

Thrax Heros Mk2

Class A Hybrid - tube/fet Amplifier



Heros is a very unusual hybrid amplifier marrying old concepts with the latest technology.

Features

- Tube amplifier architecture with the simplest signal path
- Transformer coupled input and output
- MOSFET output devices
- Silicon Carbide diodes in power supply
- Microprocessor control
- Silver input transformer
- Presettable speaker impedance
- Our favorite 6N6P tube used
- Fully balanced differential operation
- RCA and XLR inputs
- Compact chassis built like a tank
- 100W Class A power output
- DC-coupled, no capacitors in signal path
- Choke filtered power supply
- Modular design



Technology

Heros is like no other amplifier ever made as it has a single differential DC coupled FET/Tube stage working like a single super tube. This DC coupled cell is loaded by a low impedance push-pull transformer helping improve the efficiency to almost double that of a normal Solid State Class A designs. The output transformer blocks DC on the output and presents many other benefits by isolating EMI/RFI, scaling down the output voltage (reducing residual noise) and protecting the output from any power supply noise by canceling it by the nature of it's differential operation.

To guarantee a fully differential architecture we split the phase with the input transformer and sum it back up with the push-pull output transformer. This solution completely floats the the gain cell between the two transformers isolating it from any external influences making Heros immune to the influences of its environment.

The power supply uses high voltage Silicon Carbide diodes followed by a filter choke preventing any switching noise from reaching the output stage. The result is an amplifier free of grain and fizziness or screaming intermodulation, giving new meaning to transparency and tone density. We use our beloved 6N6P as the base for the proprietary DC gain cell, a recognized audiophile performance tube. To keep all at this level we chose a silver wire permalloy input transformer and the highest grade custom toroidal output and power transformers.

Operating all devices in class 'A' produces a fair amount of heat, so to handle that the Heros' chassis itself is a heat sink. It is still the most compact 100-watt class A solid state amplifier available today. The chassis is designed not only to cope with the heat produced by the components but to provide a vibration-free structure to house them. Heros can handle any speaker giving it a new voice.

Specifications

Inputs

- 1 unbalanced RCA
- 1 balanced XLR

Output Power

- 100W

Max. input level

- 4V

Gain

- +18 db

Input impedance

- 0.3k Ohm

Output impedance

- 0.5 Ohm

Signal to Noise

- 118db

Frequency response

- 20-20,000Hz +/- 1db

Power

- 260W 115/230V

50/60Hz

Weight

- 35kg

Dimensions

- 340x450x230mm

