

# microKEYER II and N1MM Logger 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 logger.

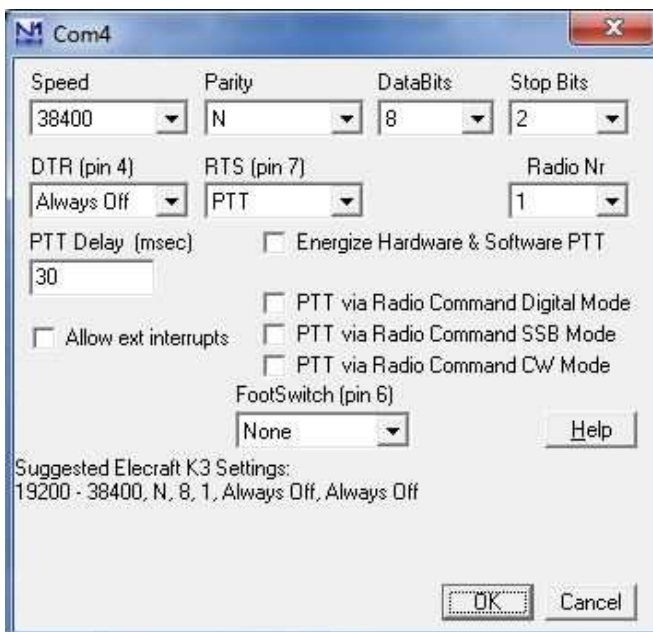
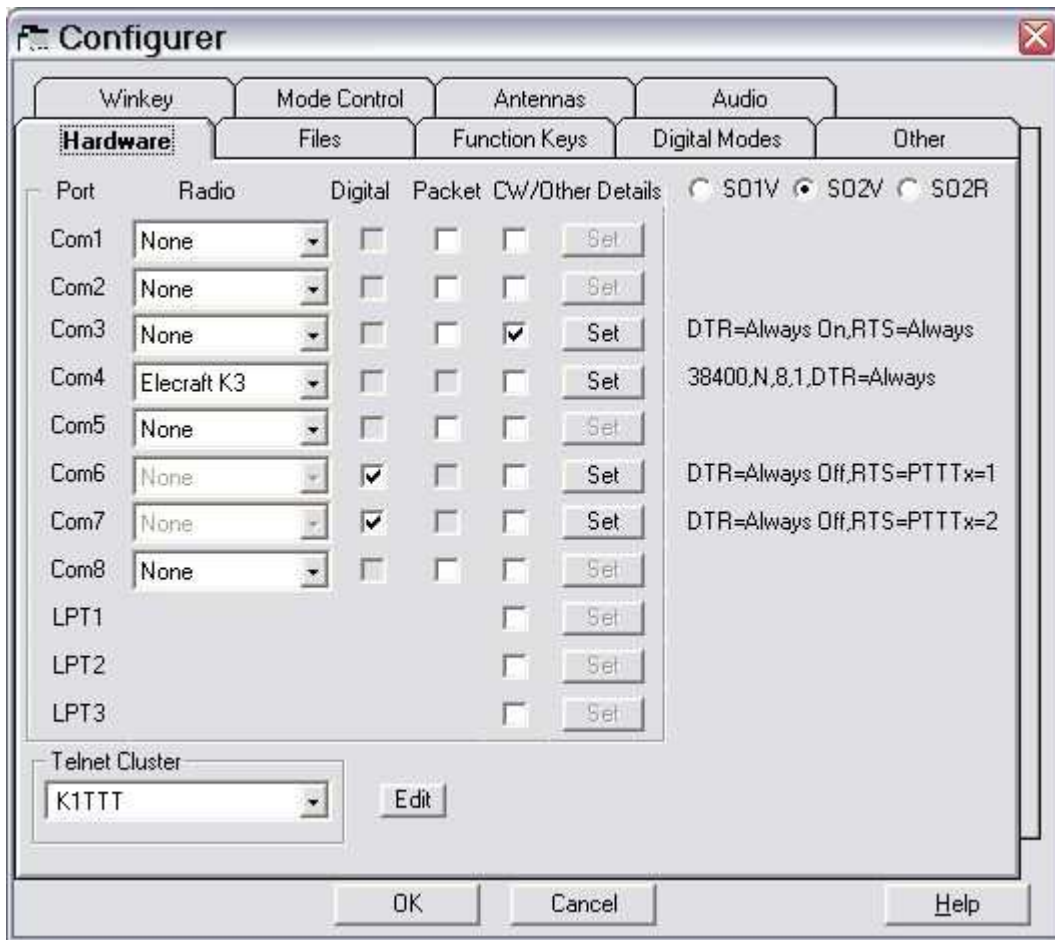
1. Assign a virtual COM port for radio control (CAT). Click the **Set** button, select the transceiver from the drop down box, set the Baud Rate and CI-V address if needed.
2. Assign PTT to RTS on the same ports as you used for CAT.
3. Assign a port for FSK and check the PTT box. If you will not be using FSK, you may skip this step.
4. Assign a port for WinKey. Select the appropriate PTT output and QSK or PTT operation on Router's PTT tab.



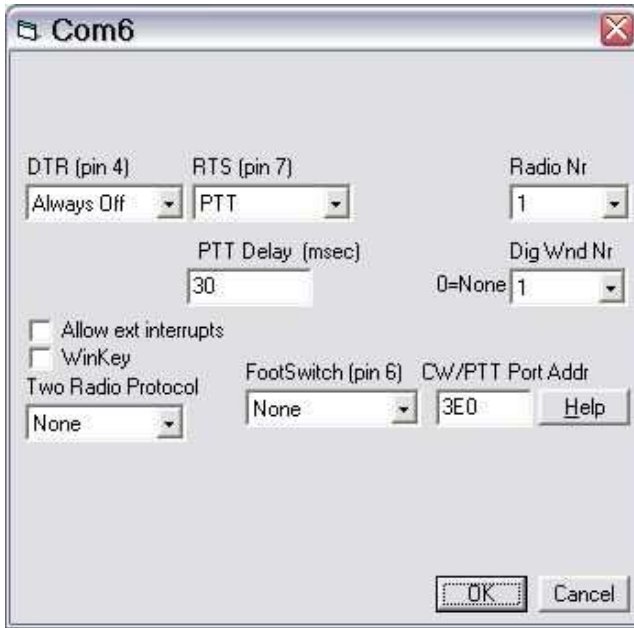
5. On the **Audio Switching** tab, set VOICE to "Microphone jack, logger or DVK control" and set FSK/DIGITAL to "Line input (rear)."
6. Set the appropriate PTT outputs for each mode on the the **PTT** tab.
7. Save settings to a preset by selecting menu **Preset | Save as**. Choose a position and name it N1MM.

# N1MM hardware setup:

1. Click **Config | Configure Ports, Telnet Addresses, Other ...**



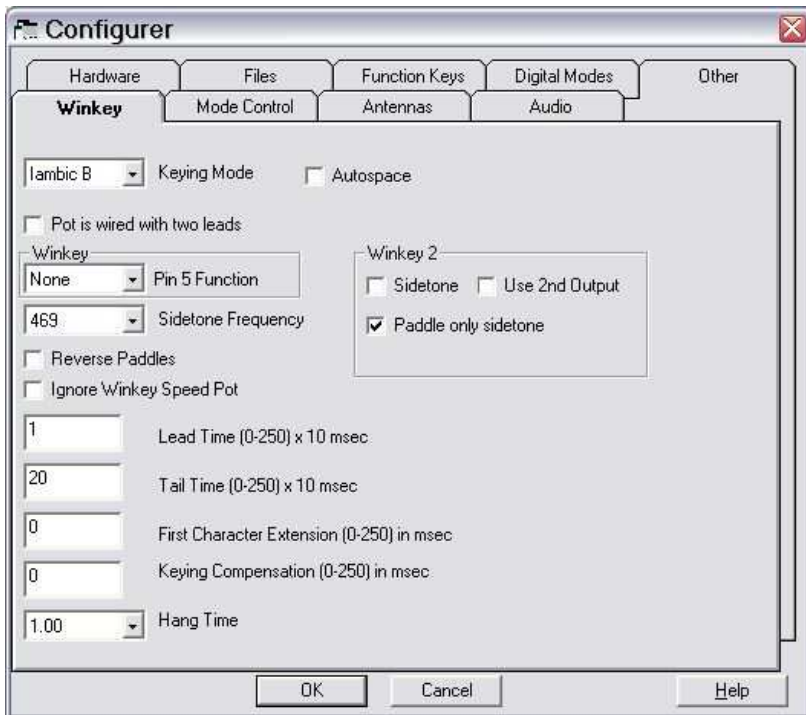
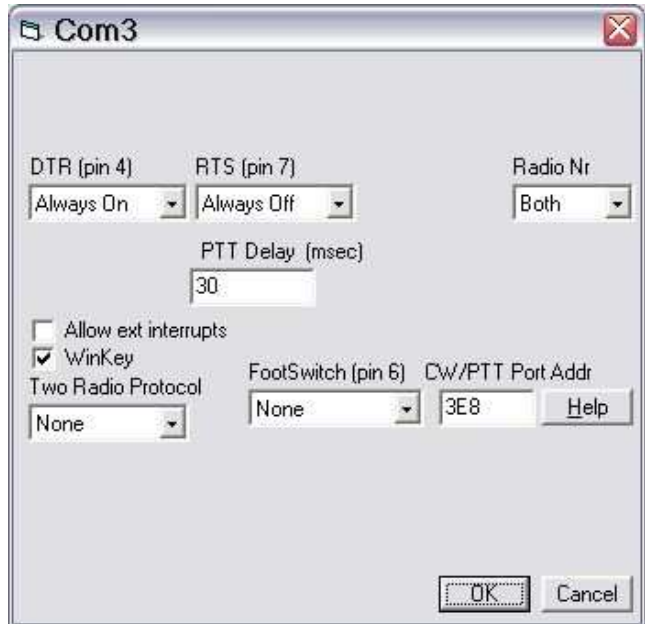
2. Assign the radio to the virtual COM port you used in Router's Ports tab
3. Assign Digital and CW/PTT functions to the virtual ports you used in Router
4. Assign a port for CW (WinKey)
5. For the radio port click **Set** and set proper communication parameters.
6. Set RTS (pin 7) to PTT.
7. Set DTR (Pin 4) to Always Off.
8. **Uncheck** "Energize Hardware & Software PTT"
9. **DO NOT** check any of the "PTT via Radio Command" options.



10. Configure the Digital ports taking care to associate each port with the correct Radio (Radio Nr) and Digital Interface (Dig Wnd Nr) if your transceiver supports SO2V operation.

11. Set DTR to "Always Off" and set RTS (pin 7) to PTT or "Always Off".

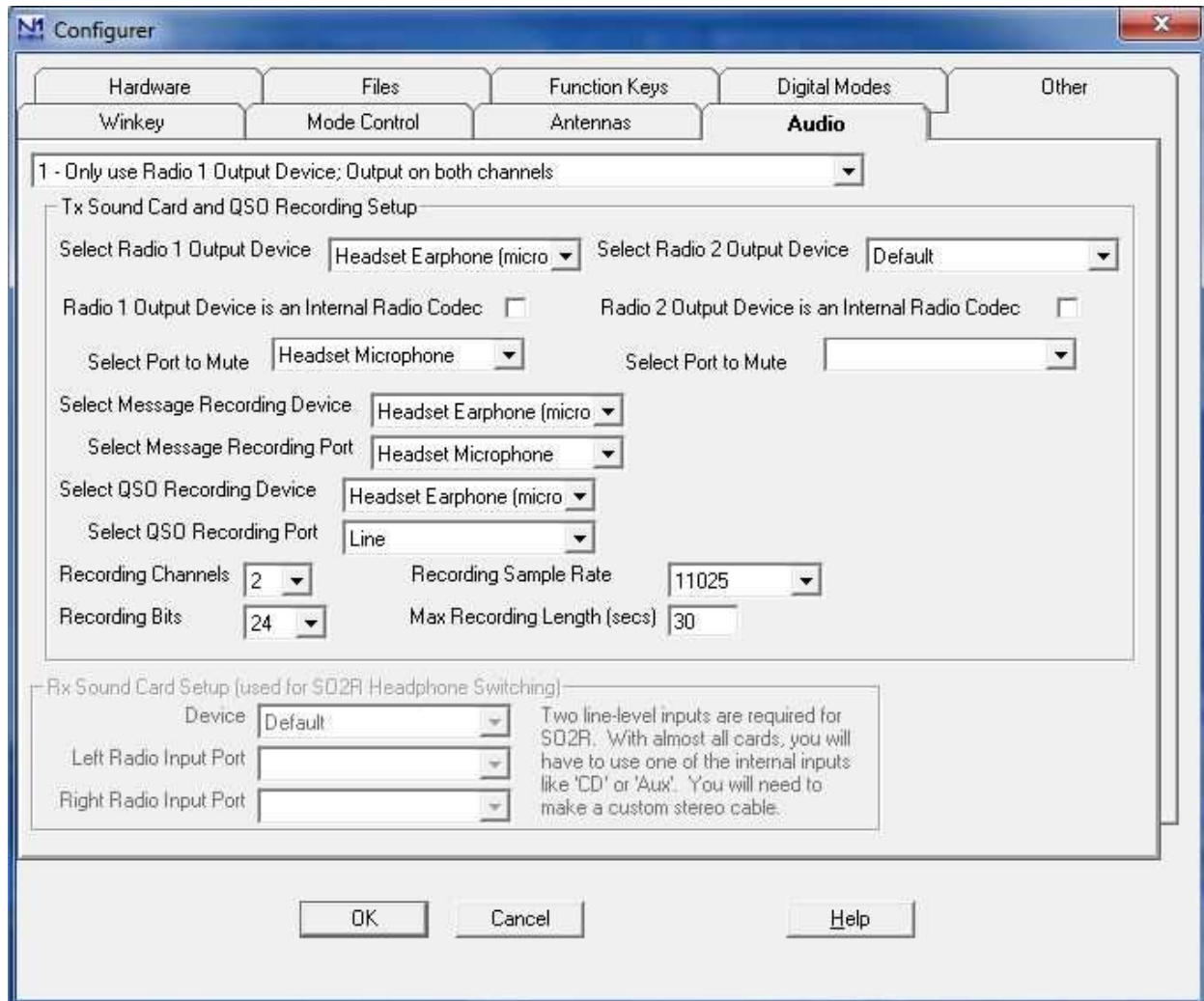
12. For the CW Port click **Set**, check the WinKey box and select Both radios.



13. Configure WinKey using the WinKey tab.

14. Pin 5 Function should be PTT.

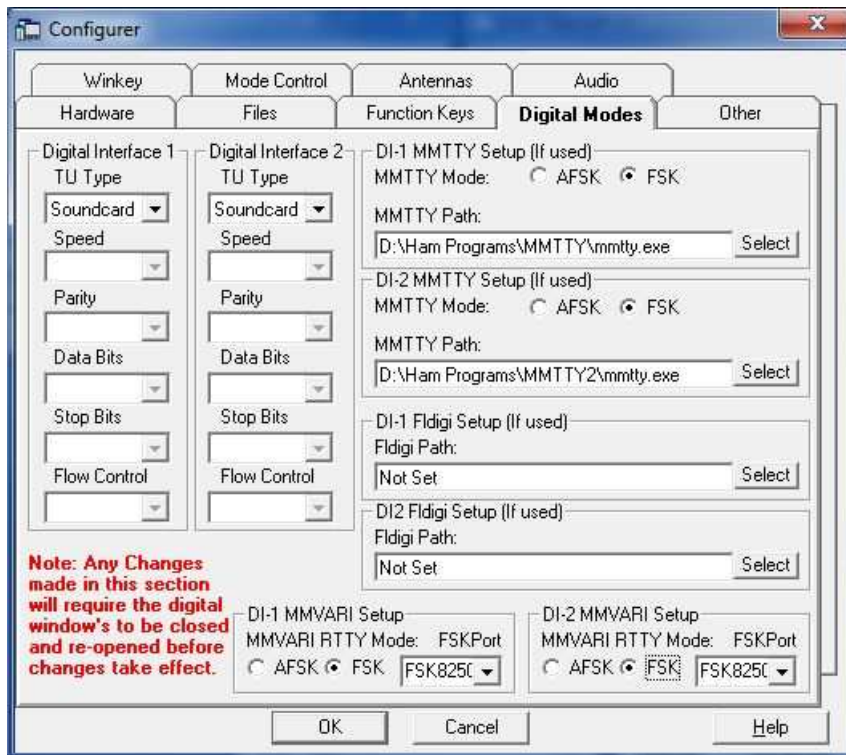
**Note:** Timing parameters are set on the CW/WinKey tab in Router. Router will override any settings made in N1MM Logger.



15. Configure Audio for "1 – Only use Radio 1 Output Device, Output on both channels"
16. Select "Headset Earphone (microHAM CODEC)" as the Radio 1 Output Device.
17. **Do Not** check either "Internal Radio Codec" box.
18. Select "Headset Earphone (microHAM CODEC)" as the Message Recording Device and select "Headset Microphone" as the Message Recording Port.
19. Select "Headset Earphone (microHAM CODEC)" as the QSO Recording Device and select "Line" as the QSO Recording Port.
20. Set Recording Channels to one (1) if your transceiver has only one receiver. Set Recording Channels to two (2) if your transceiver has a subreceiver and you want to record both receivers.

## MMTTY FSK setup:

N1MM Logger supports the MMTTY Engine, MMVARI and/or an external TNC for RTTY contesting. This configuration is based on using MMTTY in FSK mode.



1. Install MMTTY.

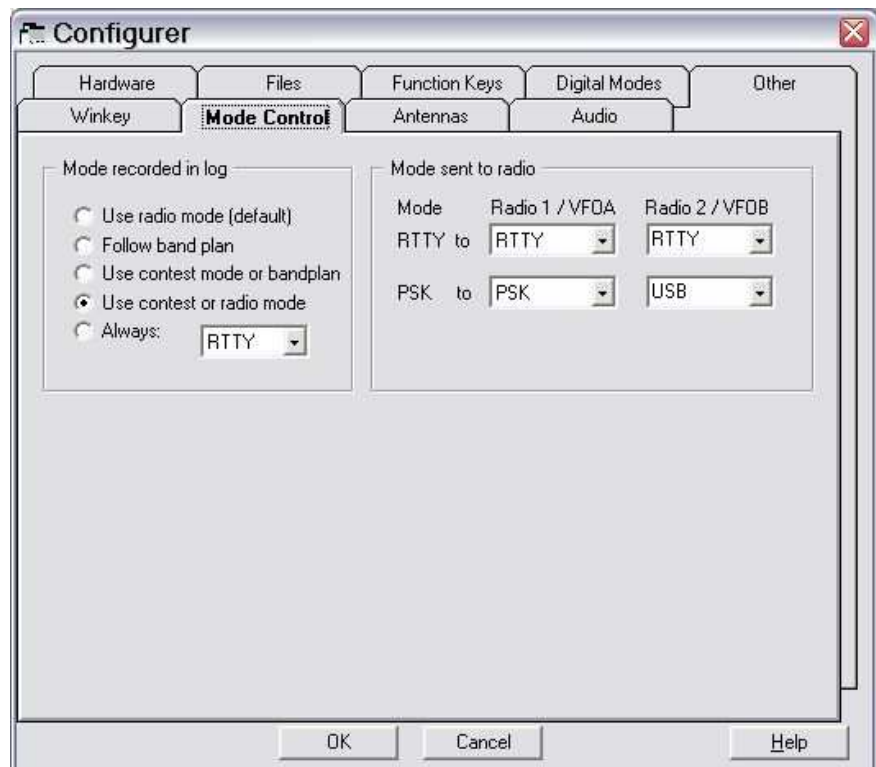
**Note:** If your radio supports dual receiver (SO2V) operation, you may want to install MMTTY to two *different* directories on your hard disk.

2. Select the **Digital Modes** tab in the N1MM Logger Configurer.
3. Set TU Type to Soundcard
4. Select FSK as the MMTTY mode for DI-1 and DI-2.
5. Enter the path to each MMTTY installation.

6. Open the **Mode Control** tab
7. Set the appropriate RTTY and PSK modes for your radio.

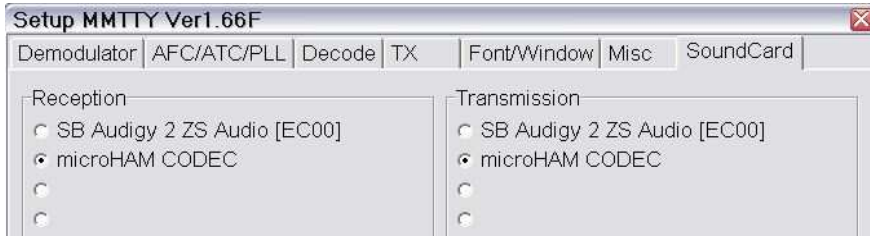
**Note:** See the N1MM Logger Help files for the supported RTTY and PSK modes for your radios.

8. Set the method to determine the mode to log.
9. Click "OK" to save the settings and close the Configurer.



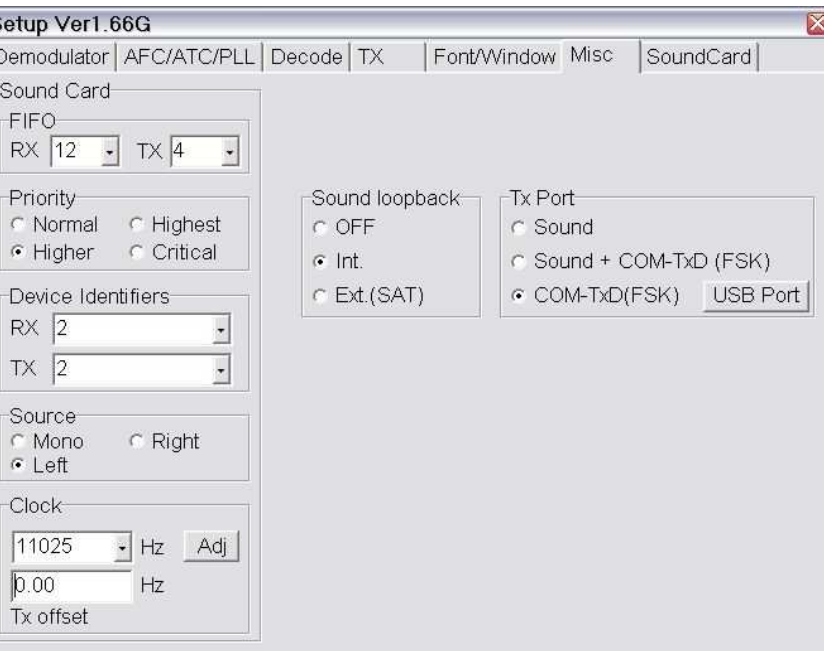
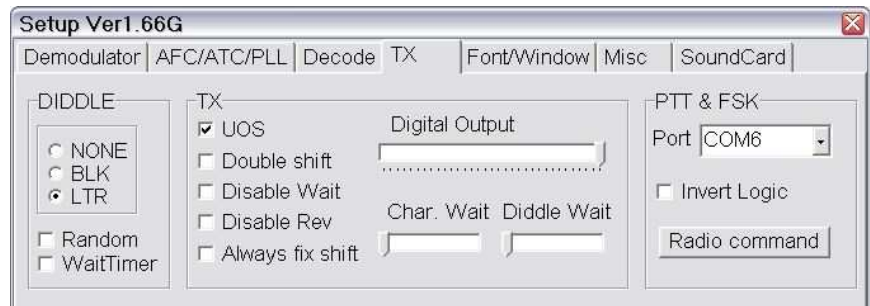


10. Activate the left Entry Window (Radio 1) and open the Digital Interface.
11. If this is the first time you have used the MMTTY interface, click on **Interface | MMTTY** to activate the MMTTY interface.
12. In the Digital Interface, Click **Setup | Setup MMTTY.**

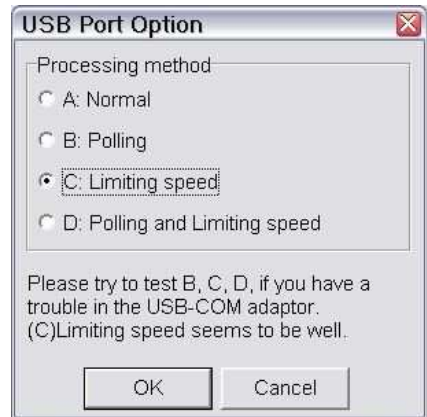


13. Select the "SoundCard" tab.
14. Select microHAM CODEC for Transmission and Reception.

15. Select the TX tab
16. Set PTT & FSK to the port used for Router's FSK port.
17. Select the Misc Tab



18. Select **Source = Left**
19. Set Tx Port to COM-TxD(FSK)



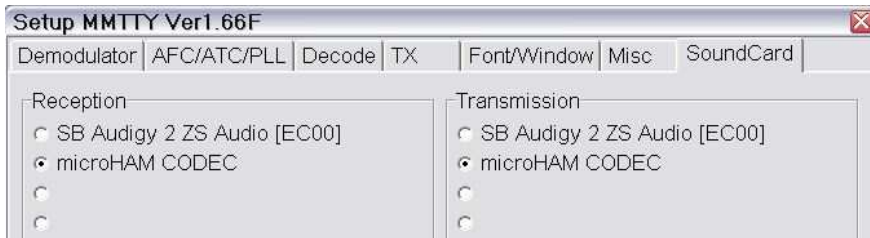
20. Click **USB port** button, choose **C: Limiting speed** and click OK
21. Click "OK" on the Misc tab to close the MMTTY Set-up for Radio 1

If your radio does not support Dual receive (SO2V) Operation, FSK configuration is complete.

22. Activate the right Entry Window (Radio 2) and open the Digital Interface.

23. Click on **Interface | MMTTY** to activate the MMTTY interface.

24. In the Digital Interface, Click **Setup | Setup MMTTY**.



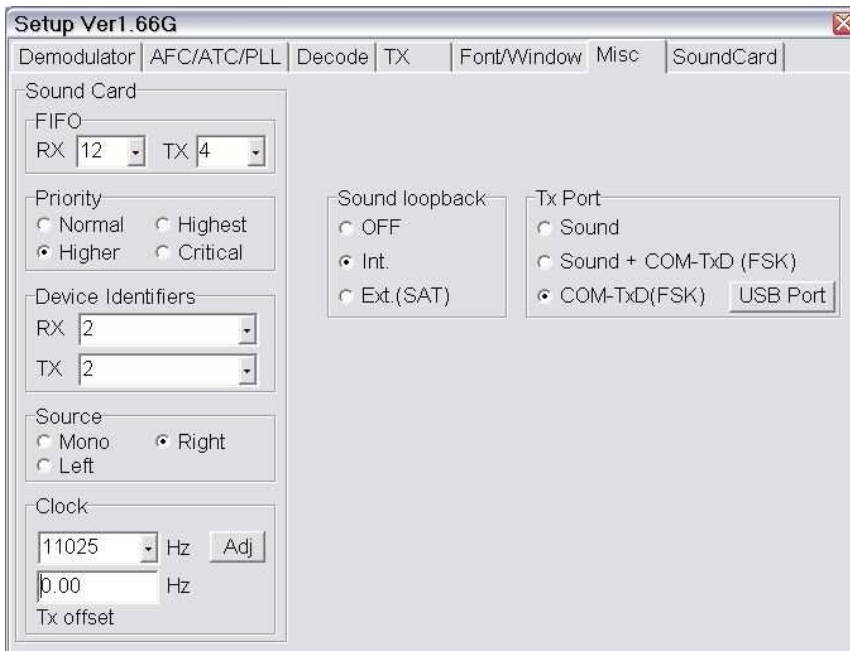
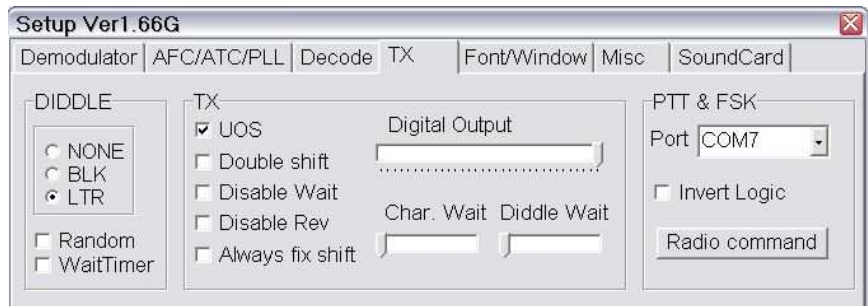
25. Select the "SoundCard" tab.

26. Select microHAM CODEC for both Transmission and Reception.

27. Select the TX tab

28. Set PTT & FSK to Router's 2<sup>nd</sup> FSK Port.

29. Select the Misc Tab

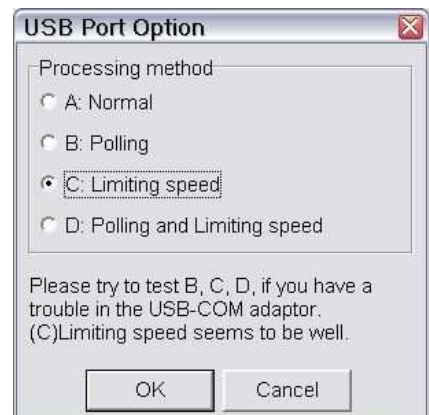


30. Select **Source = Right**

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

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

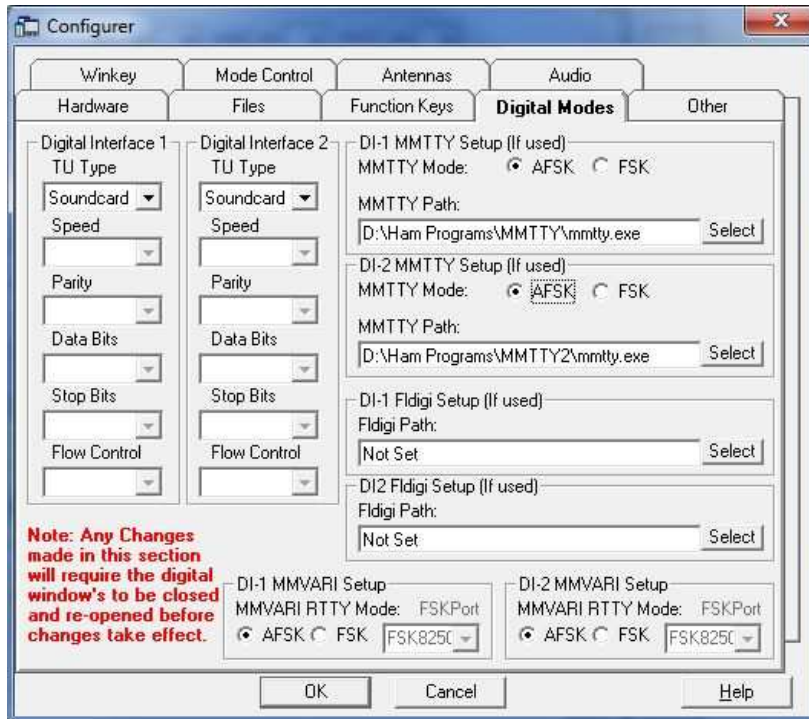
33. Click "OK" on the Misc tab to close the MMTTY Set-up.



## MMTTY AFSK setup:

N1MM Logger supports the MMTTY Engine, MMVARI and/or an external TNC for RTTY contesting. This configuration is based on using MMTTY in AFSK mode.

AFSK does not require a digital port for each radio. If you will be using only AFSK and PSK, it is not necessary to define "Digital" ports on the N1MM "Hardware" tab or FSK ports in Router.



1. Install MMTTY.

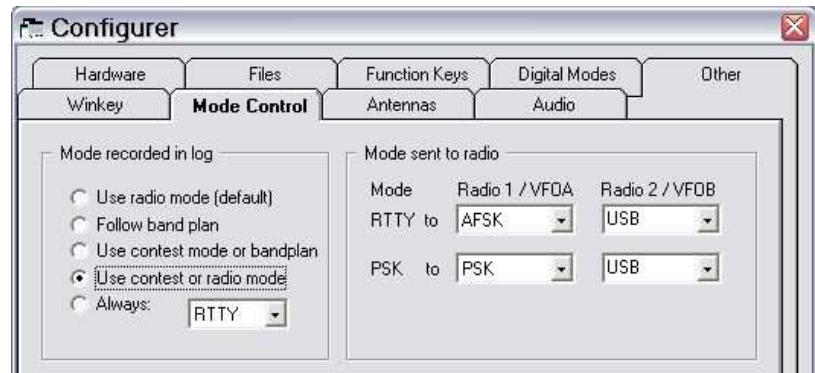
**Note:** If your radio supports dual receiver (SO2V) operation, you may want to install MMTTY to two *different* directories on your hard disk.

2. Select the **Digital Modes** tab in the N1MM Logger Configurer.
3. Set the TU Type to Soundcard
4. select AFSK as the MMTTY mode for both DI-1 and DI-2.
5. Enter the path to each copy of MMTTY.
6. Open the **Mode Control** tab

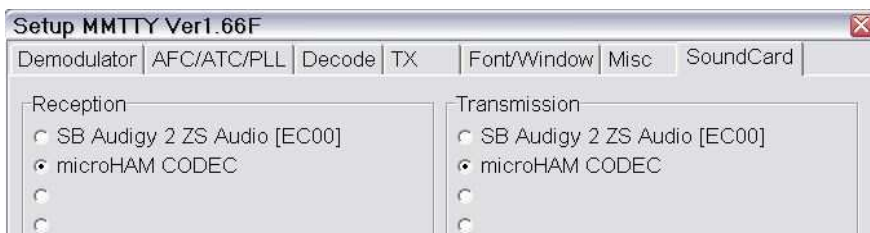
7. Set the appropriate RTTY and PSK modes for each radio.

**Note:** See the N1MM Logger Help files for the supported RTTY and PSK modes for your radios.

8. Set the method to determine the mode recorded in the log.
9. Save and Close the Configurer.



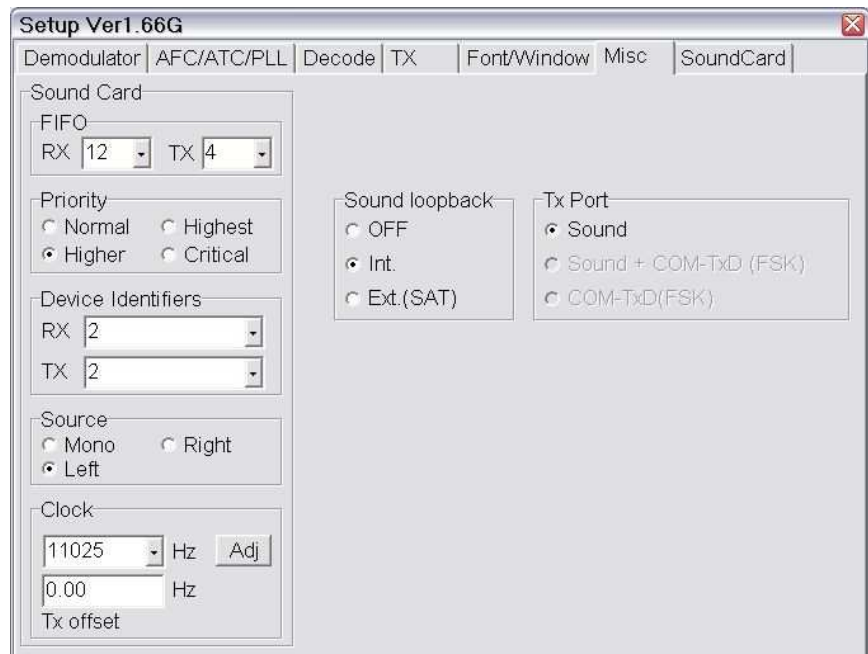
10. Activate the left Entry Window (Radio 1) and open the Digital Interface.
11. If this is the first time you have used the MMTTY interface, click on **Interface | MMTTY** to activate the MMTTY interface.



12. In the Digital Interface, Click **Setup | Setup MMTTY**.
13. Select the "SoundCard" tab.
14. Select microHAM CODEC for both Transmission and Reception.

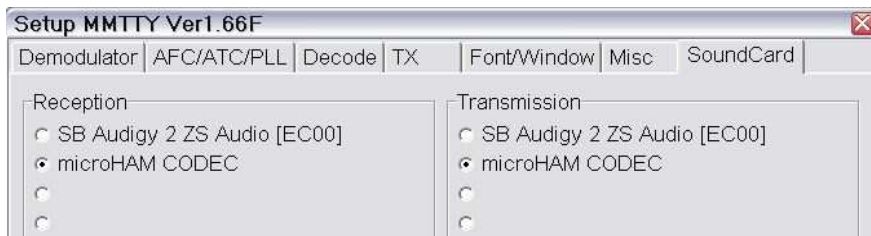


15. Select the Misc Tab
16. Select **Source = Left**
17. Set Tx Port to **Sound**.
18. Click "OK" to close MMTTY Set-up for Radio 1



If your radio does not support Dual receive (SO2V) Operation, FSK configuration is complete.

19. Activate the right Entry Window (Radio 2) and open the Digital Interface.
20. Click on **Interface | MMTTY** to activate the MMTTY interface.



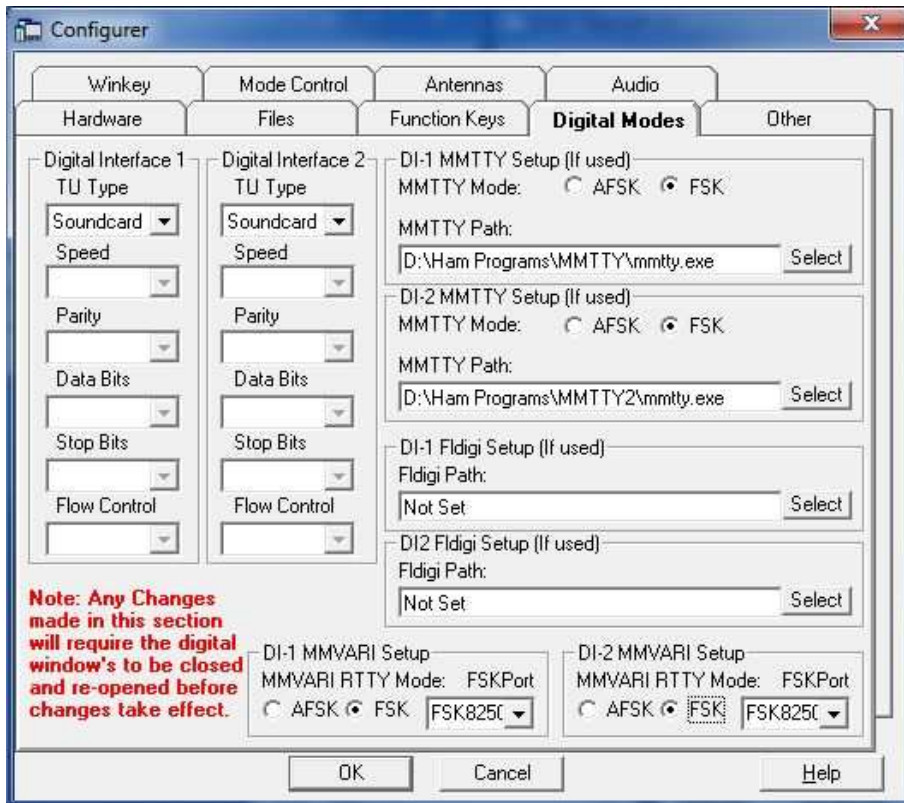
21. In the Digital Interface, Click **Setup | Setup MMTTY**.
22. Select the "SoundCard" tab.
23. Select microHAM CODEC for both Transmission and Reception.

24. Select the Misc Tab
25. Select **Source = Right**
26. Set Tx Port to **Sound**
27. Click "OK" to close MMTTY Setup for Radio 2.

## MMVARI Setup with FSK:

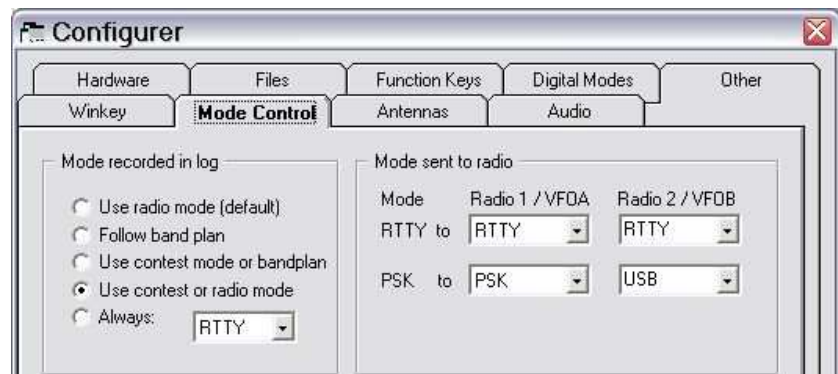
N1MM Logger supports the MMTTY Engine, MMVARI and/or an external TNC for RTTY contesting. This configuration is for **FSK RTTY** and PSK.

FSK requires use of a digital port for each radio. Be sure you have defined Digital ports for each radio in the N1MM "Hardware" tab and FSK ports in Router.



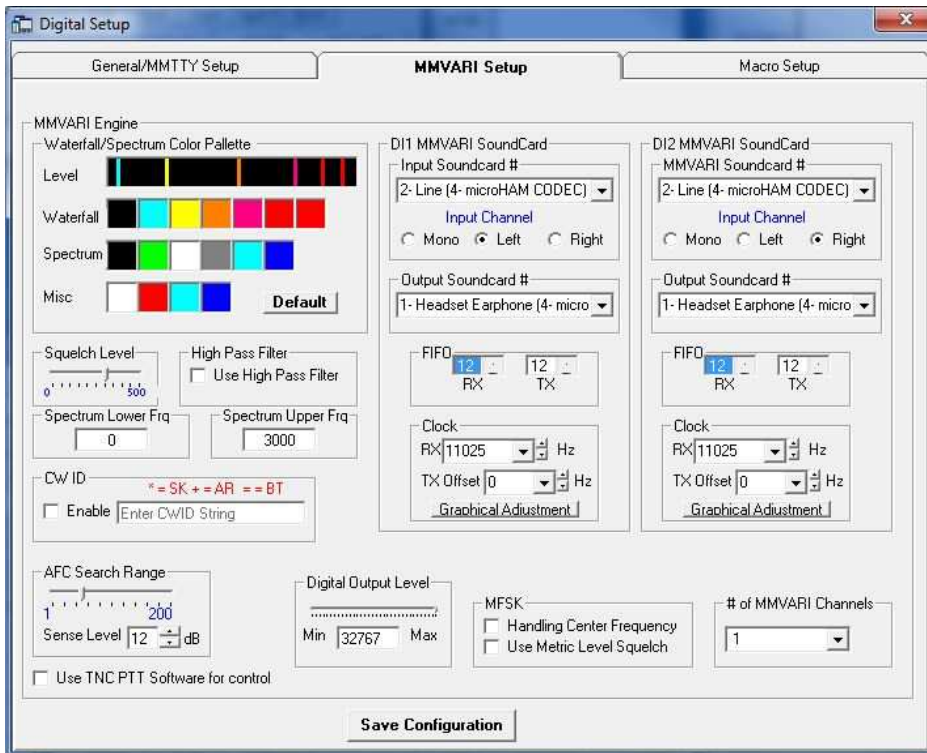
1. Select the **Digital Modes** tab in the N1MM Logger Configurer.
2. Set the TU Type to Soundcard
3. select FSK as the MMVARI RTTY mode for both DI-1 and DI-2.
4. Set the FSK Port to FSK8250 for both DI-1 and DI-2
5. Open the **Mode Control** tab

6. Set the appropriate RTTY and PSK modes for each radio.
7. **Note:** See the N1MM Logger Help files for the supported RTTY and PSK modes for your radios.
8. Set the method to determine the mode recorded in the log.
9. Save and Close the N1MM Configurer.



10. Activate the left Entry Window (Radio 1) and enter PSK.

11. Click **Setup | Settings**. Select MMVARI as the Preferred RTTY Interface and Preferred PSK Interface.



12. Select **MMVARI Setup**.

13. Set DI1 MMVARI Sound Card Input Soundcard # to "Line (microHAM CODEC)" and select the **Left** Input.

14. Set DI1 MMVARI Sound Card Output Soundcard # to "Headset Earphone (microHAM CODEC)".

15. Set DI2 MMVARI Sound Card Input Soundcard # to "Line (microHAM CODEC)" and select the **Right** input.

16. Set DI1 MMVARI Sound Card Output Soundcard # to "Headset Earphone (microHAM CODEC)"

17. Save the configuration.

18. Select RTTY-L mode in MMVARI in DI-1

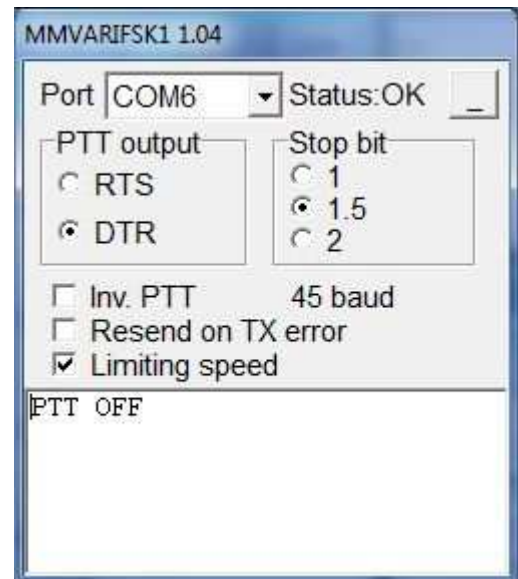
19. Select the MMVARIFSK1 window from the Windows Task Bar.

20. Set Port to the port you chose for FSK in Router

21. Set PTT output to RTS

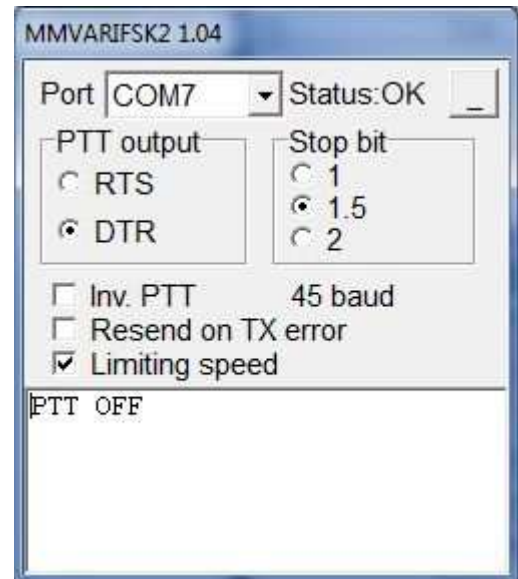
22. Check Limiting Speed

23. Return the MMVARIFSK1 window to the Task Bar.



If your radio does not support Dual receive (SO2V) Operation, FSK configuration is complete.

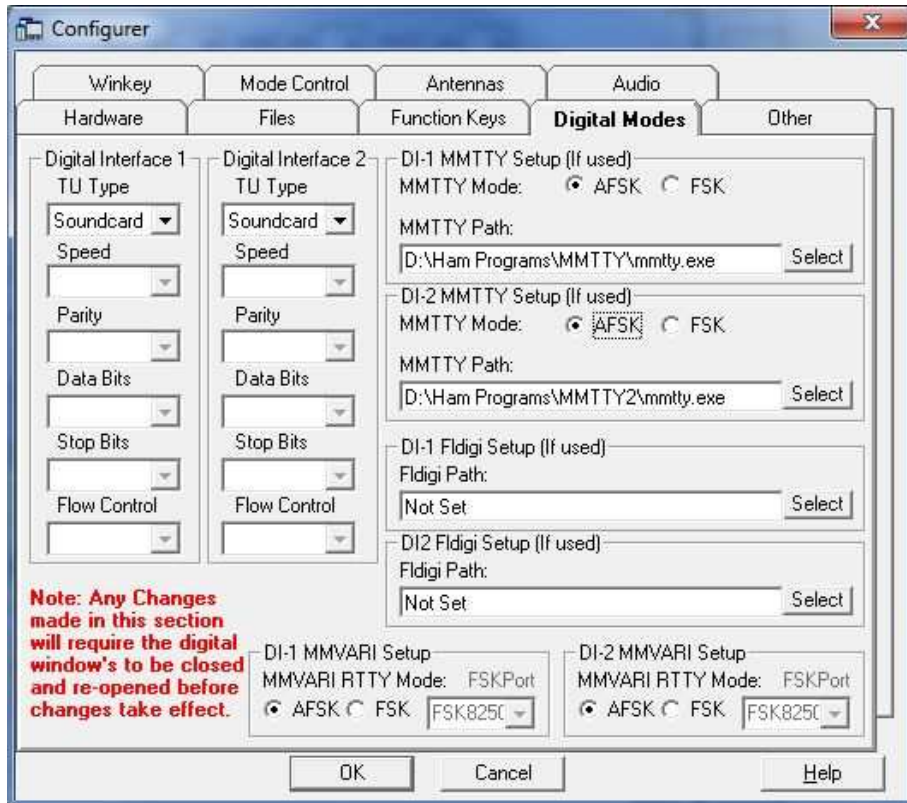
24. Select DI-2 (Open the second DI if it is not already open)
25. Select **Interface | MMVARI** if MMVARI is not already the active interface
26. Select RTTY-L mode in MMVARI.
27. Select the MMVARIFSK2 window from the Windows Task Bar.
28. Set Port to the port you chose for 2<sup>nd</sup> FSK in Router.
29. Set PTT output to RTS
30. Check Limiting Speed
31. Return the MMVARIFSK2 window to the Task Bar.



## MMVARI setup with AFSK:

N1MM Logger supports the MMTTY Engine, MMVARI and/or an external TNC for RTTY contesting. This configuration is for **AFSK RTTY** and PSK.

AFSK and PSK do not require the use of a digital port for each radio. Do not configure a Digital Port in N1MM Logger or a FSK Port in Router.

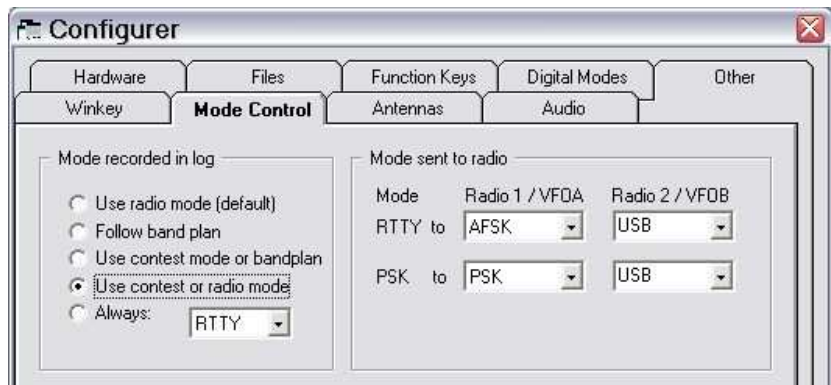


1. Select the **Digital Modes** tab in the N1MM Logger Configurer.
2. Set the TU Type to Soundcard
3. select AFSK as the MMVARI RTTY mode for both DI-1 and DI-2.
4. Open the **Mode Control** tab

5. Set the appropriate RTTY and PSK modes for each radio.

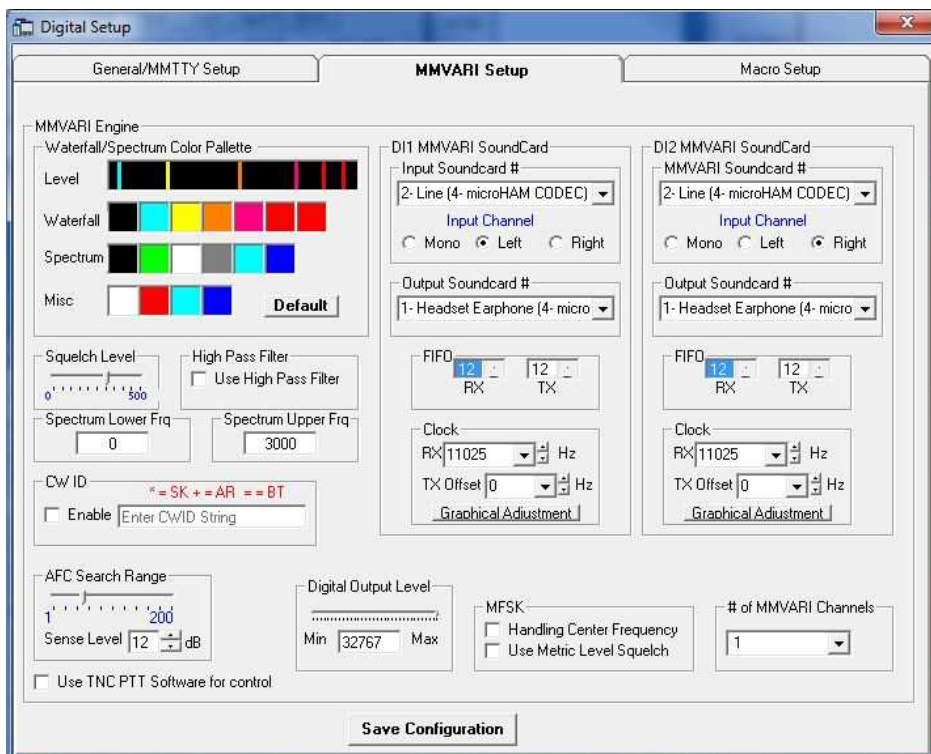
**Note:** See the N1MM Logger Help files for the supported RTTY (AFSK) and PSK modes for your radios.

6. Set the method to determine the mode recorded in the log.
7. Save and Close the N1MM Configurer.





8. Activate the left Entry Window (Radio 1) and enter PSK.
9. Click **Setup | Settings**. Select MMVARI as the Preferred RTTY Interface and Preferred PSK Interface.



10. Select **MMVARI Setup**.
11. Set DI1 MMVARI Sound Card Input Soundcard # to "Line (microHAM CODEC)" and select the **Left** Input.
12. Set DI1 MMVARI Sound Card Output Soundcard # to "Headset Earphone (microHAM CODEC)".
13. Set DI2 MMVARI Sound Card Input Soundcard # to "Line (microHAM CODEC)" and select the **Right** input.
14. Set DI1 MMVARI Sound Card Output Soundcard # to "Headset Earphone (microHAM CODEC)".
15. Save the configuration.