CW Keying a K3 with USB-COM Adapter with N1MM

N6MW 11/20/15

It is widely indicated that it is possible to key a K3 for CW and have radio control without either a computer serial port or a keying Interface using a single USB-COM adapter. It is rather less widely told exactly how.

Using a (typical?) MCT U232-P9 adapter (FTDI chip set), the task is accomplished as follows:

Only after installing the Adapter Driver (done here on Win7), connect the adapter to a USB port. A message should appear indicating the new unit is ready. Look under Device Manager (Control Panels/Icon View)/Ports and find and note the new COM port assigned to the adapter.

Open N1MM and Config Tab/Configure Ports. For the new Port COM# select Elecraft K3 as the Radio. Check the CW/Other box. Click on the corresponding SET button and select 38400 N 8 1 for the communications and select DTR to CW and select RTS Always Off. OK out of Config.

On the K3, go to CONFIG. Under PTT-KEY. Dial up "rts-dtr" and then exit CONFIG.

That's it. It may work with other settings. Now the Keying is through the DTR line of the K3 serial port. We assume that there is a built in keying interface circuit to the RS232 inside the K3.

You can, of course, also key the K3 via the Adapter without using K3 Radio control on the COM port if somehow that is desired. In that case, you need a Keying interface (RS232 input, typically with a transistor and resistor circuit and 1/4" plug out). In this case, N1MM Config for COM# has no radio indicted, check the CW/Other box and for SET put DTR to CW and RTS Always Off. (RTS can be set to PPT but it does seem to matter with either QSK or SEMI-break in). The K3 CONFIG setting for PTT-KEY does not appear to matter. OFF-OFF works. Now Keying is through the KEY jack on the rear panel of the radio and the 1/4" plug goes from the Interface box to that jack.