

SUPER-SERIES

HI-FI CLASS A POWER AMPLIFIER MODULES

- Superamp** - A low cost 100W bipolar design with a performance in excess of all other MOSFET modules
- Supermos** - A 150W MOSFET design with an unparalleled performance typically 10 times greater than all other modules
- Supermos 1** - Identical to the Supermos but uses Supermos 2 O/P devices and features total reactive (difficult) speaker drive capability.
- Supermos 2** - A totally new, 100W to 500W amplifier with exemplary performance combined with 6 additional technical sound quality improvements eliminating the sound colourations inherent in all conventional amplifiers.

SUPERMOS 2

100W to 500W The Flagship of the Super-Series

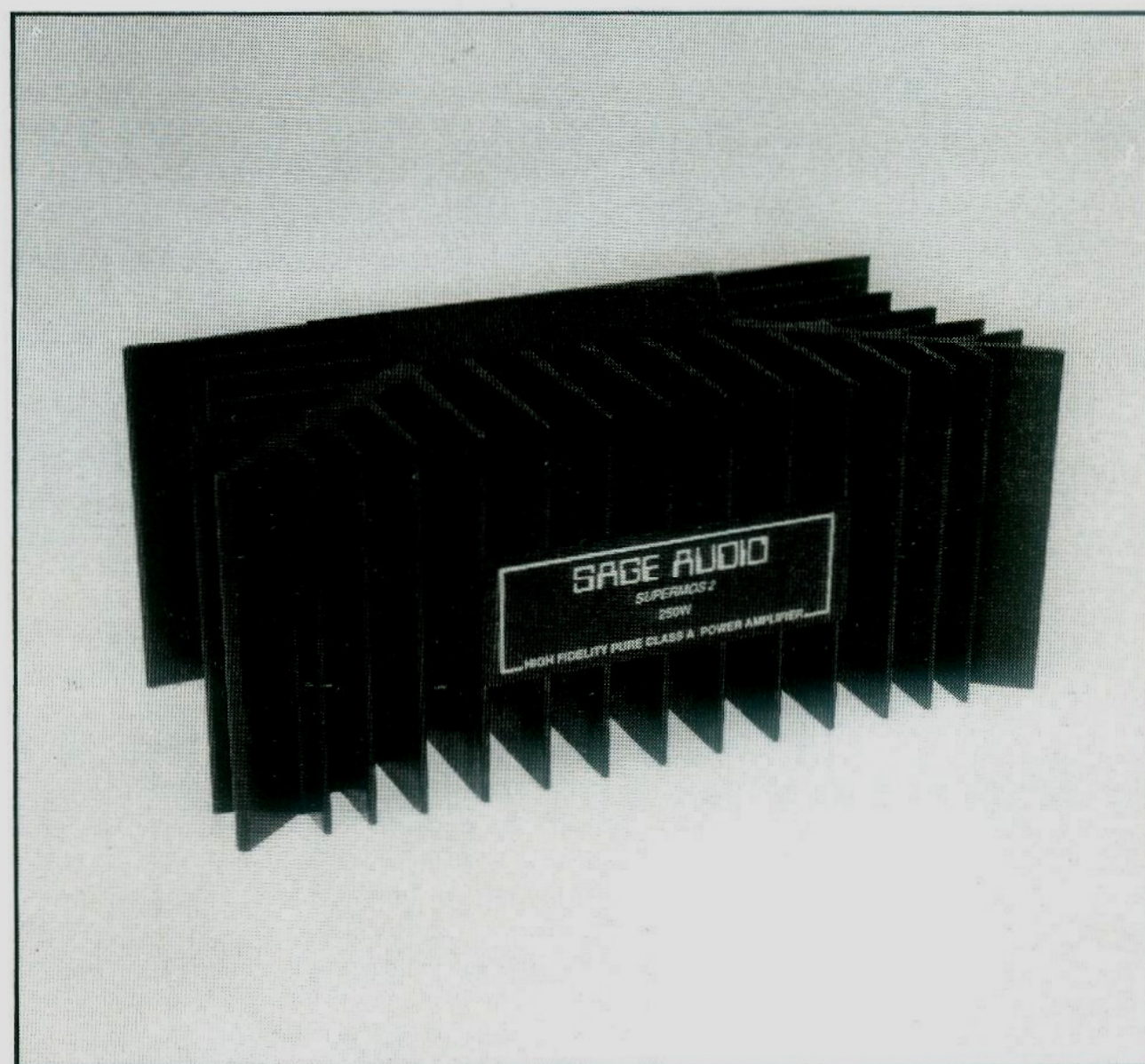
Designed and built to achieve the highest possible level of performance from an audio power amplifier. This module includes all the features of the Supermos 1 modules, plus six additional SAGE exclusive features especially designed to provide the ULTIMATE in both technical and sonic levels of performance.

INTRODUCTION

The term 'High Fidelity' means, 'faithful reproduction' i.e. without adding nor subtracting anything at all from the musical signal. This implies that there has to be zero distortions of any nature including THD, pulse and phase distortions, must have an infinite bandwidth and with no limits to the output speed and drive capacity. In addition, the subtle, sound colourations attributed to individual components themselves must also be reduced to virtual zero in order to achieve a natural, clean, clear, transparent sound quality absolutely true to the original. Furthermore, pulse (slewrate) and phase integrity must be preserved accurately in order to recreate a life-like stereo image from just two sound sources.

To achieve this aim without compromises require very careful and expert attention paid to ALL aspects of a design from input to output, from a technical view and from a component quality view. To relax slightly on any one aspect or to over engineer in one area at the expense of another area, is to compromise on performance and to introduce a sonic signature colouration.

The SAGE SUPER-Series power amplifier modules have been designed right from the start as a non-compromised audio amplification system utilising many new and innovative technical features, most of which are world first SAGE exclusive and are not to be found in any other currently available amplifiers, let alone ALL in one amplifier. These features, and the use of selected matched components are all combined into a range of four modules to suit all needs from low cost high performance to high power extra high performance. Simplicity of



construction and a guaranteed performance is assured due to the ready built, tested modular approach to Hi-Fi with only five simple connections and merely requiring a very simple dual rail power supply. Extensive layout and PSU details are supplied with the modules.

TECHNICAL FEATURES

ACTIVE CLASS A

This is the key to the exemplary performance levels attained for all the modules, it also eliminates the crossover distortions inherent in a class AB system.

The SAGE active class A circuit maintains all output and driver transistors within their linear operating conditions for all power levels and all load impedances down to zero ohms. Switching distortions are thus impossible and due to all transistors continuously conducting they cannot receive a reverse bias drive as do normal class B systems. This also vastly improves the slewrate (maximum rate of change) of the output stage by at least a factor of 10 or more over class AB and normal class A circuits. Damping factor is also improved due to the fact that all output devices are