MK2R/MK2R+ and Win-Test setup
"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 Win-Test.**

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.

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.
       ACmA or CmCmA is recommended for **Voice** Modes.

5. Assign a port for for Control. Win-Test will use this for control of MK2R or MK2R+.

6. Select "microHAM Control Protocol on COM port" on the **SO2R** tab.
This setting permits Win-Test to control:
- **Transmit Focus**
- **Receive Focus**
- **Stereo/Split Headphones**
- **Headphones Reverse**
- **Antenna Relay**

7. Antenna Relay is enabled on the Accessory tab.   MK2R and MK2R+ provide a four bit (binary) signal to drive a user supplied 1 of 16 decoder for each radio.

Set pins 6-9 and 10-13 to "Controlled by microHAM control protocol" to allow Win-Test to control the ACC port outputs for antenna switching.
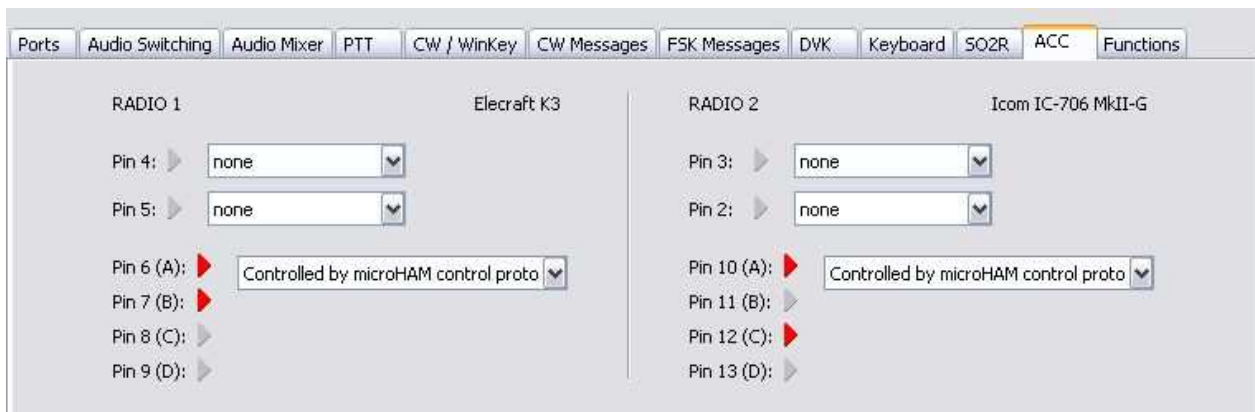
8. Save the settings to a preset by selecting menu **Preset | Save as**. Choose a position and name it Win-Test.

Win-Test setup:

1. Click **Options | Configure Interfaces** ....
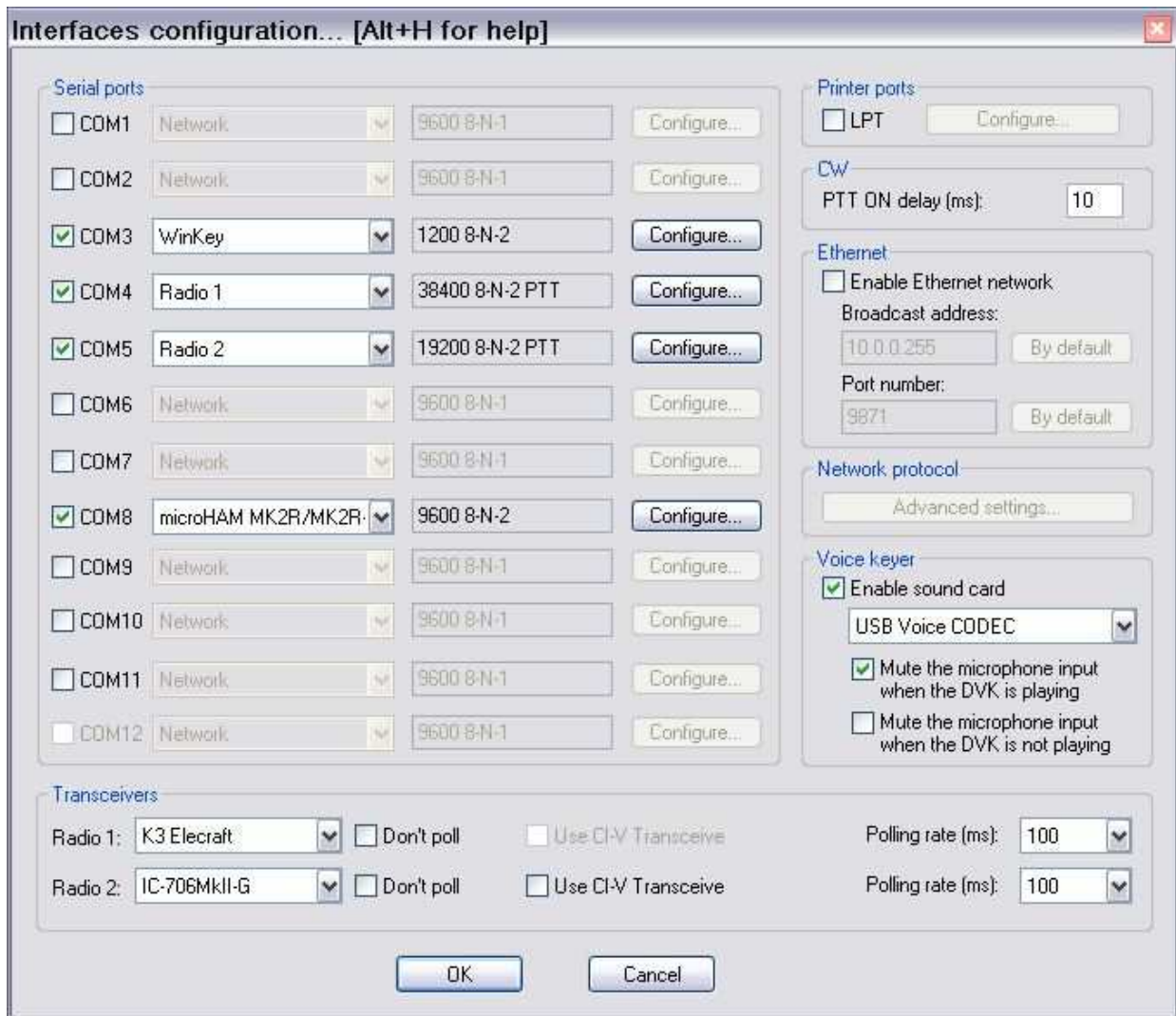
2. Check "Enable sound card" and set the sound card to USB Voice CODEC.

3. Check "Mute microphone input when DVK is playing"
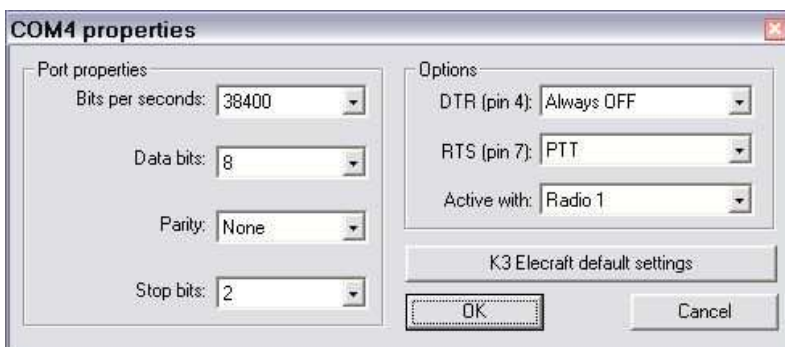
4. Check the port you chose for Radio 1 CAT and set the interface to Radio 1.

5. Click "Configure" and set the port properties for your transceiver.

6. Set DTR to Always Off, and RTS to PTT.

7. Set Active with: Radio 1

COM5 properties

Port properties
- Bits per seconds: 38400
- Data bits: 8
- Parity: None
- Stop bits: 2

Options
- DTR (pin 4): Always OFF
- RTS (pin 7): PTT
- Active with: Radio 2

K3 Elecraft default settings
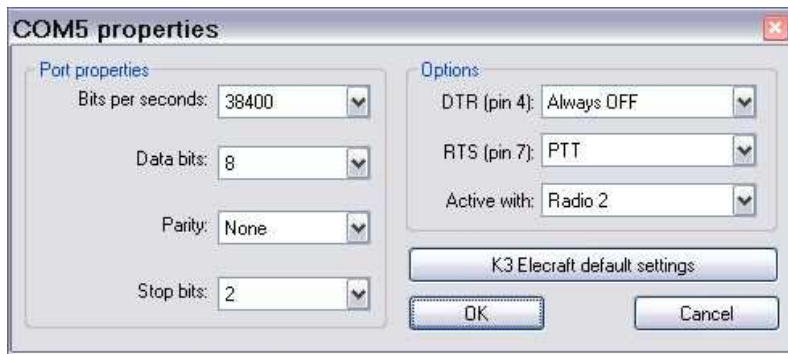
OK   Cancel

8. Check the port you chose for Radio 2 CAT and set the interface to Radio 2.

9. Click "Configure" and set the port properties for your transceiver.
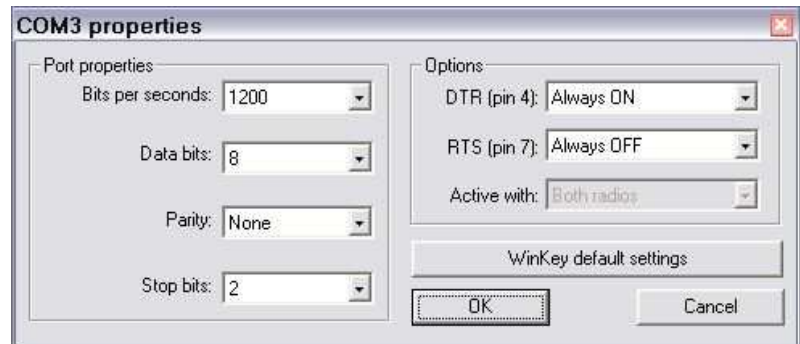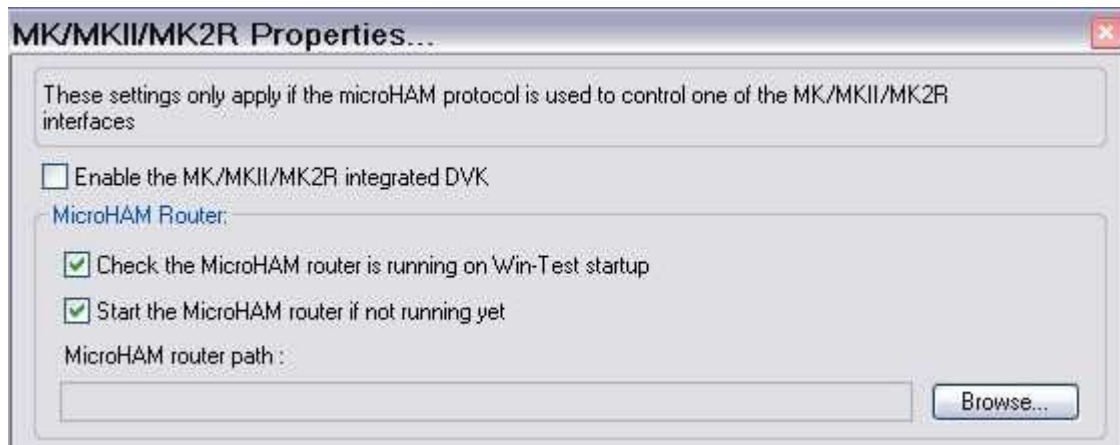
10. Set DTR to Always Off, and RTS to PTT.

11. Set Active with: Radio 2

12. Check the port you set for WinKey and set the interface to WinKey

13. Click "configure" and set the port properties to 1200, 8N2.

14. Set Options to: DTR= Always On and RTS = Always Off

COM3 properties

Port properties
- Bits per seconds: 1200
- Data bits: 8
- Parity: None
- Stop bits: 2

Options
- DTR (pin 4): Always ON
- RTS (pin 7): Always OFF
- Active with: Both radios

WinKey default settings

OK   Cancel

COM8 properties

Port properties
- Bits per seconds: 1200
- Data bits: 8
- Parity: None
- Stop bits: 2

Options
- DTR (pin 4): Always OFF
- RTS (pin 7): Always OFF
- Active with: Both radios

No default settings

OK   Cancel

15. Check the port you set for Control and set the interface to microHAM MK2R/MK2R+.

16. Click "configure" and set the port properties to 9600, 8N2.

17. Set options to: DTR = Always Off and RTS = Always Off.

18. Click **Options | MK/MK2/MK2R configuration ….**

MK/MKII/MK2R Properties…

These settings only apply if the microHAM protocol is used to control one of the MK/MKII/MK2R interfaces

☐ Enable the MK/MKII/MK2R integrated DVK

MicroHAM Router:

☑ Check the MicroHAM router is running on Win-Test startup

☑ Start the MicroHAM router if not running yet

MicroHAM router path :

Browse…

19. Check **Enable the MK/MKII/MK2R integrated DVK** if you plan to use the Router DVK.

20. Check the boxes for microHAM Router if you want Win-Test to start Router if it is not running when Win-Test starts.

21. If you plan to use the ACC port to control a band decoder for bandpass filters and/or antenna switch, set-up the band map or antenna map for Radio 1 and/or Radio 2.
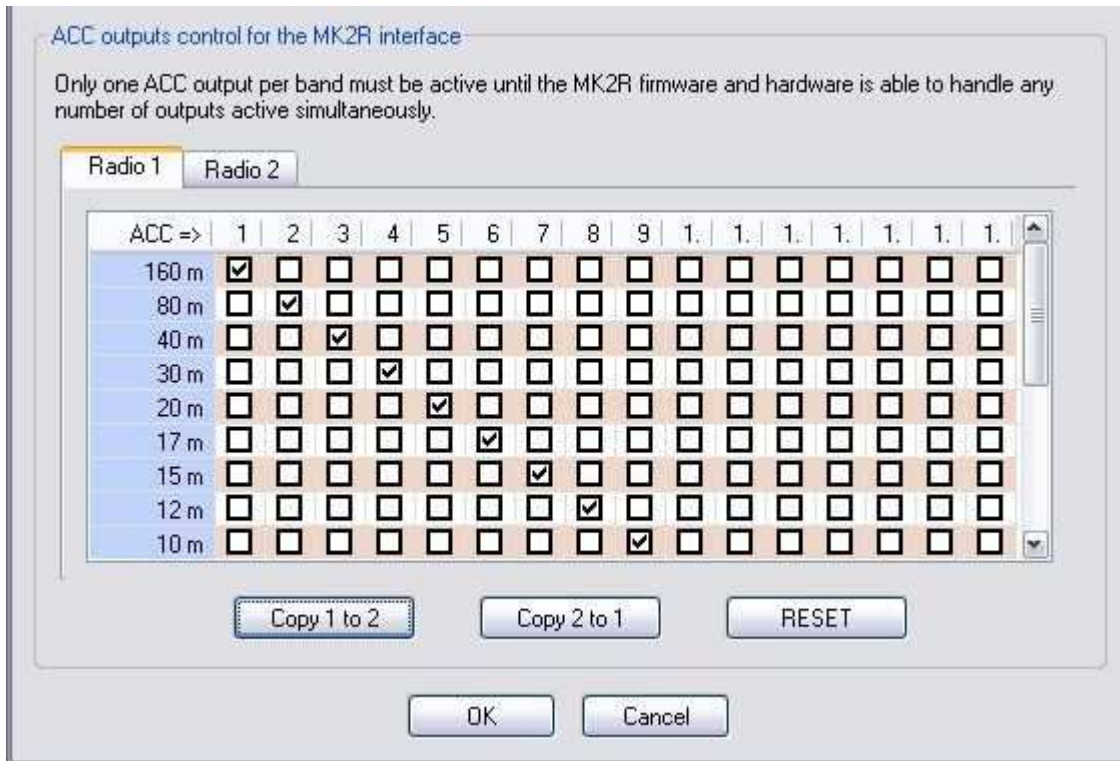

RTTY/Digital setup:

RTTY operation with microKEYER II and Win-Test requires the use of MMTTY.

**1.** Install MMTTY in two separate directories on your computer.

2. Select **Options | RTTY Configuration**

3. Check "Run MMTTY"

4. Enter the path to to each instance MMTTY

5. Make any other selections based on your operating preferences.

6. Start/open MMTTY from the path specified for Radio 1.

7. Select **Option (O) | Setup (O)** on the MMTTY Spectrum/waterfall window.

8. Select the TX tab
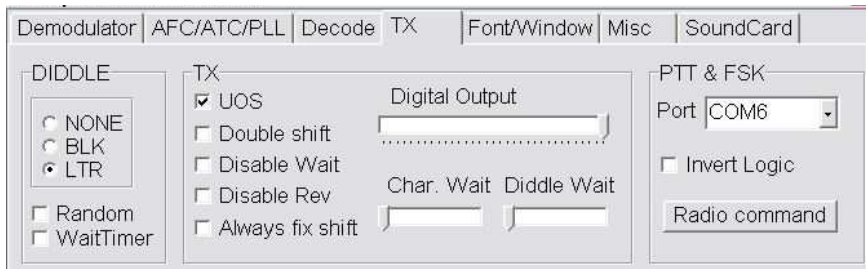
9. Set "PTT & FSK" to the port you selected for Radio FSK in Router

10. Select the SoundCard tab and set Transmission and Reception to use "USB Audio CODEC"
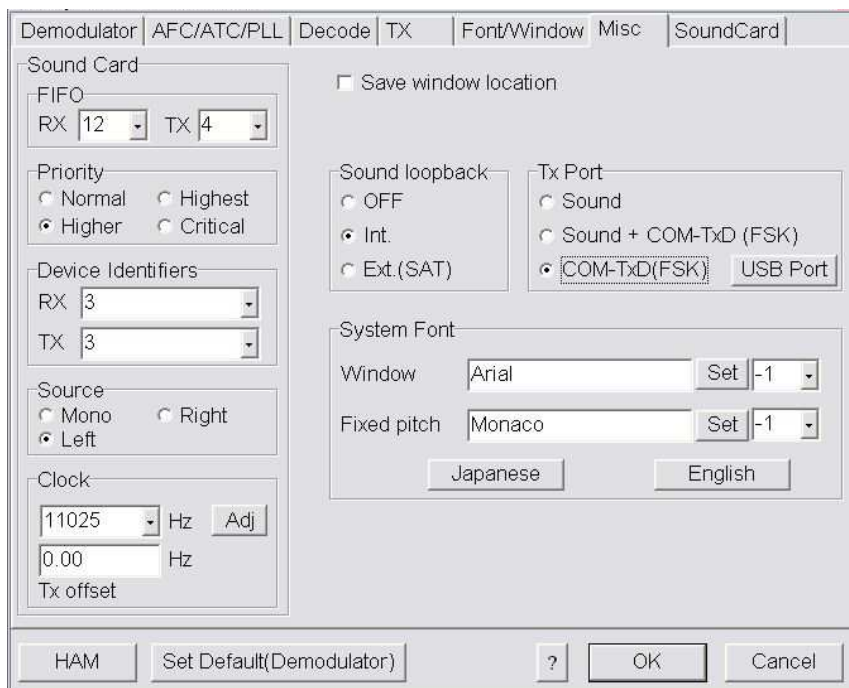
11. Select the **Misc** tab.

12. Select **Source = Left**

13. Select clock **11025**

14. Set Tx Port to COM-TxD(FSK)

15. Click the **USB Port** button

16. choose **C: Limiting speed** and click OK

17. Start/open MMTTY from the path specified for Radio 2.

18. Select **Option (O) | Setup (O)** on the MMTTY Spectrum/waterfall window.

19. Select the TX tab.

20. Set "PTT & FSK" to the port you selected for Radio 2 FSK in Router

21. Select the SoundCard tab and set Transmission and Reception to use "USB Audio CODEC"

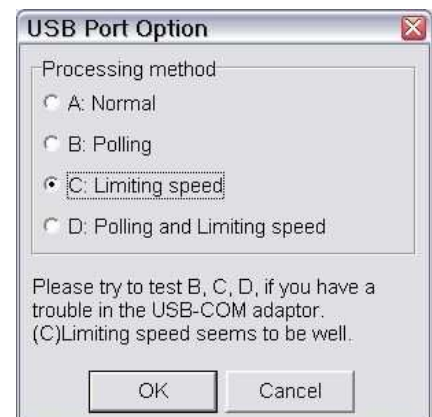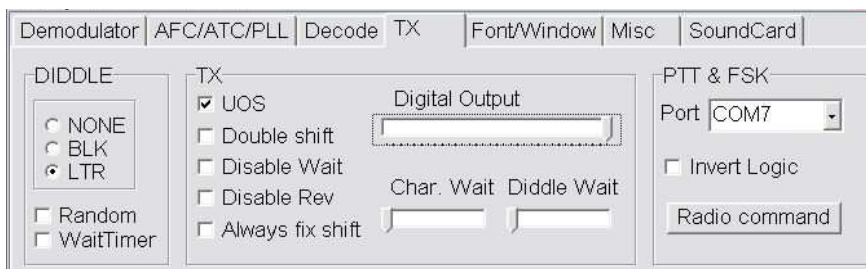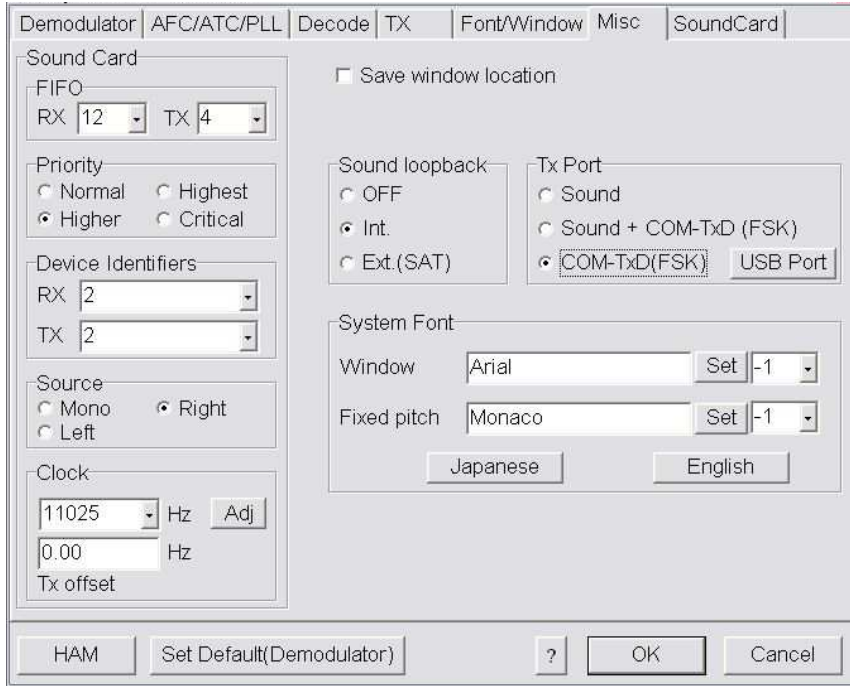| Demodulator | AFC/ATC/PLL | Decode | TX | Font/Window | Misc | SoundCard |

Reception
- ○ Conexant AMC Audio
- ○ USB Voice CODEC
- ● USB Audio CODEC
- ○

Transmission
- ○ Conexant AMC Audio
- ○ USB Voice CODEC
- ● USB Audio CODEC
- ○

| Demodulator | AFC/ATC/PLL | Decode | TX | Font/Window | Misc | SoundCard |

Sound Card

FIFO
RX [12] TX [4]

Priority
- ○ Normal ○ Highest
- ● Higher ○ Critical

Device Identifiers
RX [2]
TX [2]

Source
- ○ Mono ● Right
- ○ Left

Clock
[11025] Hz [Adj]
[0.00] Hz
Tx offset

☐ Save window location

Sound loopback
- ○ OFF
- ● Int.
- ○ Ext.(SAT)

Tx Port
- ○ Sound
- ○ Sound + COM-TxD (FSK)
- ● COM-TxD(FSK) [USB Port]

System Font
Window   [Arial]   [Set] [-1]
Fixed pitch [Monaco] [Set] [-1]
[Japanese]   [English]

[HAM] [Set Default(Demodulator)] [?] [OK] [Cancel]

22. Select the **Misc** tab.

23. Select **Source = Right**

24. Select clock **11025**

25. Set Tx Port to COM-TxD(FSK)

26. Click the **USB Port** button

USB Port Option

Processing method
- ○ A: Normal
- ○ B: Polling
- ● C: Limiting speed
- ○ D: Polling and Limiting speed

Please try to test B, C, D, if you have a trouble in the USB-COM adaptor.
(C)Limiting speed seems to be well.

[OK] [Cancel]

27. choose **C: Limiting speed** and click OK