

QRPworks K-Board and SideKar Accessories for Elecraft Transceivers

Reviewed by Stuart Thomas, KB1HQS
KB1HQS@fastmail.com

As an avid user of the Elecraft KX3 radio and a portable operating enthusiast, I am always looking for new gear to help maximize my efficiency in making radio contacts while in the field.

Two products I tried this past summer were the K-Board and SideKar, both made by QRPworks. Both accessories are designed to work with the Elecraft KX2/KX3 and K3/K3S radios, providing a keyboard interface and, in the case of the SideKar, logging features.

K-Board

The manual describes the K-Board (see Figure 19) as a “smart keyboard interface,” and that’s an apt description. It allows the operator to add a wireless or wired USB keyboard to make it easier to use the features of their Elecraft radio without adding a computer. Using the K-Board, the operator can store, play, and manage PSK, RTTY, and CW messages at a touch of a keyboard button. You can also program macros for rig control functions, such as changing frequencies, bands and modes, setting

the transmit power, enabling RIT, or entering split frequency operation, all from the keyboard without having to touch the radio.

The K-Board measures $3.625 \times 1 \times 1.9$ inches and weighs 3.2 ounces with a professional-looking metal case. It requires an 8 – 15 V dc power source and has a 2.1-millimeter coaxial power connector. QRPworks offers an optional power splitter cable (to power the radio and K-Board from a single source) and a 9 V battery holder with power cable that fits the K-Board. We also ordered the companion wireless keyboard from QRPworks. The compact keyboard isn’t much bigger than the K-Board and uses an internal rechargeable lithium-ion battery. (QRPworks also offers a larger size wireless keyboard.)

Three LEDs (red, yellow, and green)

Bottom Line

The QRPworks K-Board and SideKar offer a compact way to add a keyboard and other features to Elecraft transceivers. They are especially attractive for portable operations.

on the front of the K-Board case indicate the firmware and input/connections status, a useful feature considering the K-Board has no LCD display. A reference guide is printed on the case above the LEDs, a feature appreciated when you don’t have the manual with you.

On the top of the unit (see Figure 20) are the connections for external power input and radio data cable, along with a power switch. For operating outdoors, I would prefer to see a sealed rocker switch in its place.

Setting up the K-Board

Setting up the K-Board requires connecting the radio and the K-Board with the included 3.5-millimeter stereo cable. I then verified that my KX3 was set to the correct baud rate of 38,400. If you supply your own keyboard, it can be either wired or wireless. If wireless, you will need a 2.4 GHz version (not Bluetooth) for it to work properly. A PC port is located on the side of the K-Board for programming the unit using a computer. It’s interfaced to the computer using the same Elecraft KXUSB or KXSER cable used to connect the radio to a computer.



Figure 19 — The QRPworks K-Board, shown here with its optional compact wireless keyboard, uses the LEDs to indicate status and communicate with the user.



Figure 20 — Connections for the radio, computer, and power, plus an on/off switch, are located along the bottom of the K-Board. The SideKar is similar.

I started by interfacing the K-Board to my MacBook and downloaded the *Message Management Utility* program from the QRPworks website. (A Windows version of the software is available as well.) Using *Message Management Utility*, I programmed my predetermined messages for the K-Board. The unit is capable of storing up to 200 messages or macros, a very handy feature when participating in various contests and operating activities. Messages/macros are arranged in 10 groups of 20 messages/macros each. They are accessed using the F1 to F10 and ALT F1 to F10 keys. Use ALT-G and one of the function keys to access the different message/macro groups.

The *Elecraft K3s/K3/KX3/KX2 Programmer's Reference* offers an in-depth look at the wide variety of rig control commands that can be sent to the radio from an external computer. The K-Board can store rig control macros in memory and send them to the radio in the same way messages are handled. Rig control macros begin with a period to differentiate them from messages. They can have a short name, followed by a colon, followed by the programming code(s) separated by semicolons. For example, `.CW15:MD3;KS015;` is a macro named CW15 that commands the radio to switch to CW mode (MD3) and set the keyer speed to 15 WPM (KS015). Macros can be much more complicated than that, stringing together any number of commands.

It should be noted that you can program the messages directly into the K-Board using the keyboard and/or CW paddle (without a computer), which is useful in the field when you want to change messages on the go or as your operating situations change. The contents of messages or macros can be previewed using the radio's scrolling display.

One issue I encountered initially was that the K-Board would not recognize



Figure 21 — The SideKar and compact wireless keyboard with the author's KX3 transceiver.

the wireless keyboard. After a full charge of the keyboard battery, everything synced up correctly. Considering that this was an issue with the keyboard and not the K-Board, you might prefer a wired keyboard if you have limited charging capability in the field. The user should select a wired or wireless keyboard based on their operating location and preference.

On the Air with the K-Board

During a recent Parks on the Air (POTA) activation in Maryland, the message feature proved to be very useful as the band conditions were not cooperating that day. (POTA is part of the World Wide Flora and Fauna in Amateur Radio program — see www.f-kff.com.) I used the F1 button on my wireless keyboard to send CQ POTA on CW repeatedly, hoping to start up some activity. Using this setup was very convenient because I didn't have to be located right next to the radio while calling CQ.

Once contact was established with another operator, I sent another mes-

sage including signal report, park designator, and state. Along with the message memories, I used the keyboard to send typed text as needed. Using a keyboard and hearing CW as I typed was a little strange at first, but I quickly adapted. To my ears, the spacing sounded good and would be easily decodable by the other operator (or by a computer program).

The K-Board programming uses a series of ALT key combinations to initiate different commands. For example, the Quick QSY feature allows you to change frequencies and modes from the keyboard — press ALT-Q then type 14070P to switch to PSK31 on 14.070 MHz. Or press ALT-Q then 7235L for 7.235 MHz LSB. This is a handy feature compared to the multiple button presses and tuning knob dialing required for band and mode changes from the KX3's front panel.

Another example of the ALT key command that I found useful was ALT-V, allowing me to check the battery or power supply voltage of the K-Board.

QRPworks provides a helpful ALT command table as a reference sheet in the manual.

The 37-page manual does a great job of covering all the features in depth as well as offering tips to operate the device. It's extensive in size, but is well organized and includes a number of color photos.

SideKar

The SideKar (see Figure 21) offers all the K-Board features plus an LCD screen and logging capabilities. The QRPworks website offers a comparison chart of their products if you would like to see all the features side by side. As with the K-Board, the SideKar is supported with an 82-page, well-illustrated manual available for download from the QRPworks website.

The SideKar measures $3.6 \times 1.7 \times 1.9$ inches and weighs 5.6 ounces — like the K-Board, a very compact and portable-friendly package that requires an 8 to 15 V dc supply. The LCD screen located on the face of the SideKar has five levels of amber brightness and is readable in sunlight, a must-have when operating outside on sunny summer days. Also found on the face are two pushbuttons that can be programmed with user-defined commands, such as sending a message or freezing the display (handy if decoded data is flying by too fast). The pushbuttons also allow for entering con-



Figure 22 — Transmitted text rolling across the SideKar screen.

tacts in the log without a keyboard.

Unlike the K-Board, the SideKar can be mounted to the side of the KX3 or the top of the KX2 using supplied mounting brackets (specify the radio at time of order). If you don't want to mount it on your radio, you can also place it near the radio on your working surface.

Setting up the SideKar is very similar to the K-Board, and it also uses the *Message Management Utility* software. In addition to displaying sent messages/macros (see Figure 22), the two-line LCD displays the most recent 40 characters of decoded PSK, RTTY, or CW from the radio. That's quite a bit more text than is available on the radio's eight-character scrolling display. (A SideKar Plus version, with a four-line display, is also available.)

In addition, once powered on and con-

nected, the SideKar can store a log with up to 1,000 contacts, including call sign, date, time, frequency, mode, and exchange information up to 10 characters. A special DXpedition logging mode offers a quick way to respond and log calls. This abbreviated logging mode was designed for Summits on the Air, county hunting, and other portable/mobile operations. When you have completed your on-the-air operations, the SideKar offers the option for ADIF file export to a PC or MacBook.

During my summer radio outings using the SideKar, I found having the keyboard gave me easy access to control all my messages, modes, frequencies, and logging. With this external keyboard, I was no longer required to be hunched over the radio while operating, giving me the freedom to kick back, drink some cold lemonade, and relax at the park.

For those portable Elecraft radio operators looking to expand their radio's functionality, keyboard messaging, and logging options, these QRPworks products are a great addition to their radio gear.

Manufacturer: QRPworks, www.qrpworks.com. Price: K-Board, \$169; SideKar, \$259; SideKar Plus (four-line display), \$279; compact wireless keyboard, \$27.95; power splitter cable, \$19.95.