MK2R/MK2R+ and DXLab Suite Setup

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 the application.**

1. Assign both radio control virtual COM ports. Click the **Set** button for each radio and select the radio on that port from the drop down box.

2. Set PTT for each radio to use RTS on the same virtual port as CAT.

3. Assign one port for FSK on Radio 1 and check the PTT box.

4. Assign a port for WinKey. Select the appropriate PTT output or QSK operation for each radio on Router's PTT tab.

5. Select the audio switching for EACH radio on the **Audio Switching** tab.

6. Check "Steer FSK" and "Steer WinKey CW/PTT"

7. Select "microHAM control protocol on COM port" on the **SO2R** tab.

These settings permit DXLab/Commander to select transceiver - including microphone, headphones, PTT, CW, RTTY (FSK) and control antenna selection.

8. In order for Commander to perform antenna selection, set Pin 6 (Radio 1) and Pin 10 (Radio 2) to "Controlled by microHAM control protocol" on the ACC tab. The output is a four bit (hex) signal to drive a user supplied 1 of 16 decoder for each radio. Seen the DXLab Suite Wiki for information on configuring frequency dependent devices.
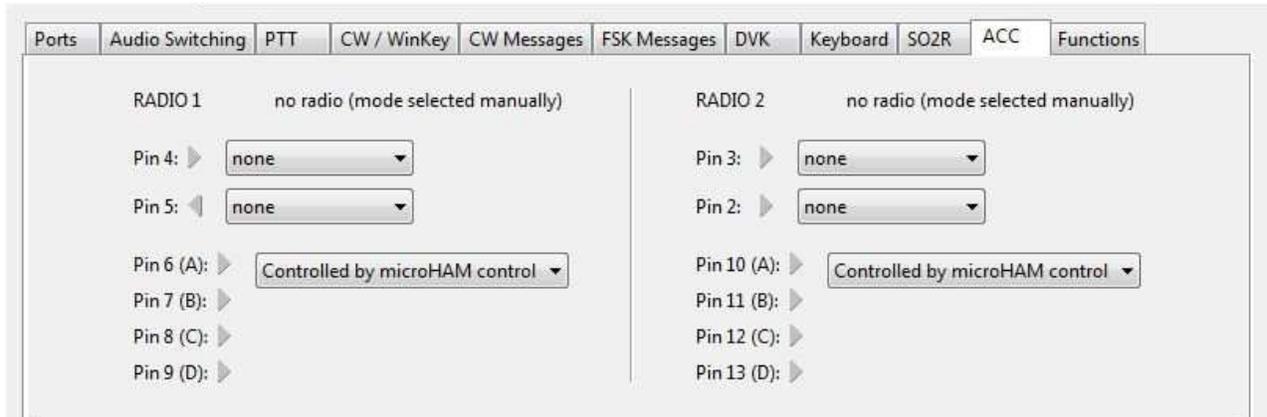
9. Router can provide a substitute Antenna Relay (Band Data) signal derived from the transceiver operating frequencies. In order to use Router derived switching, set pins 6-9 and 10-13 on the ACC tab to R1 TX Band Data and R2 TX Band data respectively. The specific BCD code for each band can be set at Router | Options | Band Map.
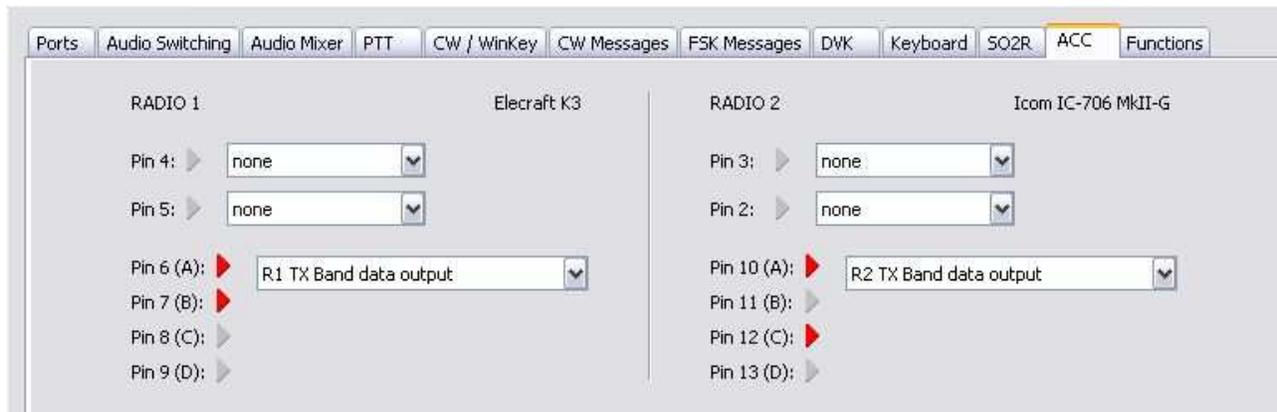
10. Save settings to a preset by selecting menu **Preset | Save as.** Choose a position and name it DXLab.

CI-V Commander setup:

1. Click **Config** and select the **MultiRadio tab** ...

2. Select the Transceiver model for each radio you defined in Router's Ports tab

3. Select the Serial Port, Baud Rate, Parity, Word Length, and Stop Bits settings for each radio.

4. Set RTS to "X" (on to xmit) - this is PTT for each radio.

5. Select the **Ports** tab.

6. Check the **Enable** box and select "**microHAM**" in the SO2R Protocol box.

7. Set the Port you selected for Control in Router.

8. If you want Commander to control antenna selection, enable the ACC Output. For information on configuring frequency dependent devices in Commander, see the DXKab Suite help files:
   http://www.dxlabsuite.com/commander/Help/Configuration.htm#SO2R Serial Port and
   http://www.dxlabsuite.com/commander/Help/Devices.htm

9. Select the **General** tab and check "supporess CAT" in the PTT box
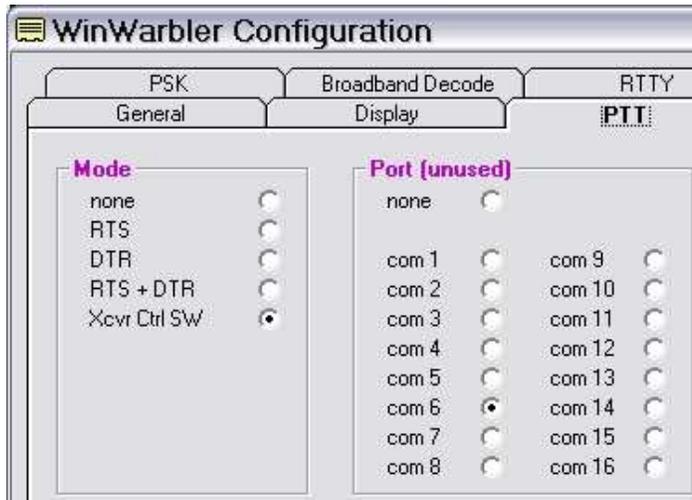
WinWarbler setup:

Note: It is important to execute the following steps in order. Otherwise PTT, FSK and CW sharing will not operate properly.

The user has the option to configure WinWarbler for either FSK or AFSK. Configuration information is provided for both options.

1. Click **Config** and select the **PTT tab** …

2. Select "Xcvr Ctl SW" as the Mode.

   WinWarbler will direct commander to assert PTT in Phone (Voice) and PSK modes.

3. Select the port you defined for FSK in the "Port" box. This will be used for MMTTY FSK and PTT.

4. Select the Soundcard Tab
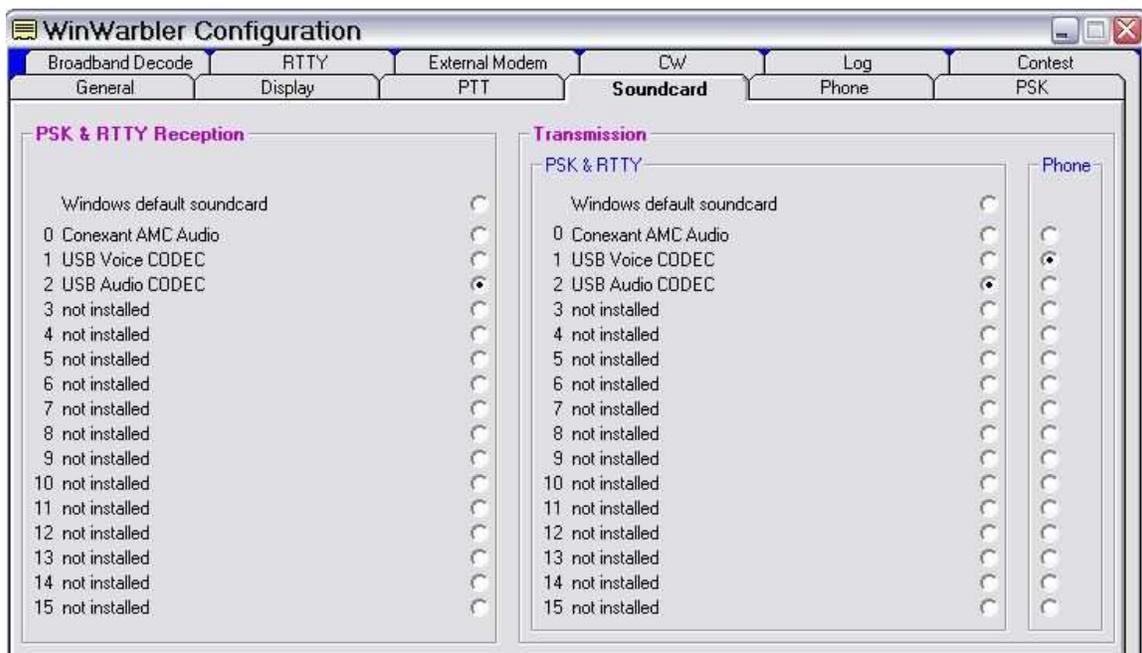
5. Set the appropriate soundcard for PSK & RTTY Reception. For MK2R+ use USB Audio CODEC; for MK2R use the sound card connected to the SC1 Line Out and Line In jacks.

6. Set the appropriate soundcard for PSK & RTTY Reception. For MK2R+ use USB Audio CODEC; for MK2R use the sound card connected to the SC1 Line Out and Line In jacks.

7. Set the appropriate soundcard for Phone Transmission. For MK2R+ use USB Voice CODEC; for MK2R use the sound card connected to the SC1 Mic Out and Line In jacks.

CW setup:

1. Switch WinWarbler to CW Mode

2. Open the WinWarbler's Configuration and select the **CW Tab**.
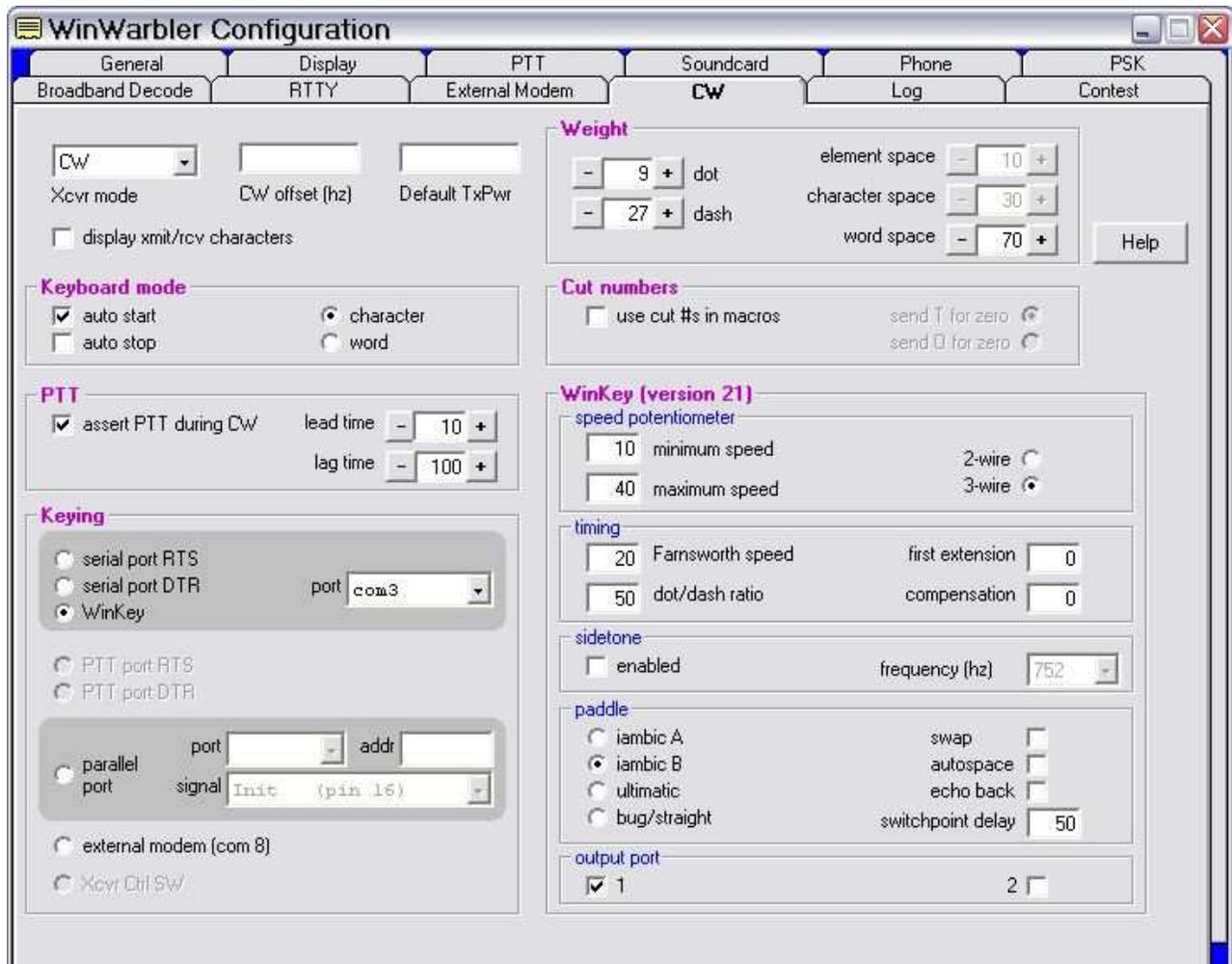

3. Select **WinKey** in the Keying box and set the Port that you chose for WinKeyer2 in Router.

4. Check "Assert PTT during CW." Other values (e.g., Weight, Speed Max/Min, Timing, etc.) are controlled from Router's CW/WinKey tab.
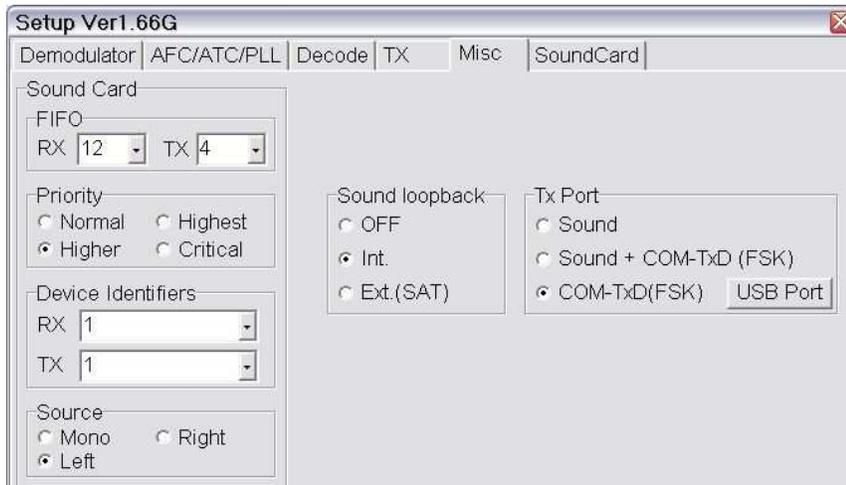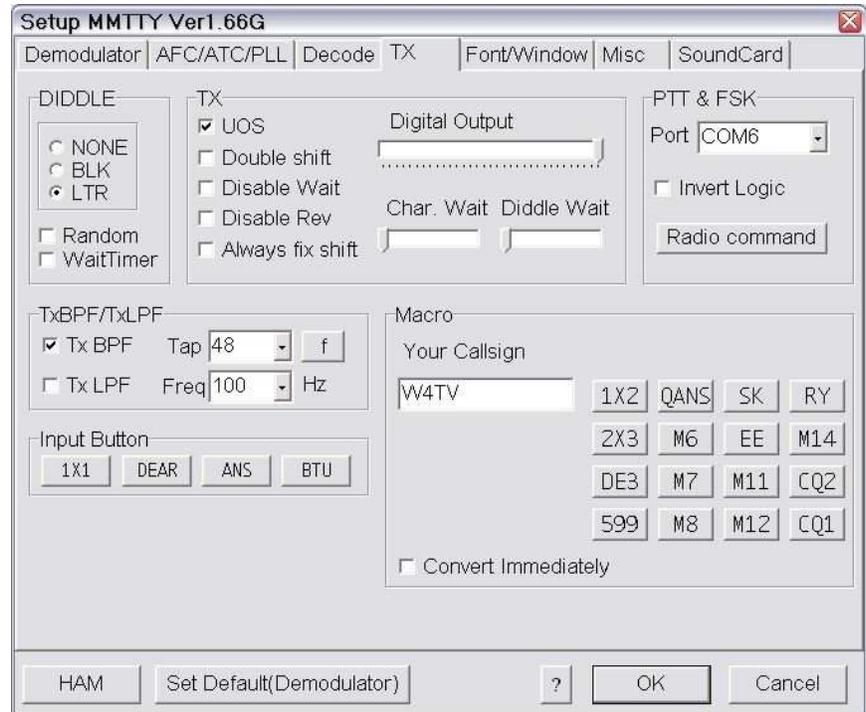
RTTY/MMTTY setup (FSK):

Note: **FSK is the preferred RTTY mode with MK2R and MK2R+. In most transceivers RTTY is FSK but the AFSK modes change from manufacturer to manufacturer and even from model to model for some manufacturers. It is difficult to find a "common" AFSK mode.**

1. Switch WinWarbler to RTTY mode.

2. Click **Config** and select the **RTTY tab** ...
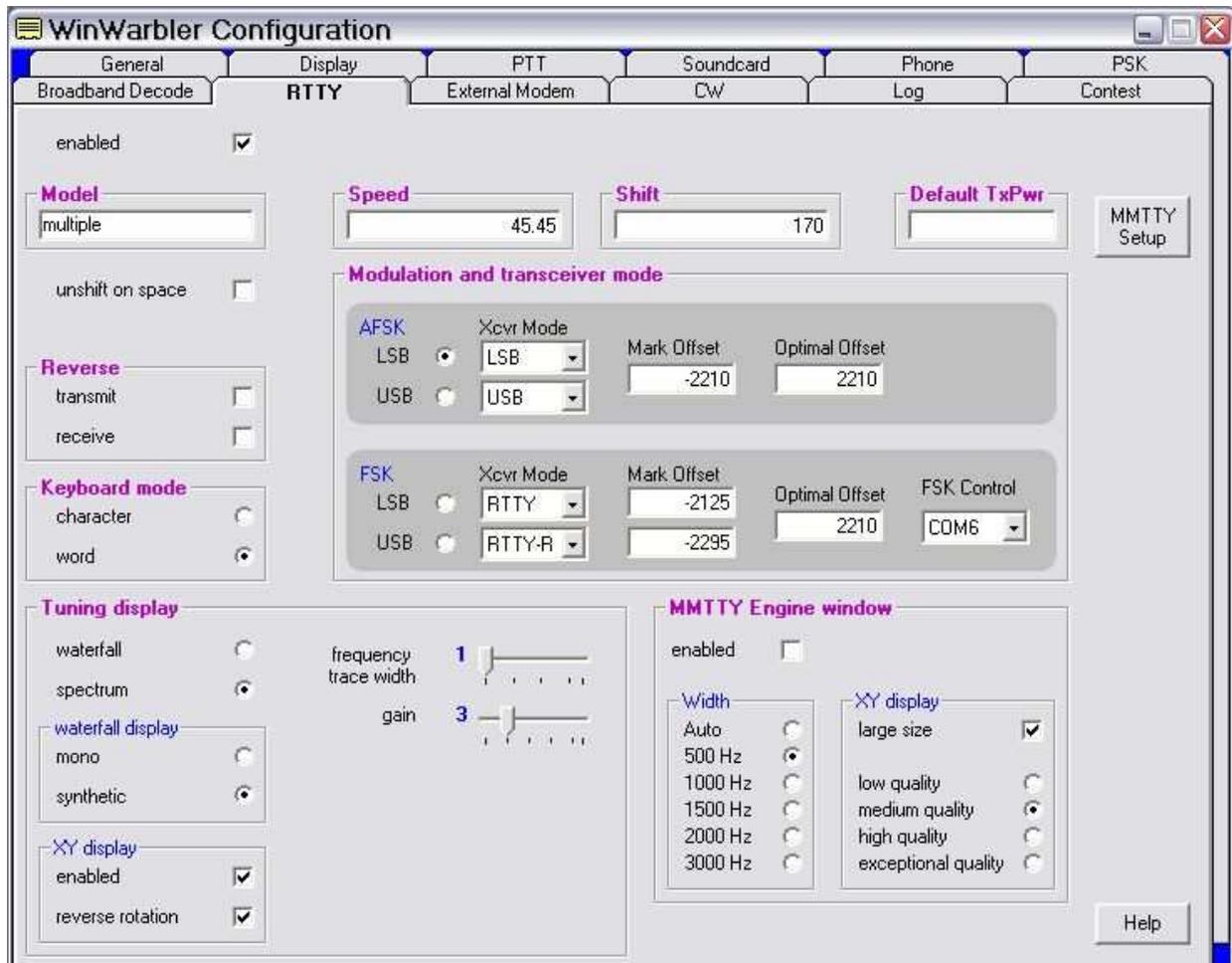
3. Configure the FSK Settings as needed by your radio

4. Set FSK Control to the port you selected for FSK in Router.

5. Click on the **MMTTY Setup** button ...

6. Select the **TX Tab ...**

7. Select the Port you configured for FSK in Router's Ports Tab in the PTT box.
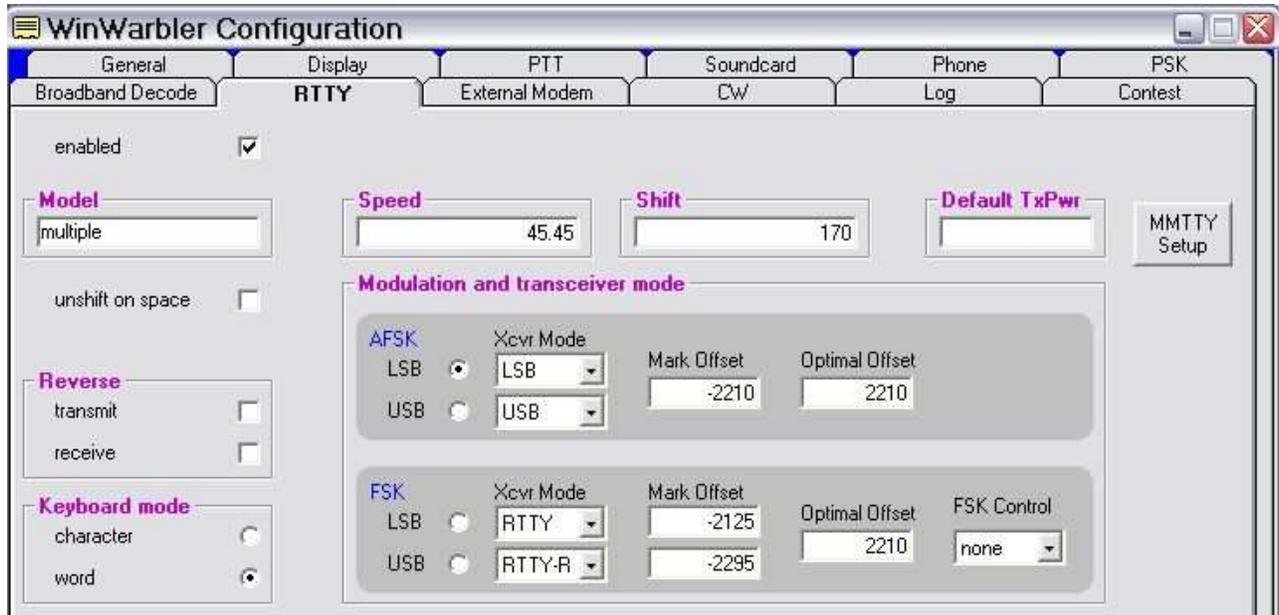
8. Select the **Misc Tab ...**

9. Select Source **Left**

10. Select COM-TxD (FSK) in the TX Port box.

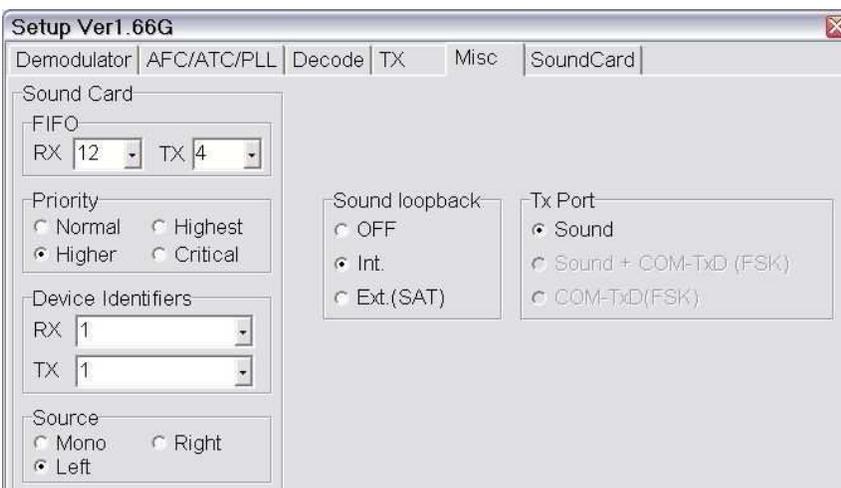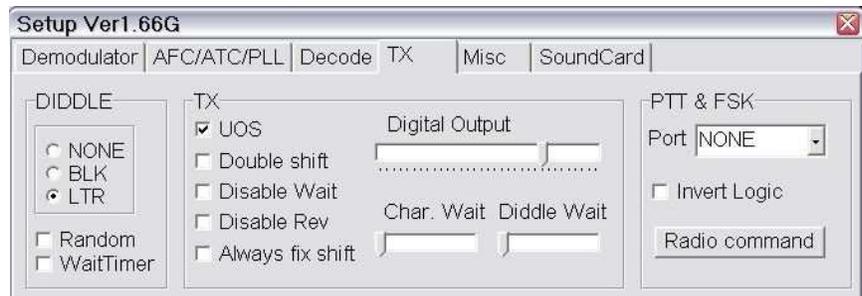11. Click **USB port** button and choose **C: Limiting speed**

RTTY/MMTTY setup (AFSK):

1. Switch WinWarbler to RTTY mode.

2. Click **Config** and select the **RTTY tab** …

3. Configure the AFSK Settings required by your radio.

4. Set FSK Control to None

5. Click on the **MMTTY Setup** button …

6. Select the **TX Tab …**

7. Select NONE in the PTT Port box.

8. Choose the **Misc Tab.**

9. Select Source **Left**

10. Select "Sound" as the TX Port.