microHAM Digi Keyer

"One box does it all." Yes, that's a shopworn cliché, but it applies very well to the new microHAM Digi Keyer. Within a small aluminum enclosure you'll find a deluxe interface that allows you to operate any sound-card-based mode simply and efficiently. The Digi Keyer even supplies the "sound card" in the form of a sound chipset. This means that the Digi Keyer can put you on the air without tying up your computer sound card (this is a big plus when using an older PC with a sound card that is, shall we say, less than optimum). The Digi Keyer can also be used for keyboard CW.

In addition to sending and receiving signals, this versatile box will pass control data and other information back and forth between your computer and your transceiver. Most modern rigs have computer control capability and this is very handy for automatic frequency logging and remote station control. The catch is that you usually have to purchase an extra interface to allow the radio to communicate with the computer. Not so with the Digi Keyer. You don't need to buy a "level converter" or any other extraneous hardware. Just connect the Digi Keyer and your rig-control software will soon be engaging in a lively data discussion with the radio. During this review, I used it with *TRX Manager* software to control my transceiver via the Internet. Other than the unavoidable delays caused by Internet "propagation," the remote setup worked quite well.

Don't worry about the lack of available serial ports on your PC; the Digi Keyer doesn't need one. Instead, it connects with a single USB cable using the native drivers your computer already has. It doesn't get much easier than that.

Installation

You have to jump through a couple of hoops to get the Digi Keyer up and running the first time. Before you even think of hooking it up, you have to open the enclosure and set a few jumpers to configure the Digi Keyer for your transceiver. There is a well-written manual on the Digi Keyer CD-ROM that guides you through this process.

The next step is to install the *Windows* "USB Router" software on your computer of choice. This application talks to the Digi Keyer and sets up the virtual COM ports that you'll need for your operating software. When setting up *WriteLog* to use the Digi Keyer, for example, I needed to "tell" the software to look for the interface on COM 5 — a virtual COM port established by the Digi Keyer.

Thanks to the custom cable used to connect the Digi Keyer to your transceiver, the rest of the installation process is highly streamlined. Interestingly, the Digi Keyer is not powered from your computer's USB port. Instead, the "transceiver side" of the Digi Keyer draws power from your radio — if it can — through the custom cable. This trick doesn't work with the Elecraft K2, Yaesu FT-847/FT-736 or any Kenwood transceivers, though. For these rigs you'll need to supply the power yourself or purchase the external Digi Keyer power supply ($10).

Taking it to the Air Waves

My first test of the Digi Keyer was during Field Day when I connected it to my Yaesu FT-817 transceiver and ran digital QRP. The Digi Keyer was as smooth as proverbial silk. Thanks to the Digi Keyer's front-panel transmit and receive audio controls, I didn't have to fumble with the awkward *Windows* sound mixer in my laptop. (The Digi Keyer has two receive-audio channels with dedicated gain controls. This is ideal for dual-receiver rigs.)

The built-in sound chipset was superb with remarkably low noise. With the receive audio properly set, the *MixW* waterfall display was nearly black in the areas where signals were not present. It was also nice to see that the Digi Keyer didn't appear to introduce noise of its own. I didn't notice any spurious signals that I could attribute to the Digi Keyer.

The specifications recommend an 800 MHz Pentium PC as a minimum computer configuration. I ran the Digi Keyer from an old 800-MHz laptop with no problems. I should mention that the Digi Keyer provides hardware frequency shift keying (FSK) for RTTY operating, if your transceiver supports an FSK mode. This allows the interface to apply the MARK/SPACE RTTY data directly to the radio. The result is usually a cleaner signal and the ability to select narrower RTTY IF filters in the receiver.

Finally, VHF operators should take note of the Digi Keyer's built-in *T/R sequencer*. I've never seen anything quite like this in a computer/radio interface. For those who are unfamiliar with the term, a sequencer makes sure that sensitive components, such as receive preamplifiers, are switched out of the antenna system whenever the transceiver is keyed. The user can set up the Digi Keyer to impose a slight transmit delay while it switches the preamp, transverter, etc, out of the line before keying the radio to apply RF.

If you want to completely integrate your computer with your station, the microHAM Digi Keyer is worth a serious look. The quality is top-notch and the no-hassle installation is icing on the cake.

Manufacturer: microHAM, distributed in the US by microHAM America, PO Box 1257, Geneva, FL 32732; e-mail **info@microHAM-USA.com**; *Web* **www.microham-usa.com/**. *$289.*

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