

# MK2R/MK2R+ and WriteLog setup guide

## *"USB Only" SO2R*

### Router setup:

**Note: The specific port numbers are not important. The key is consistency - the same port number must be used for a specific function in both Router and WriteLog.**

1. Assign virtual COM ports for control of both radios. Click the **Set** button for each radio and select the radio on that port from the drop down box. Uncheck **Disable router queries** box.
2. Assign ports for FSK and check the PTT box.

**Note: If you will be using the WriteLog's native FSK support, check the "strict bps" box. The speed will be about 20% slower than normal but strict BPS is necessary to prevent PTT timing and buffer overflow issues with the WriteLog UART interface.**

3. Assign a port for WinKey. Select the appropriate PTT output and QSK or PTT operation for each radio on Router's PTT tab.
4. Select the audio switching for EACH radio on the **Audio Switching** tab.  
CmCmA is recommended for **Voice** Modes. If you do not intend to change DVK messages "live" you can use ACmA.
5. Assign a port for Control. WriteLog will use this port to control MK2R or MK2R+.

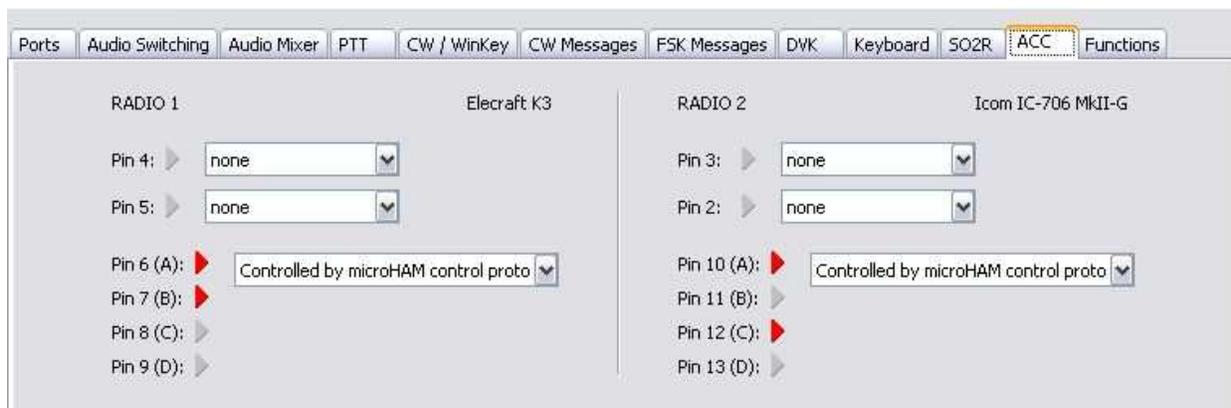
The screenshot shows the 'Ports' configuration window in WriteLog. It is divided into two main sections for RADIO 1 (Elecraft K3) and RADIO 2 (Icom IC-706 MkII-G). Each radio section has a frequency display and a 'CW' mode indicator. Below these are several rows of controls: CAT (Call Audio Tone) with a dropdown menu and a 'Set' button; 2nd CAT; FSK (Frequency Shift Keying) with a dropdown menu, a checked 'PTT' box, and a 'Test' button; 2nd FSK; CW (Continuous Wave) with a dropdown menu and a 'Test' button; PTT (Push To Talk) with a dropdown menu and a 'Test' button; 2nd PTT; and Foot Switch with a dropdown menu and an 'invert' checkbox. At the bottom of the window, there are additional controls for WinKeyer2 and Control, each with a dropdown menu and a 'Mon' button. On the right side of the bottom section, there are four checkboxes: 'Use LPT for CW', 'Use LPT for PTT', 'Generate FS on LPT', and 'Steer serial CW/PTT'. The 'Steer WinKey CW/PTT' checkbox is checked.

6. Select "microHAM control protocol on COM port" on the **SO2R** tab. This setting permits WriteLog to control:
  - **Transmit Focus**
  - **Receive Focus**
  - **Headphone Split**
  - **Headphones Reverse**
  - **Antenna Relay**



7. Band Decoding (Band Relay) is enabled on the Accessory tab. See the WriteLog Help file [BandRelayEncode] topic for information on configuring antenna selection by band.

Set pins 6-9 and 10-13 to "Controlled by microHAM control protocol" to allow WriteLog to use them for "Band Data" (Band Relay).

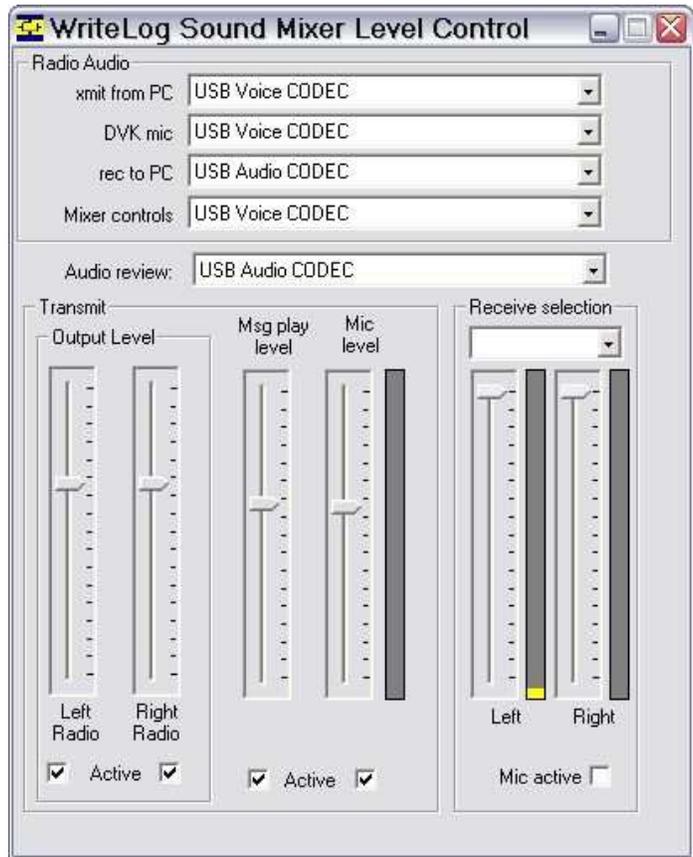


8. Save settings to a preset by selecting menu **Preset | Save as**. Choose a position and name it WriteLog.

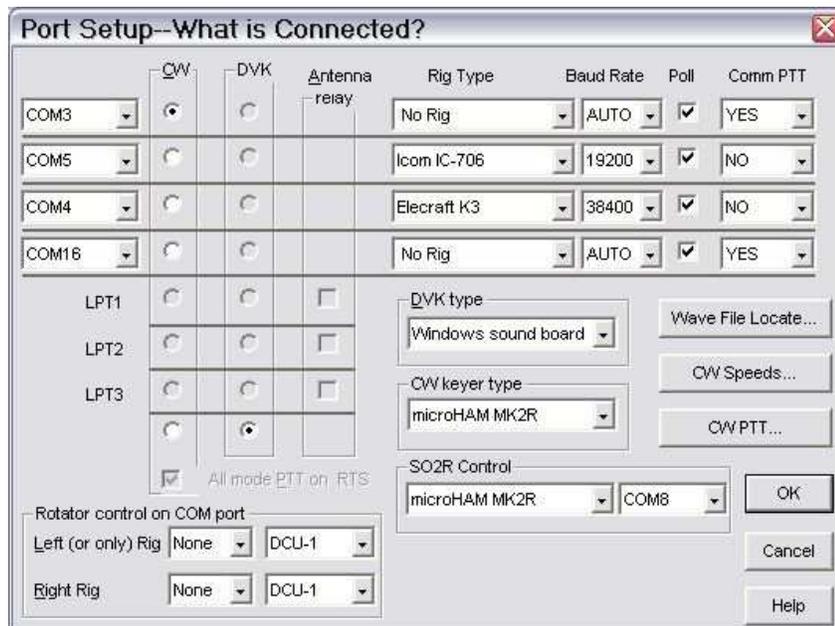
# WriteLog setup:

## Audio configuration:

1. Open the WriteLog sound board mixer control by clicking on: **START | Programs | WriteLog v10 | Sound board mixer control**
2. Set xmit from PC: USB Voice CODEC  
If you will be using RTTYrite for AFSK or PSK set this to USB Audio CODEC for digital operation only.
3. Set DVK mic: USB Voice CODEC
4. Set rec to PC: USB Audio CODEC
5. Set Mixer controls: USB Voice CODEC
6. Assign Audio review to any appropriate sound card. USB Audio CODEC can be selected by the headphones or you can use another sound card in your computer.
7. Leave the Receive selection blank (any selection will be ignored). USB Audio CODEC has only one stereo input and no mixer control. The level sliders will be gray – set the off air recording level with the "Recording / Digital" controls on the front of MK2R or MK2R+.



## WriteLog Port configuration



8. Open WriteLog and select Setup | Ports

9. Assign each radio to the virtual COM port you used in Router's Ports tab.

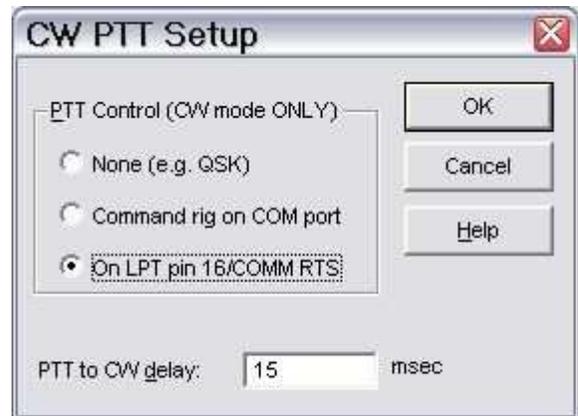
It may be necessary to add CommSlot statements to WriteLog.ini

- Note: ALWAYS set Comm PTT to NO for ALL radios.**

10. Select **microHAM MK2R** as the CW keyer type.

11. Set SO2R Control to **microHAM MK2R** and the port to the the virtual port you used for Control in Router.

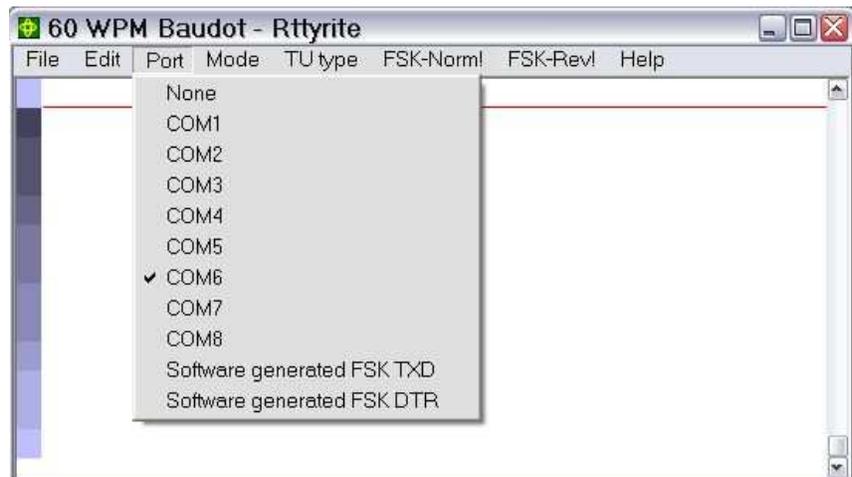
12. Set DVK type to **Windows sound board**
13. Click CW PTT and select "On LPT pin16/COMM RTS." If you prefer QSK, check "None" and set CW PTT to QSK or Semi Break-in for each radio on Router's PTT tab.
14. Click "OK" to close Setup
15. Save the configuration with **Setup | Save Configuration**



## RTTY/Digital setup:

MK2R+ supports the MMTTY plug-in, Stereo Sound Board AFSK or Stereo Sound Board FSK TU types.

1. If you have not already set up WriteLog for two radio operation, select **Radio | Number of Radios | 2**. Label Radio 1 = Left and Radio 2 = Right.
2. Activate the Left Radio entry window and click on **Window | RTTY Window** to open the first RTTY window.
3. If you will be using FSK with either RTTYrite or the MMTTY plug-in, use the Port menu and select the virtual port you defined as the the RADIO 1 FSK port in Router.
4. Activate the Right radio entry window and click on **Window | RTTY Window** to open the first RTTY window.
5. If you will be using FSK with either RTTYrite or the MMTTY plug-in, use the Port menu and select the virtual port you defined as the RADIO 2 FSK port in Router.

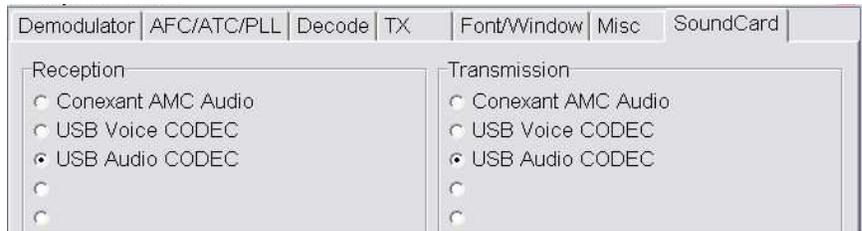


## Using the MMTTY Plug-in

1. Install MMTTY in TWO different directories on your hard disk. We recommend using MMTTY version 1.66g as it significantly simplifies the audio configuration process.
2. If you have not already done so, install the MMTTY Plug-in see:: [http://www.writelog.com/ThirdParty/MMTTYPluginforWritelog\\_V13.exe](http://www.writelog.com/ThirdParty/MMTTYPluginforWritelog_V13.exe).
3. Select Radio 1 (left) and click Window | RTTY Window to open the first RTTY Window.
4. Select TU type and select MMTTY to activate the MMTTY plug-in. If this is the first time you have used MMTTY, the plug in will ask you to set-up the path to MMTTY. Use the first installation for the Left radio.
5. From the TU type menu, Select **TNC Setup** and click on the MMTTY Settings button.

6. Chose the "SoundCard" tab.

7. Select "USB Audio CODEC" for both transmission and reception.

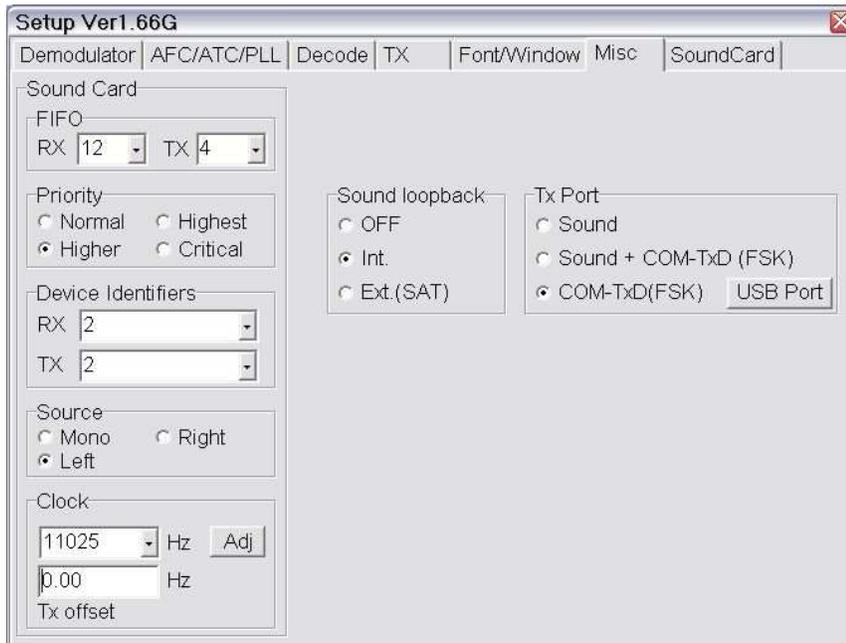


8. Click the **Misc** tab.

9. Select **Source = Left**

10. Select clock **11025**

11. If you will be using AFSK, select "Sound" in the Tx Port box. If you will be using FSK, select COM-TxD (FSK) or Sound + COM-TxD (FSK)



12. Click **USB port** button, choose **C: Limiting speed** and click OK

13. Click "OK" on the Misc tab to close the MMTTY Set-up for Radio 1

14. Select Radio 2 (right) and click Window | RTTY Window to open the second RTTY window.

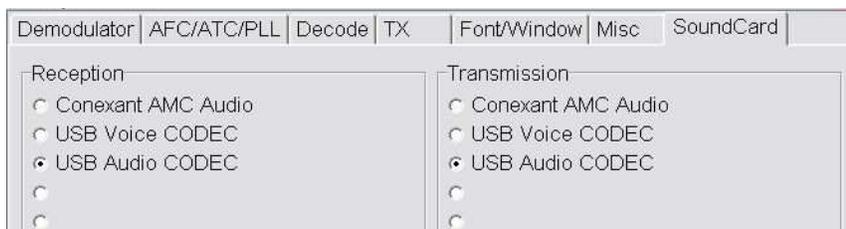
15. Select TU type and select MMTTY to activate the MMTTY plug-in. If this is the first time you have used MMTTY with the second RTTY window, the plug in will ask you to set-up the path to MMTTY. Use the second installation for the Right radio.

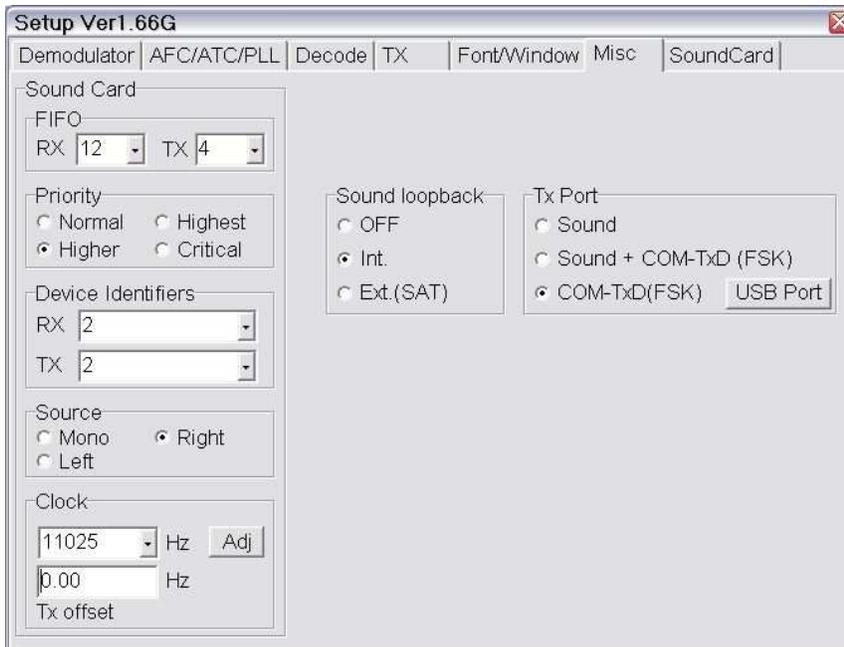
16. From the TU type menu, Select **TNC Setup** and click on the MMTTY Settings button.



17. Chose the "SoundCard" tab.

18. Select "USB Audio CODEC" for both transmission and reception.



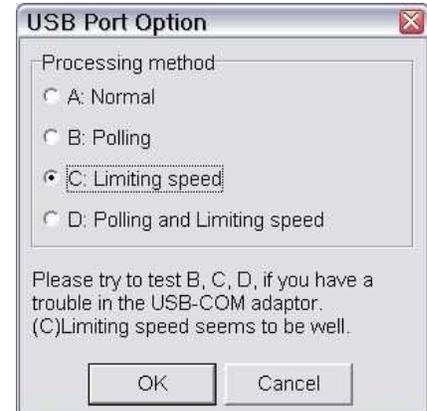


19. Click the **Misc** Tab.

20. Select **Source Right**

21. Select clock **11025**

22. If you will be using AFSK, select "Sound" in the Tx Port box. If you will be using FSK, select COM-TxD (FSK) or Sound + COM-TxD (FSK).



23. Click **USB port** button and choose **C: Limiting speed**

24. Click "OK" on the Misc tab to close the MMTTY Set-up for Radio 2.

**Note:** When setting up RTTY macros, add two or three extra spaces before the "%E" to prevent PTT from being released too early and clipping the end.