

# micro2R and WriteLog setup guide

## 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.

micro2R does not provide transceiver control. You will need a CAT/CI-V interface for each radio. They can be anything from traditional serial ports to *microHAM microKEYER II*. Connection data is in the *micro2R User Manual*.

1. Assign a port for Control. N1MM Logger will use this port to select transmit and receive focus.
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.

**Suggestion:** If you are using *microHAM* CAT/CI-V interfaces, use the FSK ports in those devices instead of the FSK ports in *micro2R*.

3. Assign a port for WinKey. Use the PTT & ACC tab to select PTT or QSK operation in CW (Use WinKey PTT).
4. Use the PTT & ACC tab to select whether *micro2R* is to generate PTT for each radio (Generate PTT Output).

The screenshot displays the 'Ports' configuration window in the micro2R software. The window has a tabbed interface with the following tabs: Ports, Audio, PTT & ACC, CW / WinKey, CW Messages, FSK Messages, DVK, Keyboard, and SO2R. The 'Ports' tab is active, showing settings for two radios and global control options.

**RADIO 1 Configuration:**

- Buttons: CW, VOL, FSK
- FSK: COM6,  PTT, closed, Test
- 2nd FSK: none,  PTT,  invert,  strict bps
- CW: none, DTR, Test
- PTT: none, RTS, Test
- 2nd PTT: none, RTS

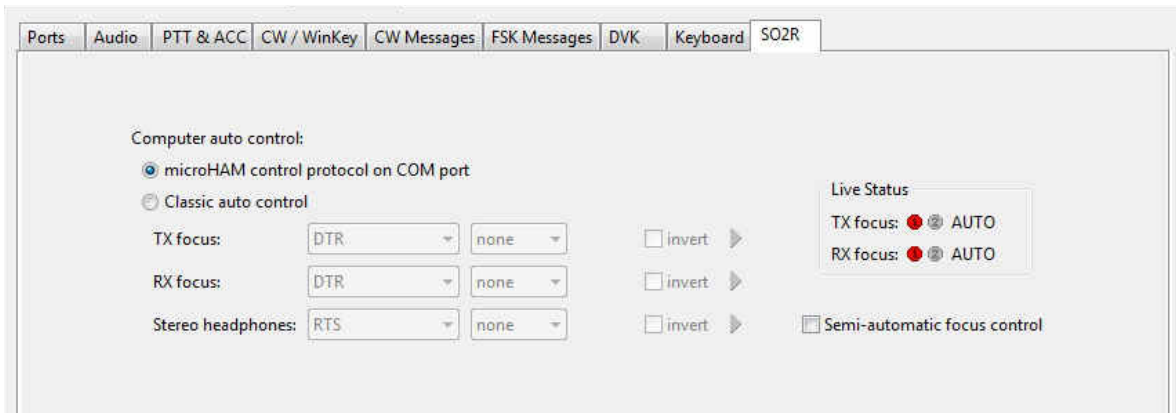
**RADIO 2 Configuration:**

- Buttons: CW, VOL, FSK
- FSK: COM7,  PTT, closed, Test
- 2nd FSK: none,  PTT,  invert,  strict bps
- CW: none, DTR, Test
- PTT: none, RTS, Test
- 2nd PTT: none, RTS

**Global Control Options:**

- WinKey2: COM3, closed, Test, Mon
- Control: COM8, closed, Mon
- Foot Switch: none, CTS,  invert
- Use LPT for CW
- Use LPT for PTT
- Steer serial CW/PTT
- Steer FSK
- Steer WinKey CW/PTT

5. 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**



Antenna Relay is simply passed through to the ACCESSORY jack. *micro2R* provides a four bit (binary) signal to drive a user supplied 1 of 16 decoder for each radio. See the WriteLog help file for information about Antenna Relay Support.

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

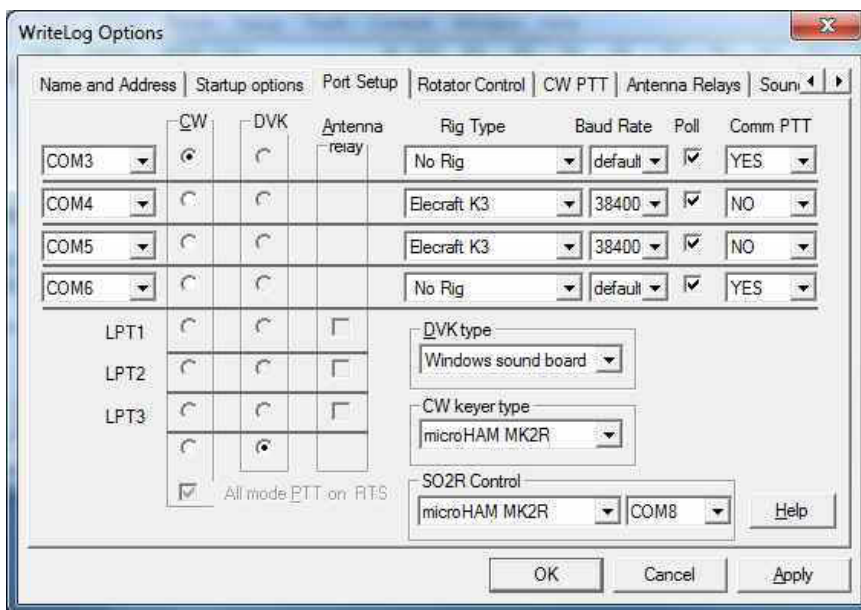
# WriteLog setup:

## Audio configuration:

1. Open the WriteLog sound board mixer control by clicking on: **START | Programs | WriteLog v10 | Sound board mixer control**
2. Select the inputs and outputs for the soundcard attached to *micro2R*.
3. Assign Audio review to any appropriate sound card.
4. 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



1. Open WriteLog and select Setup | Ports
2. Assign a COM port for each radio.

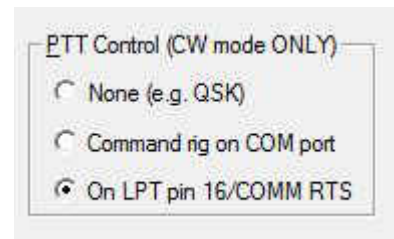
**Note:** It may be necessary to add CommSlot statements to WriteLog.ini

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

1. Select the COM port you assigned for WinKey for CW.
2. Select **microHAM MK2R** as the CW keyer type.
3. Set SO2R Control to **microHAM MK2R** and the

port to the the virtual port you used for Control in Router.

5. Set DVK type to **Windows sound board**
6. Click CW PTT and select "On LPT pin16/COMM RTS." If you prefer QSK, check "None" and clear the "Use WinKey PTT" boxes on Router's PTT & ACC tab.
7. Click "OK" to close Setup
8. Save the configuration with **Setup | Save Configuration**



## RTTY/Digital setup:

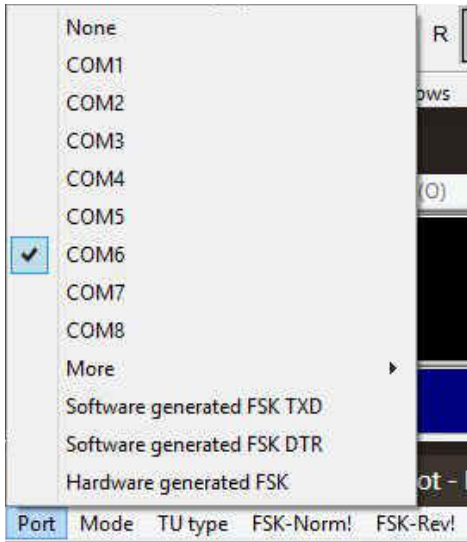
**NOTE:** Other than setting the correct virtual port for FSK (if used), the digital configuration is identical to that used with your existing digital interface. The information below is provided as a matter of convenience. Please refer to the Writelog Help file and documentation for your particular interface when configuring digital mode support.

- 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.** Beginning in version 11.11, there are 12 different combinations for FSK transmission and five combinations for AFSK transmission with WriteLog and MK2R+. This guide will document two options for FSK (the "old" MMTTY plug-in by SM6SRW and the new XMMT.ocx interface) and three options for AFSK (the "old" MMTTY plug-in by SM6SRW, the new XMMT.ocx interface with MMTTY, and the XMMT.ocx interface with 2Tone).
- 3.** If you have not already done so, create **at least** two directories for MMTTY (and 2-Tone if you plan to use it). If you will be using cloned windows, you will need to create an additional directory for each clone.
- 4.** Each Installation will need to be done twice – once for Radio 1 (Left) and once for Radio 2 (Right). This guide will document the installation/set-up for Radio 1 (left). The installation for Radio 2 will be similar except that FSK will use a different port and audio will use the right channel of the shared sound card or the left channel of a second sound card dedicated to the right radio.

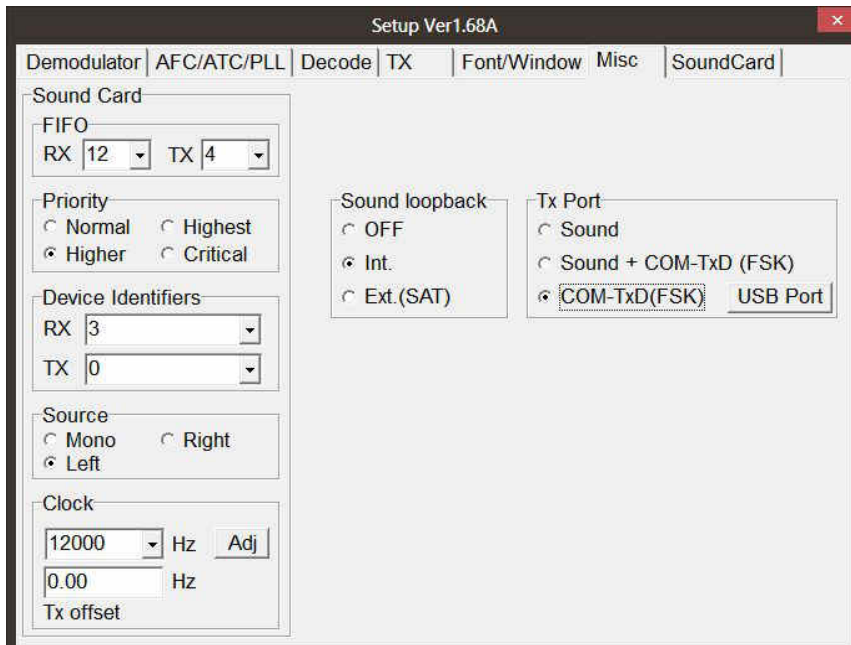
## RTTY/Digital setup (FSK):

### Configuring the MMTTY Plug-in for WriteLog by SM6SRW for FSK:

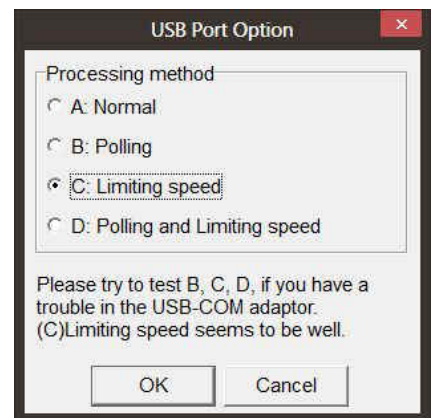
1. Install the MMTTY Plug-in for WriteLog by SM6SRW.
2. Activate the Left Radio entry window and click on **Window | RTTY Window** to open the first RTTY window.



3. Open the WriteLog RTTY Window and select the same port as you assigned for FSK in Router.
4. **DO NOT** select Hardware generated FSK.
5. Select MMTTY as the TU Type and set the path to MMTTY.exe if prompted.
6. Click on TNC Setup then click the MMTTY Settings button to configure MMTTY.



7. Choose the Misc Tab.
8. Select **Source LEFT**
9. Select clock 12000
10. Select COM-TxD (FSK) for the TX Port.



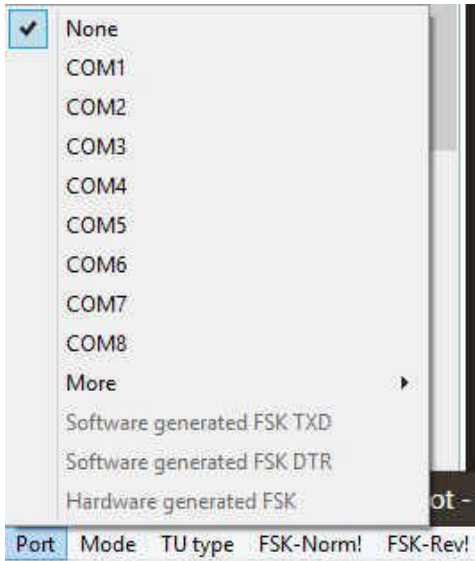
11. Click the **USB port** button and choose **C: Limiting speed**

12. Select "Microphone (USB Audio CODEC)" for Reception in the Sound Card tab.

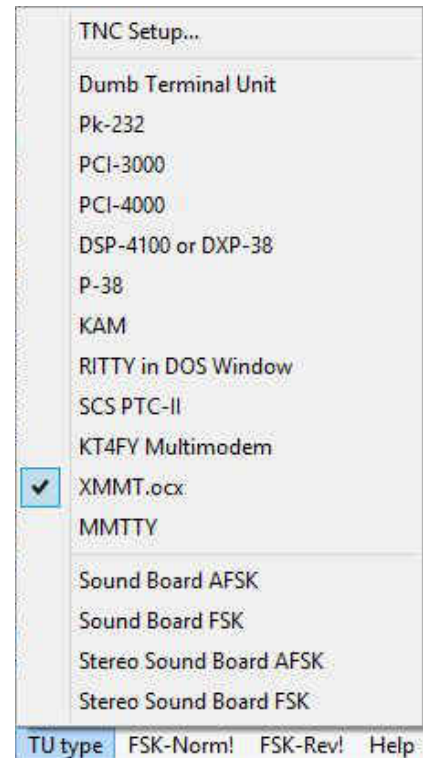


## Configuring XMMT.ocx for FSK using MMTTY

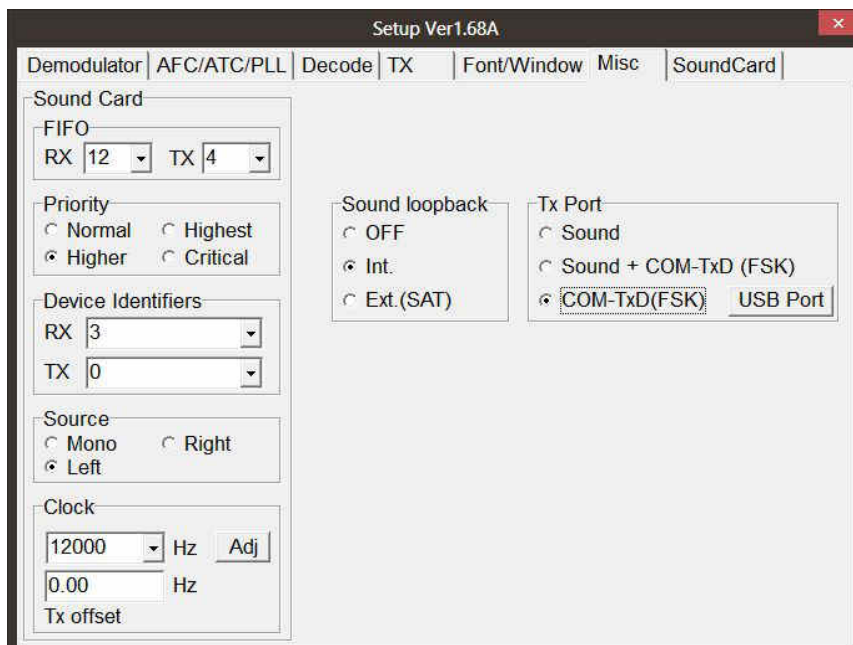
1. If you have not already installed XMMT.ocx or previously used another logging package that installed XMMT.ocx, see: <http://www.rttycontesting.com/writelog/xmmt/xmmt.pdf> (thanks Don, AA5AU).
2. Activate the Left Radio entry window and click on **Window | RTTY Window** to open the first RTTY window.



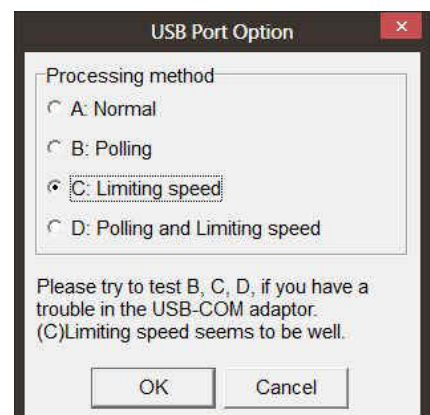
3. Open the WriteLog RTTY Window and set Ports to **None**.
4. Select XMMT.ocx as the TU Type
5. Click TNC Setup and set the **full path** to MMTTY.exe
6. Click the XMMT Setup button to configure MMTTY



7. Select the TX tab and set the PTT & FSK port to the port you set for Radio 1 FSK in Router.
8. Choose the Misc Tab.
9. Select **Source LEFT**
10. Select clock 12000



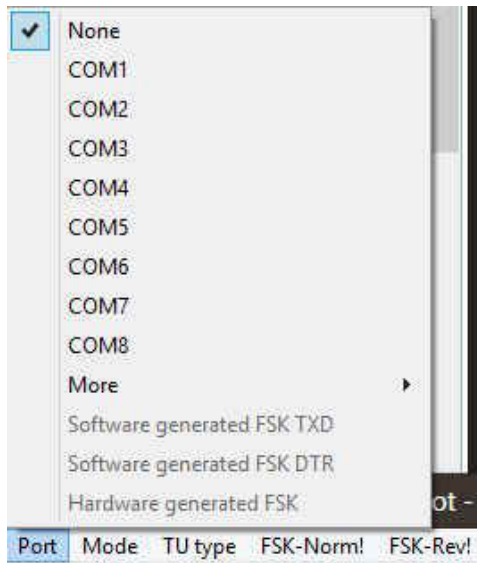
11. Select COM-TxD (FSK) for the TX Port.
12. Click the **USB port** button and choose **C: Limiting speed**
13. Select "Microphone (USB Audio CODEC)" for Reception in the Sound Card tab.



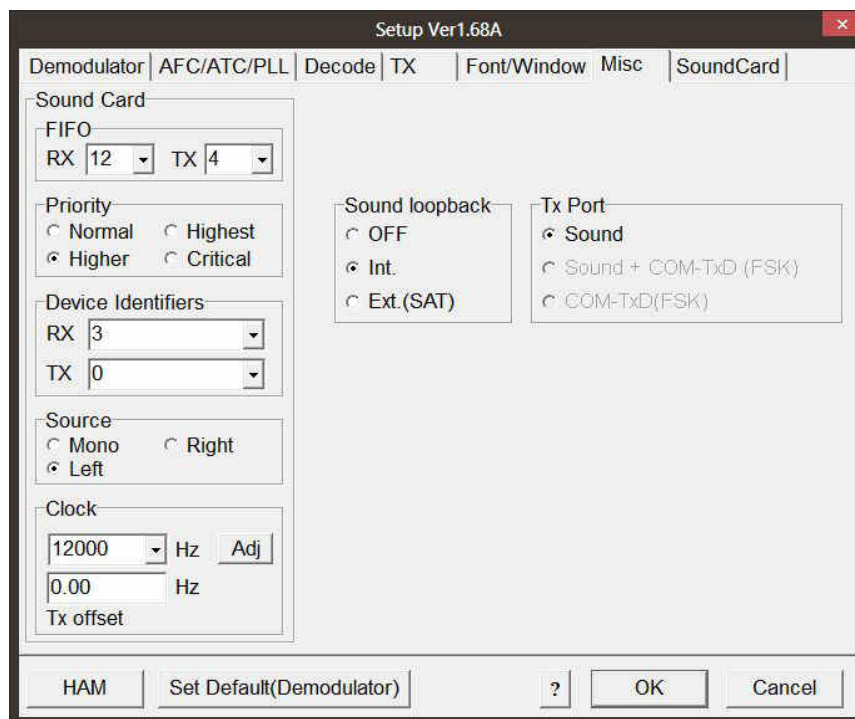
## RTTY/Digital setup (AFSK):

### Configuring the MMTTY Plug-in for WriteLog by SM6SRW for AFSK:

1. Install the MMTTY Plug-in for WriteLog by SM6SRW.
2. Activate the Left Radio entry window and click on **Window | RTTY Window** to open the first RTTY window.



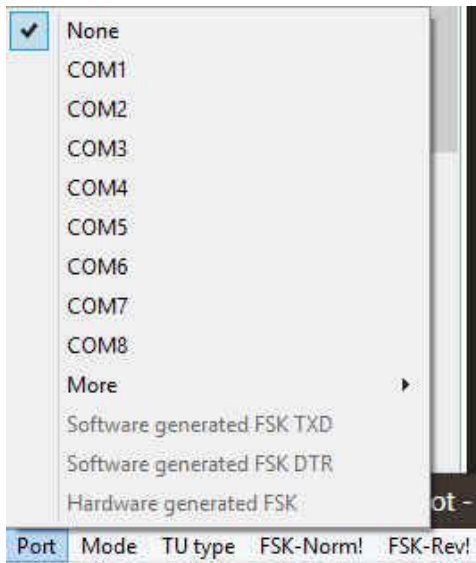
3. Open the WriteLog RTTY Window and set the Port to **None**.
4. Select MMTTY as the TU Type and set the path to MMTTY.exe if prompted.
5. Click on TNC Setup and click the MMTTY Settings button to configure MMTTY.



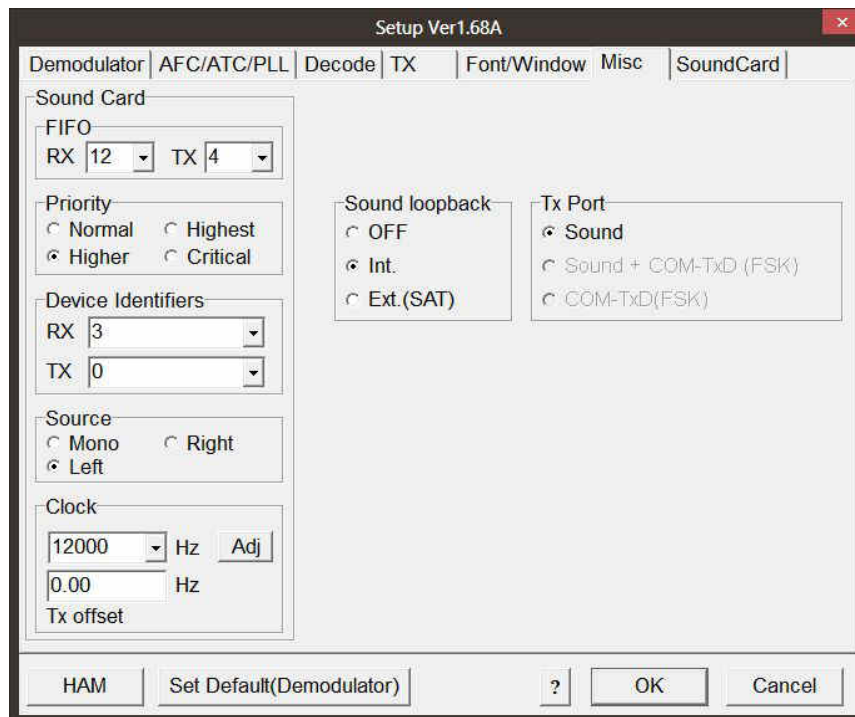
6. Choose the Misc Tab.
7. Select **Source LEFT**
8. Select clock 12000
9. Set TX Port to Sound.
10. Choose the Sound Card tab.
11. Select the "Line" input for the sound card connected to the Left Radio for reception
12. Select the output of the sound card connected to the "Line" input of the Left Radio for transmission.

## Configuring XMMT.ocx for AFSK using MMTTY

1. If you have not already installed XMMT.ocx or previously used another logging package that installed XMMT.ocx, see: <http://www.rttycontesting.com/writelog/xmmt/xmmt.pdf> (thanks Don, AA5AU).
2. Activate the Left Radio entry window and click on **Window | RTTY Window** to open the first RTTY window.



3. Open the WriteLog RTTY Window and set Ports to **None**.
4. Select XMMT.ocx as the TU Type
5. Click TNC Setup and set the **full path** to MMTTY.exe
6. Click the XMMT Setup button to configure MMTTY

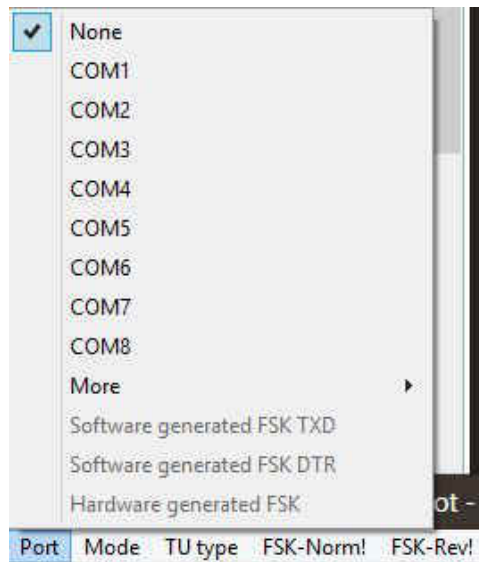


7. Choose the Misc Tab.
8. Select **Source LEFT**
9. Select clock 12000
10. Select Sound for the TX Port.
11. Select the "Line" input for the sound card connected to the Left Radio for reception
12. Select the output of the sound card connected to the "Line" input of the Right Radio for transmission.

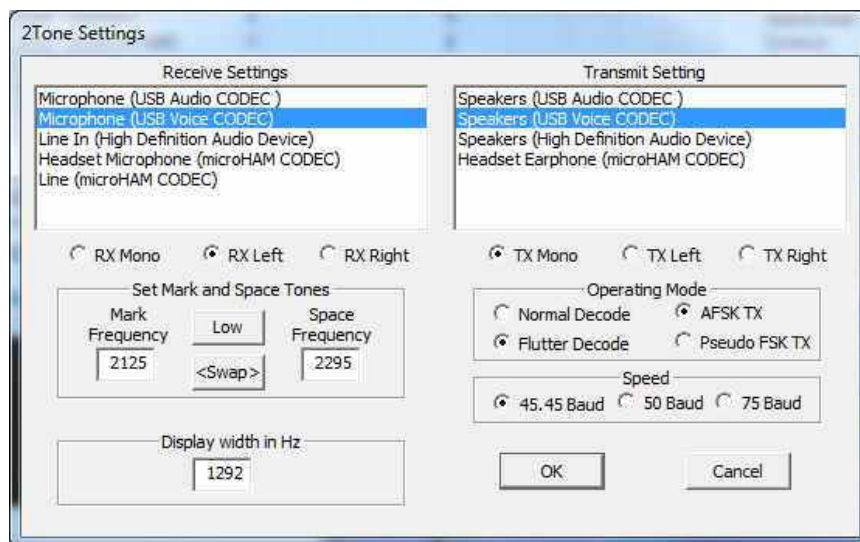


## Configuring the XMMT.ocx interface for AFSK with 2Tone

1. If you have not already installed XMMT.ocx, or previously used another logging package that installed XMMT.ocx, see: <http://www.rttycontesting.com/writelog/xmmt/xmmt.pdf>. 2Tone may be downloaded from: <http://www.rttycontesting.com/downloads/downloads.html> and set-up instructions are available at: <http://www.rttycontesting.com/writelog/xmmt/xmmt-2Tonesetup.html> (thanks Don, AA5AU).
2. Activate the Left Radio entry window and click on **Window | RTTY Window** to open the first RTTY window.



3. Open the WriteLog RTTY Window and set Ports to **None**.
4. Select XMMT.ocx as the TU Type
5. Click TNC Setup ... and set the full path to 2Tone.exe
6. Click TNC Setup | XMMT. Setup ... to configure 2Tone.



7. Select "Microphone (USB Audio CODEC)" in the "Receive Settings" box.
8. Select "Speakers (USB Audio CODEC)"
9. Choose "**RX LEFT**" (left channel) for the Radio 1 receiver audio.
10. Set Operating mode to AFSK TX

11. Set Speed to 45.45 Baud for normal operation.