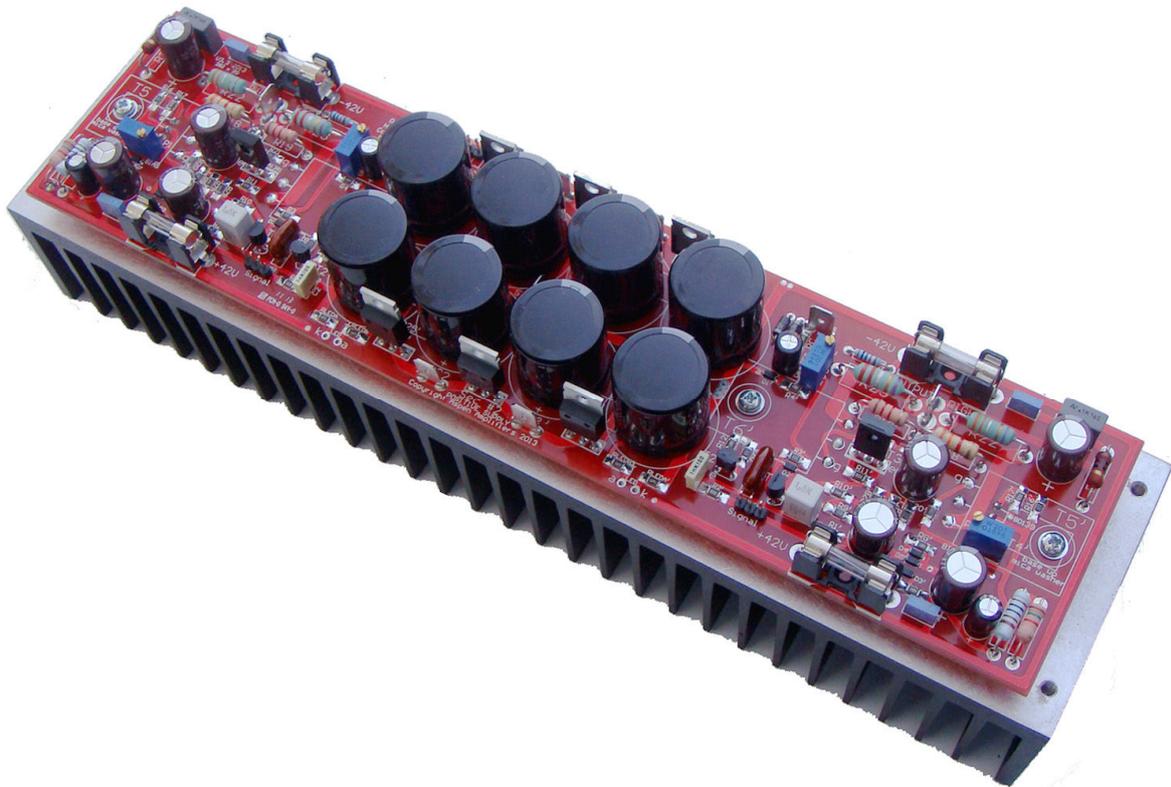


# NAKSA 80 Stereo Amplifier Module

May, 2013

The NAKSA 80 is a solid state, Class AB stereo power amplifier module of unusual design delivering 80 watts RMS into an 8 ohm load using a 300VA 30-0-30Vac power transformer.

The NAKSA 80 is a fully built and tested stereo amplifier module. For domestic use, the user connects the two secondaries of a suitable transformer (not supplied), the signal inputs, earth wire, and the speaker outputs. The entire stereo amplifier, including all power supply circuitry, is built onto a single high quality, double-sided circuit board of 280mm x 70mm mounted on a Conrad MF30-75 heatsink.



The NAKSA 80 has evolved from the very successful NAKSA 70, though with different topologies. The use of surface mount components permit a compact, neat layout. Topology enhancements include a new voltage amplification stage, improved offset control, radical output stage drive and bias control. Two robust complementary Mosfet output devices per channel are used.

Other details are indicator LEDs, a bipolar power output connector for powering accessories, a chassis earth lift, and high quality, insulated fuse holders. The amplifier can be used immediately out of the package with all settings factory adjusted.

The NAKSA 80 exhibits almost eerie silence. The sound quality gives extraordinary low frequency grip, startling dynamics, crystalline clarity, and resolution to better many Class A amplifiers.

## NAKSA 80 Specifications

- Maximum power: 80 watts into 8 ohms, or 120 watts into 4 ohms
- Distortion at 1 watt (1KHz, 8ohms): 0.06%
- Distortion at 12.5 watts (20dB, 1KHz, 8ohms): 0.06%
- Frequency Response (at 12.5 watts into 8 ohms):
  - 1dB down at 10 Hz,
  - 1dB down at 150 KHz.
- Input impedance: 26 Kohms
- Gain: 26 (or 28.3dB)
- Input sensitivity: 972mV RMS for 80 watts into 8 ohms.
- Output stage bias: Adjust to between 100mA to 120mA (invariant hot or cold).
- Output Offset: Adjust to less than 10mV when warm.
- Circuit Board Size: 280mm by 70mm, 2mm FR4, two layers, 70um copper clad.
- Heatsink: Conrad MF30-75, 300mm by 75mm (or case alone if used)
- Fuses: 10 Amp, 20mm by 5mm, slow blow
- Transformer: 300VA toroid with two 30 Vac secondary windings (not supplied)
- Amplifier rail voltage: Do not exceed 45 volts (42 volts recommended)
- Mains fuse: A 5 Amp mains fuse is recommended for 230 Volt AC.

The NAKSA 80 product shipment includes:

- A fully assembled circuit board module containing an integrated power supply (rectifiers, filter capacitors and fuses), and two amplifiers.
- 300mm by 75mm Conrad MF30-75 heatsink, machined and tapped, with the NAKSA 80 module attached. Alternatively, the NAKSA 80 module can be supplied mounted in a custom designed 3mm thick Aluminium chassis, which acts as the heatsink, at an additional cost.
- Two RCA input connectors (one Red, one Black).
- Coaxial input cable.
- Two speaker 'hot' leads with integral 1uH inductor.
- Two speaker 'cold' leads.
- Front panel power indicator Green LED.
- Chassis ground wire.
- Four crimp spade connectors for the transformer secondary connections.
- Heatshrink tubing.
- Detailed build instructions, and Email support.

## Contact

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