microKEYER II and N1MM Logger Setup

Router setup:

<u>Note:</u> 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.

 Addio Switching	Audio Mixer	FI	C W / WILKEY		v messages	1 24 1463:	sayes	DAV	Keyboard	ызріау	System Settings
		RADIO					Eleci	raft K3 (p	atched)		
				18.	075.700	DA	TA				
		CAT:	COM4	~	open 3	8400 8N1		Set			
		2nd CAT:	none	~			${}^{\langle \rangle}$				
		FSK:	COM6	~	PTT	closed	⊳	Test			
		2nd FSK;	COM7	~	PTT 💟	closed		invert strict	: bos		
		CW:	none	~	DTR 🔽		\gg	Test	(
		PTT:	COM4	~	RTS 🛩	open	\geq	Test			
		2nd PTT:	none	~	RTS 🗸		₽				
		Foot Swit	ch: none	~	DSR 🔽		4	🗌 invert			
		Auxiliary:	none	~			${}^{<}\!$	Mon			
		WinKey:	СОМЗ	~		closed	${}^{\oplus}$	Test	Mon		
		Control:	none	~			$\oplus $	Mon			

- 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:

W	inkey	Mode	Control		Anten	nas 📗	Audio	
Hard	ware	Files	;	∫ Fu	nction K	ieys [)igital Modes	Other
Port	Radio	[Digital	Packet	: CW/0	ther Details	C S01V @ S	02V 🔿 S02R
Com1	None	•		Г		Set		
Com2	None	•		Г	Г	Set		
Com3	None	*		Г	~	Set	DTR=Always On	,RTS=Always
Com4	Elecraft K3	+	Π	Г	Г	Set	38400,N,8,1,DT	R=Always
Com5	None	•	Г	Г	Г	Set		
Com6	None		₽		Π	Set	DTR=Always Off	RTS=PTTTx=1
Com7	None	10	₹	Г	Г	Set	DTR=Always Off	RTS=PTTTx=2,
Com8	None	•	Г	Г	Г	Set		
LPT1					Г	Set		
LPT2					Г	Set		
LPT3					Г	Set		
Telnet (Cluster		1				HI.	
K1TTT	8	-	E	dit				

1. Click Config | Configure Ports, Telent Addresses, Other ...

Speed	Parity	DataBits	Stop Bits
38400	• N	• 8 •	2 💌
DTR (pin 4)	RTS (pin 7)		Radio Nr
Always Off	 PTT 	•	1 💌
Allow ext int	errupts	T via Radio Comm T via Radio Comm T via Radio Comm h (pin 6)	and Digital Mode and SSB Mode and CW Mode
	None	-	<u>H</u> elp
	ft K3 Settings:		

- 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. <u>Uncheck</u> "Energize Hardware & Software PTT"
- 9. **<u>DO NOT</u>** check any of the "PTT via Radio Command" options.

🖻 Com6 🛛 🔯	10. Configure the Digital ports taking care to associate each port with the correct Radio (Radio Nr) and Digital Interface (Dig Wind Nr) if
DTR (pin 4) RTS (pin 7) Radio Nr Always Off PTT Delay (msec) Dig Wnd Nr 30 D=None 1 Allow ext interrupts WinKey Two Radio Protocol None Softwitch (pin 6) CW/PTT Port Addr None Softwitch (pin 6) CW/PTT Port Addr Cancel 12. For the CW Port click Set , check the WinKey	your transceiver supports SO2V operation. 11. Set DTR to "Always Off" and set RTS (pin 7) to PTT or "Always Off". Image: Com3 Image: Com3
box and select Both radios.	Cancel
Hardware Files Function Keys Digital Modes Winkey Mode Control Antennas Audio	13. Configure WinKey using the WinKey tab.
Iambic B 🗾 Keying Mode 🦵 Autospace	14. Pin 5 Function should be PTT.
Pot is wired with two leads Winkey None Pin 5 Function 469 Sidetone Frequency Reverse Paddles Ignore Winkey Speed Pot 1 Lead Time (0-250) x 10 msec 20 Tail Time (0-250) x 10 msec 0 First Character Extension (0-250) in msec 0 Keying Compensation (0-250) in msec 1.00 Hang Time	Note: Timing parameters are set on the CW/WinKey tab in Router. Router will override any settings made in N1MM Logger.
OK Cancel	

Hardware	Files	Function Keys	Digital Modes	Other
winkey	Mode Control	Antennas		
Inly use Radio 1 Outp	out Device; Output on both	channels	_	
x sound card and Us	NO Recording Setup			
elect Radio I Uutput	Device Headset Earphor	ne (micro 💌 Select Radio ,	2 Output Device Default	<u> </u>
ladio 1 Output Device	e is an Internal Radio Codeo	e 🥅 🗖 Radio 2 Outp	ut Device is an Internal Radio (Codec 🗖
Select Port to Mute	Headset Microphone	Select Port	t to Mute	
elect Message Recor	ding Device Upadaet Fa	rohone (mioro 💌		
Select Message Re	cording Port Landsot Mi			
elect QSO Recordina	Device Usedeat Faceh			
Select QSO Record	ling Port			
ecording Channels	2 June 2 J Recordi	ing Sample Rate 1103)5 -	
ecording Bits	A I Max Be	cordina Lenath (secs)		
1		100	-1	
Sound Card Setup (u	sed for \$02R Headphone !	Switching)	2002	
Device	Default	S02R. With almost	are required for all cards, you will	
Left Hadio Input Port		 have to use one of the like 'CD' or 'Aux'. You 	ne internal inputs u will need to	
ight Radio Input Port		make a custom stere	o cable.	
	04	Canaal	Hala	
	UN	Cancel	Telb	

- 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 "Heasdet 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.

Hardware		Antennas	Audio				
	Files	Function Keys	Digital Modes	Other			
igital Interface 1 - TU Type Soundcard ▼	Digital Interface 2 TU Type Soundcard	DI-1 MMTTY Se MMTTY Mode:	tup (If used) ← AFSK ● FSK	ŝ			
Speed	Speed	D:\Ham Programs\MMTTY\mmtty.exe Select					
Parity	Parity	DI-2 MMTTY Se MMTTY Mode: MMTTY Path:	tup (If used)				
		D:\Ham Progra	ns\MMTTY2\mmtty.exe	Select			
Stop Bits	Stop Bits	DI-1 Fldigi Setup (If used) Fldigi Path: Not Set Select					
Flow Control	Flow Control						
Ŧ	· · ·	DI2 Fldigi Setup Fldigi Path:	(If used)				
te: Any Change	es	Not Set		Select			
I require the di ndow's to be cl d re-opened be anges take effo	osed - DI-1 MMVAF fore MMVARI BT ect. C AFSK •	II Setup TY Mode: FSKPor FSK FSK825(-	DI-2 MMVARI Set MMVARI BTTY M C AFSK © FSK	up ode: FSKPort FSK825(🗸			

- 6. Open the **Mode Control** tab
- 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.

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

Winkey Mode Control Antennas Audio ode recorded in log Mode sent to radio Use radio mode (default) Mode sent to radio Follow band plan Mode sent to RTTY Use contest mode or bandplan BTTY Use contest or radio mode RTTY Always: RTTY	Hardware	Files	Function Keys	Digital M	lodes	Other
ode recorded in log Mode sent to radio Use radio mode (default) Mode sent to radio Follow band plan Mode sent to radio Use contest mode or bandplan RTTY to RTTY IN RTTY Use contest or radio mode Always: RTTY IN	Winkey	Mode Control	Antennas 🍸	Audio	<u> </u>	
	Iode recorded C Use radio C Follow ba C Use conto C Use conto C Always:	d in log mode (default) ind plan est mode or bandplan est or radio mode RTTY	Mode sent to rac Mode Rac RTTY to RT PSK to PS	dio dio 1 / VFOA TY <u>·</u> K ·	Radio 2 / RTTY USB	VFOB

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.

- 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.



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.



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.

Winkey	Mode Control	Antennas Audio	
Hardware)	Files	Function Keys Digital Modes	Other
Digital Interface 1 TU Type Soundcard 💌 Speed	Digital Interface 2 TU Type Soundcard 💌 Speed	DI-1 MMTTY Setup (If used) MMTTY Mode: • AFSK · FSK MMTTY Path: D/Mar Brogram MMTTY methy out	Select
Parity	Parity	DI-2 MMTTY Setup (If used) MMTTY Mode: C AFSK C FSK MMTTY Path:	
Data Bits Stop Bits	Data Bits	D:\Ham Programs\MMTTY2\mmtty.exe	Select
Flow Control	Flow Control	Fldigi Path:	
*	Ţ.	DI2 Fldigi Setup (If used) Fldigi Path:	
ate: Any Chang ade in this sect Il require the d ndow's to be c id re-opened b anges take eff	ion igital losed efore ect. • AFSK C	Not Set Il Setup TY Mode: FSKPort FSK FSK825(→) FSK C FSK F	Select FSKPort

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.

Setup MMTTY Ver1.66F	
Demodulator AFC/ATC/PLL Decode TX	Font/Window Misc SoundCard
Reception SB Audigy 2 ZS Audio [EC00] microHAM CODEC C	Transmission ⊂ SB Audigy 2 ZS Audio [EC00] ☞ microHAM CODEC ⊂ ⊂

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

Configurer X Hardware Files Function Keys Digital Modes Other Winkey Antennas Audio Mode Control Mode recorded in log Mode sent to radio Mode Radio 1 / VFOA Radio 2 / VFOB C Use radio mode (default) RTTY to AFSK USB * * C Follow band plan C Use contest mode or bandplan PSK to PSK USB * * Use contest or radio mode C Always: BITY -

1. Install MMTTY.

Note: If your radio supports dual receiver (SO2V) operation, you may want to install MMTTY to two <u>different</u> 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

- 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

		Mico Coundored
Demodulator	Jecode IX Font/	window wise [SoundCard]
Sound Card		
FIFO		
RX 12 • TX 4 •		
Priority	Sound loopback	Tx Port
C Normal C Highest	COFF	Sound
• Higher • Critical		C Sound + COM-TxD (FSK)
Device Identifiers	C Ext.(SAT)	C COM-TXD(FSK)
RX 2 •		
TY 2		
Source		
C Mono C Right		
Fair		
Clock		
11025 - Hz Adj		
A CONTRACTOR OF A CONTRACTOR O		
0.00 Hz		

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.

Setup MMTTY Ver1.66F	
Demodulator AFC/ATC/PLL Decode TX	Font/Window Misc SoundCard
Reception C SB Audigy 2 ZS Audio [EC00] microHAM CODEC C	Transmission SB Audigy 2 ZS Audio [EC00] microHAM CODEC C

- 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
- 3. select FSK as the MMVARI RTTY mode for both DI-1
- 4. Set the FSK Port to FSK8250 for both DI-1
- Open the Mode Control

- 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.

łardware	Function Ke	eys 🍸 Digital M	odes 🎽	Other
inkey Mode Conti	ol Antennas	Audio	Y	
de recorded in log Use radio mode (default) Follow band plan Use contest mode or band Use contest or radio mode Always: RTTY	Mode sent I Mode RTTY to plan PSK to	Radio 1 / VFDA RTTY + PSK +	Radio 2 / RTTY USB	VFOB

- 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.



- 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.

MMVARIFSK1 1.04	
Port COM6	✓ Status:OK
PTT output ∩ RTS ∩ DTR	Stop bit C 1 C 1.5 C 2
Inv. PTT Resend on Inv. PTT Inv. PTT Inv. PTT Inv. PTT Inv. PTT Inv. PTT	45 baud TX error eed
PTT OFF	

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

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.
- Set DI1 MMVARI Sound Card Output Soundcard # to "Headset Earphone (microHAM CODEC)"
- 17. Save the configuration.

- 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 2nd FSK in Router.
- 29. Set PTT output to RTS
- 30. Check Limiting Speed
- 31. Return the MMVARIFSK2 window to the Task Bar.

Stop bit C 1 • 1.5 C 2
45 baud X error ed

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.

Hardware Files Function Keys Digital Modes Other Digital Interface 1 Digital Interface 2 Di-1 MMTTY Setup [If used] Other Configurer. 1U Type Soundcard Soundcard MMTTY Mode: • AFSK C FSK Select Speed D:2 MMTTY Setup [If used] D:2 MMTTY Setup [If used] 3. select AFSK as the MMVA RTTY mode for both DI-1 and DI-2. Parity Parity Parity Di-2 MMTTY Setup [If used] 3. select AFSK as the MMVA RTTY mode for both DI-1 and DI-2. Data Bits Data Bits Di-1 Fldigi Setup (If used] Fldigi Path: Not Set Flow Control Flow Control Di-2 Fldigi Setup (If used] Fldigi Path: Not Set Indow's to be closed in this section Di-1 MMVARI Setup Di-2 MMVARI Setup MMVARI BTTY Mode: FSKPort MMYARI RTTY Mode: FSK C FSK FSK825C + MMVARI RTY Mode: FSKPort AFSK C FSK FSK825C +	Winkey	Mode Control	Antennas	Audio		1.	tab in the N1MM Logger
Digital Interface 1 Digital Interface 2 Di-1 MMTTY Setup (If used) TU Type Soundcard I Soundcard I Speed Image: Speed Speed Parity Di-2 MMTTY Setup (If used) MMTTY mode: Image: Select Parity Di-2 MMTTY Setup (If used) MMTTY mode: Image: Select Di-2 MMTTY Setup (If used) MMTTY mode: Image: Select Select Di-2 MMTTY Path: Di-2 MMTTY Setup (If used) RTTY mode for both DI-2 and DI-2. Stop Bits Di-1 Fldigi Setup (If used) Fldigi Path: Flow Control Flow Control DI-2 Fldigi Setup (If used) Fldigi Path: Not Set Select Flow Control DI-1 MMVARI Setup DI-2 MMVARI Setup MMVARI RTTY Mode: FSKPort Or-2 MMVARI Setup MMVARI RTTY Mode: FSKPort AFSK C FSK	Hardware	Files	Function Keys	Digital Modes	Other		Configurer.
 Speed Speed D:\Ham Programs\MMTTY\mmtty.exe Select Di-2 MMTTY Setup (If used) MMTTY Mode: • AFSK • FSK AMTTY Path: Data Bits Dt-1 Fldigi Setup (If used) Fldigi Path: Not Set Select Di-2 Fldigi Setup (If used) Fldigi Path: Not Set Select Di-2 Fldigi Setup (If used) Fldigi Path: Not Set Select Di-1 MMVARI Setup MMVARI RTTY Mode: FSKPort MVARI RTTY Mode: FSKPort AFSK • FSK FSK FSK FSK FSK FSK FSK FSK FSK FSK	Digital Interface 1 TU Type Soundcard 💌	Digital Interface 2 TU Type Soundcard 💌	DI-1 MMTTY Se MMTTY Mode: MMTTY Path:	tup (If used) ・ AFSK C FSK		2.	Set the TU Type to Soundcard
Parity Parity Parity MMTTY Mode: AFSK FSK MMTTY Path: Data Bits Stop Bits Flow Control Flow Control DI-1 Fldigi Setup (If used) Fldigi Path: Not Set DI-2 Fldigi Setup (If used) Fldigi Path: Not Set DI-2 Fldigi Setup (If used) Fldigi Path: Not Set DI-2 MMVARI Setup MMVARI RTTY Mode: FSKPort MMVARI RTTY Mode: FSKPort AFSK FSK FSK FSK FSK825C	Speed	Speed	D:\Ham Program	ns\MMTTY\mmtty.exe tup (If used)	Select	3.	select AFSK as the MMVARI
Data Bits D:\Ham Programs\MMTTY2\mmty.exe Select Stop Bits D:\Ham Programs\MMTTY2\mmty.exe Select Stop Bits D:\Ham Programs\MMTTY2\mmty.exe Select Flow Control Flow Control Flow Control Flow Control Flow Control Flow Control Flow Control Flow Control Flog Setup (If used) Flog Path: Not Set Select Not Set Select Flog Path: Not Set Select MVARI Setup MVARI STY Mode: FSKPort MVARI RTY Mode: MVARI RTY Mode: FSKPort MVARI RTY Mode: * AFSK C FSK FSK825C * *	Parity	Parity	MMTTY Mode: MMTTY Path:	● AFSK C FSK		5.	RTTY mode for both DI-1 and DI-2.
Stop Bits Stop Bits DI-1 Fldigi Setup (If used) 4. Open the Mode Control tab Flow Control Fldigi Path: Not Set Select 1 Image: Any Changes nade in this section will require the digital indow's to be closed in the section tab fore the repended before thanges take effect. DI-1 MMVARI Setup DI-2 MMVARI Setup DI-2 MMVARI Setup Image: take effect. AFSK C FSK FSK825C + Image: F			D:\Ham Program	ns\MMTTY2\mmtty.exe	Select		On an the Made Control
Flow Control Flow Control Not Set Select Image: Display and the section will require the digital indiversity to be closed and re-opened before thanges take effect. Di-1 MMVARI Setup Di-2 MMVARI Setup Image: Display and the section will require the digital indiversity to be closed and re-opened before thanges take effect. Di-1 MMVARI Setup Di-2 MMVARI Setup	Stop Bits	Stop Bits	– DI-1 Fldigi Setup Fldigi Path:	(If used)		4.	tab
Image: Index in this section will require the digital window's to be closed and re-opened before thanges take effect. DI-1 MMVARI Setup Image: Index in this section will require the digital window's to be closed and re-opened before thanges take effect. DI-1 MMVARI Setup	Flow Control	Flow Control	Not Set		Select		
Not Set Select made in this section DI-1 MMVARI Setup will require the digital DI-1 MMVARI Setup window's to be closed MMVARI Setup made re-opened before MMVARI RTTY Mode: FSKPort changes take effect.	×		D12 Fldigi Setup Fldigi Path:	(If used)			
will require the digital will require the digital window's to be closed and re-opened before changes take effect. AFSK C FSK FSK825C - DI-2 MMVARI Setup MMVARI SETU	ote: Any Change	\$	Not Set		Select		
	ill require the dig indow's to be clo nd re-opened be hanges take effe	ital bsed fore ct. Image: DI-1 MMVAF MMVARI RT MMVARI RT	RI Setup TY Mode: FSKPort FSK FSK825(DI-2 MMVARI Sett MMVARI RTTY M	p ode: FSKPort FSK8250		

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.

Hardware	Files	Function Ke	ys 🕺 Digital M	lodes	Other
Winkey M	ode Control	Antennas	Audio	7	
ode recorded in log	9	⊢ Mode sent to	o radio		
🗇 Use radio mode	e (default)	Mode	Radio 1 / VFOA	Radio 27	/ VFOB
Follow band pla	m	RTTY to	AFSK 🛃	USB	-
Use contest mo	de or bandplan	PSK to	PSK 🚽	USB	*
 Use contest or Always 	radio modej			(1	

- 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.