## **Configuring Writelog for the SO2R Box**

There are two ways to use the SO2R Box with Writelog. If you have Writelog version 10.86 or later you can use Windows named pipes or virtual COM ports. If you have an earlier version you must use virtual COM ports.

Windows named pipes are simpler to set up. Also in Writelog version 10.86 if you use named pipes you can turn latch mode on and off from the Radio→Headphones Latch menu or by using Control-X. This feature is not available with virtual COM ports although this may change in future versions of WriteLog.

If you are using other programs which require virtual COM ports you may decide you prefer to set up Writelog using them also.

## Windows named pipes

First you must configure the SO2R Box application for named pipes. This is simple; just select the box labeled pipes. Below is an example:

| SO2R Box  |  |
|---|--|
| Keyer<br>Iambic Ultimatic Dit Dah Straight<br>Weight PTT Pre (ms) PTT Post (ms)<br>128  0  Gamma D  Gamma D | A timing       Min Speed         Tight timing       Min Speed         Long word space       5         Keyer PTT       Max Speed         Reverse       49 |
| Headphones<br>Normal Symmetric Spatial<br>Blend 0  Latch Radio 2 2  | <ul> <li>Keyer COM25</li> <li>SO2R COM26</li> <li>Pipes</li> </ul>   |
| Connected to SO2R Box version 1.2-0   | RX1 Ant1 0<br>TX1 Ant2 0<br>38 WPM   |
| 🔽 Verbose Output 🔲 Verbose Keyer 📄 Verbose SO2R   | Verbose RTTY   |

Note that if the Keyer or SO2R box are selected the Pipes box cannot be selected.

If there is no Pipes box you are running an older version of the SO2R Box software. Go to <u>http://so2r.k1xm.org/</u> and find the download page. You will need version 1.3 or newer.

Next, tell Writelog to use named pipes using the Setup→Ports dialog. Below is an example:

| Port SetupWhat is Connected?      |      |              |  |     |               |                            |                                  | ×      |  |
|-----------------------------------|------|--------------|--|-----|---------------|----------------------------|----------------------------------|--------|--|
|                                   |      | - <u>c</u> w |  | DVK | <u>A</u> nten | ina                        | Rig Type Baud Rate Poll Comm PTI | Г      |  |
| COM1                              | •    | $^{\circ}$   |  | 0   | reiay         |                            | Yaesu FT-1KMP 💌 defaul 💌 💌 YES 💌 | ]      |  |
| COM2                              | •    | 0            |  | 0   |               |                            | Elecraft K3 💌 38400 💌 🗹 YES 💌    | ]      |  |
| СОМЗ                              | •    | 0            |  | 0   |               |                            | No Rig 💽 defaul 💌 🗹 YES 💌        | Ī      |  |
| COM4                              | •    | 0            |  | 0   |               |                            | No Rig 💽 defaul 💌 🗹 YES 💌        | ]      |  |
|                                   | LPT1 | 0            |  | 0   |               |                            | DVK type                         | -      |  |
|                                   | LPT2 | 0            |  | 0   |               |                            | Windows sound board              |        |  |
|                                   | LPT3 | 0            |  | 0   |               |                            | CW keyer type CW Speeds          |        |  |
|                                   |      | ۲            |  | ۲   |               |                            | WinKey+OTRSP pipe: CW PTT        | CW PTT |  |
| All mode PTT on RTE SO2R Control  |      |              |  |     |               |                            | SO2R Control                     | _      |  |
| Rotator control on COM port       |      |              |  |     |               | WinKey+OTRSP pipes COM6 OK |                                  |        |  |
| Left (or only) Rig None 💌 DCU-1 💌 |      |              |  |     | )CU-1         | •                          | Cance                            | el     |  |
| Right Rig DCU-1  Help             |      |              |  |     |               |                            |                                  |        |  |

To setup the named pipes pull down the menu under CW keyer and select Winkey+OTRSP pipes. The keyer and SO2R functions will communicate without using ports.

Once the keyer and SO2R control are configured, click OK and return to the Writelog main screen. Use the up-arrow and down-arrow keys to make sure Writelog can switch transmit and audio between the two radios using the YCCC SO2R Plus. Then try sending CW using the paddle and Writelog to make sure CW sending is working.

Save the configuration using Setup→Save Configuration.

## Virtual COM ports

First you must set up two pairs of virtual COM ports. One pair will be used for the keyer and the other port will be used for SO2R switching. One virtual COM port in each pair will be used by the SO2R Box interface program, and the other virtual COM port in each pair will be used by Writelog.

Below is an example showing two pairs of virtual COM ports configured in the com0com virtual COM port setup program:



Note that the COM port names have been changed from the default names assigned to them by com0com. Neither SO2R Box nor Writelog will be able to use the com0com default names. All four ports must be assigned to standard COM port names that are not used on your system. Simply change the names in the boxes shown above. If you get a message from com0com that a COM port is already in use in the database, you'll have to choose another name that's not in use.

The example shows COM port pair COM15 and COM31, which will be used for the keyer, and COM port pair COM16 and COM32, which will be used for SO2R switching. The lower number in each pair (COM15 and COM16) will be assigned to Writelog and the higher number in each pair will be assigned to SO2R Box.

Below is an example of the virtual ports assigned in SO2R Box:

| 2, SO2R Box  |   |  |  |
|--|---|--|--|
| Keyer         Iambic       Ultimatic       Dit       Dah       Image: A to | iming 🗖 Long word space<br>ht timing 🗖 Keyer PTT<br>werse   |  |  |
| Headphones Radio 1<br>• Normal C Symmetric C Spatial Radio 2<br>• Blend 0 •                                    | <ul> <li>✓ Keyer COM31 ✓</li> <li>✓ SO2R COM32 ✓</li> </ul> |  |  |
| Connected to SO2R Box version 1.0-0  | RX1 Ant1 0<br>TX1 Ant2 0                                    |  |  |
| ☐ Verbose Output ☐ Verbose Keyer ☐ Verbose SO2R  | 28 WPM  |  |  |

Use the pull-down boxes to select the appropriate COM port number, then check the check box next to Keyer and SO2R. You should not get any error messages from SO2R Box. At this point, one end of the Keyer and SO2R virtual COM port connections has been setup.

Next, assign the other port in each pair to Writelog using the Setup→Ports dialog. Below is an example:

| Port SetupWhat is Connected?      |     |     |     |         |                 |           |       |             |
|-----------------------------------|-----|-----|-----|---------|-----------------|-----------|-------|-------------|
|                                   |     | CW1 | DVK | Antenna | Rig Type        | Baud Rate | Poll  | Comm PTT    |
| COM15                             | •   | ۲   | C   | relay   | No Rig          |           |       | YES 💌       |
| COM1                              | •   | C   | 0   |         | Elecraft K3     | ▼ 38400 ▼ |       | NO 💌        |
| СОМЗ                              | -   | C   | С   |         | Elecraft K3     | ▼ 38400 ▼ | •     | NO 💌        |
| COM5                              | -   | С   | C   |         | No Rig          | ▼ AUTO ▼  | •     | YES 💌       |
| LF                                | PT1 | С   | С   |         | DVK type        | 1         | Waya  | File Locate |
| LF                                | PT2 | 0   | C   |         | Windows soun    | d board 💌 | vvave | The Locale  |
| LF                                | тз  | С   | С   | Г       | -CVV keyer type |           | C/    | / Speeds    |
|                                   |     | С   | •   |         | K1EL Winkey     | -         | 0     | WPTT        |
| All mode PTT on RTS               |     |     |     |         |                 |           |       |             |
| Rotator control on COM port       |     |     |     |         |                 |           |       |             |
| Left (or only) Rig None 💌 DCU-1 💌 |     |     |     |         |                 |           |       | Cancel      |
| Right Rig None  DCU-1             |     |     |     |         |                 |           |       | Help        |

In this particular example, the station has two K3 radios, assigned to COM1 and COM3 respectively. These COM ports are used for communication with the radios and have nothing to do with the YCCC SO2R Plus.

The keyer and SO2R functions each require a dedicated virtual COM port. To setup the keyer, pull down the menu under CW keyer type and select K1EL Winkey. Then select a COM port for the keyer using one of the unused rig COM ports in the upper left of the dialog box. Writelog supports COM port numbers from COM1-COM16. In this example, COM15 has been assigned to the keyer because that's the name of the virtual COM port associated with the virtual COM port we assigned to the keyer in SO2R Box (COM15 $\leftrightarrow$ COM31 are used for keying functions.) Click the radio button under CW to assign the keyer to the selected COM port. Set the Rig Type to No Rig.

Next, pull down the box under SO2R Control, and select Open 2 Radio SP. Then use the pull down box next to it to select the virtual COM port associated with the COM port configured for SO2R switching in SO2R Box. In this case, it's COM16 (COM16↔COM32 are used for SO2R switching.)

Once the keyer and SO2R control are configured, click OK and return to the Writelog main screen. Use the up-arrow and down-arrow keys to make sure Writelog can switch transmit and audio between the two radios using the YCCC SO2R Plus. Then try sending CW using the paddle and Writelog to make sure CW sending is working.

Save the configuration using Setup→Save Configuration.