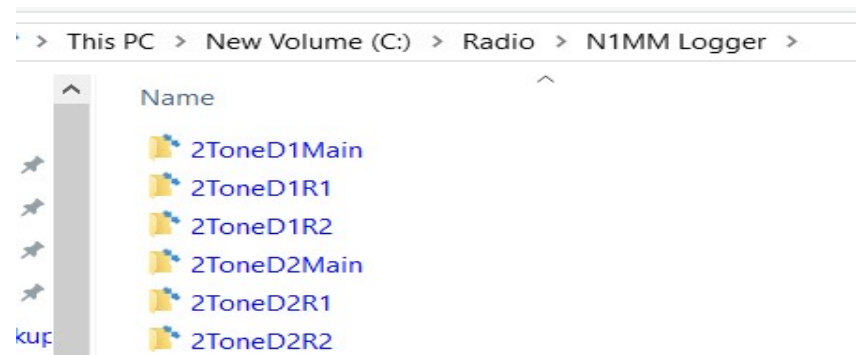
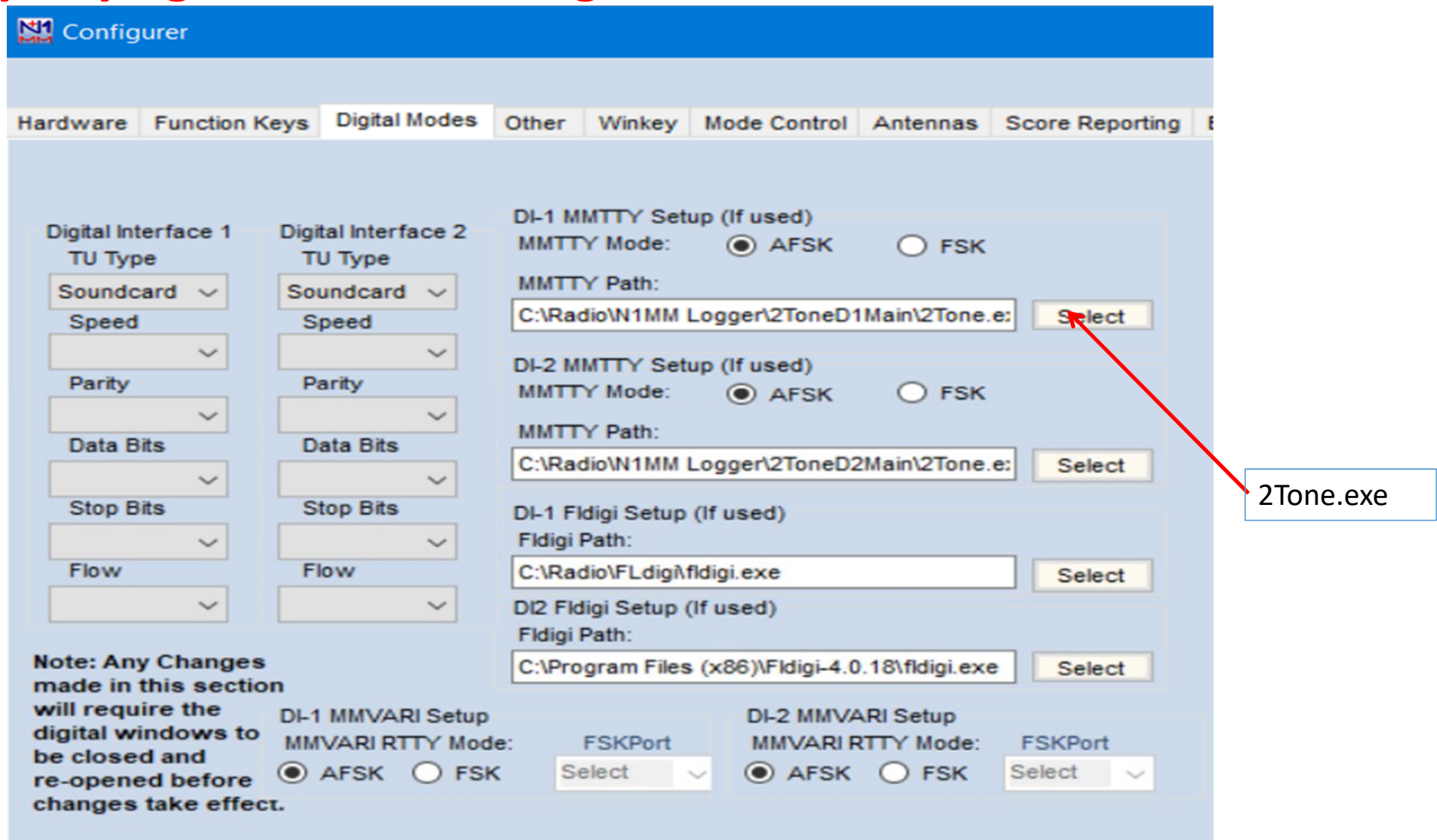


# Demystifying N1MM+ : RTTY

- Simplest RTTY Decoder to set up is 2Tone. It out performs MMTTY.
- Get it either from N1MM Groups files section or
- <https://www.rttycontesting.com/downloads/2tone/>
- Or if holder of UK call: email [g3yyd@btinternet.com](mailto:g3yyd@btinternet.com) for the latest version.
- Make a number of folders **not** in any of the Program Files folders. I suggest at least 4 folders, e.g.
- Copy files in Zip to each folder
- Start N1MM!



# Demystifying N1MM+ : Configure N1MM



**N1MM+ Configurer**

Hardware | Function Keys | **Digital Modes** | Other | Winkey | Mode Control | Antennas | Score Reporting

**Digital Interface 1**

TU Type: Soundcard  
Speed:   
Parity:   
Data Bits:   
Stop Bits:   
Flow:

**Digital Interface 2**

TU Type: Soundcard  
Speed:   
Parity:   
Data Bits:   
Stop Bits:   
Flow:

**DI-1 MMTTY Setup (If used)**

MMTTY Mode: ☒ AFSK ☐ FSK

MMTTY Path: C:\Radio\N1MM Logger\2ToneD1Main\2Tone.e: **Select**

**DI-2 MMTTY Setup (If used)**

MMTTY Mode: ☒ AFSK ☐ FSK

MMTTY Path: C:\Radio\N1MM Logger\2ToneD2Main\2Tone.e: **Select**

**DI-1 Fldigi Setup (If used)**

Fldigi Path: C:\Radio\Fldigi\Fldigi.exe **Select**

**DI2 Fldigi Setup (If used)**

Fldigi Path: C:\Program Files (x86)\Fldigi-4.0.18\Fldigi.exe **Select**

**Note: Any Changes made in this section will require the digital windows to be closed and re-opened before changes take effect.**

**DI-1 MMVARI Setup**

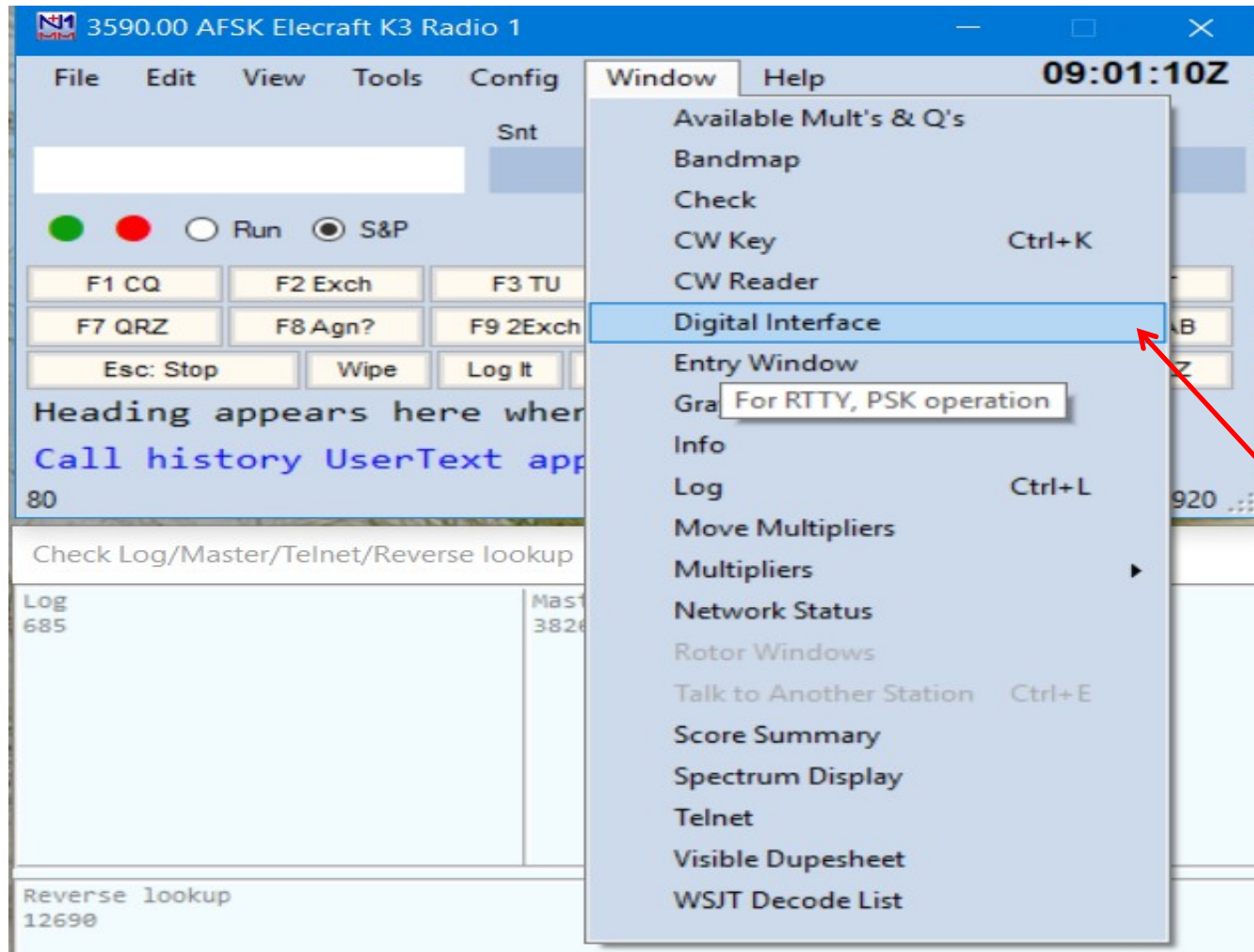
MMVARI RTTY Mode: ☒ AFSK ☐ FSK FSKPort: Select

**DI-2 MMVARI Setup**

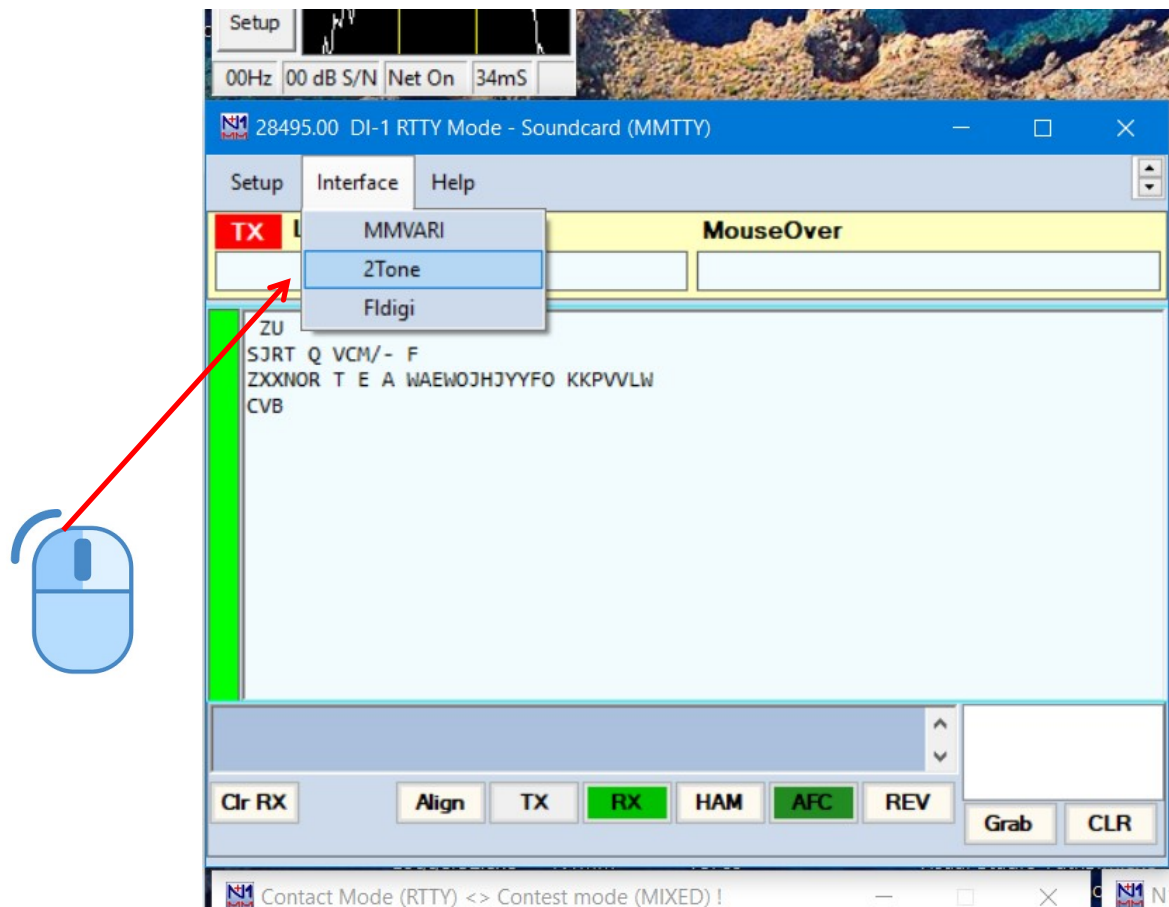
MMVARI RTTY Mode: ☒ AFSK ☐ FSK FSKPort: Select

2Tone.exe

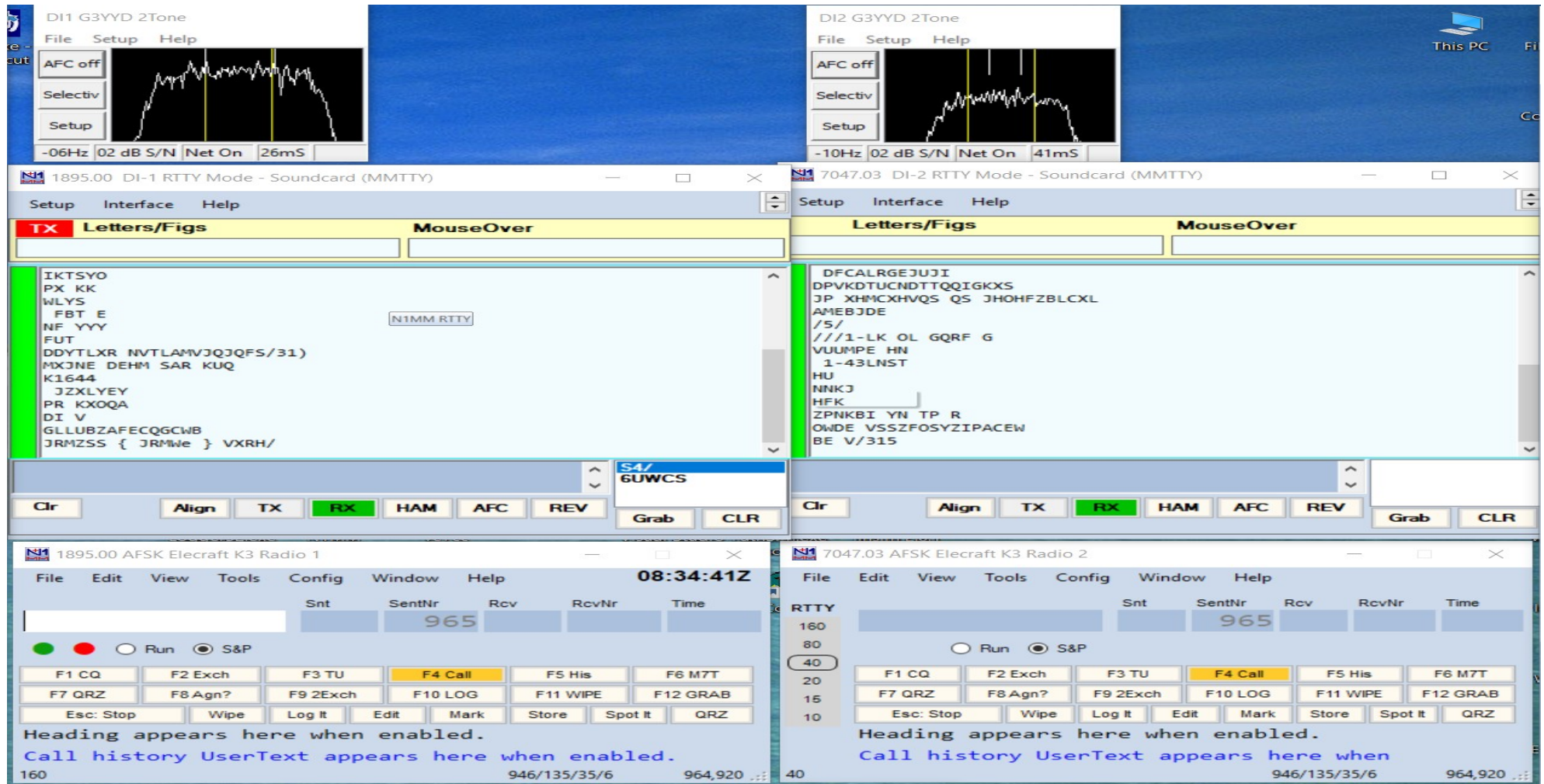
# Demystifying N1MM+ : Open Di (Digital Interface) Window



# Demystifying N1MM+ : Ensure 2Tone is Opened by Di

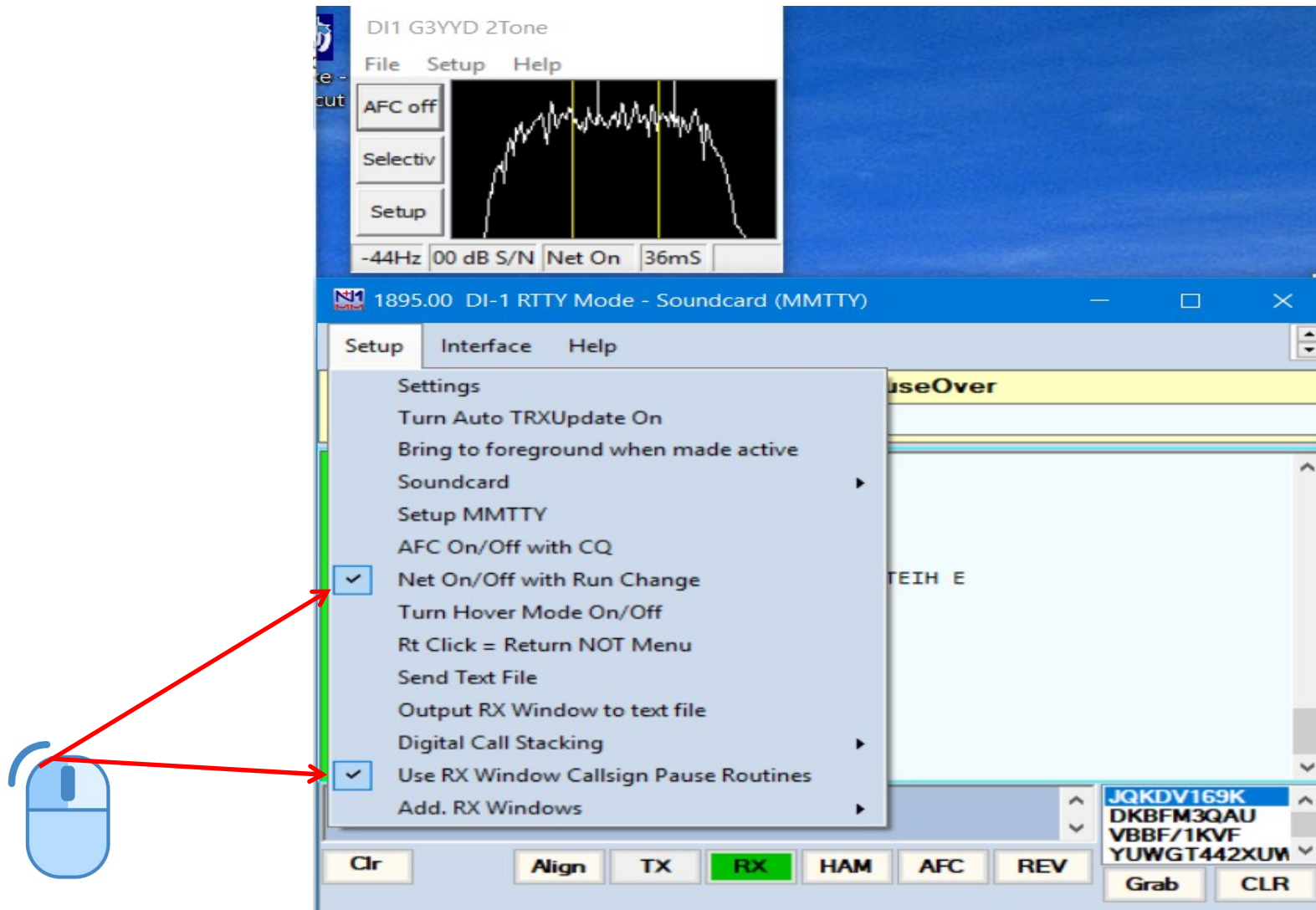


# Demystifying N1MM+ : Di1 and Di2 open





# Demystifying N1MM+ : Di Setup Menu



# Demystifying N1MM+ : Di Setup Window

DigitalSetupWindow

General / MMTTY SetupMMVARI SetupMessage Setup

**General Settings**

- ☒ RX Windows add to Grab window
- ☒ Display Radio Freq and not Exact Freq in DI Caption
- ☒ Add Callsign to Bandmap on Alt-G
- ☐ Send Space on Callsign Mouse Click
- ☐ (MMTTY)Send HamDefault on Run to S&P Change
- ☒ (MMTTY - MMVARI)Turn AFC On/Off on Run Change
- ☒ Do Not add Dups to Grab Window
- ☐ Send Space on Using Grab
- ☐ If QSY Wipes call is checked Clear Grab Window and RX window on QSY
- ☐ QSY will clear Grab Window and Main RX window always.
- ☒ Clear Grab Window On CQ
- ☐ Only Grab Master.scp Calls and Prev. Worked Calls in Current Contest
- ☒ When using Deuling CQ's (Ctrl-B) in Digital ESC turns off Dueling CQ
- ☒ When using Digital Callstacking {STACKANOTHER} will pull top call from Grabwindow.

**On Top Settings**

- ☒ MMTTY Always on Top
- ☐ MMVARI Always on Top
- ☒ FLDIGI Always on Top

**Window Scroll**

Window ScrollScrolling

☐ Highlight insertion line in Light Gray

Note: When using multiple windows in the PSK Engine, Scrolling Text will be used.

**Shift Frequency Compensation**

	Enabled	Offset Frequency
DI1	<input type="checkbox"/>	0
DI2	<input type="checkbox"/>	0

**Callsign Validity and Highlight Routines**

- ☐ Use Generic Routines
- ☐ Use these resources:
  - ☒ Master.scp
  - ☒ Call History
  - ☒ Telnet Calls
  - ☒ Logged Calls
- ☒ Use Combination of both

Use Search Routine to find master.scp calls in Garbage Text

☒ Highlight Foreground Text☐ Highlight Background of Text

Using Combination Routines will highlight calls that are listed in the checked resources in the selected highlight method. Calls that are not in the checked resources will be highlighted Yellow in reverse highlight of what you are using.

**Alignment Frequency**

MMTTY		MMVARI		FLDIGI
1275	RTTY	1360	*	RTTY 1275
	Other	1360		Other 1360

MMTTY,FLDIGI = Mark Freq MMVARI = Center Freq

\* Add 85 to place Mark Freq on desired frequency. Ex. On 2000 enter 2085

**Default RTTY Interface**

MMTTY

**Default PSK Interface**

FLDIGI

**MMTTY Window Layout**

Normal

Save Settings

# Demystifying N1MM+ : 2Tone Setup

- Set the Receive Sound Card
  - Left is normally Main RX and Right 2<sup>nd</sup> RX
  - Mark and Space tones anything between 650 and 3000Hz. Default is 2125/2295Hz
  - Radio needs to be on LSB for correct shift
  - Display Width is the Spectrum display width
- 
- Select TX sound card, can be same for all apps.
  - Set DOOK TX for best performance, do not use radio FSK timing jitter and many radios FSK are very wide.
  - If not using VOX when prompted set PTT COM port. NB only one app at a time per COM port.
- 
- Speed: all contests are 45.45 baud apart from a few special ones at 75 baud.
- 
- RX only Windows, Set TX mode to DOOK.

The screenshot shows the '2Tone Settings' dialog box with two main sections: 'Receive Settings' and 'Transmit Setting'.

**Receive Settings:**

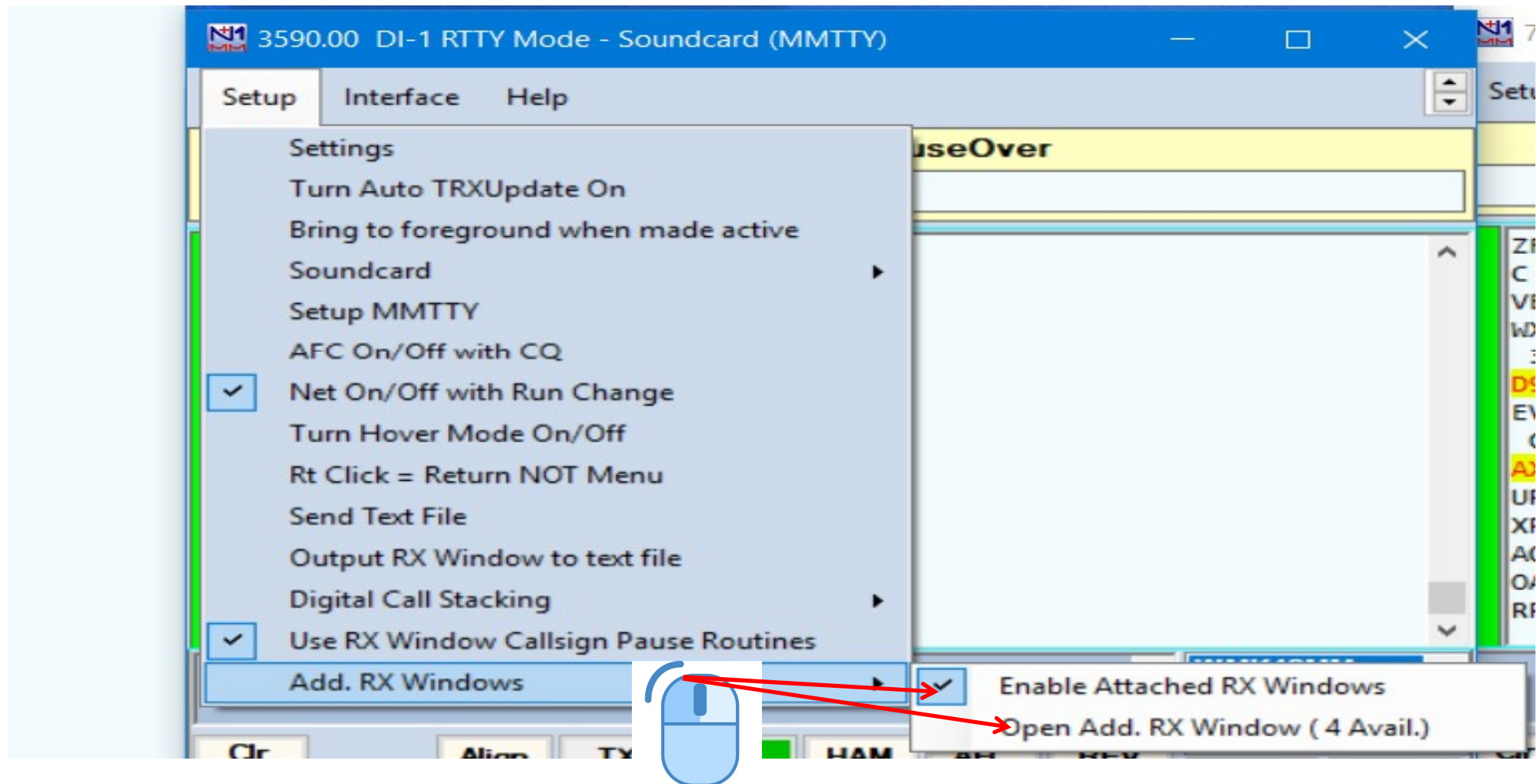
- A list of audio devices is shown, with 'Line In (ASUS Xonar DG Audio Device)' selected.
- Below the list are three radio buttons: 'RX Mono' (unselected), 'RX Left' (selected), and 'RX Right' (unselected).
- A section titled 'Set Mark and Space Tones' contains two input fields: 'Mark Frequency' with the value '1275' and 'Space Frequency' with the value '1445'. A '<Swap>' button is between them.
- Below this is a 'Display width in Hz' input field with the value '652'.

**Transmit Setting:**

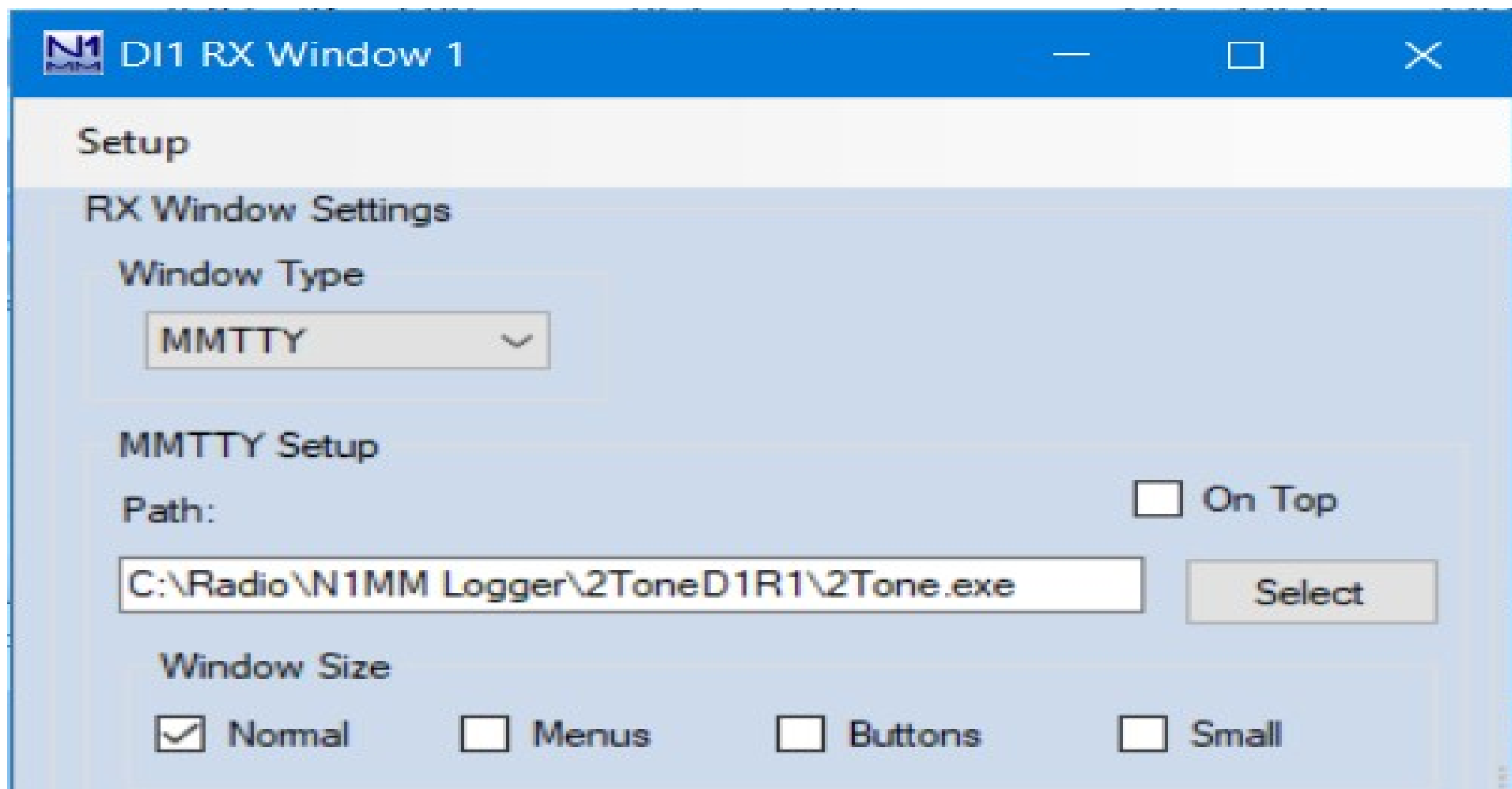
- A list of audio devices is shown, with 'Speakers (ASUS Xonar DG Audio Device)' selected.
- Below the list are three radio buttons: 'TX Mono' (selected), 'TX Left' (unselected), and 'TX Right' (unselected).
- A section titled 'TX Operating Mode' contains three radio buttons: 'AFSK TX' (unselected), 'DOOK TX' (selected), and 'Pseudo FSK TX' (unselected). To the right are two more radio buttons: 'TinyFSK TX' (unselected) and 'FSK TX' (unselected).
- Below this is a 'Speed' section with three radio buttons: '45.45 Baud' (selected), '50 Baud' (unselected), and '75 Baud' (unselected).
- At the bottom are 'OK' and 'Cancel' buttons.



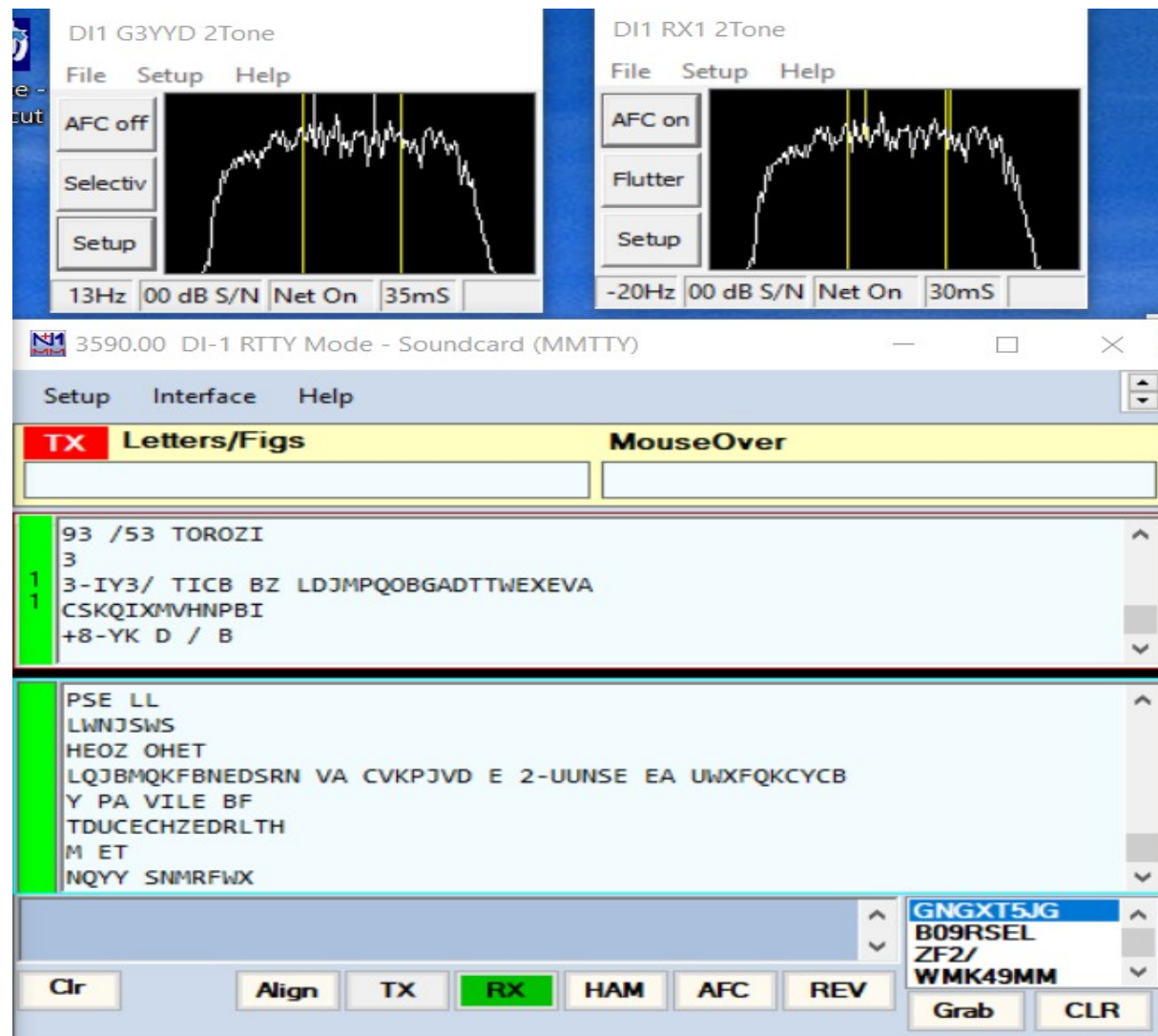
## Demystifying N1MM+ : Adding RX decoders



## Demystifying N1MM+ : RX Window Path



# Demystifying N1MM+ : Di with RX window



# Demystifying N1MM+ :F Key set up

- To edit F keys right click on a Entry Window F key
- Macros are for BARTG March Contest
- Other contests do not have {TIME2}
- {TX} and {RX} must match one less {RX} and TX stays on forever or you hit ESC key.
- DO NOT use “G3YYD de MM3ABC” when Calling just your own call twice/thrice.
- DO NOT use “PSE K” just {RX}
- DO NOT use questions marks, see F7, F8, it is obvious what is required.
- Run F6 is a SO2R thing
- Run F10 is for call stacking for the experienced tester.
- Note: F9 when asked for NR NR...
- N1MM Wiki is excellent, use it. Google for what is needed, e.g. N1MM Shortcuts or N1MM Macros

```
F1 CQ,{CLEARIT}{DELALL}{TX}{ENTER}CQ {MYCALL} {MYCALL} {MYCALL} CQ{RX}
F2 Exch,{TX} {EXCH} {EXCH} {TIME2} {TIME2} ! {RX}
F3 TU,{TX} ! tu {MYCALL} cq {RX}
F4 Mine,{TX} {MYCALL}{RX}
F5 His Call,{TX}{ENTER} ! {RX}
F6 QSY,{TX} PSE QSY to {OTHERFREQ}? {RX}
F7 QRZ,{TX} QRZ {MYCALL} {MYCALL} QRZ{RX}
F8 NR,{TX} nr nr nr {RX}
F9 2Exch,{TX}{ENTER} {EXCH} {EXCH} {TIME2} {TIME2} {EXCH} {EXCH} {TIME2} {TIME2} {RX}
F10 LOGPOP,{TX} TU{LOGTHENPOP} NOW{F5}{F2}{RX}
F11 WIPE,{WIPE}
F12 GRAB,{GRAB}
#S&P MESSAGES, Search and Pounce Messages begin here -----
F1 CQ,{TX}{CLEARIT}{DELALL}CQ {mycall} {mycall} CQ{RX}
F2 Exch,{TX} {EXCH} {EXCH} {TIME2} {TIME2} {MYCALL} {RX}
F3 TU,{TX}{ENTER} ! TU {MYCALL} {RX}
F4 Call,{TX} {MYCALL} {MYCALL} {MYCALL} {RX}
F5 His,{TX} ! {RX}
F6 {MYCALL},{TX} {MYCALL} {RX}
F7 QRZ,{TX} QRZ {RX}
F8 Agn?,{TX}{ENTER}agn agn {RX}
F9 2Exch,{TX}{ENTER} {EXCH} {EXCH} {TIME2} {TIME2} {EXCH} {EXCH} {TIME2} {TIME2} {RX}
F10 LOG,{FORCELOG}
F11 WIPE, {WIPE}
F12 GRAB, {GRAB}
```