

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

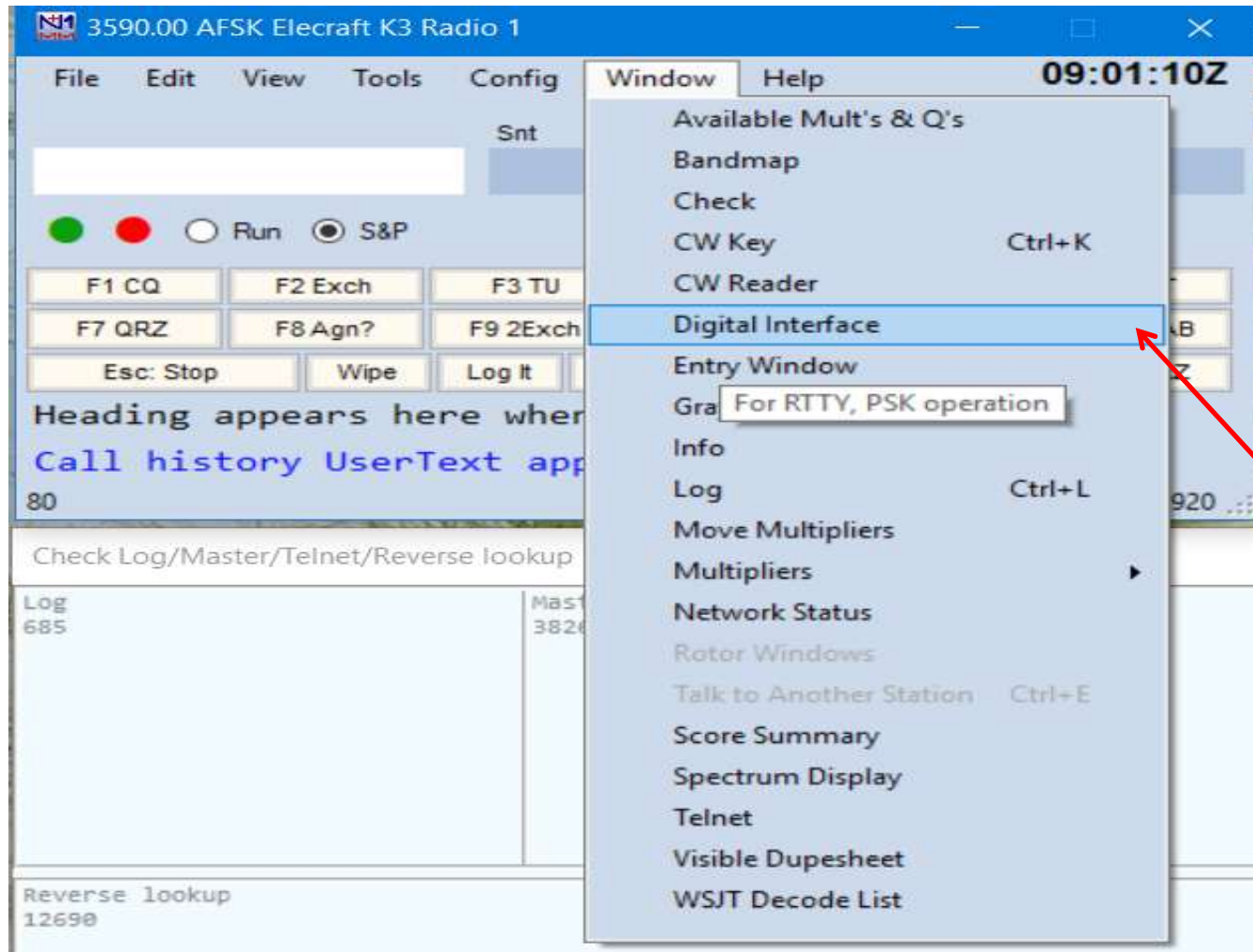
MMVARI RTTY Mode: ☒ AFSK ☐ FSK FSKPort: Select

DI-2 MMVARI Setup

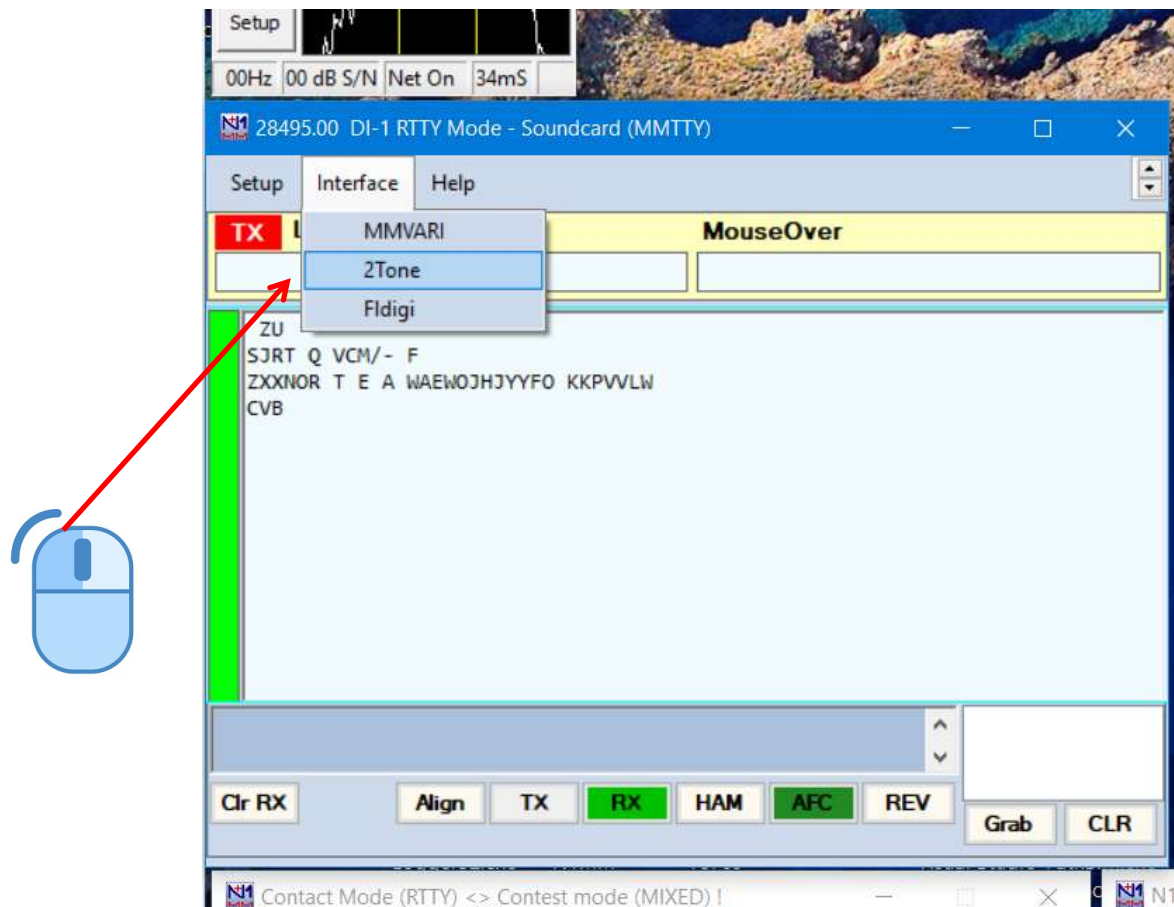
MMVARI RTTY Mode: ☒ AFSK ☐ FSK FSKPort: Select

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: a menu bar (File, Setup, Help), a status bar (AFC off, Selectiv, Setup), and a main text area for messages. The bottom section contains a control panel with buttons for TX, RX, HAM, AFC, REV, Grab, and CLR. The time displayed is 08:34:41Z.

DI-1 G3YYD 2Tone
File Setup Help
AFC off
Selectiv
Setup
-06Hz 02 dB S/N Net On 26mS

DI-2 G3YYD 2Tone
File Setup Help
AFC off
Selectiv
Setup
-10Hz 02 dB S/N Net On 41mS

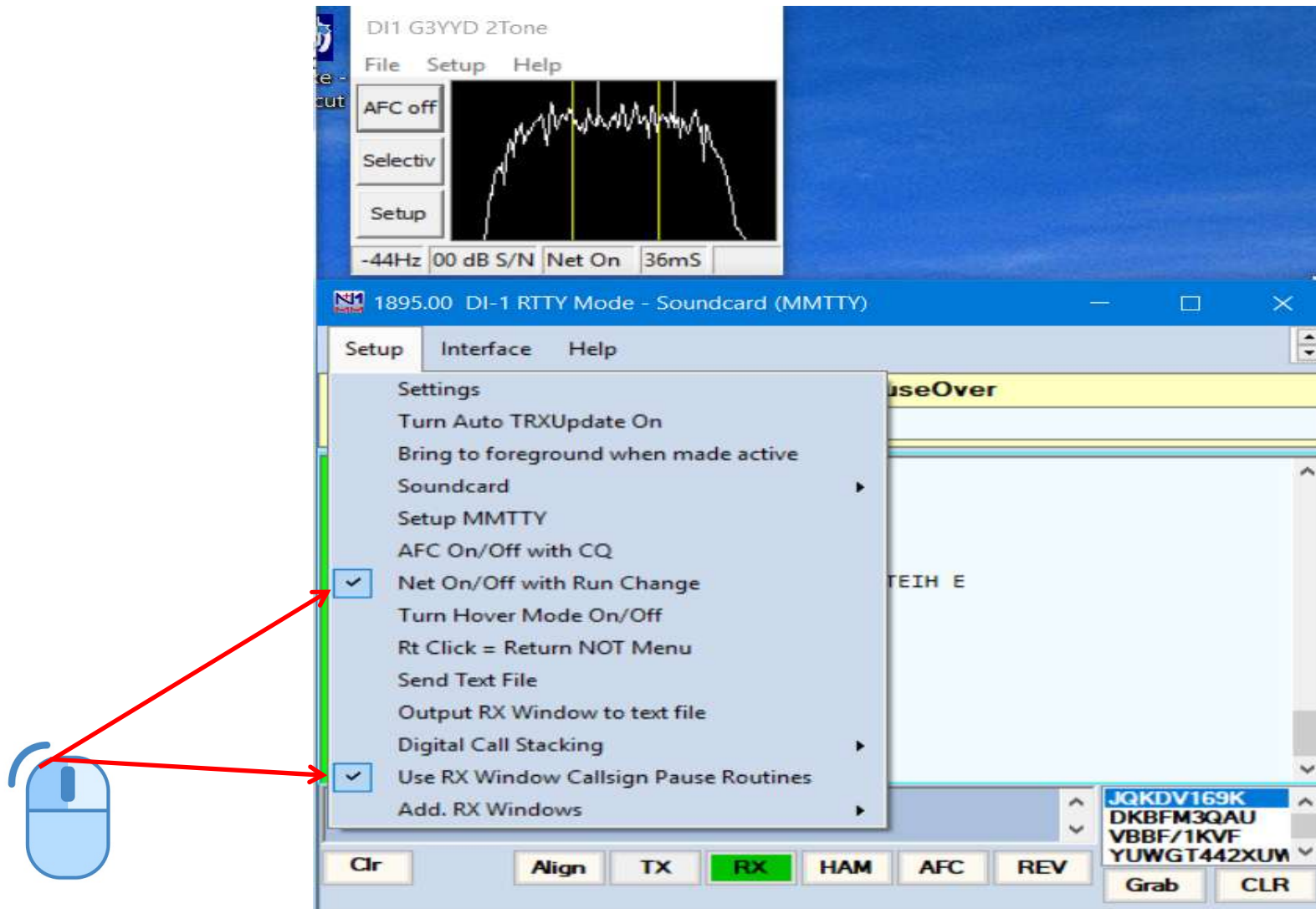
1895.00 DI-1 RTTY Mode - Soundcard (MMTTY)
Setup Interface Help
TX Letters/Figs MouseOver
IKTSYO
PX KK
WLYS
F8T E
NF YYY
FUT
DDYTLXR NVTLAMVJQJQFS/31)
MXJNE DEHM SAR KUQ
K1644
JZXLYEY
PR KXQQA
DI V
GLLUBZAFECQGCWB
JRMZSS { JRMWe } VXRH/

7047.03 DI-2 RTTY Mode - Soundcard (MMTTY)
Setup Interface Help
Letters/Figs MouseOver
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
BE V/315

1895.00 AFSK Elecraft K3 Radio 1
File Edit View Tools Config Window Help
Snt SentNr Rcv RcvNr Time
965
Run S&P
F1 CQ F2 Exch F3 TU F4 Call F5 His F6 M7T
F7 QRZ F8 Agn? F9 2Exch F10 LOG F11 WIPE F12 GRAB
Esc: Stop Wipe Log It Edit Mark Store Spot It QRZ
Heading appears here when enabled.
Call history UserText appears here when enabled.
160 946/135/35/6 964,920

7047.03 AFSK Elecraft K3 Radio 2
File Edit View Tools Config Window Help
Snt SentNr Rcv RcvNr Time
965
Run S&P
F1 CQ F2 Exch F3 TU F4 Call F5 His F6 M7T
F7 QRZ F8 Agn? F9 2Exch F10 LOG F11 WIPE F12 GRAB
Esc: Stop Wipe Log It Edit Mark Store Spot It QRZ
Heading appears here when enabled.
Call history UserText appears here when enabled.
40 946/135/35/6 964,920

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 Dueling 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:

☐ Use Combination of both

☐ Use Search Routine to find master.scpx calls in Garbage Text

☒ Highlight Foreground Text

☐ Highlight Background of Text

Using these resources will highlight only calls that are listed in the checked resources. All other calls will not be highlighted.

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

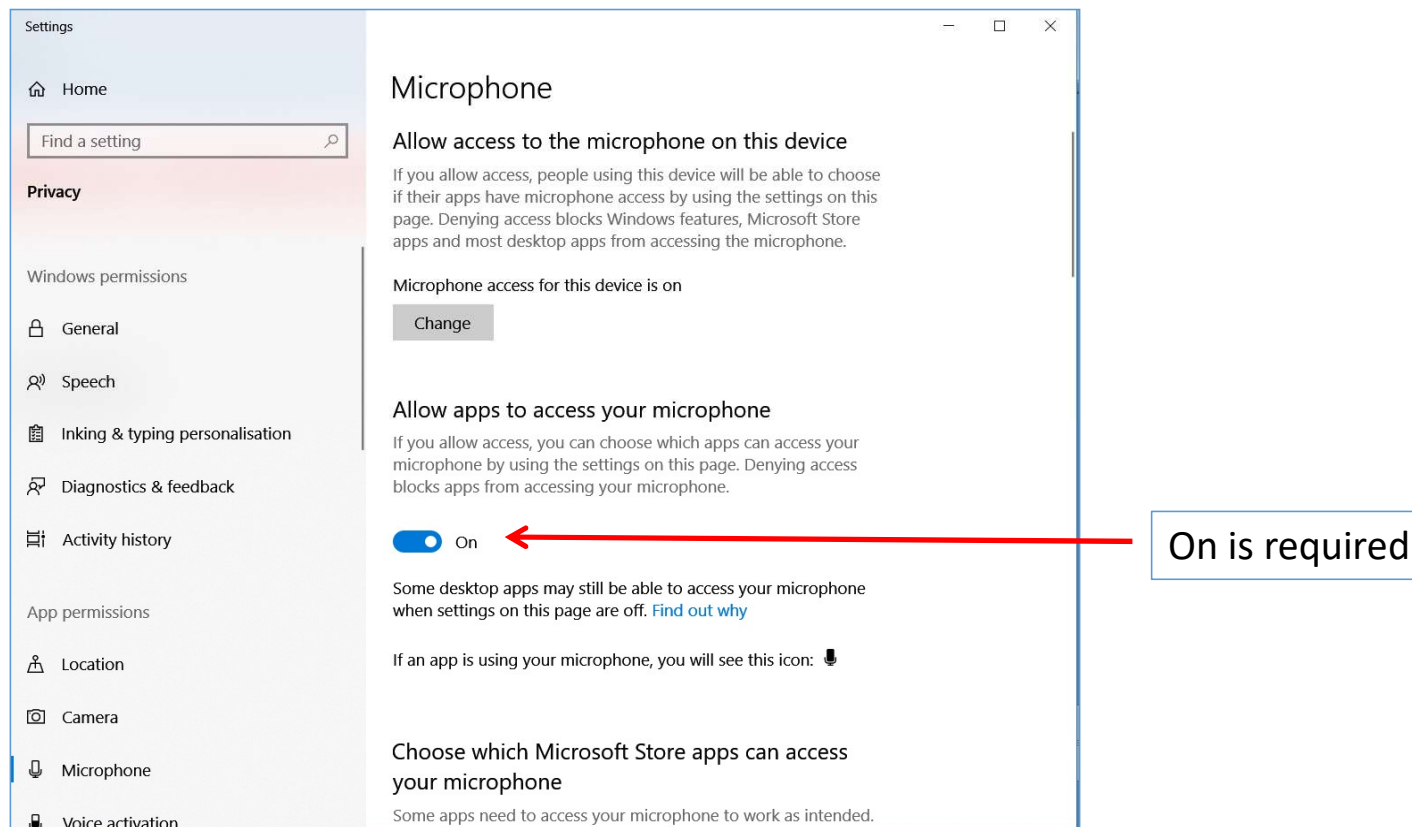
MMTTY Window Layout

Normal

Save Settings

Demystifying N1MM+ : 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 2nd 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 radios FSK are very wide causing unnecessary QRM.
- 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'.

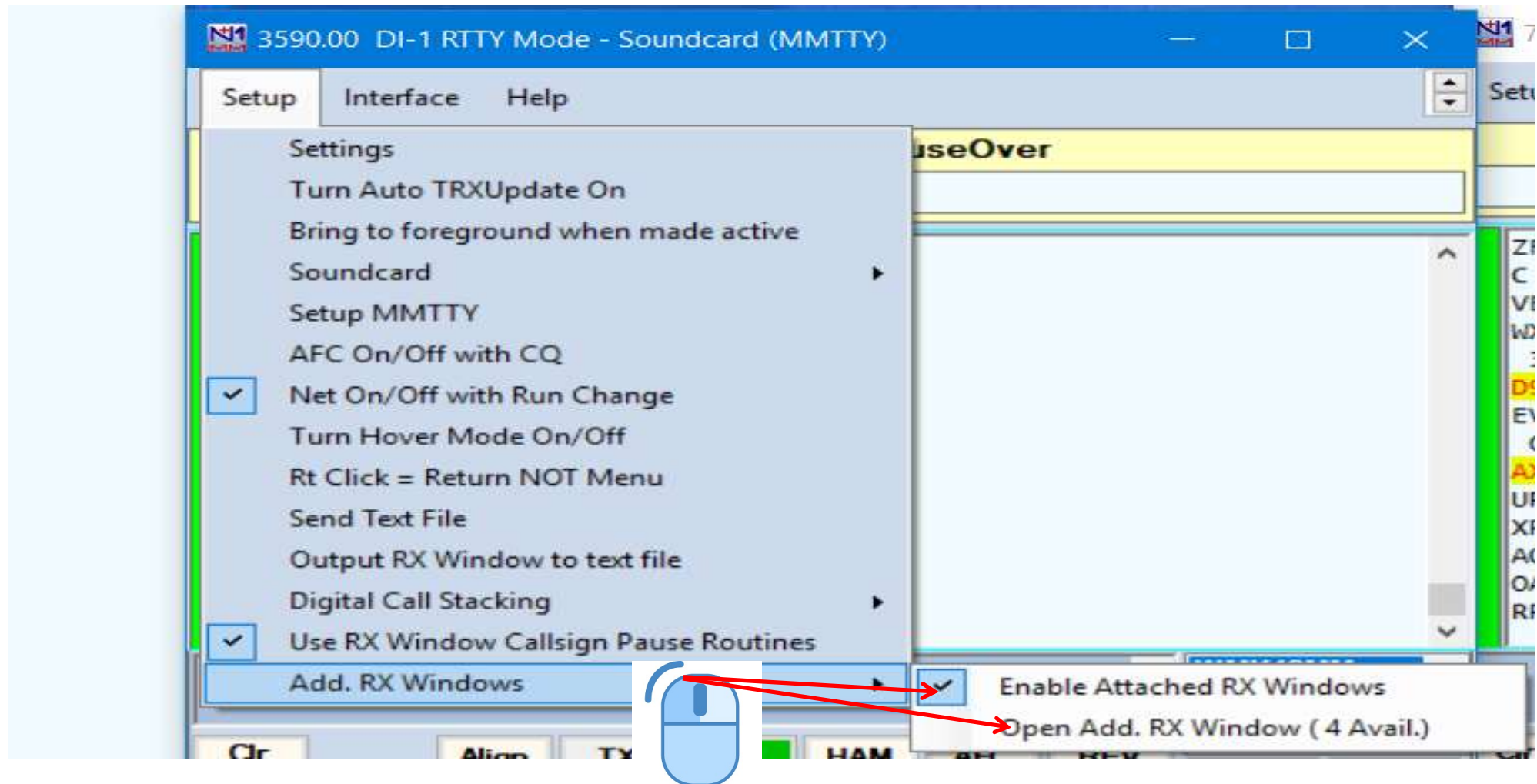
Receive Settings:

- A list of audio devices: 'Line In (High Definition Audio Device)', 'Microphone (High Definition Audio Device)', and 'Line In (Sound Blaster Audigy Fx)'. The last one is selected.
- Radio buttons for 'RX Mono' (selected), 'RX Left', and 'RX Right'.
- A 'Set Mark and Space Tones' section with 'Mark Frequency' (1275), 'Space Frequency' (1445), and a '<Swap>' button.
- A 'Display width in Hz' section with a value of 603.

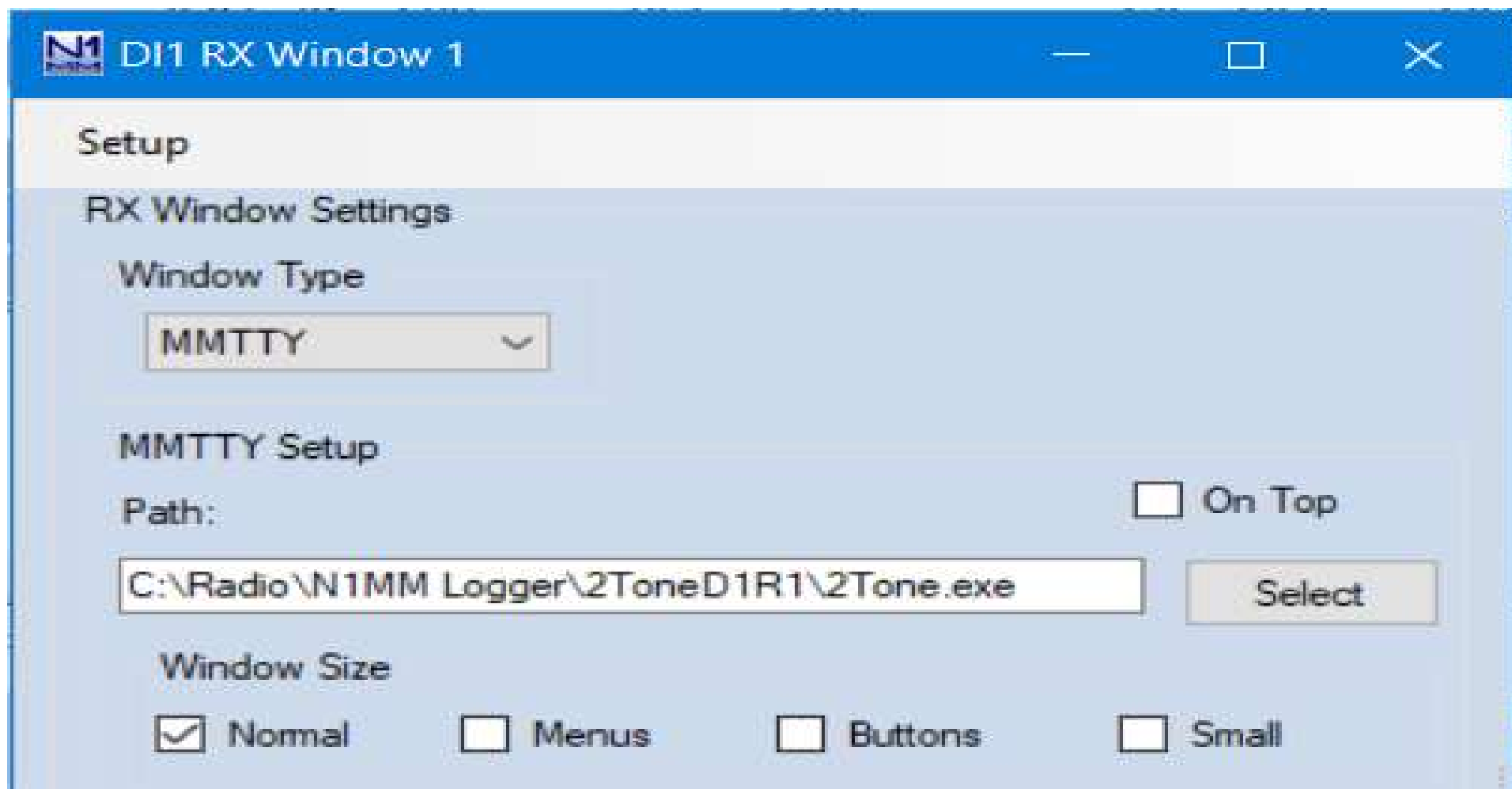
Transmit Setting:

- A list of audio devices: 'Speakers (High Definition Audio Device)' and 'Digital Audio (S/PDIF) (High Definition Audio Device)'.
- Radio buttons for 'TX Mono' (selected), 'TX Left', and 'TX Right'.
- A 'TX Operating Mode' section with radio buttons for 'AFSK TX', 'DOOK TX' (selected), 'TinyFSK TX', 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.

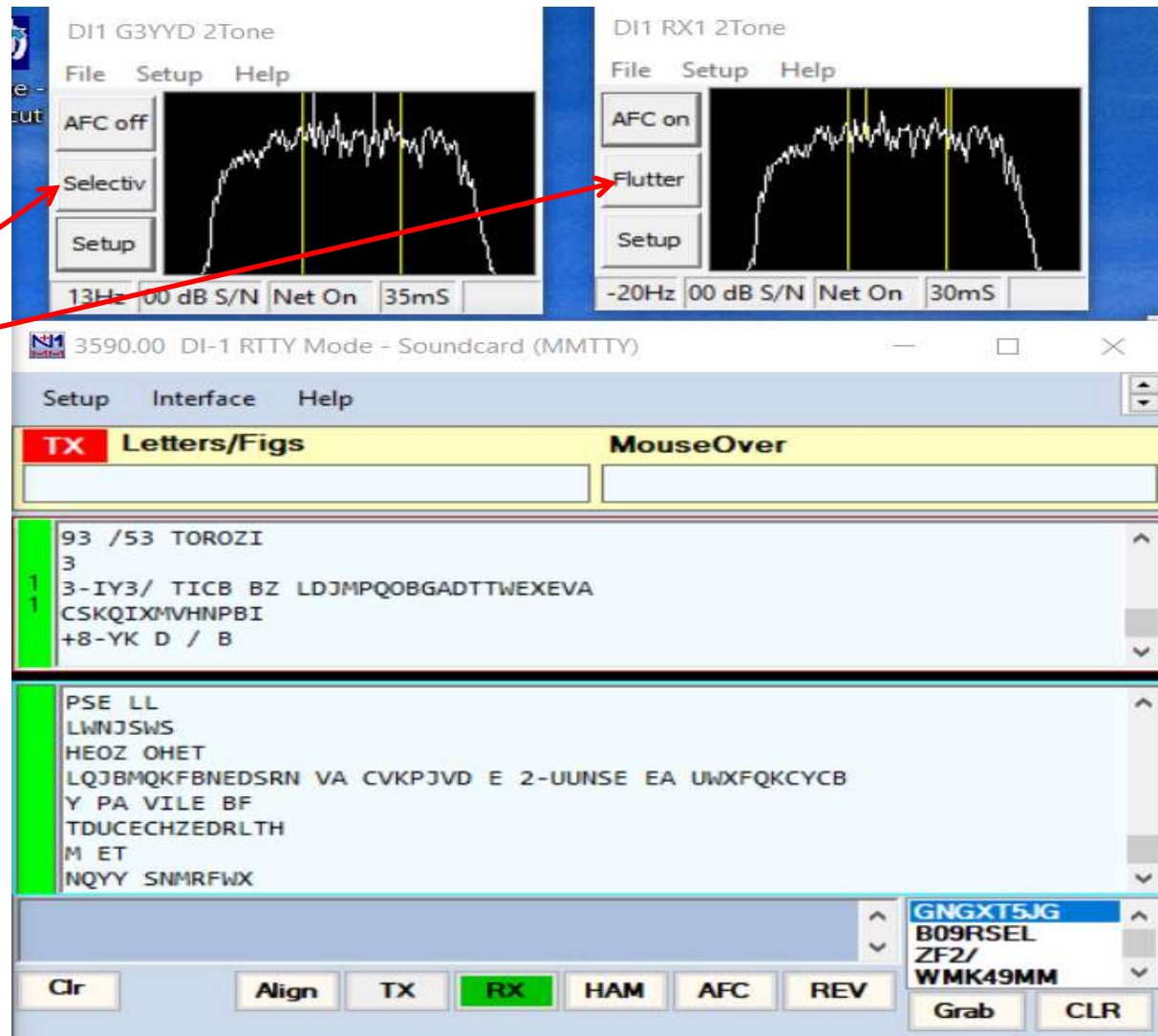
Demystifying N1MM+ : Adding RX decoders



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}
```