CWMorse MY-KEY USB to key interfaces

MY-KEY-MOUSE and MY-KEY-SERIAL are hardware interfaces to connect your computer/tablet to a straight or iambic key via a USB port using compatible software. MY-KEY-MOUSE supports an HID compatible software controlled USB mouse interface while the MY-KEY-SERIAL supports a common USB to serial interface. MY-KEY-SERIAL2 (coming soon) includes an addition opto-isolated keying output for positive and negative type keying.

NEVER plug anything other than a key into the MY-KEY-MOUSE or MY-KEY-SERIAL key input jack. Any voltages present on the jack could damage both the device and your PC/Tablet! The Common (Shield) connection to the key input is **NOT** a ground!
Use caution when connection your radio key jack to the MY-KEY-SERIAL2 key out jack. <u>Make sure you do not connect your radio to the KEY IN jack.</u> Damage to the MY-KEY-SERIAL2, computer, and radio **WILL** occur.

DEVICE/SOFTWARE COMPATABILITY

The list keeps growing for both serial and mouse interfaces.
For the most recent list of compatible software and apps and updates please see
https://kc9on.com/ham-radio/code-practice/

Compatibility Notes:

- In most mouse controlled software a regular mouse needs to hover over a specific area before keying works.
- For Android phone use the MY-KEY-MOUSE with an OTG (AKA On The Go) cable. The cable must match the USB connection to your device. In some situations the mouse pointer will be outside the window (top or bottom status bars) in which the software will not function correctly.
- Typically most software in straight key mode will have both TIP and RING active. You may need to disable the RING jumper to avoid constant key down depending on the style or connection of the jack.

- Some software, such as CWCom, can not swap paddles within their programs. Adjust the jumpers on the interface as needed.
- Some Windows software may operate in Linux under WINE mode.
- Some older Windows software only supports COM ports 1-4. You may need to change your COM port# in the device management.

KEY JACK AND JUMPER SETTINGS

- TIP – Typically this is the straight key input or one of the Iambic paddles, usually connected to the Left Click for DIT.
- RING – For Iambic keys this is for the second paddle, nusually connected to Right Click for DAH. For a straight key this is left open. If the software is operating as a continuous key down in straight key mode try removing the RING jumper.
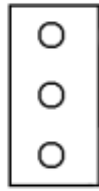- SHIELD – This is the common connection for all keys. Note, this is **NOT** a ground.

KEY INPUT JUMPERS

The jumpers connect the appropriate tip and ring signals from the key jack to the USB interface. In the case of the mouse interface the choices are right-click and left-click emulation buttons. In the case of the serial interface the CTS and DSR signals are used. Refer to the software being used to determine which signals to connect to your key/paddles.

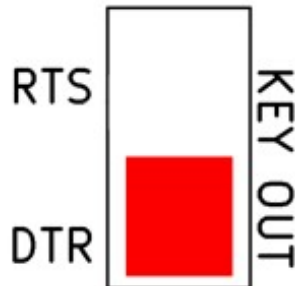| Straight Key (when using a mono jack or when ring is shorted to shield)	RING ○ ○ ○	RIGHT CLICK COMMON LEFT CLICK	TIP (red) ○	RING ○ ○ ○	CTS COMMON DSR	TIP (red) ○

MY KEY SERIAL2 TRANSMIT KEYING OUTPUT JUMPERS AND JACK

It is recommended to use RTS when possible as some keying software also uses the DTR as a common for key inputs.

TRANSMITTING CAUTION – Make sure you are not accidentally transmitting in key down mode! Some software may improperly activate the line on first use or when closing. For example Morse Keyer V4.3 activates this line when the program starts but does not deactivate (key up) until first use, then responds normally.
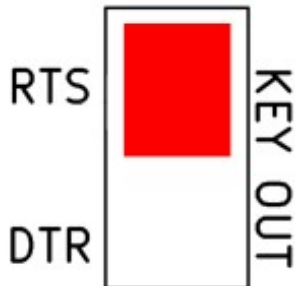
RTS for output keying   DTR for output keying

Inverting output jumper – Some software allows the keying output to be inverted, others do not. We have configures the MY-KEY-SERIAL2 to operate correctly with most software encountered (keying is normally OFF when properly set up). Inside the KEY-KEY-SERIAL2 is an internal jumper which can invert the output. Simply remove the top cover and locate JP4. Cut the small trace between the pads marked "N" and solder a small jumper between the pads marked "I".

TRANSMITTER KEY OUT JACK (MY KEY SERIAL2 ONLY)

- TIP – Active connection to your radio CW keying jack. Typically the positive terminal, however MY-KEY-SERIAL2 supports both positive and negative keying.
- RING – Not Used
- SHIELD – Active connection to your radio CW keying jack. Typically the negative terminal, however MY-KEY-SERIAL2 supports both positive and negative keying.

- The output uses an optocoupler for isolation which is bi-directional (no polarity) and can handle up to 100V/100mA with a maximum power dissipation of 150mW.

MY KEY MOUSE TROUBLESHOOTING

To test your key on the MY KEY MOUSE use one of the online mouse testing apps. This will show the right, left, and middle (modified version) buttons in relation to your key.

https://www.onlinemictest.com/mouse-test/

https://devicetests.com/mouse-test

https://joltfly.com/mouse-test/

WINDOWS FINDING YOUR SERIAL PORT

Windows: Most software will ask for a COM (serial) port when configuring MY-KEY-SERIAL. Here is a short video showing how to find your COM ports. Hint: if you have multiple COM ports, plugging and un-plugging your adapter will make the COM port appear and disappear in the device manager.
- Press the Windows key
- In the search box type devmgmt and press enter
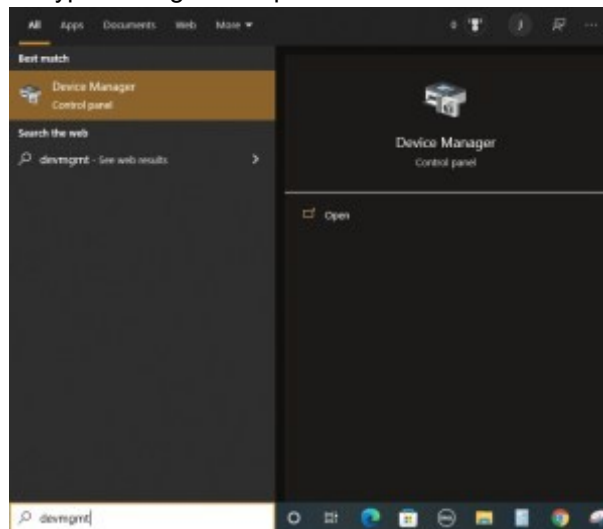
- Expand the Mice and other pointing devices to find your MY-KEY-MOUSE or expand the Ports (COM and LPT) to see the COM port number of your MY-KEY-SERIAL.
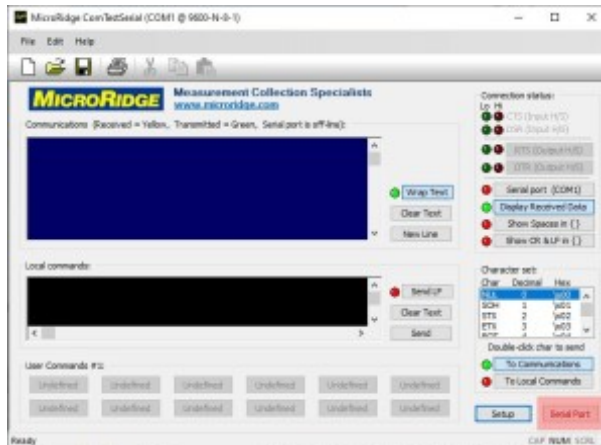
MY KEY SERIAL TROUBLESHOOTING

We commend the following Windows app to check for CTS/DSR activity, however any serial port testing app you are familiar with that can see the CTS and DSR status will work.
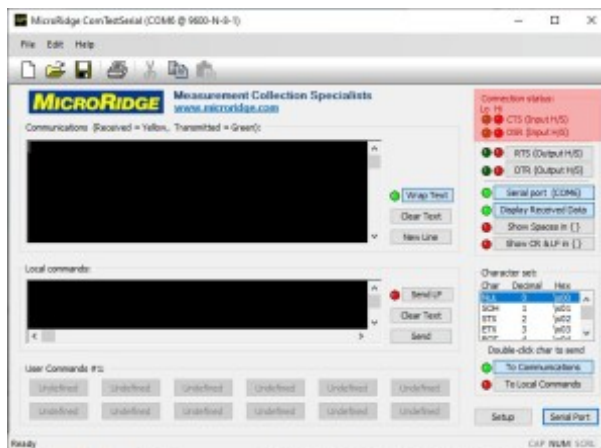
https://www.microridge.com/comtestserial.htm

1.First find the COM port in use (above).

2.Launch the ComTestSerial app. In the lower right push the **Serial Port** button

3.Check the COM port number found in step 1 and press OK
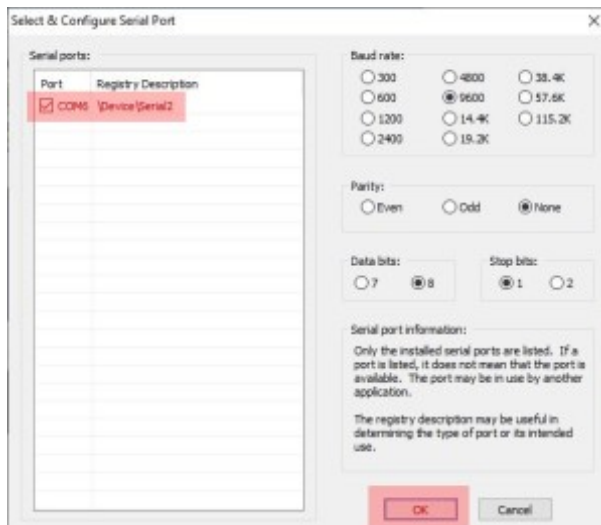
4.Check the CTS and DSR status indicators in the upper right area of the window as you use your key. These correspond with the jumpers on the MY KEY SERIAL.

5.For the MY KEY SERIAL 2 you should be able to toggle the transmitter keying output with the RTS or DTR buttons below the status indicators.

DRIVERS

For MY-KEY-MOUSE no drivers are required. Your operating system will detect this as an HID compliant mouse. For MY-KEY-SERIAL Windows and Linux should automatically detect and install the serial drivers. However, since not all operating systems are alike, below are driver files and instructions for manual installation for Windows, Linux, and Mac.

WCH CH34x USB Drivers
Sparkfun Video to install drivers