ELECRAFT® K3S Transceiver



160-6 m • Superhet / SDR Architecture • Ultra Low-Noise RX/TX

Introducing the Elecraft K3S 160-6 m Transceiver: Higher Performance, Many New Features

The Elecraft K3 set the standard for compact, high-performance transceivers, proving to be ideal for DXpeditions, multi-transmitter contesting, Field Day, and home stations alike. With the second-generation K3S, we've raised the bar once again, upgrading nearly every subsystem. Improvements include:

- ***Ultra low-noise synthesizer*** for exceptional strong-signal receive performance and transmit signal purity (KSYN3A)
- ***USB port–integrates remote control and line-level audio, eliminating the need for a PC sound card and audio cables***
- ***Second preamp for 12-6 m weak signal work*** (on included KXV3B module)
- ***Multiple attenuators***, providing steps of -5/-10/-15 dB
- ***Enhanced look and feel***, with new LCD bezel, soft-touch VFO knob
- ***Lower-Loss ATU option with true bypass relay*** (KAT3A)
- ***Redesigned AF output circuitry*** for outstanding speaker audio
- ***Accurate, high-speed CW transmit*** even in SPLIT mode
- ***Coverage of the 630-meter band*** (~470 kHz), and lower[1]

Superhet / SDR Architecture

The K3S delivers the best of both worlds: a hybrid of software-defined radio (SDR) technology and our proven, high-dynamic range superhet receive architecture. The optional KRX3 high-performance, fully independent sub receiver offers true diversity operation to reduce fading. 32-bit DSP provides stereo effects, NR, EQ, notch, and built-in PSK31/CW/RTTY decode/encode.

100-Watt or Upgradeable 10-Watt Model

Choose from two models: the K3S/100 or K3S/10. The K3S/10, which can be easily upgraded to a K3S/100 at any time, offers the same exciting features and performance at lower cost.

P3 Panadapter now with Transmit Monitoring

The P3's bright, full-color LCD has both spectral and waterfall displays, and new optional TX metering and signal envelope monitoring. The P3 has a faster sweep rate and better sensitivity than most built-in panadapters. Tap to QSY to any signal.

Companion 500-W Amplifier and Antenna Tuner

The K3S and P3 are members of our fully integrated K-Line. Rounding out the K-Line are our KPA500 solid-state amplifier and matching KAT500 ATU, both of which can be used with nearly any transceiver. When used with the K3S, the amp and ATU track the rig's band and VFO, so you'll be ready wherever DX appears.

Add 2 Meters with our K144XV Internal Option

Expand coverage to 144-148 MHz with the K144XV and operate FM, SSB, CW and Data modes on 2 Meters.

Remote Operation via the K3/0-Mini Control Panel

If your Elecraft K-Line station is at a remote location, you can still operate it from anywhere in the world using our K3/0-Mini control panel. The Mini duplicates all K3S controls, providing a virtually seamless operating experience over any Ethernet connection. By logging into *RemoteHams.com*, you can even use the Mini to access other K-Line stations. Many of these offer ideal DX locations, and have high-performance, all-band antenna farms.

Factory Assembled or No-Soldering Kit

All modules are pre-assembled and 100% tested, ensuring identical performance whether you purchase your K3S factory assembled or build it yourself — saving money in the process. The easy-to-build kit version does not require soldering.

Legendary Customer Support

Elecraft is committed to customer satisfaction (just ask our customers). We offer full phone and email support, on-line manuals and application notes, and an active user forum.

[1]Requires KBPF3A module. Receive coverage extends down to 100 kHz. 0.5-mW transmit output at 472 kHz (630 m band) for use with external amplifier.

K3S Transceiver Specifications



STANDARD FEATURES

- 160-2 meter all-mode coverage (2 meters with K144XV option)
- Superhet/SDR architecture with narrow ham-band filtering
- High-contrast, full-custom LCD with alphanumeric text display
- 100-W or 10-W (upgradeable) models
- 32-bit I.F. DSP (dual DSPs with sub receiver installed)
- Built-in PSK/RTTY decode/display; send data using CW keyer paddle
- High performance, low-noise synthesizer with 1-Hz tuning
- All radio firmware updateable with K3 Utility software

RECEIVER

- Optional sub receiver with performance identical to main receiver
- 2nd preamp for 12-6 m weak-signal work; 3 attenuator levels (5/10/15 dB)
- RX ANT in/out jacks included (on KXV3B module, now standard)
- Optional general-coverage band-pass filters (KBPF3A); allows receive coverage down to 100 kHz, 0.5-mW transmit on 630-m band (472 kHz)
- Optional crystal roofing filters as narrow as 250 Hz; DSP filters to 50 Hz plus 30-Hz CW audio peaking filter (APF)
- Synchronous AM receive or envelope detection
- Easy-to-use Shift/Width/HiCut/LoCut w/ DSP passband display
- Automatic and manual notch filtering; adjustable noise reduction
- 8-band graphic equalizer with separate CW/voice settings
- Hardware and DSP noise blankers with individual level controls
- Center tuning indicator for CW and data modes

TRANSMITTER

- Adjustable output, 0.1 to 100 W+ (K3S/100) or up to 10 W+ (K3S/10)
- Rugged, SWR-protected finals; dedicated PA circuit breaker
- DSP I.F. speech processor with noise gate for maximum DX punch
- Dual 4-speed fans in K3S/100
- Fast, silent, PIN-diode T-R switching – no relays
- 8-band equalizer tailors mic audio to your voice and microphone

OTHER FEATURES

- Includes both USB and RS232 ports; Using USB port eliminates need for PC sound card and line-level audio cables (line in/out jacks still included)
- K144XV option adds 144-148 MHz, 10W, all-mode operation
- Transverter in/out jacks included; 9 transverter band displays
- Internal CW keyer with message buffers; voice messages with KDVR3
- User 'macros' automate often used sequences, such as custom SPLITs
- 100 general-purpose VFO memories and 4 "quick memories" per band (plus a free memory editor utility for use on your computer)
- P3 DSP Panadapter integrates transparently with the K3 or K3S
  - Spectrum and waterfall displays (split or full screen)
  - Superior sensitivity for weak signal work
  - Select-and-tap QSY tuning of the K3S

P3 Panadapter spans 2-200 kHz with both spectrum and waterfall displays



OPTIONS AND CRYSTAL FILTERS

KRX3A High Performance Sub receiver (includes 2.7 kHz filter; see filter options)
KAT3A 100 W Internal Autotuner with 2 Ant. Jacks
KBPF3A General Coverage RX Band-pass Filters (can also be installed in KRX3)
MH2 Elecraft Hand Microphone
KDVR3 Digital Voice Recorder
KTCXO3-1 1 ppm TCXO (typ. 0.5 PPM over 10-50 C)
KPA3A 100 W Internal PA (for K3S/10 upgrade to 100 W)
KFL3A-( ) 8-pole Roofing Filters: .25, .40, 1.0, 1.8, 2.1, 2.8, 6.0 (AM), 13 kHz (FM)
KFL3A-( ) 5-pole Roofing Filters: .50, and 2.7 kHz (2.7 kHz supplied with K3S)
K144XV 144-148 MHz 10 W internal module
P3 Panadapter (optional SVGA external monitor adapter)
KPA500 500W Solid State, Instant-On, Auto Band-Switch Linear Amplifier
KAT500 500W Automatic Antenna Tuner
K3/0-Mini Remote Front Panel

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