

# TOTAL SYMMETRY AMPLIFIERS



TSA from Hill Audio — the *definitive* linear power amplifier

- 8000W peak power output
- Total Audio Symmetry
- Clip eliminator - switchable
- Bargraph level indication
- Speakon™ output connectors
- Stereo, Mono and Bridge modes
- High temperature warning
- AC inrush limiter





Total Symmetry Amplifiers are the culmination of 18 years experience in high powered amplifier design and application. Never before however have we been able to offer a package which combines such high power output with true audiophile performance.

The enviable sound quality of the TSA range is a result of our dedication to a Total Symmetry design philosophy. To achieve Total Symmetry all audio signals, positive or negative, must be treated in an identical manner. This goal can never be met in standard "push-pull" type designs as these employ two types of output device which by definition have different transfer characteristics. The TSA range uses only selected NPN power devices arranged in a "sliding bias" configuration resulting in a sonically superior, totally symmetrical output stage of unparalleled linearity.

The massive dual linear power supply ensures that the output stages of the TSA are never starved of current and can deliver the type of transient response that most designs are incapable of sustaining for more than a few microseconds.

Because of the extremely high power levels that TSA can generate, care must be taken to ensure that the load being driven does not receive too much power. To assist with this, each TSA has been fitted with a clip eliminator circuit. This ingenious device will allow the amplifier to deliver its full undistorted power capability but will not allow the signal waveform to "square wave" which can so often lead to premature failure of transducers, particularly compression drivers. In addition, TSA will protect both the load and themselves from all common fault conditions by means of a power isolation relay. More effective than simple load isolation techniques, this system also removes any unnecessary components from the signal path that may cause signal degradation.

Cooling of the power devices and other key components within the TSA is provided by two DC fans whose speed is proportional to heatsink temperature eliminating the hot/cold thermal cycling that often occurs in units fitted with a simple on/off fan system.

### TSA - the definitive linear power amplifier

	OUTPUT POWER $\leq 1\%$ THD			BRIDGED		PEAK POWER	THD 1KHz	THD 20-20KHz	IMD
	8+8 Ohms	4+4 Ohms	2+2 Ohms	8	4	BRIDGED 4 Ohms			
<b>TSA 1602</b>	600+600	1100+1100	1600+1600	2200	3200	8000	0.004%	0.01%	0.01%
<b>TSA 1202</b>	450+450	850+850	1200+1200	1700	2400	6000	0.004%	0.01%	0.01%

