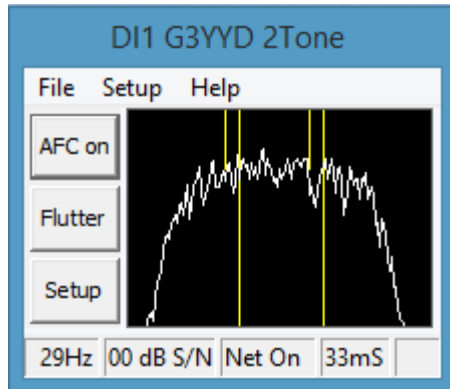# G3YYD's 2Tone - MMTTY Replacement

## Introduction

This software has been designed to be used in conjunction N1MM contest logging software. It is simpler to use with improved decoding performance. It uses less CPU and memory coupled with a smaller display footprint. It also works with some other logging programs.
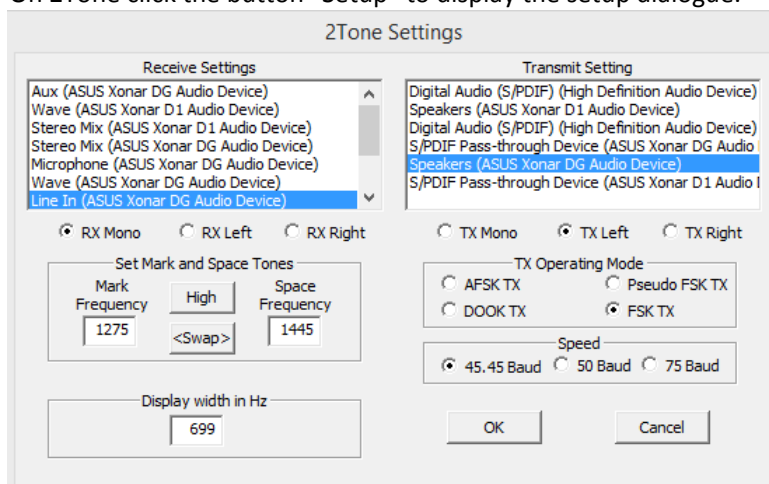


2Tone takes little display space yet delivers what is needed with simplicity.

## Installing

1. Create/Choose a folder that is not in Program Files or Program Files (x86) to install into.
2. Unzip files the files into the selected folder. You can put 2Tone.exe and the pdf files into your MMTTY folder but not the MMTTY.ini as it will overwrite your existing one. Do not delete MMTTY.ini file as N1MM **requires** this file to be in the same folder as 2Tone.exe to function correctly.
3. To run multiple copies of 2Tone repeat 1 and 2 above using different folders.
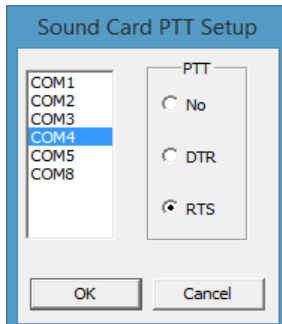
## Setting up 2Tone

1. Start N1MM and left click on N1MM menu configure, Configure Ports...., digital modes tab, and click on MMTTY Path and edit or use Select button to use 2Tone.exe in place of MMTTY.exe. You will have to type this by hand as N1MM auto fills the filename as MMTTY.exe then OK.
2. Start the Digital Interface (Window, digital Interface) and 2Tone will open on the screen.
3. On 2Tone click the button "Setup" to display the setup dialogue.
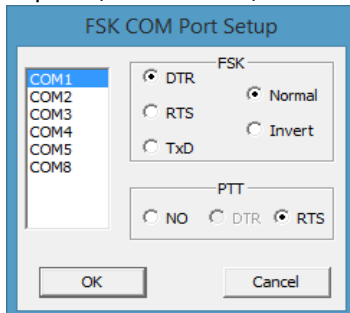


4. Set the sound card for the RX along with mono or left or right as required.
5. Set up the default Mark and Space tone frequencies by clicking on the button. It toggles between Low (1275/1445) and high tones (2125/2295). **Other tone pairs** can be entered into the edit boxes to be compatible with your receiver filtering. If your transmitter may generate audio harmonics which can cause QRM to other band users, please use tone frequencies above 1500Hz.

6.  Selecting the transmission type in the TX Operating Mode group, AFSK, DOOK, pFSK (FSK follows) will open a dialogue for PTT. If using VOX or other PTT method (i.e.N1MM) select No. Otherwise select required COM port and line. Then select TX sound card with mono, left or right as required. Click Ok to finish. The software will tell you if the COM port is not available for use, in which case use another COM port.



7.  Selecting FSK TX will open another dialogue to select COM port and the output pin: DTR(pin4), RTS(pin7) or TxD(pin3). Note COM port must not be in use by N1MM. Select Normal (Mark is -12v, Space is +12v) or Invert (Mark is +12v, Space is -12v). The software will tell you if the COM port is not available for use, in which case use another COM port. Select PTT output pin if required, -12v receive, +12v Transmit. Click Ok to finish. Note PTT is on the same port as FSK.



8.  The spectrum display bandwidth can be set between 449 and 1292Hz (45.45 baud).
9.  Speed, virtually all RTTY QSOs are at 45.45 baud. However 50 or 75 baud can be selected for specialist contests.
10. This completes 2Tone setup, click OK, but further work on N1MM is required.
11. N1MM DI (Digital Interface) setup needs to have one menu item ticked if running AFSK or DOOK. In N1MM DI menu, setup: ensure the menu item "NET off/on with RUN change" has a tick against, if not left click. This must be done so that when tuning the band in Search and Pounce mode the transmitter will be on the same frequency as the receiver.
12. To enable the .wav file per logged QSO feature need to edit the N1MM Logger.ini file. Open N1MM Logger.ini file with **Notepad** look in N1MM.exe folder scroll down to the line [ExternalBroadcast] and ensure it contains the following lines

        BroadcastContactAddr=127.0.0.1:12060 127.0.0.1:12061 127.0.0.1:12062
        BroadcastRadioAddr=127.0.0.1:12060 127.0.0.1:12061 127.0.0.1:12062
        IsBroadcastContact=True
        IsBroadcastRadio=True

    amend as necessary use copy and paste if required then save. Leave any other lines alone.

If there is no [ExternalBroadcast] in your .ini file then add this to the end of the N1MM Logger.ini file

[ExternalBroadcast]
DestinationIPs=127.0.0.1
DestinationPort=12060

# G3YYD's 2Tone - MMTTY Replacement

BroadcastContactAddr=127.0.0.1:12060 127.0.0.1:12061 127.0.0.1:12062
BroadcastRadioAddr=127.0.0.1:12060 127.0.0.1:12061 127.0.0.1:12062
IsBroadcastContact=True
IsBroadcastRadio=True


13. Pseudo FSK is a settings option. Look in my N1MM-digital folder for circuit details:
    https://groups.yahoo.com/neo/groups/N1MMLogger-Digital/files/G3YYD/

14. Now open 2Tone.pdf for details on further information on using 2Tone.

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21st July 2014