

## THE "OPTI-MOS" TOTEM POLE PROFESSIONAL AMPLIFIER KITS.

The "OPTI-MOS Professional Amplifier" kits are DC coupled monaural audio power amplifiers. They feature "no compromise" professional quality construction throughout, incorporating a fully complementary-symmetry topology (commonly called a "mirror-image" topology), a very conservatively rated complementary symmetry lateral MOSFET output stage utilizing a massive heatsink assembly, a dual-cascode input stage for the maximum in ultra-low noise operation, and four separate grounding systems for the virtual elimination of any hum or ground loop distortion mechanisms.

The printed circuit board is the finest FR4 fiberglass material available, silkscreened, double-sided with plated through holes, and fabricated with 3-oz. copper artwork. The amp circuitry utilizes 1% low-noise metal film resistors throughout, with the remaining passive and active components being the best available in quality and application suitability.

In addition, the topology is virtually "bulletproof," incorporating a special zener-protected input stage and active "multi-slope" short-circuit and overload protection circuit. When properly constructed, the operation of these amplifiers should be nothing less than exceptional in the areas of performance, reliability, and quality.

### **SPECIFICATIONS:**

<b>Power Output</b>	400-watts RMS [or higher, depending on whether the standard or double-die L-MOSFETS are incorporated into the output stage] into either 4 or 8-ohm speaker systems. The amplifiers are 2 ohm stable, and the overload protection circuits will limit the maximum output power down to short-circuit conditions, without blowing the rail fuses.
<b>Total Harmonic Distortion</b>	Typically no more than 0.002% at 1KHz at OdB output levels. The 'worst case' maximum distortion will never exceed 0.01% throughout the entire audio spectrum, regardless of listening levels.
<b>Frequency Response</b>	3 Hz to 140 KHz, +0dB -3dB @ rated output.
<b>Input Sensitivity</b>	800 millivolts RMS
<b>Input Impedance</b>	10 Kohm
<b>Load Impedance</b>	Typically 4 or 8-ohms, 2-ohm stable; no restrictions for wider variations of output power.
<b>SNR</b>	Better than - 110 dB
<b>Power Requirements</b>	The OPTI-MOS Totem Pole modules are intended for dual-polarity unregulated power supplies with outputs ranging from 35-volts to 85-volts DC. The maximum RMS current requirements for maximum output power into 4-ohm loads is 6 amps per rail. Voltage and current maximums will vary according to the load impedance and the desired maximum output power.