# Elecraft KXPA100 External 100-Watt Amplifier

High-performance KXPA100 home/mobile amplifier seamlessly integrates with the KX3 as well as other>popular 5- to 10-W transceivers such as the Yaesu FT<-817, Icom 703, and others. It has an option for it's own internal ATU (KXAT100) with dual antenna jacks.
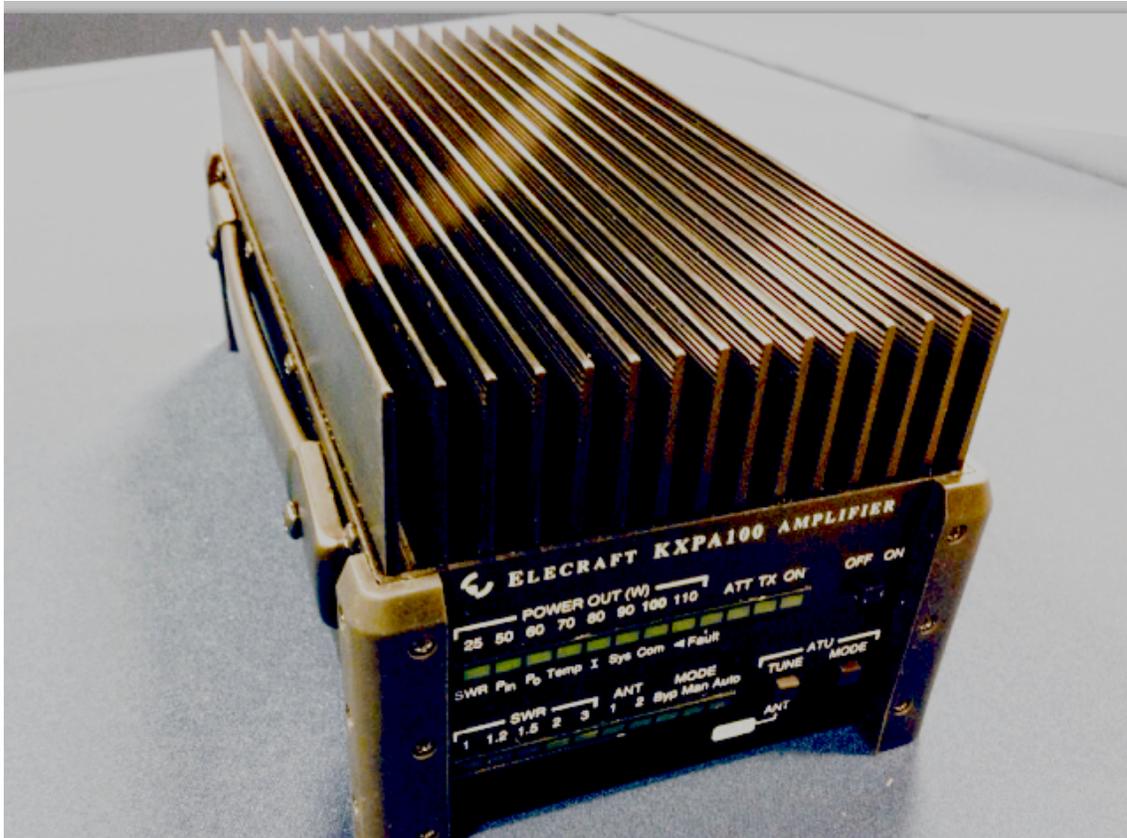
Front view

The preliminary specs:

- 100 W Output on all bands, 160 m to 6 m with 4 W Input
- Modern Design with MOSFET Output Stage
- Solid State diode T/R Switching — supreme fast and silent T/R and QSK
- 13.8V nominal DC Powered. No moving parts (no fan required)
- One RF input, 1 or 2 ANT outputs. (2nd ANT output with internal ATU option.)
- LED Bar-graphs for power, status and SWR (with the internal ATU option).
- KXPA100 works with any rig with just AMP KEY and RF. The internal freq counter auto band switches.
- The KXPA100 Integrates Seamlessly with the KX3, but also functions with other QRP transceivers.
- Dedicated KX3 interface with band data communicates between the KX3 and Amp.
- Pre-drive band data switching, while not required, supports rigs, including the Yaesu FT-817 & Icom IC-703.
- Double APP power connectors for additional friction fit in mobile apps & optional daisy chaining of KX3 power.
- The rugged KXAT100 Internal integrated ATU handles a 10:1 SWR range on most bands with Elecraft's proven high performance fast matching algorithm.
- ATU settings, once tuned, are remembered per band, per band segment, and per antenna.

Rear view
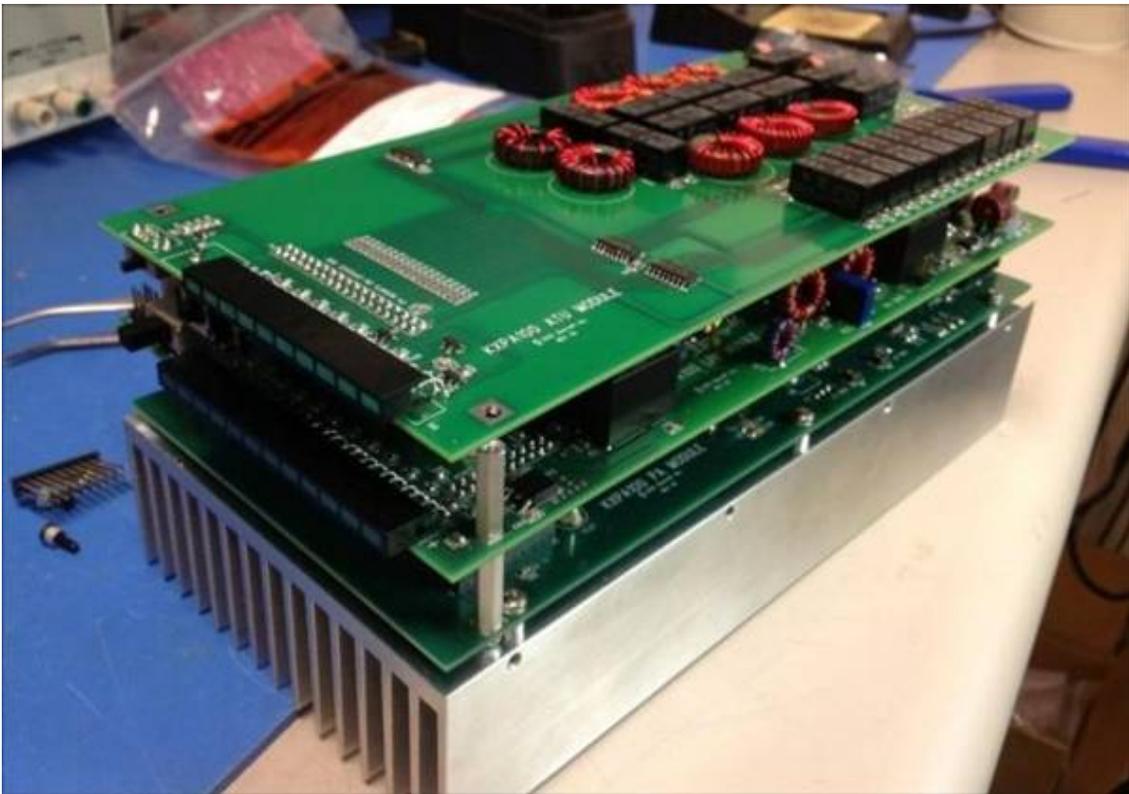
Inside viewed upside down

KXPA100 amp for the KX3 etc - Lab shots. PCB set, with optional ATU.

Ideal for Portable use

The Elecraft KXPA100 will have RF sensing and band-control inputs that work with various radios. The amp will provide very tight integration when used with a KX3. This will include tracking the rig's band changes. The amp's actual power output will display on its own bargraph and TUNE display. The entire control interface between the KX3 and the amp (band change and remote control, keying, and A LC) will be handled via a single cable connected to the KX3's ACC1 jack. If a computer is also being used, it can be connected to the amp's second control port, and the amp will then relay commands between the computer and the KX3, allowing the use of remote-control and logging applications without any software configuration changes. The amp will also have the companion KXAT100 -100 watt ATU that bolts beneath it, forming a single-box solution. This ATU will have the same matching range as the KXAT3, the KX3's internal ATU. When the KX3 detects that a 100 watt ATU is present, it will automatically put the internal ATU in bypass, if applicable. The 100 watt ATU will include two antenna jacks, selectable via the ANT switch on the KX3.

Unlike all other stand-alone 100 watt amps, the KXPA100's low-pass filters are single-band, allowing optimization for minimum transmit IMD on each band. Other amps use about half as many filters, most covering two bands, resulting in compromise IMD performance. Like the 500 watt KPA500 amp, the KXPA100 will have temperature- compensated bias circuitry, and full monitoring of SWR, power, current drain, temperature, and other parameters. This ensures safe and reliable operation. An input attenuator is also provided so the KXPA100 can work with nominal 5- or 10-watt drive levels. information provided here is based on posts on Twitter Elecraft forums..

Updated June 15, 2013