

MK2R/MK2R+ and DX4Win setup guide

Router setup:

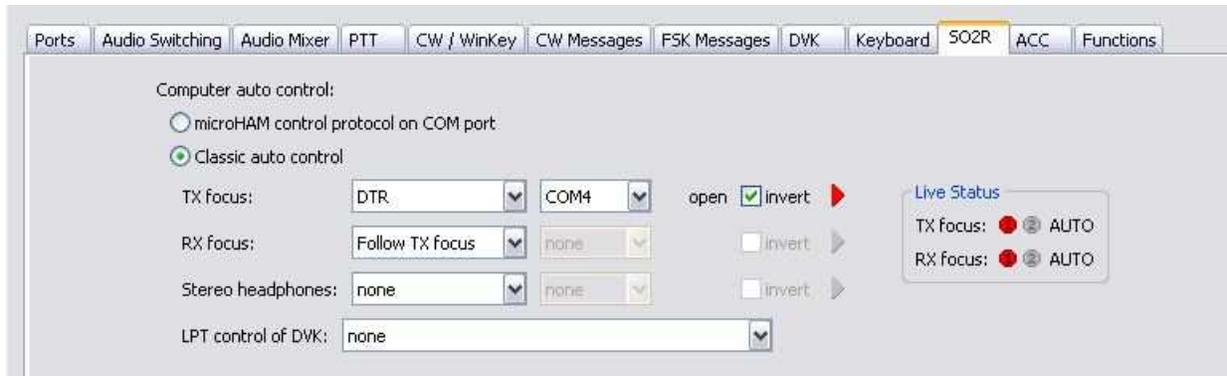
Note: The specific port numbers are not important. The key is consistency - the same port number must be used for a specific function in both Router and the logger.

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. Uncheck the **Disable router queries** box.
2. Assign one port for PTT on Radio 1.
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. ACmA is recommended for **Voice** Modes.

The screenshot shows the DX4Win software interface with the 'Ports' tab selected. The interface 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 mode selector (CW). Below these are several rows of settings, each with a dropdown menu, a status indicator, and a 'Test' button. The settings include CAT, 2nd CAT, FSK, 2nd FSK, CW, PTT, 2nd PTT, and Foot Switch. At the bottom of the interface, there are additional settings for WinKeyer2 and Control, along with checkboxes for 'Use LPT for CW', 'Use LPT for PTT', 'Generate FS on LPT', 'Steer serial CW/PTT', 'Steer FSK', and 'Steer WinKey CW/PTT'. The 'Steer serial CW/PTT', 'Steer FSK', and 'Steer WinKey CW/PTT' checkboxes are checked.

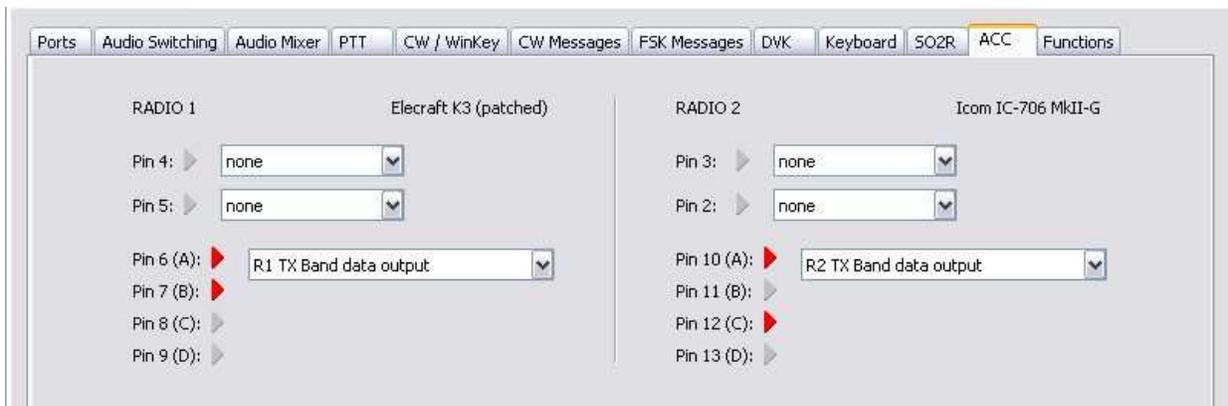
6. Check "Steer serial CW/PTT"
7. Check "Steer FSK"
8. Check "Steer WinKey CW/PTT"

- Select "Classic auto control" on the **SO2R** tab and assign the following controls:
 - ◆ **TX focus:** **DTR** - select the port for Radio 1 and check "Invert"
 - ◆ **RX Focus:** **Follow TX Focus**
 - ◆ **Stereo Headphones:** **None**
(DX4Win has no "Dual Receive" function)



- These settings permit DX4Win to select transceiver - including microphone, headphones, CW and RTTY (FSK).
- Router can provide a substitute Antenna Relay (Band Data) signal derived from the transceiver operating frequencies.

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.



- Save settings to a preset by selecting menu **Preset | Save as**. Choose a position and name it DX4Win.

DX4Win setup:

1. Click **File | Preferences** to open the Setup Preferences notebook ...

2. Select the Radio page.
3. Select the type of transceiver used for Radio 1.
4. Select the COM port used for Radio 1 and set the Baud Rate if it is different than the default.
5. Check "DTR high"
6. Select the type of transceiver used for Radio 2.
7. Select the COM port used for Radio 2 and set the Baud Rate if it is different than the default.
8. Check "DTR high"
9. Set the Address for Icom and those TenTec transceivers that require it.

10. Select the CW page
11. Select WinKey as the CW Device type
12. Set External keyer to the virtual port you chose for WinKey on Router's Ports tab.
13. Set the Software CW Keying/PTT Control Interface to the virtual port you chose for PTT on Router's Ports tab and set RTS line to PTT control.

Setup Parameters

File

Band decoder

Type	LPT Port	Active bands
None	LPT1	160m-10m

Rotator Control

Type	COM Port
None	COM1

Message handshake

ThunderForm|ARSWIN

PSK sound card

Card 2

SteppIR

Port	Baud Rate	Bands enabled
COM1	9600	<input type="checkbox"/> 160m <input type="checkbox"/> 80m <input type="checkbox"/> 60m <input type="checkbox"/> 40m

Take output from

Disabled

Personal
Station
QSO
Screen
Import
Radio
Control
CW
Packet1
Packet2
Packet3
RTTY
Ext Data
F2 Key
Rep/Lab

14. Select the Control page.

15. Select the **PSK sound card**.

To find the correct card number, click the **Get ID** button on Router's **Audio Mixer** tab and use the **Mixer ID**.

16. Select the RTTY page.

17. Enter the path to the MMTTY Executable file.

Setup Parameters

File

RTTY interface

Type	COM Port
None	COM5

Baud Rate	Flow Control	Data / Parity
9600	None	8 bits/no parity

Scrollback capacity

500

Options

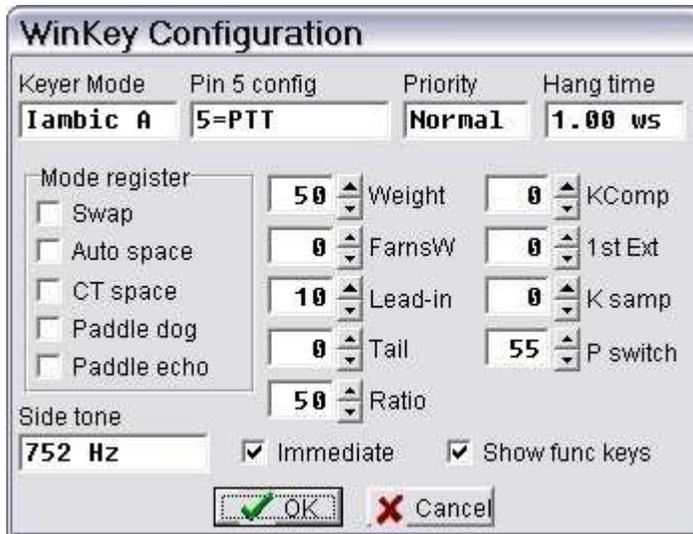
- Check for DX spots
- Announce DX to other window
- Always in Immediate mode
- Use bell character
- Show function keys

MMTTY

Executable

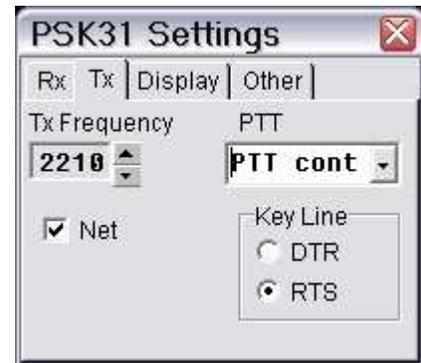
D:\Ham Programs\MMTTY\MMTTY.EXE

Personal
Station
QSO
Screen
Import
Radio
Control
CW
Packet1
Packet2
Packet3
RTTY
Ext Data
F2 Key
Rep/Lab



18. Open the CW Keyboard (ALT-K)
19. Open the CW Keyboard settings (ALT-S)
20. Configure the settings you prefer for CW operation including weight, PTT or QSK operation, etc.

It is generally most convenient to make the CW parameters the same as you have set on Router's CW/WinKey tab.

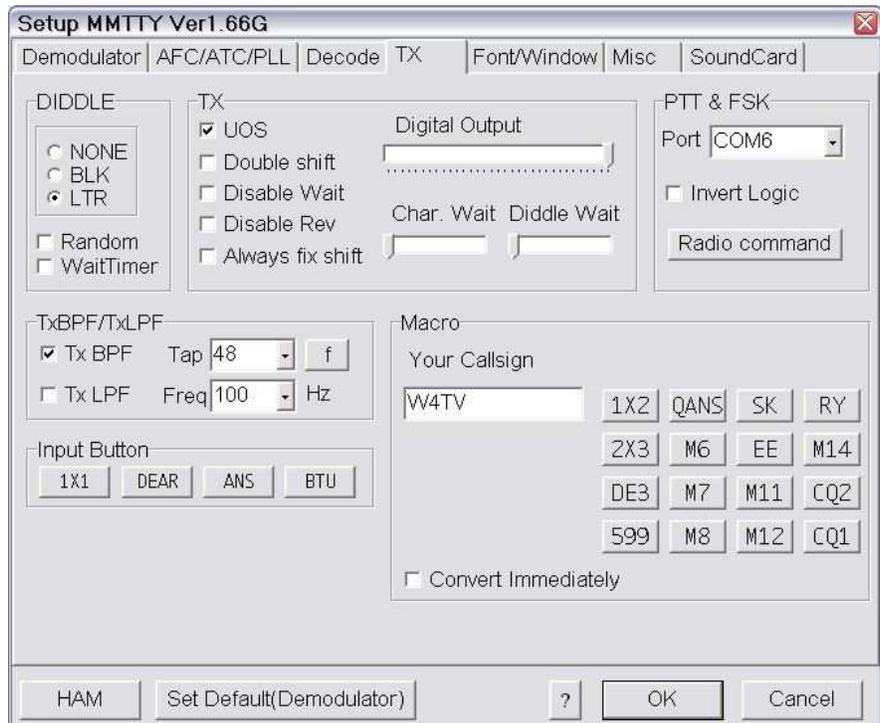


21. Open the PSK31 window (ALT-3)
22. Open the PSK31 settings (ALT-S)
23. Select the TX tab and set PTT to "PTT control"

MMTTY setup:

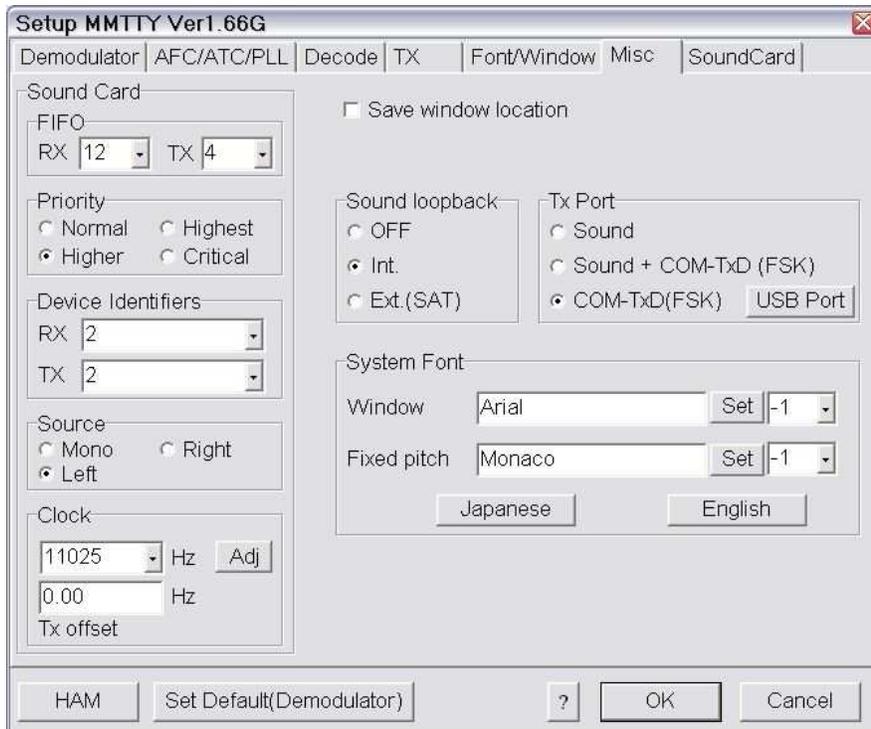
If you plan to operate FSK with the MMTTY window you will need to first configure MMTTY in stand-alone mode. We recommend using MMTTY version 1.66g as it significantly simplifies the audio configuration process.

1. Open MMTTY from the Windows Start menu.
2. Select **Options | Setup MMTTY**.
3. Select the TX Tab
4. Choose the FSK port you set on Router's Ports tab for the PTT Port.



5. Choose the **SoundCard tab**.

6. Select USB Audio CODEC



7. Choose the **Misc Tab**.

8. Select **Source Mono**

9. Select clock **11025**

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

If you want the option to switch between AFSK and FSK, select Sound + COM-TxD (FSK)

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

12. Close MMTTY



13. Start DX4Win and open the MMTTY Window

14. Open the MMTTY Window Keying Settings (ALT-S)

15. Select "PTT control" and RTS