



QRPworks SideKar Plus on Elecraft KX2 transceiver. (Photo courtesy of the author)

QRPworks SideKar Plus

By Mark Haverstock K8MSH

Being a recent convert to QRP operation, I've been looking at radios and accessories that I can put into a small go-kit for portable operations and something I can easily take on trips. Whether it's hiking to a location off the grid or packing luggage for a flight—lightweight and portable are at the top of the list.

With propagation conditions declining, I'm finding myself spending less time working SSB at QRP levels and devoting more time operating in digital modes and relearning CW. It's not practical to lug around a standard-sized laptop and radio equipment. QRPworks SideKar Plus appeared to be a workable solution for digital and CW operation, while minimizing the size of my portable station.

A Little on the Side

Before we go too far into the review, I want to emphasize that the SideKar Plus and the SideKar are accessories specifically designed for the Elecraft KX3 and KX2, utilizing the RTTY/PSK/CW decoders built into these rigs. They won't work with the Yaesu FT-817ND or other QRP rigs. However, another QRPworks product, the Key Log Go

(KLG), provides some of the same features of the SideKar for the 817 and other rigs. KLG is a keyer, a defined message generator, logging program and will also decode on receive when using the Elecraft KX2/KX3.

The SideKar attaches, as the name suggests, on the side of the KX3 using a supplied thumbscrew. On the KX2, it's attached using two supplied brackets and thumbscrews to the top of the radio. The foot on the back of the KX2 needs to be removed for proper fit, but can be reattached to one of the mounting brackets on the SideKar. If you don't want to mount SideKar on the radio, it can sit near the radio on a flat surface.

One 3.5-mm stereo cable is included and connects the SideKar Plus rig port to the ACC/ACC1 connector on the KX2/KX3. An optional splitter cable divides an 8-15 volt power supply connection between the radio and SideKar. A 9-volt battery may also be used to power the SideKar; an optional battery case/cable combo is also available.

A USB connection on the side of the case accommodates a standard PC keyboard. QRPworks also offers two optional wireless keyboards: a compact (5.94 x 2.32 x .49-inches) or slim (11.25 x 4.75 x 0.75-inches), both at \$28.



Left: Calling CQ using wireless keyboard stored message. Right: SideKar Plus logbook. (Photos courtesy of the author)

I chose the slim keyboard since I have fat fingers and needed the larger key size to type comfortably.

Macro Mania

Ease of operation is important, and a few shortcuts always help. SideKar has 20 memory locations reserved for text messages, rig macros, or both. Each of the 20 text messages or macros can be up to 80 characters, and are assigned to the keyboard's function keys. F1-F10 keys store the first 10 items, and the remaining 10 are accessed using Alt-F1 through Alt-F10. Used as text messages, they can store typically useful text such as calling CQ, contest exchanges, and station information. Macros can control rig functions, such as mode, power levels, or going to a frequency. These are explained in the Elecraft KX2/KX3 manual.

QRPworks has a free PC/Mac Message Management Utility that is downloadable from their website, www.qrp-works.com. It allows you to define messages and macros with your computer and download them to the SideKar. You can also manually program text messages and macros with the keyboard or in CW using a paddle.

SideKar Plus also has two programmable buttons on the front panel. The default settings are Log a QSO and Freeze display. However, there are 12 additional functions that can be assigned, such as Quick QSY and Send message.

On the Road

The SideKar Plus rode along with me on a flight to Arizona for the holidays. I packed it in the Lowepro CS-60 padded case (sold by Elecraft) along with the KX2 and some cables. As you can see in the picture, it just fit. The case was tucked into a carry-on with a small power supply, two small wire antennas, keyboard, 30 feet of coax, a 2 meter HT, and some clothing items that doubled as padding. Incidentally, the TSA cleared everything through the airport checkpoint without any questions.

Once we arrived, I set up a 10-40 meter Off-Center-Fed antenna from our second floor condo balcony in a sloper configuration. The station was placed on a nearby folding table with the KX2 and SideKar Plus by its side. I tuned the antenna and then began looking for PSK-31 signals on 20 meters.

The KX2/KX3 both decode incoming signals and display them on a scrolling 8-character display at the bottom right of the rig's screen. The data received can be PSK31, PSK63, CW or RTTY and it moves by quickly. The SideKar Plus captures the information from the radio and then displays it on the built-in 80-character screen. This means you can read words and sentences instead of small chunks of text. Plus you can freeze and scroll back the text if you miss something.

When the lines begin to fill up, they will scroll up leaving space for the additional incoming data. While receiving text, the status LED above the display will be off, indicating it's in the receiving mode. The ALT-T command toggles decoded text on and off, with the default being on at power-up.

Careful tuning on your radio makes the difference between reading gibberish and understandable text. For best results, use the visual tuning aid (CWT) on your KX2/KX3 and center the indicator under the CWT arrow. Tapping the radio's RATE button will change the tuning rate to 1Hz steps, which is especially helpful for fine-tuning PSK and CW. I found that, with practice, I could get solid copy when band conditions were acceptable.

Transmitting

Starting a QSO is as simple as typing on the keyboard, using one of the predefined messages you saved into memory, or even a paddle connected to the rig. Note that the KX2/KX3 automatically translates CW from the paddle into the mode in which you are operating: PSK-31, PSK-63, RTTY or CW.

As you type in the immediate mode, the rig is keyed

and SideKar will display the characters you sent. If you're not comfortable with sending on the fly, there's a buffered mode that will hold up to 20 characters at a time. This gives you an opportunity to view and correct text before sending.

Of course there are the programmable messages assigned to the function keys that are great for contesting, SOTA, Field Day, and other events where there's a set exchange format or items that are frequently repeated. Essentially, I copied my macros from FLDIGI and used them for some PSK-31 contacts.

Grab & Go is a neat feature that helps you maintain the flow of a QSO, especially during contests. You add the @ character as a placeholder at the beginning of stored messages, such as a response to a CQ. When you press the function key to send a stored message, it prompts you to enter the call sign, which is sent as you type. A second tap on the function key sends the rest of the message.

Logging Your Contacts

SideKar can log up to 1,000 contacts, including call sign, date, time, mode, frequency and exchange info. It's not a full-blown log, but it allows you to capture the basics and will check for duplicates. It's a lot handier than a paper log or trying to use a PC logging program while operating in the field.

A special DXpedition-style logging mode offers a speedy way to respond and log calls. It's handy for logging Summits on the Air (SOTA), county hunting and other operations. SideKar Plus offers ADIF log file export to both PCs and Macs.

Logging a new QSO begins with activating the log with Alt-L, followed by L to begin entry. SideKar also keeps track of QSO serial numbers and will reference SOTA, IOTA and grid information.

Impressions

I chose the SideKar Plus because of the 80-character display versus 40 on the original SideKar. It's easier to read, and only weighs 9 ounces as compared to 5.5 ounces. Given the small price difference, I think the Plus version is well worth the extra investment. The display, though not quite as bright as the one on the KX2, was quite readable even outdoors. It mounts neatly on the radio, almost like it was an Elecraft-made add-on.

On the website, you'll find all the support you need, whether it's accessories, firmware updates, software, advice, or warranty service. Shel Radin responds quickly to messages and provides excellent customer support. Though the SideKar is plug and play, you'll probably want to download a copy of the manual in PDF format for reference while trying out its many features. The manual is well written and contains many useful illustrations. An abbreviated version can be accessed by pressing F-11 on the keyboard.

As mentioned earlier in the review, many of the import-



SideKar Plus and Elecraft KX2 ready for travel in LowePro CS-60 padded case. (Photo courtesy of the author)

ant functions of the SideKar are dependent on the KX2/KX3 features. For best results, be sure to familiarize yourself with the CW/data modes and text decoding instructions in the manuals (KX2 pg. 27-29; KX3 pg. 13, 16, 18-19).

Obviously, SideKar Plus won't replace all the functions your laptop or tablet, but it has all the important stuff you'll need to make portable and travel operation enjoyable and productive without weighing you down.

QRPworks: <https://www.qrpworks.com/sidekar--sidekar-plus.html>

SideKar Plus, \$279.00 w/data cable and mounting hardware; SideKar Plus Package, \$309.00 w/ data cable, power splitter, wireless keyboard, and mounting hardware. Original Sidekar, \$249.00 w/ data cable and mounting hardware.

Key Log Go, \$295.00

Feature Summary

- Mounts on the side of the KX3, the top of the KX2, or sits on a desk with supplied brackets.
- View decoded text in CW, RTTY, & PSK modes
- Freeze the screen and scroll back. New incoming text is stored.
- Send CW, RTTY or PSK using the keyboard or paddle
- Built in logger for 1,000 QSOs with ADIF export.
- Uses USB keyboard (wireless/wired) or paddle for data entry functions
- Create and edit 20 messages/macros using the device or the free Message Management Utility

TSM