



# ELECRAFT® K2 and K2/100

SSB/CW HF Transceiver Kits - *Now with DSP & 60M!*



## Put the Fun back into Amateur Radio!

The K2 160-10 meter SSB/CW Transceiver re-creates the excitement of building and operating a full-featured HF radio. Imagine the feeling you'll get from your first K2 QSO when you tell the other operator that you built it yourself!

## "I Can't Believe It's a Kit!"

The K2 is no ordinary transceiver kit. Its high-performance, low-noise receiver puts it firmly in the big leagues, topping the charts in terms of close-in dynamic range (5 kHz spacing). And the K2 includes features you've come to expect from radios costing much more. Dual VFOs with multiple memories, split TX/RX operation, RIT/XIT, full break-in CW, memory keyer, narrow IF crystal filtering and IF-derived AGC are all standard. We even provide up to six programmable band displays for use with transverters.

## Low Power Consumption for Portable Use

The K2 is designed for use both at home and in the field. The K2's low receive current (as low as 150 mA in battery save mode) is one-tenth that of most high-performance transceivers, allowing the use of much smaller batteries. Our internal 2.9 AH battery (KBT2) and internal fully-automatic antenna tuner (KAT2) further enhance portability.

## Build the K2 for QRP or 100W Operation

The K2 offers efficient QRP CW operation with up to 15 watts output. Build it as a K2/100 by including the internal KPA100 option to get a full 100W radio with silent diode switched T/R. We also offer SSB, 60 m, 160 m, noise blanker, RS-232 computer control and DSP filter options.

## Easy to Build, Understand and Repair

The K2 uses Elecraft's *wireless* design methodology to eliminate nearly all point-to-point wiring inside the radio. The K2's RF, Front Panel and Microprocessor boards plug directly into each other to form a clean, rugged and open design. All K2 boards are easily accessible for test, alignment and repair. The K2 utilizes only through-hole components for easy assembly.

## Comprehensive Assembly and User Manual

Our illustrated step-by-step assembly instructions include modular assembly and check out of each control, receive and transmit stage. Extensive theory of operation and troubleshooting sections are also provided.

## Lab Equipment Not Required

The K2 provides *built-in* test equipment, including a digital voltmeter, ammeter, frequency counter and RF power meter. Microprocessor based self-alignment firmware speeds the testing of your K2.

## Strong Customer Support

Our technical support via telephone and the Internet will get your K2 up and running quickly. On-line manuals, frequently asked questions (FAQ), and our very active user group email list make building the K2 a great experience.

*(The K2 is an intermediate kit. First time builders may want to start with our K1 CW transceiver or other entry-level kits.)*

## K2 STANDARD FEATURES

- Rugged, attractive custom enclosure
- Small, portable size: 2.9h x 7.8w x 8.2d inches
- Weight 3.3 lbs. (excluding internal options)
- 80-10 meter ham band+ coverage; 60 m, 160 m optional
- Efficient 12 Volt (10 - 15 V) operation for home or field
- Receive current as low as 150 mA (battery save mode)
- CW-only or SSB/CW + Digital Modes with SSB option
- PLL synthesized--low phase noise
- Up to 6 transverter bands; programmable display freq., I.F., power

Specifications and Pricing subject to change without notice

- Dual VFOs with split operation.
- Direct keypad entry of frequencies and memory channels.
- RIT and XIT with four offset ranges
- Built-in high-efficiency speaker
- Memories store mode, VFO A/B, split, RX filter, etc.
- Simple menu system for advanced settings. (Up to two menu functions can be assigned to the two programmable front panel function keys.)
- Room for additional connectors on the rear panel
- Smart 'hunt and pounce' band-scanning mode plus mem. channel scan

## RECEIVER

- Low-noise, single-conversion superhet receiver
- Double-balanced diode mixer for excellent dynamic range
- Receive sensitivity: 0.15 uV (pre-amp on, typical.)
- Narrow ham-band, double-tuned bandpass RX/TX filters, relay switched for better IMD response
- Smooth, fast attack, I.F.-derived AGC (no "popping")
- Switchable preamp and attenuator
- Variable-bandwidth I.F. crystal filtering
- Multiple VFO tuning rate selections and scanning modes
- 10 Hz tuning resolution
- Bar graph S/R F OUT/ALC meter
- Adjustable squelch

## TRANSMITTER

- Adjustable 0.1-15 W (K2), 0.1 - 100W (K2/100)
- Rugged, SWR-protected, push-pull PA transistors
- Programmable current limit for battery operation
- Harmonics and spurious outputs: Better than -43 dBc

## CW FEATURES

- Full diode switched break-in with variable QSK delay
- 9-memory keyer; iambic A and B; adjustable weight
- 9-50 wpm (internal keyer); 70+ wpm (external keying)
- Programmable message repeat interval
- Simultaneous computer and paddle CW keying inputs
- Variable bandwidth crystal filter (approx. 200 - 2000 Hz)
- Adjustable RX CW offset with tracking TX side tone.
- Selectable opposite sideband RX for QRM reduction

## OPTIONS

### K2/100W Internal Integration Kit (KPA100)

- The KPA100 option completes the K2 as the 100-watt K2/100 transceiver. Includes fast, diode-switched T/R, extensive monitoring (SWR, current, and temperature), and RS-232 rig control. Either the KPA100--or our 20 W automatic antenna tuner and internal battery options--can be installed inside the K2.

### SSB (KSB2)

- 8 pin mic connector; jumpers allow use w/most mics
- Adjustable speech compressor
- Optimized 7-pole, 2.2 kHz crystal filter

### 160 m With Receive Antenna Jack (K160RX)

- Adds 160 meters TX/RX
- 2<sup>nd</sup> RX antenna input (usable for all bands)

### 60 m and Low Level Transverter Interface (K60XV)

- Adds 60 m coverage with channel scan to the K2 and K2/100
- Provides separate low level (-10 to 0 dBm) transverter split I/O

### Advanced DSP Filter for the K2 (KDSP2)

- 4 user-configurable DSP filters in each mode (CW, SSB, Data)
- Automatic Noise Reduction with four settings and full adjustment
- Automatic Notch Filter
- Real Time Clock

### Audio Filter with Real-Time Clock (KAF2)

- Low-pass filter eliminates noise and splatter above 3 kHz
- Two-stage narrow band-pass filter for CW or data use

### Internal Battery (KBT2)

- 2.9 AH, the gel-cell battery can be recharged inside the K2 continuously from the same DC power supply used at home. May not be used with KPA100 installed.
- KBT2-X battery holder only ( no battery) also available

### Noise Blanker (KNB2)

- Variable threshold and pulse width

### Internal 20W Automatic Antenna Tuner (KAT2)

- SWR and power metering to front panel.
- Two antenna jacks; front-panel antenna selection

### 100W Auto Tuner for K2, K2/100 (KAT100)

- KAT100-1 includes 1.25" high enclosure (sits under or next to K2).
- KAT100-2 includes front & back panels for EC2, does not include complete case. Must be mounted inside an existing EC2.

### XV Series Transverters (XV50, XV144, XV222)

- High Performance transverters for use with the K2 and most other rigs
- Transverters are stackable; K2 or push-button selects active band
- 20 W (XV50); 25W (XV144, XV222)

**Note:** The KAT100, XV Transverters and KRC2 require either the KIO2 or the KPA100 option installed in the K2.

### AUX I/O RS-232 Interface (KIO2)

- Supports computer logging, contesting, remote control applications (*KIO2 functionality is included in KPA100.*)

### Band Decoder and Controller (KRC-2)

- Controls external antenna and BPF switches
- Works with theK2 and most other rigs.
- CW feedback accessibility aid; Four function keys

### K2 Keyer Paddle System (KXPDI-K2)

- The KXPDI-K2 bracket is a lightweight, sturdy adapter that allows our model KXPDI paddle to be used with the K2.
- KXPDI paddle must also be purchased for use with the KXPDI-K2

Please see our Price List or website for current pricing.



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