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KPA1500: Frequently Asked Questions

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KPA1500 General Questions

Q: What is the KPA1500?

A: Our new KPA1500 solid-state amplifier won't take over your entire desktop. The lightweight companion power supply can be placed on the floor or in any other convenient location.

The KPA1500 was designed with the serious operator in mind. Its no-nonsense front panel shows all important parameters at a glance, with a high-contrast 32-character LCD and fast, bright LED bar graphs. Band switching is instantaneous, via control inputs or RF sensing. Protection and monitoring circuitry is extensive and foolproof, letting you focus on the job at hand — breaking pileups and overcoming the most difficult operating conditions. And it wouldn't be an Elecraft amp without robust PIN-diode T/R switching. Like our KPA500, the KPA1500 offers fast QSK without a noisy relay.

The amplifier's rugged internal ATU can handle full power with load SWR up to 3:1, while a wider matching range is allowed at lower power levels, including up to 10:1 in standby mode.

Q: When will the KPA1500 available for ordering?

A: Announcements for when the KPA1500 will be available for ordering will be made on the [Elecraft Email Reflector](#). Please email sales@elecraft.com to be put on an announcement list.

Note: This device has not been authorized as required by FCC rules. This device is not, and may not be offered for sale, or lease, or sold or leased, until authorization is obtained

Q: What is the pricing for the KPA1500?

A: Introductory pricing is \$5,995 U.S. This includes the 1500-watt linear amp, internal tuner and separate switching power supply.

Q: When is the KPA1500 expected to begin shipping?

A: Initial shipments are expected to begin mid-Summer. The exact date will be determined when regulatory testing and certification have been completed.

Q: Is the KPA1500 offered factory assembled and in kit form?

A: Initially it will be available in Factory-built form only.



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Q: When will the KPA1500 be available for regions outside of North America?

A: The exact date will be determined when regulatory testing and certification (CE etc.) have been completed.

Q: Feature-wise, how does the KPA1500 compare to the KPA500?

	KPA500	KPA1500
Maximum rated power, 160M to 6M	500 watts	1500 watts
AC power requirements	120V or 240V AC	240V AC only
Weight	26 lbs/12 kg	RF Deck: 21.6 lbs/9.8 kg Pwr Supply: 15.6 lbs/7.1 kg Total: 37.2 lbs/16.9 kg
Power Supply Type	Linear	Switching In external cabinet - same size as RF Deck
Very compact design	4.0 x 10.8 x 10.0 inches 10.2 x 27.4 x 25.4 cm HWD	4.5 x 13.5 x 11.5 inches 11.5 x 34 x 29 cm HWD
Full Integration with K3/K3S	✓	✓
Automatic Band Select	✓	✓
Instant On	✓	✓
Fast, Silent Pin Diode T/R switching	✓	✓
Built-in Tuner Option with dual antenna jacks	Use KAT500 separately	Built in at no extra charge
RF Sensing Band Change	✓	✓
Remote Operation capable	✓	✓
Active Overdrive/SWR protection	✓	✓
Compatible with nearly any transceiver	✓	✓



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Q: What does the KPA1500 control panel and rear panel look like?

A: Here's a quick view of the front panel controls. Note that the buttons use the familiar Tap or Hold functions for access to the most-used features.

Additionally, there is a Menu system for tailoring the KPA1500 operating settings to the operator's preference. Most of these need only be set up one time.



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Q: What kind of connections will the KPA1500 provide for peripherals and transceiver connections?

A: The rear panel of the KPA1500 has a series of jacks and connectors described below.

- **USB**: Provides a virtual COM port for use with the KPA1500 Utility and other computer-based programs.
- **Ethernet**: Intended for Local and Remote operation applications.
- **PC Data**: An RS232 level serial data connection for use with the KPA1500 Utility and other computer-based applications.
- **TUNE**: An input signal supported by the KPA1500's antenna tuner so it can emulate an Icom Remote tuner for use with Icom transceivers.
- **AUX**: A 15-pin jack for use with the K3 or K3S for Enhanced Mode operation. This fully integrates the KPA1500 with the K3 or K3S.
- **KEY In**: Used with any transceiver to enable the KPA1500 for transmit when the transceiver goes into transmit. This presents a 5 volt, 100 ma signal. Shorting it to ground causes the KPA1500 to be placed in transmit mode.
- **ALC Out**: Provides a negative-going voltage to transceivers that require this feature. Elecraft radios do not require ALC to operate properly.
- **REM**: A 12-volt input signal intended for use in Remote operation applications. This signal can be used to power on/off the KPA1500 with 12 volts DC applied to this connection.
- **Control**: Contains the signals for the Transmitter to communicate with the Power Supply cabinet.
- **HV Supply**: The high voltage and current buss cable for the Transmitter.
- **Ground**: Intended for attaching the KPA1500 to other peripherals and to station ground.
- **TX Sample**: Provides a low level KPA1500 TX RF signal for sampling use by transceivers that support it.
- **RF Input**: Connects to your transceiver's RF output.



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- **ANT 1 and ANT 2:** Dual RF output ports. When used with the internal 1500 watt tuner, the result of successful Full Cycle tunes are remembered on a per-port basis. This makes it easy to quickly QSY between antennas and recall the tuning elements needed immediately. Further, you can establish preferences for which ANT port to select when QSY'ing between bands. This allows you to pre-select what antennas you want assigned to each band.

Q: What does the power supply cabinet look like and how do I know it is on?

A: Here is what the power supply cable looks like. It is the same size as the KPA1500 RF deck. There are quick-check lights for all power supply operating states.



Q: Does the KPA500 stay in the product lineup now that the KPA1500 has been announced?

A: Yes, it does. The KPA1500 and the KPA500 support different customer needs.

Q: Now that there's the KPA1500, will there be continued enhancements for the KPA500?

A: Yes. Elecraft will continue to produce, support, and enhance the KPA500.



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KPA1500 Options, cables and cabinets

Q: What cables and accessories come in the box with the KPA1500?

A: While the AC power cable is completely attached, the plug ends will be adaptable to meet NEMA specifications for various parts of the world. Additionally, control interconnect cables and a Keying cable will be in the box. The Keying cable is an RCA-to-RCA cable intended for use with transceivers to enable the KPA1500 for transmit.

Q: What are the options for the KPA1500?

A: Here's an overview of the options:

Option	Description	What do I need to order?
AC plug Europe	An AC plug suitable for the European markets	Specify at order time.
AC plug USA/Canada	An AC plug suitable for the North American markets	Specify at order time.
AC plug Australia/New Zealand	An AC plug suitable for the Australia and New Zealand markets	Specify at order time.
AC plug Asia	An AC plug suitable for the Asian markets	Specify at order time.
KPAK3AUX cable kit	A series of 2 adapters and an 15 pin cable for use with the K3/K3S series of radios.	KPAK3AUX

Q: Does the KPA1500 include the internal tuner?

A: Yes. The KPA1500 the internal tuner system is part of the amplifier. The KPA1500 is not available without the internal tuner. The tuner is the same architecture as our other tuners.

Q: Are the Transmitter and Power Supply cabinets the same size?

A: **Yes.** Each case is the same size measuring, 4.5 x 13.5 x 11.5 inches (41.5 x 34 x 29 cm) HWD.

Q: How are the 2 cabinets connected?

A: There are 2 cables connecting the cabinets together:

- 1) A High Voltage DC power cable using the popular Anderson Power Pole connection system for the Transmitter cabinet. The other end is permanently installed in the Power Supply cabinet.
- 2) A Control cable containing the signals needed for the Master Controller (MCU) to monitor and control the power supply cabinet.

Q: How far apart may I place the Power supply and Transmitter cabinets?

A: Both KPA1500 cables are 5.5 feet in length; suitable for use in a typical shack where the power supply may be placed in a more convenient location. Longer cable lengths will be supported.



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Q: How is the AC cable made to accommodate international AC outlets?

A: The AC cable is permanently connected to the Power Supply cabinet. This makes it easy to accommodate the different AC plug conventions on a world-wide basis. You will specify the proper AC plug when purchasing the KPA1500.

Q: What AC cable plug do I need to have?

A: The AC cable itself is installed into the Power Supply cabinet. You only need to install the proper AC plug suitable for your local electrical code. The fixed AC cable will be terminated with stripped wires for an AC plug to be installed.

Q: What size AC power should I plan to have available to run the KPA1500?

A: You should plan to have a 200-240 volt, 20 AC amp run from the load panel for the KPA1500.



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Operation with the Elecraft K3/K3S

Q: How is the KPA1500 connected to a K3 or K3S?

A: You can use the KPAK3AUX cable kit for a complete set of cables. This cable kit will enable Enhanced Mode operation where the K3 or K3S is able to interact with the KPA1500 for fully integrated operation.

For instance, the K3 or K3S can detect when the KPA1500 is in OPER or STBY mode and will adjust its RF output automatically to accommodate the lower RF drive required by the KPA1500. Then, it can return to 'barefoot' mode output when the KPA1500 is placed in STBY mode.

Q: Can I use the KPA1500 with a KAT500? If so, what cables are needed?

A: There is no need to use a separate, external tuner since the KPA1500 already has an integrated internal 1500 watt tuner that comes with the amplifier.



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KPA1500 Operation with Other Popular Radios

Q: How do I hook up the KPA1500 to my non-Elecraft radio?

A: Please use this table to find how you can hook up your radio.

- See notes below these tables defining Basic and Advance Mode operation.

Icom

Model	Basic Mode	Enhanced Mode	Cables available from Elecraft? **
IC7300	✓ Cable included with purchase	✓	Yes, Basic mode
IC-746/756 series	✓ Cable included with purchase	✓	Yes, Basic mode
IC-7410/7600 series	✓ Cable included with purchase	✓	Yes, Basic mode
		** 3 rd party custom cable maker available	

Kenwood

Model	Basic Mode	Enhanced Mode	Cables available from Elecraft? **
TS-590 series	✓	✓	No **
TS-2000	✓	✓	No **
TS-570 series	✓	✓	No **
TS-990	✓	✓	No **
		** 3 rd party custom cable maker available	

Yaesu

Model	Basic Mode	Enhanced Mode	Cables available from Elecraft? **
FTdx5000	✓	✓	No **
FTdx3000	✓	✓	No **
FTdx1200	✓	✓	No **
FTdx3000	✓	✓	No **
FT-897/857	✓	✓	No **
		** 3 rd party custom cable maker available	



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Flex

Model	Basic Mode	Enhanced Mode	Cables available from Elecraft? **
6700	Cable shipped with the KPA1500	Use DDUtil	No **
6500	Cable shipped with the KPA1500	Use DDUtil	No **
6300	Cable shipped with the KPA1500	Use DDUtil	No **
5000	Cable shipped with the KPA1500	Use DDUtil	No **
3000	Cable shipped with the KPA1500	Use DDUtil	No **
		** 3 rd party custom cable maker available	

Q: What is meant by Basic and Enhanced mode?

A: Here's what we mean by those terms:

Basic mode connection uses only the KEY signal and RF from the transceiver to 'arm' the KPA1500 for transmit when the transceiver goes into transmit. This approach uses the KPA1500's ability to read the RF frequency on the VFO dial as you just begin to transmit. Basic mode, therefore, depends on just a 'sip' of RF in order to quickly and smoothly change bands.

Enhanced mode connection uses a communication method to determine what the VFO frequency or band is before the transceiver goes into transmit. While the communication method varies by the maker of the radio, they all serve to tell the KPA1500 how to prepare itself prior to transmitting. For DXers and Contesters, you can move quickly between frequencies in the same band or QSYing across bands.



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KPA1500 Remote Operation

Q: Will I be able to use the KPA1500 in a Remote station with Elecraft radios?

A: Yes. It has been designed to be operated remotely.

Q: Will the KPA1500 work with the K3/0 Mini and Remote system?

A: Yes. Elecraft K3 Remote System will be supporting the KPA1500 in future releases.

Q: Are there special cables needed to operate the KPA1500 remotely? How do I order them?

A: Yes. Expect more complete remote features to be delivered in future firmware releases.

Q: Is the KPA1500 FCC Certified at this time?

A: Our lab testing of the KPA1500 looks excellent. We expect final FCC certification confirmation in 30-45 days (or sooner). This is primarily a test data document submission on our part and then the grant of certification by the FCC.

Formal Statement: *This device has not been authorized as required by FCC rules. This device is not, and may not be offered for sale, or lease, or sold or leased, until authorization is obtained.*