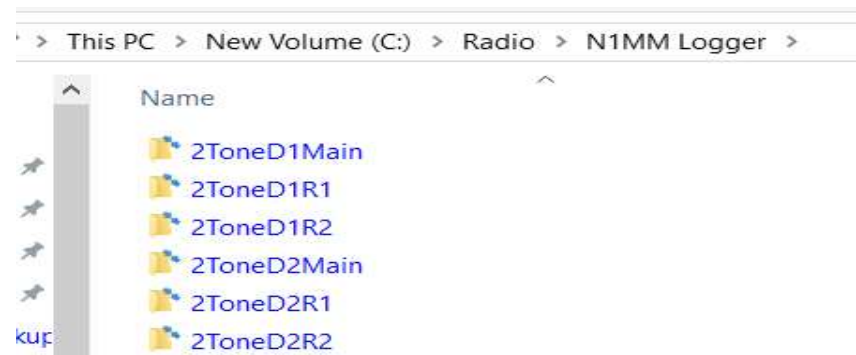


# Demystifying N1MM+ : RTTY

- Simplest RTTY Decoder to set up is 2Tone. It outperforms MMTTY.
- Make a number of folders **not** in any of the Program Files folders. I suggest at least 4 folders, e.g.
- Copy 2Tone.exe to each folder having read the .txt file in the zip file
- 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**

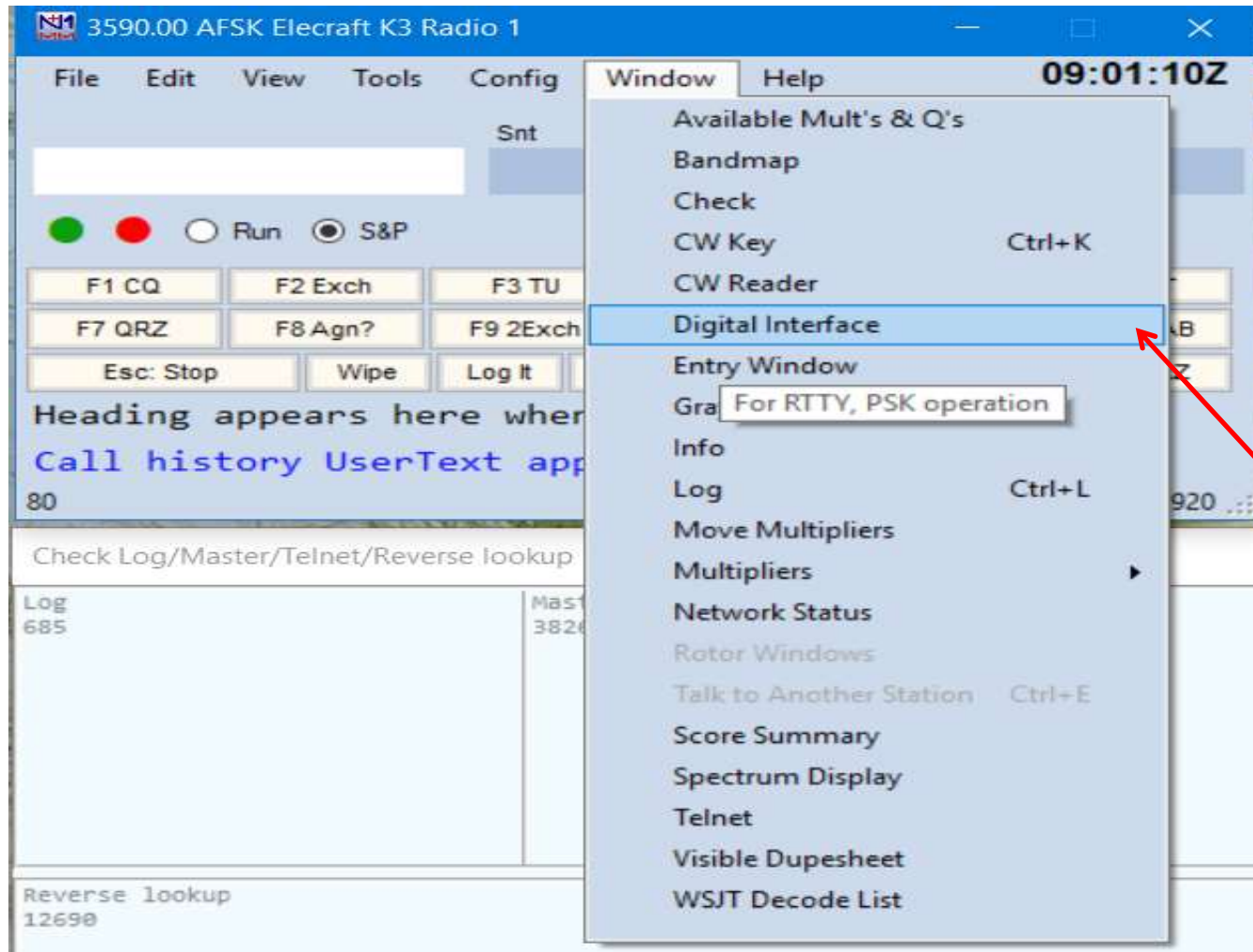
MMVARI RTTY Mode: ☒ AFSK ☐ FSK FSKPort: [Select] [ ]

**DI-2 MMVARI Setup**

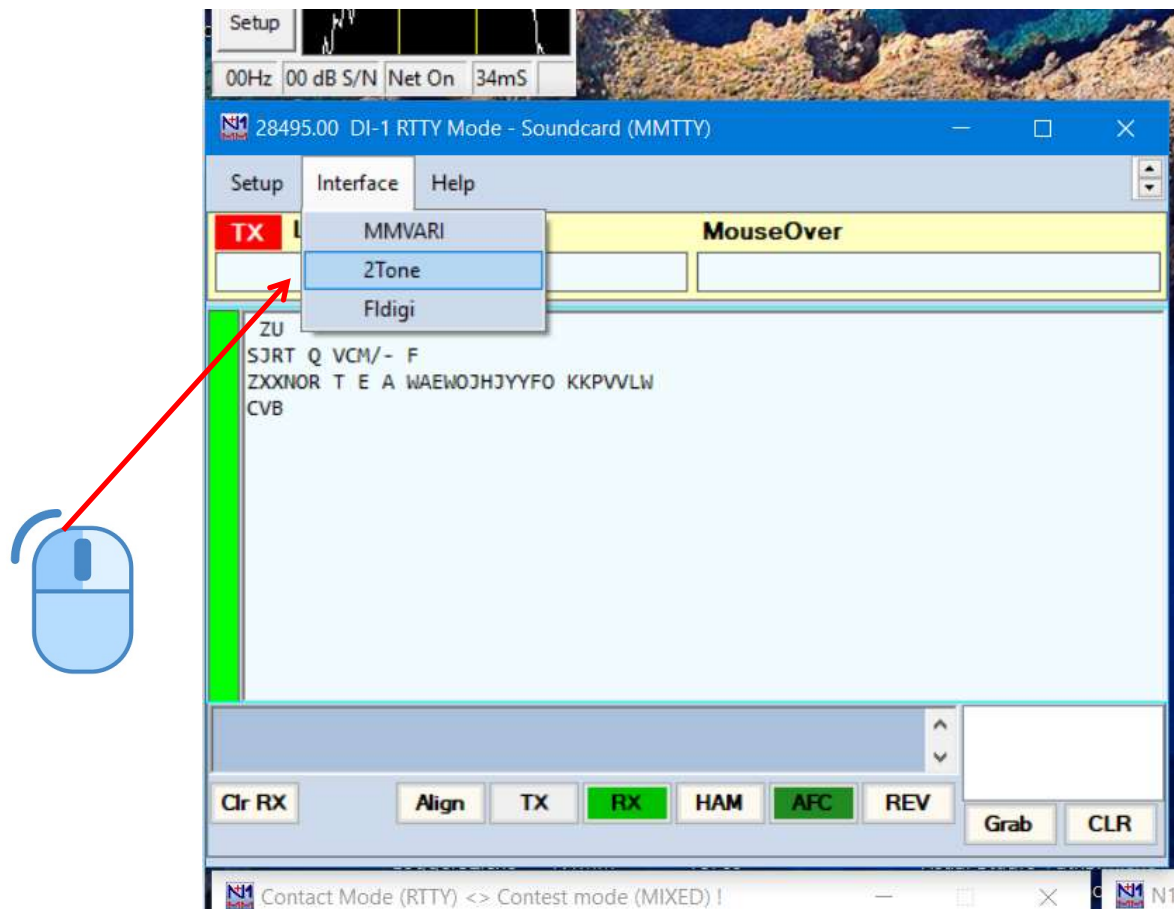
MMVARI RTTY Mode: ☒ AFSK ☐ FSK FSKPort: [Select] [ ]

2Tone.exe

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



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



# Demystifying N1MM+ : Di1 and Di2 open

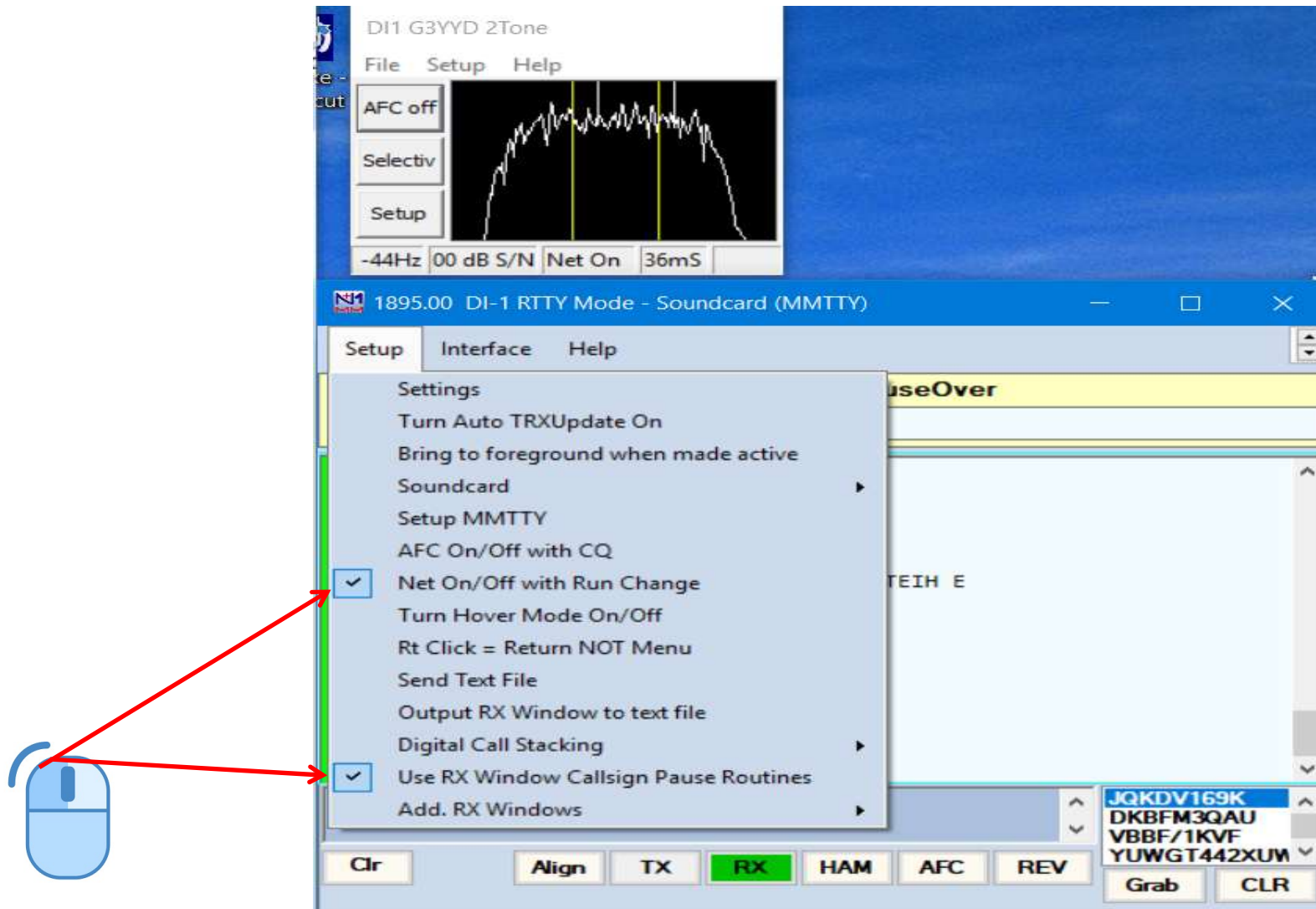
The screenshot displays two parallel instances of the N1MM+ software interface, labeled DI-1 and DI-2, both operating in RTTY Mode. The top section of each window shows a spectrum display with a signal trace. Below this, the main interface is divided into several sections:

- Call List:** A list of callsigns and messages on the left side of the main text area.
- Main Text Area:** A large area for displaying received messages and call history.
- Control Panel:** A bottom section with buttons for TX, RX, HAM, AFC, REV, and other functions. The RX button is highlighted in green.
- Status Bar:** A bottom-most section showing the time (08:34:41Z) and other status information.

The DI-1 window shows a call list with callsigns like IKTSYO, PX KK, WLYS, FBT E, NF YYY, FUT, DDTLXR, NVTLAMVJQJFS/31), MXJNE, DEHM, SAR, KUQ, K1644, JZXLVEY, PR KXQQA, DI V, GLLUBZAFECQGCWB, and JRMZSS { JRMWe } VXRH/. The DI-2 window shows a call list with callsigns like DFCALRGEJUJI, DPVKDTUCNDTTQIGKXS, JP XHMCXHVQS QS JHOHFZBLCXL, AMEBJDE, /5/, ///1-LK OL GQRF G, VUUMPE HN, 1-43LNST, HU, NNKJ, HFK, ZPNKBI YN TP R, OWDE VSSZFOSYZIPACEW, and BE V/315.



# Demystifying N1MM+ : Di Setup Menu



# Demystifying N1MM+ : Di Setup, Settings

DigitalSetupWindow

General / MMTTY Setup MMVARI Setup Message 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.scpx 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 Scroll Scrolling

- ☐ Highlight insertion line in Light Gray

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

### Callsign Validity and Highlight Routines

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

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.

- ☒ Use Search Routine to find master.scpx calls in Garbage Text
- ☒ Highlight Foreground Text ☐ Highlight Background of Text

### 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

### Shift Frequency Compensation

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

### Default RTTY Interface

MMTTY

### Default PSK Interface

FLDIGI

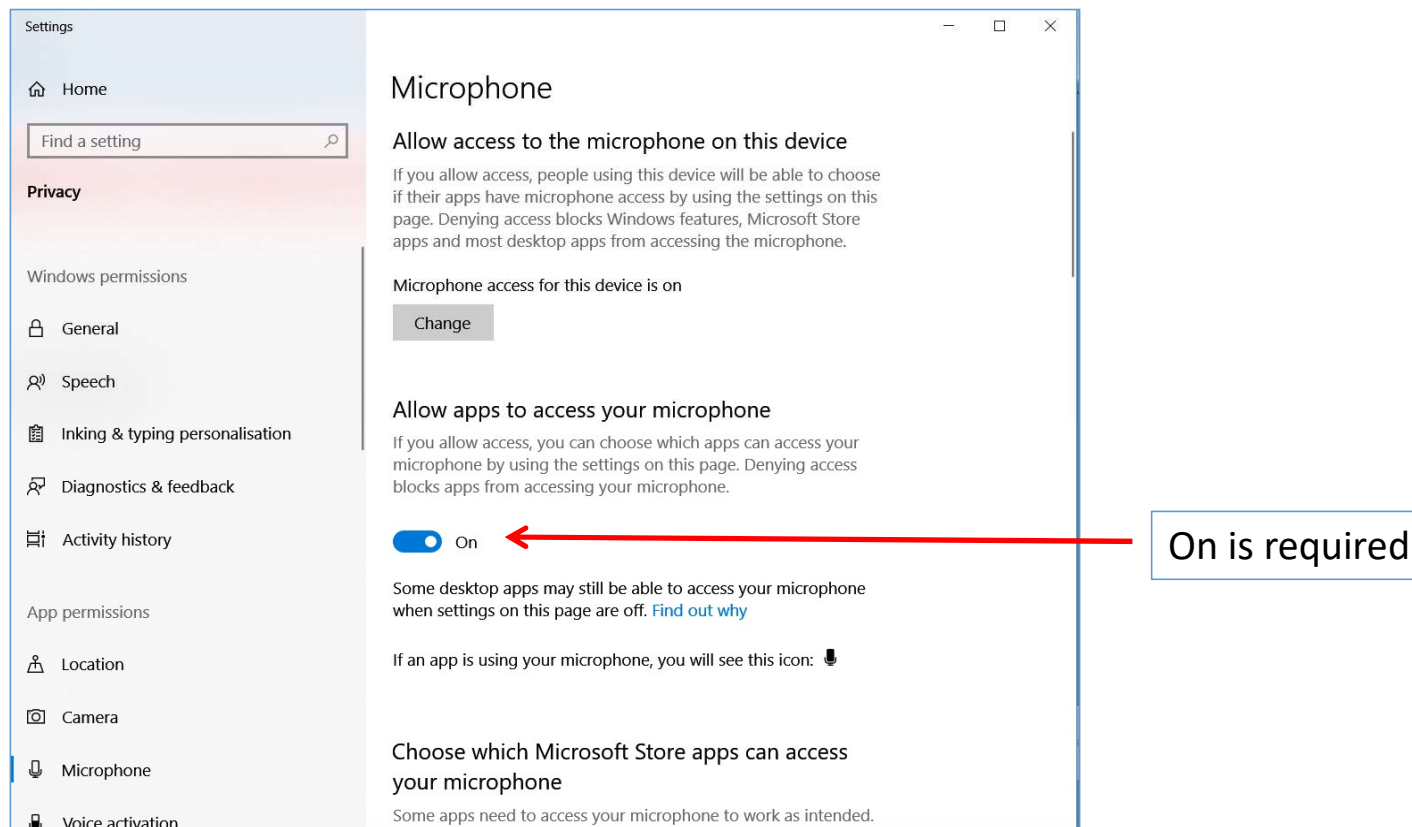
### MMTTY Window Layout

Normal

Save Settings

# Demystifying N1MM+ : Windows Microphone

- Windows updates can turn RX audio off,
- Windows key and type:
- “Microphone” and select “Microphone privacy 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, many radio's FSK is 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. It is divided into two main sections: 'Receive Settings' and 'Transmit Setting'.

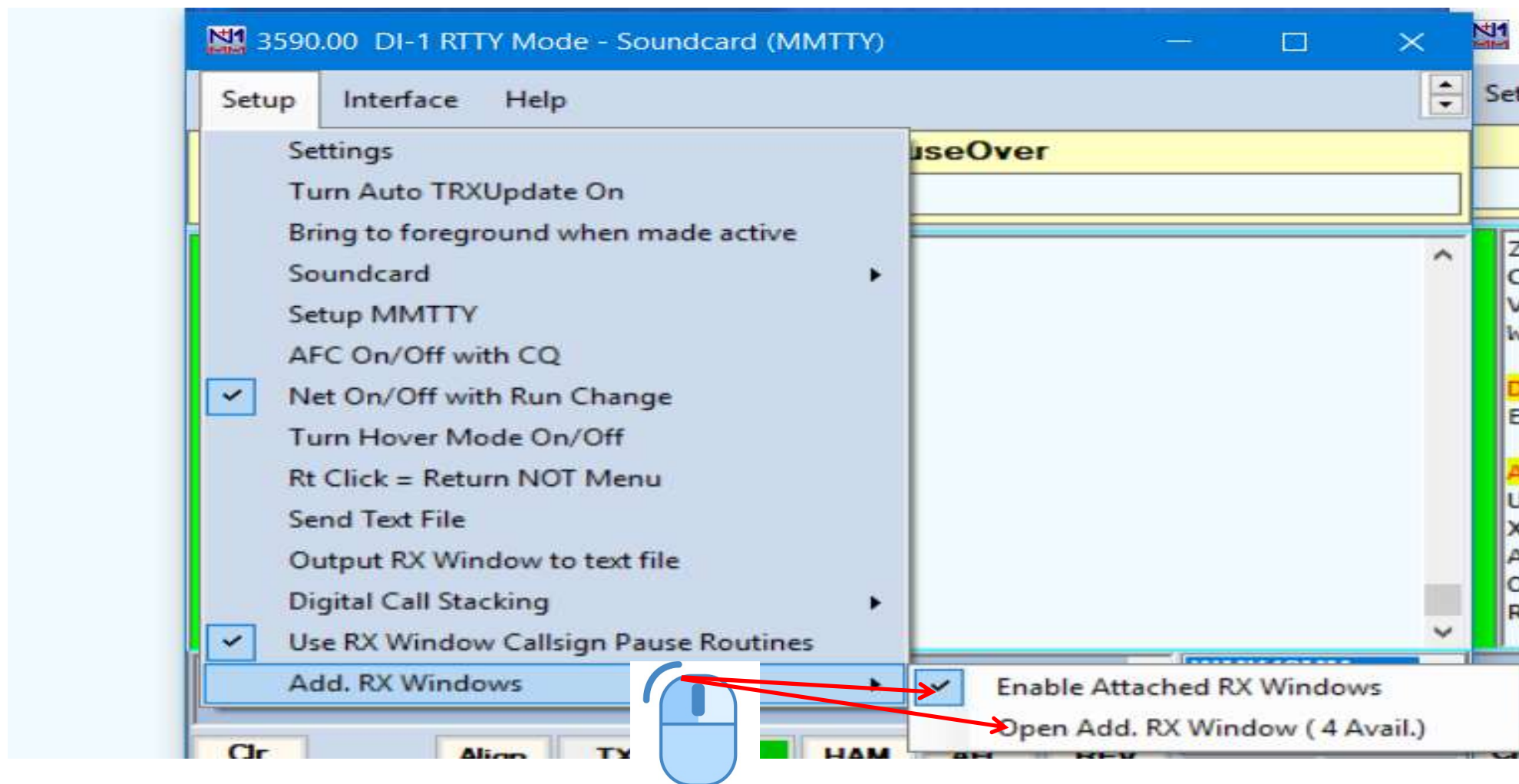
**Receive Settings:**

- A list of audio devices: Microphone (Sound Blaster Audigy Fx), Microphone (Sound Blaster Audigy Fx), Line In (Realtek(R) Audio), Line In (Sound Blaster Audigy Fx) (highlighted), and Microphone (Realtek(R) Audio).
- Radio buttons for RX Mono, RX Left (selected), and RX Right.
- A 'Set Mark and Space Tones' section with two columns: 'Mark Frequency' (1275) and 'Space Frequency' (1445). The 'Mark' is set to 'High' and there is a '<Swap>' button between them.
- A 'Display width in Hz' field set to 566.

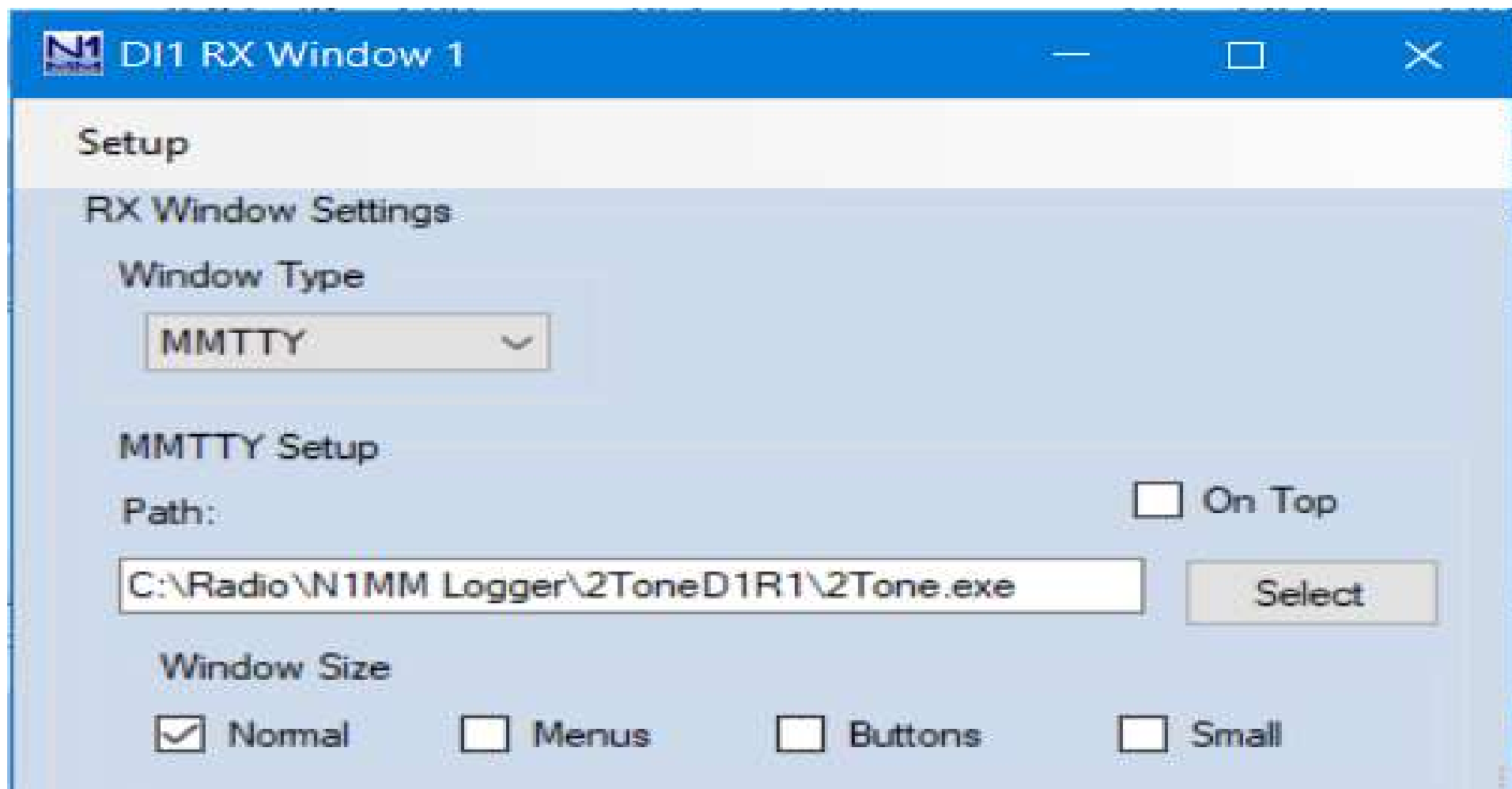
**Transmit Setting:**

- A list of audio devices: Speakers (Realtek(R) Audio) (highlighted), Digital Output (AMD High Definition Audio Device), LG FULL HD (NVIDIA High Definition Audio), Realtek Digital Output (Realtek(R) Audio), and Speakers (Sound Blaster Audigy Fx).
- Radio buttons for TX Mono (selected), TX Left, and TX Right.
- A 'TX Operating Mode' section with radio buttons for AFSK TX, TinyFSK TX, DOOK TX (selected), and FSK TX.
- A 'Speed' section with radio buttons for 45.45 Baud (selected), 50 Baud, and 75 Baud.
- 'OK' and 'Cancel' buttons at the bottom.

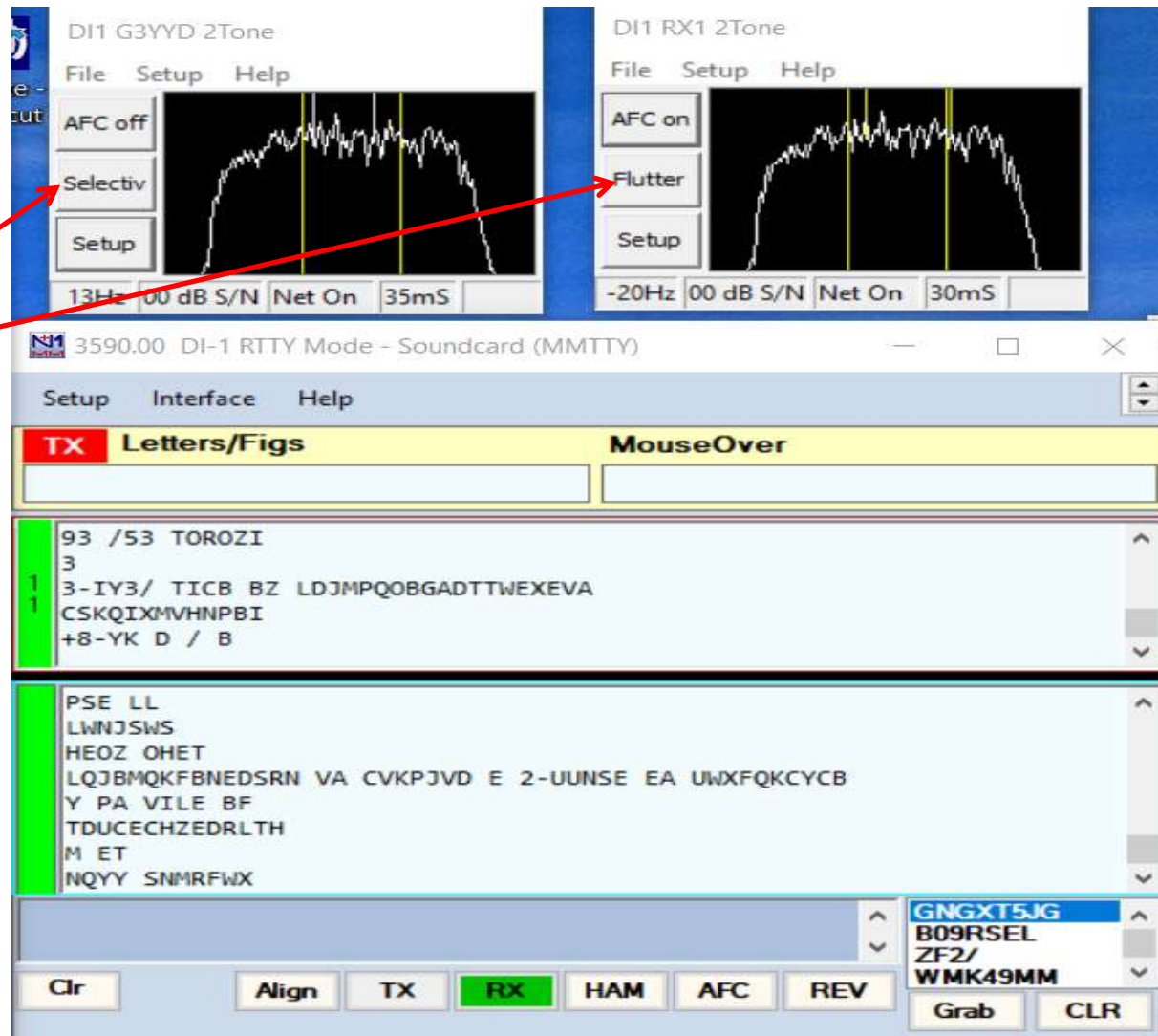
## Demystifying N1MM+ : Adding RX decoders



## Demystifying N1MM+ : RX Window Path



## Demystifying N1MM+ : Di with RX window



Note different  
2Tone decoders  
There are 3

# 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 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}
```