerWave is a revolutionary switching power supply technology that provides ample current to the audio power circuitry by charging the supply rails 230,000 times a second through an ultra-low impedance circuit. So unlike amplifiers that use conventional supplies, the audio signal is never starved prematurely and remains crisp and clean.

Through continued improvement and innovation, QSC's new PowerLight 2 offer features not found in any other professional audio amplifier.

- 3 year warranty, plus optional 3 year extended service contract!
### PL 2 BASE MODEL SPECS

<table>
<thead>
<tr>
<th></th>
<th>PL 218</th>
<th>PL 224</th>
<th>PL 230</th>
<th>PL 236</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stereo Mode (both channels driven)</strong></td>
<td><strong>Continuous Average Output Power Per Channel</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 ohms FTC 20 Hz–20 kHz</td>
<td>310W</td>
<td>440W</td>
<td>575W</td>
<td>725W</td>
</tr>
<tr>
<td>8 ohms EIA 1 kHz</td>
<td>350W</td>
<td>475W</td>
<td>625W</td>
<td>800W</td>
</tr>
<tr>
<td>4 ohms FTC 20 Hz–20 kHz</td>
<td>525W</td>
<td>715W</td>
<td>900W</td>
<td>1100W</td>
</tr>
<tr>
<td>4 ohms EIA 1 kHz</td>
<td>600W</td>
<td>825W</td>
<td>1050W</td>
<td>1300W</td>
</tr>
<tr>
<td>2 ohms EIA 1 kHz</td>
<td>900W</td>
<td>1200W</td>
<td>1500W</td>
<td>1850W</td>
</tr>
</tbody>
</table>

**Bridge-Mono Mode**

<table>
<thead>
<tr>
<th>Bridge-Mono Mode Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 ohms FTC 20 Hz–20 kHz</td>
</tr>
<tr>
<td>8 ohms FTC 20 Hz–20 kHz</td>
</tr>
<tr>
<td>4 ohms EIA 1 kHz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Noise (20 Hz–20 kHz)</th>
<th>-107 dB</th>
<th>-108 dB</th>
<th>-107 dB</th>
<th>-107 dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage Gain</td>
<td>32dB</td>
<td>34dB</td>
<td>35dB</td>
<td>36dB</td>
</tr>
</tbody>
</table>

**Input Sensitivity**

- 8 ohms: 1.23 Vrms
- 4 ohms: 1.15 Vrms

**Input Clipping**

- 10 Vrms (+22dBu)

**Cooling**

- Variable-speed fan, rear-to-front air flow

**Connectors (each channel)**

- Input: 1/4” TRS, 3-pin XLR and 3-pin detachable terminal blocks (1 each per channel)
- Output: Neutrik Speakon™ and touch-proof binding post

**Controls**

- Front: AC switch, Ch.1 and Ch.2 gain knobs
- Rear: DIP switch for Ch.1 and Ch.2: clip limiter on/off, LF filter on/off, LF filter freq select 30 or 50 Hz; inputs parallel or stereo; bridge mode

**Indicators**

- Parallel Inputs: Orange LED, Clip/Prot: Red LED (1 per channel)
- Bridged: Yellow LED, Level -10 dB: Amber LED (1 per channel)
- Power-On: Green LED, Level -20 dB: Green LED (1 per channel)
- Signal -35dB: Green LED (1 per channel)

**Amplifier Protection**

- Full short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into reactive or mismatched loads

**Load Protection**

- On/off muting, DC-fault power supply shutdown

**Dimensions**

- 19” (48.3 cm) rack mounting, 3.5” (8.9 cm) tall (2 rack spaces), 14” (35.6 cm) deep (from front mounting rails)

**Weight**

- 21 lb (9.5 kg) net, 27 lbs (12.3 kg) shipping

---

* @ 120 VAC, both channels driven; multiply current by 0.5 for 230V units

**Note:** 1/8 power is representative of current draw with typical music program material with occasional clipping.
**PL 2A MODEL SPECS**

<table>
<thead>
<tr>
<th><strong>Stereo Mode (both channels driven)</strong></th>
<th><strong>Continuous Average Output Power Per Channel</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>8 ohms FTC 20 Hz–20 kHz 0.05% THD</td>
<td>310W</td>
</tr>
<tr>
<td>8 ohms EIA 1 kHz 1% THD</td>
<td>350W</td>
</tr>
<tr>
<td>4 ohms FTC 20 Hz–20 kHz 0.07% THD</td>
<td>525W</td>
</tr>
<tr>
<td>4 ohms EIA 1 kHz 1% THD</td>
<td>600W</td>
</tr>
<tr>
<td>2 ohms EIA 1 kHz 1% THD</td>
<td>900W</td>
</tr>
<tr>
<td><strong>Bridge-Mono Mode</strong></td>
<td><strong>Bridge-Mono Mode Operation</strong></td>
</tr>
<tr>
<td>8 ohms FTC 20 Hz–20 kHz 0.1% THD</td>
<td>1100W</td>
</tr>
<tr>
<td>4 ohms EIA 1 kHz 1% THD</td>
<td>1800W</td>
</tr>
<tr>
<td>Noise (20 Hz–20 kHz)</td>
<td>-103 dB</td>
</tr>
<tr>
<td>Input Sensitivity @ 8 ohms</td>
<td>2.57 Vrms (26dB) 1.28 Vrms (+4dBu) 1.28 Vrms (32dB)</td>
</tr>
<tr>
<td>Voltage Gain</td>
<td>26, 32, 32 dB</td>
</tr>
<tr>
<td>Output Circuitry</td>
<td>AB</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>8 A*</td>
</tr>
</tbody>
</table>

**All models**

- Distortion (SMPE-IM): Less than 0.01%
- Distortion (typical): Less than 0.05% THD
- Frequency Response: 20 Hz–20 kHz, ±0.2 dB / 8 Hz–65 kHz, +0, –3 dB
- Damping Factor: greater than 500
- Input Impedance: 6 KΩ unbalanced, 12 KΩ balanced
- Input Clipping: 10 Vrms (+22dBu)
- Connectors (each channel): Input: 3-pin rubber isolated XLR and 3-pin detachable terminal blocks (1 each per channel) Output: Neutrik Speakon™ and touch-proof binding posts

* @ 120 VAC, both channels driven; multiply current by 0.5 for 230V units

**Note: 1/8 power is representative of current draw with typical music program material with occasional clipping.

---

**Side View of PL 2A Model**

1. Low pass delay network SIP* socket (J5)
2. Crossover frequency network SIP socket (J4)
3. Subaudio filter push-button switches (1 per channel)
4. Subaudio filter “on” indicator LED’s (1 per channel)
5. DIP** switch for subaudio filter frequency select, low frequency delay enable, HF attenuation and horn boost
6. DIP switches for power limiting adjustments and clip limiting enable
7. Activity LED’s for indication of power limiter activity (1 per channel)

*SIP is the abbreviation for Single-In-line Package
**DIP is the abbreviation for Dual-In-line Package

---

**Rear View of PL 2A Model**

- Terminal block inputs
- Configuration switches
- Heavy duty XLR inputs
- Speakon™ outputs
- Binding post outputs
- Cooling air inlet vents
- LED indicators
- Serial number label
- Locking IEC connector for AC power cord
## PL 2A Model Specs continued

### Controls (rear)
- Input Configuration: Stereo or Parallel
- Mode: 2 Channel, Bi-amp, or Bridge-mono
- DataPort Input Signal: Pre-processing, Post-processing, or Off
- Gain Sensitivity: 26dB, 1.2 Vrms, or 32 dB

### Controls (side)
- Subaudio Filter (ea. channel): Frequency (5 Hz (off), 30 Hz, or 50 Hz)
- Clip Limiter (ea. channel): On or Off

### Crossover Controls (side)
- Frequency: Range of 85 Hz to 2500 Hz, configured with SIP resistor.
- Low-frequency Delay Enable (Ch. 1 only): On or Off. Active only in bi-amp mode only.
- Low-frequency Delay (Ch. 1 only): Range of 0.14 to 6.5 msec, configured with SIP resistor.
- High-Frequency ch. attenuation (Ch. 2 only): Range of 0 to -15 dB in 1-dB steps. Active only in bi-amp mode.
- CD Horn equalization (Ch. 2 only): Range of 0 to +14 dB boost in 2-dB steps. Active only in bi-amp mode.

### Power Limiter Controls (side)
- Power Limiter Enable (ea. channel): On or Off
- Power Limiter Mode (ea. channel): Average or Peak attack and release mode
- Power Limiter Threshold (ea. channel): Range of 0 to -15 dB in 1-dB steps
- Power Limiter Speed (ea. channel): Fast: 1-8 mSec. of attack (depending on limiter mode) and 20 ms release
  - Medium: 10-80 mSec. of attack (depending on limiter mode) and 200 ms release
  - Slow: 180 mSec.-1.6 Sec. of attack (depending on limiter mode) and 4 sec. release
- Power Limiter Tracking: Ch. 1 tracks Ch. 2, Ch. 2 tracks Ch. 1, or Off

### Indicators
- Front: Power: Green LED; Bridged: Yellow LED; Parallel: Orange LED; Biamp: Blue LED; Clip: Red LED (1 per ch.);
- Level -10: Orange LED (1 per ch.); Level -20: Green LED (1 per ch.); Signal -35: Green LED (1 per ch.)
- Rear: Stereo: Green LED; Parallel: Orange LED; Biamp: Blue LED; 2CH mode: Green LED; Bridged: Yellow LED;
- DP Pre Processing: Blue LED; DP Out: Green LED; DP Post Processing: Yellow LED; Gain 26dB: Orange LED;
- Input Sensitivity +4dB: Green LED; Gain 32dB: Yellow LED
- Side: LF filter engaged: Green LED (1 per ch.); Power Limiter Activity: Yellow LED (1 per ch.)

### Amplifier Protection
- Full short circuit, open circuit, thermal, ultrasonic, and protection. Stable into reactive or mismatched loads

### Load Protection
- On/off muting, DC-fault power supply shutdown

### Dimensions
- 19” (48.3 cm) rack mounting, 3.5” (8.9 cm) tall (2 rack spaces), 14” (35.6 cm) deep (from front mounting rails)

### Weight
- 21 lb (9.5 kg) net, 27 lbs (12.3 kg) shipping

---

**Block diagram of audio path of a PL 2A amplifier**

---

1675 MacArthur Boulevard • Costa Mesa, CA 92626 • Ph: 800/854-4079 or 714/957-7100 • Fax: 714/754-6174 • www.qscaudio.com

PowerLight 2 Spec Sheet 080803