

## ONE 60.6

6-channel AB class amplifier

[ Rev 2.0 – 2012.10 ]

### CEA-2006-A SPECIFICATIONS

**POWER RATING: 65 Watt per channel @ 4 Ohm < 1% THD+N**  
**SN RATIO: >80 dBA (reference: 1 Watt into 4 Ohm)**

### MOS SPECIFICATIONS (T<sub>case</sub> = 25 °C / 4 Ohm stereo / 0.2V input level @ 14.4 Volt if not otherwise specified)

**TARGET POWERS:**  
**65** Watt x 6<sub>ST</sub> @ 4 Ohm (50 Watt @ 12V6)  
**60** Watt x 4<sub>ST</sub> @ 4 Ohm + **230** Watt x 1<sub>BTL</sub> @ 4 Ohm (45 Watt x 4<sub>ST</sub> + 175 Watt x 1<sub>BTL</sub> @ 12V6)  
**100** Watt x 6<sub>ST</sub> @ 2 Ohm (75 Watt @ 12V6)  
**200** Watt x 3<sub>BTL</sub> @ 4 Ohm (150 Watt @ 12V6)

**EFFECTIVE POWERS:**  
**69** Watt x 6<sub>ST</sub> (52 Watt @ 12V6) @ 4 Ohm / 1% THD / 1KHz – **45.8 A** (η = 62.8 %)  
**63** Watt x 4<sub>ST</sub> + **235** Watt x 1<sub>BTL</sub> @ 4 Ohm / 1% THD / 1KHz – **57.5 A** (η = 58.8 %)  
 (48 Watt x 4<sub>ST</sub> + 180 Watt x 1<sub>BTL</sub> @ 12V6) @ 4 Ohm / 1% THD / 1KHz – **50.4 A** (η = 58.5 %)  
**102** Watt x 6<sub>ST</sub> (78 Watt @ 12V6) @ 2 Ohm / 1% THD / 1KHz – **78.3 A** (η = 54.2 %)  
**204** Watt x 3<sub>BTL</sub> (156 Watt @ 12V6) @ 4 Ohm / 1% THD / 1KHz – **78.3 A** (η = 54.2 %)

**THD @ 4 Ohm / ST mode:** < **0.05 %** (1KHz / 90% Power rating ref)  
**THD @ 2 Ohm / ST mode:** < **0.05 %** (1KHz / 90% Power rating ref)  
**DIM @ 4 Ohm / ST mode:** < ---- % (Power rating ref)  
**DIM @ 2 Ohm / ST mode:** < ---- % (Power rating ref)

**DC-DC converter typology:** Unregulated  
**Conversion frequency:** **45 KHz** (± 6 %)  
**Absolute maximum operation supply voltage range:** **10.5 V ÷ 15 V**  
**Recommended operation supply voltage range:** **11 V ÷ 14.4 V**  
**Power-on/Power-off Voltage Threshold:** **9.5 V / 8.0 V**  
**Mute delay time:** **3 secs**  
**Secondary voltages (Amp. / Driver / Pre.):** **±27.9 V / ±13.4 V / ±14.8 V**  
**Max output offset voltage (each channel):** **±15 mV**  
**Standby current:** **< 0.1 mA (typical)**  
**Quiescent consumption @ 12V6 / 14V4:** **0.92 A / 0.99 A** (no idle current regulation)  
**Idle current regulation @ 14V4 (no signal):** **0.05 A** (each trimmer)  
**Quiescent consumption @ 12V6 / 14V4:** **1.05 A / 1.14 A** (with idle current set)  
**Thermal protection consumption:** **0.2 A**  
**Battery ground vs secondary ground decoupling:** **1 KOhm**  
**Body ground vs battery ground decoupling:** **68 Ohm**  
**Bandwidth (-3dB ÷ 1 Watt):** **< 5 Hz ÷ 100 KHz**  
**Input sensitivity (Power rating ref):** **0.34 Vrms ÷ 15.57 Vrms**  
**Input impedance @ 1 KHz (STEREO input):** **10 Kohm** [Low Level] / **47R** [High Level]  
**Input capacitance @ 1 KHz (STEREO input):** **220 pF** [Low Level] / **10 nF** [High Level]  
**Input ground decoupling:** **47R** [Low Level] / **34 Kohm** [High Level]  
**S/N ratio (AP filter 10 Hz - 500 KHz) – Power rating ref:** **>78 dB**  
**S/N ratio (AP filter 10 Hz - 22 KHz) – Power rating ref:** **>98 dB (“A” weighted)**  
**Channel separation @ 100Hz / 1KHz / 10KHz – 10 Watt ref:** **>67 dB / >63 dB / >47 dB**

**Features:**  
 [FRONT / REAR / SUB] **High to Low Adapter** (auto switch-on with BTL radios)  
 [FRONT] **HIGH Pass** / [REAR] **HIGH Pass or LOW Pass**  
 [FRONT freq.] (45 ÷ 225Hz - 12dB/oct) / [REAR freq.] (20 ÷ 225Hz - 12dB/oct)  
 [FRONT] **Front Stage Adjuster** / [FRONT & REAR] **F+R facility**  
 [SUB] **LOW Pass (45 ÷ 225Hz - 12dB/oct)**  
 [SUB] **Remote Volume Control (-12dB ÷ 0dB)** (low pass only)  
 [SUB] **Phase Shift (0° ÷ 180°)**  
 [SUB] **F mix R option**  
**88 °C** (±5°C)  
**50 °C** (±5°C)  
 [FRONT] **87 / 92** - [REAR] **85 / 92** - [SUB] **87 / 91**  
 [FRONT] **87 / 92** - [REAR] **86 / 92** - [SUB] **87 / 91**  
 [FRONT] **83 / 88** - [REAR] **83 / 89** - [SUB] **83 / 86**  
**2 Ohm / 4 Ohm** (Stereo / Bridged)  
**2x30 A (onboard)**

**Thermal cutoff Threshold:**

**Cooling Fan Temperature Threshold:**

**Damping factor @ 100 Hz - 10 Watt ref (Right / Left):**

**Damping factor @ 1 KHz - 10 Watt ref (Right / Left):**

**Damping factor @ 10 KHz - 10 Watt ref (Right / Left):**

**Load drive limitations (\*):**

**Suggested fuse:**

(\* **VERY IMPORTANT NOTE - READ CAREFULLY**)

**4 Ohm ST or 8 Ohm BTL – CONTINUOUS SINEWAVE SIGNAL** – pure resistive load or speaker load  
**2 Ohm ST or 4 Ohm BTL – MUSICAL SIGNAL** – pure resistive load or speaker load