The **MX 3000a** is a high power, low profile professional power amplifier with advanced features and a flexible input. It delivers tremendous power in only three rack spaces, providing high level performance under the most demanding conditions.

A stepped linear output circuit combines high power with high efficiency to provide greater average and dynamic audio performance, while reducing normal system cooling and AC requirements by greater than 50%. An automatic variable speed fan matches cooling capacity with heat requirements.

The rear panel uses Level 1 of QSC’s exclusive Open Input Architecture™ which allows the use of optional input connectors, input transformers, cinema crossovers, power limiters, precision attenuators, and other signal processing cards as they become available.

<table>
<thead>
<tr>
<th>LOAD</th>
<th>FTC CONTINUOUS AVERAGE</th>
<th>EIA WATTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stereo (W/Ch)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8Ω</td>
<td>800 watts</td>
<td>825 watts</td>
</tr>
<tr>
<td>4Ω</td>
<td>1200 watts</td>
<td>1250 watts</td>
</tr>
<tr>
<td>2Ω</td>
<td></td>
<td>1600 watts*</td>
</tr>
<tr>
<td><strong>Mono-Bridged</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16Ω</td>
<td>1600 watts</td>
<td>1650 watts</td>
</tr>
<tr>
<td>8Ω</td>
<td>2400 watts</td>
<td>2500 watts</td>
</tr>
<tr>
<td>4Ω</td>
<td></td>
<td>3200 watts*</td>
</tr>
</tbody>
</table>

*typical

- **1600 watts per channel at 2 ohms**
- **1250 watts per channel at 4 ohms**
- High efficiency, 3-step output circuit for improved thermal performance and lower AC current consumption
- Built-in clip limiter
- Dual mono configuration — for greater reliability, independent power supply on each channel
- Quiet variable speed fan
- Independent DC and sub audio speaker protection & thermal overload protection on each channel
- Open Input Architecture™ - Level 1
- Recessed calibrated front gain controls for easy access & protection from damage
- Patented Output Averaging™ short-circuit protection
- Comprehensive LED status arrays
- 1/4" RTS and barrier balanced input connectors
- Mono-bridging/parallel switch
- "Touch proof" binding post output connectors
- THX approved for cinema applications
- 3 year warranty PLUS optional 3 year extended service contract
### Audio Products Model MX 3000a Specifications

**Output Averaging™** short circuit protection (US Patent 4,321,554)

#### Output Power (per channel)
- 8 ohms, 20 Hz to 20 kHz, 0.1% THD: 800 watts
- 8 ohms, 1kHz, 1% THD: 825 watts
- 4 ohms, 20 Hz to 20 kHz, 0.1% THD: 1200 watts
- 4 ohms, 1 kHz, 1% THD: 1250 watts
- 2 ohms, 1 kHz, 1% THD: 1600 watts

#### Output Power (bridged mono)
- 8 ohms, 20 Hz to 20 kHz, 0.1% THD: 2400 watts
- 4 ohms, 1 kHz, 1% THD: 3200 watts

---

**Distortion:**
- SM PTE-IM, less than 0.05% typical

**Frequency Response:**
- 20 Hz to 20 kHz, ±0.15 dB
- 8 Hz to 100 kHz, +0/-3 dB

**Damping Factor:**
- Greater than 200

**Dynamic Headroom:**
- 3 dB at 4 ohms

**Sensitivity:**
- 1.0 Vrms for rated power (8 ohms)

**Voltage Gain:**
- 80 (38 dB)

**Input Impedance:**
- 10K unbalanced, 20K balanced

**Controls:**
- Front: AC Switch, Ch 1 and Ch 2 Gain Knobs
- Back: Parallel/Stereo/Bridge Switch

**Indicators:**
- PWR-ON: Green LED
- SIGNAL PRESENT: Yellow LED
- CLIP: Red LED
- PROT: Red LED

**Connectors:** (each channel)
- Input: Barrier strip and 1/4" RTS
- Speakers: "Touch proof" binding posts

**Cooling:** Variable speed fan, rear-to-front air flow.

**Amplifier Protection:**
- Full short circuit, open circuit, ultrasonic, and RF protection. Stable into reactive or mismatched loads.

**Load Protection:**
- On/off muting, Clip limiting, DC-fault load grounding relay with internal fault fuses.

**Output Circuit Type:**
- Complementary linear outputs, 3 step high efficiency circuit.

**Power Requirements:**
- 100, 120, 240 Vac, 50-60 Hz

**Power Consumption:**
- Normal Operation: 4 ohms per channel: less than 12 amps, 120 Vac (3440 VA) maximum (full power, 2 ohms per channel): 58 amps, 120 Vac (7000 VA)

**Dimensions:**
- 19.0" (48.3 cm) rack mounting
- 5.25" (13.3 cm) tall (3 spaces)
- 17.9" (45.5 cm) deep (rear support ears)

**Weight:**
- 69 lbs (31.2 kg) net, 77 lbs (34.9 kg) shipping

---

**ARCHITECT'S AND ENGINEER'S SPECIFICATIONS**

The amplifier shall contain all solid-state circuitry, using complementary silicon output devices. The amplifier shall exceed the efficiency of an ordinary class-B linear output circuit. Overall efficiency, with four or eight-ohm loads, shall exceed 50% at 1/3 power and 35% at 1/8 power. The amplifier shall operate from 50-60 Hz AC power, with internal taps for selecting voltages 100, 120, or 220-240 Vac. The amplifier shall operate from a normal household AC outlet, drawing less than 1440 VA when driven with random program material at 1/8 rated power into four-ohm loads. The amplifier shall be supplied with a single molded AC cord having an appropriate AC plug for the intended operating voltage.

The amplifier shall employ forced-air cooling with a variable speed fan for minimum acoustic noise. Air flow shall be from rear to front to avoid temperature rise inside the rack. Rack mounting shall be possible without clearance necessary between amplifiers for ventilation. The amplifier shall be capable of continuous operation at 1/8 power, into four-ohm loads, for ambient temperatures up to 104°F (40°C).

Each channel shall be capable of 800 watts into 4 ohms, 1200 watts into 4 ohms, 20Hz to 20kHz, with less than 0.15% THD. The voltage gain shall be 80, equivalent to 38dB, and the input sensitivity shall be 1.0 Vrms. The signal to noise ratio over the range of 20 Hz to 20 kHz shall exceed 100 dB unwighted. HIF damping factor shall exceed 200.

The amplifier chassis shall occupy three rack spaces, with provisions for securing the rear corners. Depth from mounting surface to tips of rear supports shall be 17.9" (45.5 cm).

The amplifier shall be capable of meeting the following performance criteria with both channels driven: Sinewave output power of 800 watts into eight ohms, and 1200 watts into four ohms, 20kHz to 20kHz, with less than 0.1% THD. Frequency response at 3dB below rated power shall be 20Hz to 20kHz 0.15 dB. The voltage gain shall be 80, equivalent to 38dB, and the input sensitivity shall be 1.0 Vrms. The signal to noise ratio over the range of 20 Hz to 20 kHz shall exceed 100 dB unwighted. HIF damping factor shall exceed 200.

The amplifier shall employ forced-air cooling with a variable speed fan for minimum acoustic noise. Air flow shall be from rear to front to avoid temperature rise inside the rack. Rack mounting shall be possible without clearance necessary between amplifiers for ventilation. The amplifier shall be capable of continuous operation at 1/8 power, into four-ohm loads, for ambient temperatures up to 104°F (40°C).

The amplifier shall contain all solid-state circuitry, using complementary silicon output devices. The amplifier shall exceed the efficiency of an ordinary class-B linear output circuit. Overall efficiency, with four or eight-ohm loads, shall exceed 50% at 1/3 power and 35% at 1/8 power. The amplifier shall operate from 50-60 Hz AC power, with internal taps for selecting voltages 100, 120, or 220-240 Vac. The amplifier shall operate from a normal household AC outlet, drawing less than 1440 VA when driven with random program material at 1/8 rated power into four-ohm loads. The amplifier shall be supplied with a single molded AC cord having an appropriate AC plug for the intended operating voltage.