


Using N1MM+ Logger for CW Contesting

Even With Limited Morse Code Skills??

Disclaimers

- N1MM+ is more than just a logging program. If I say N1MM, same thing.
 - N1MM+ is a Feature Rich Program with Many Capabilities That I Have Not Yet Utilized
 - This presentation will only cover some of them that I do know, not a detailed view of N1MM+
 - Intended for casual contesting
 - If you don't like using computers with ham radio, this probably is not for you
 - If you want to exclusively use you keyer/paddle/straight key in a contest, this probably is not for you, though you may get something out of it
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What This Isn't

- Where to download N1MM
- How to Install N1MM
- How to Connect Your Rig to a PC (will touch on this)
- All of this is easily found using a search engine, and great videos are out there




CW Skills Limited?

Could I operate a cw contest at 25+ WPM without knowing CW??

- Yes, probably, but you would struggle at times, miss some contacts, and not likely be competitive.
 - Probably can only work stronger stations
 - If your goal is to have fun, it is *possible*, but knowledge of CW and the ability to copy short exchanges, like callsigns, number groups, etc is extremely helpful
 - If you can copy 18-20 WPM, you likely could copy 25-35 wpm contest exchanges.
 - There are tools that can help.
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What is N1MM+

- A contest logging program. Not for everyday logging.
 - A tool for optimizing your contesting, simplify many aspects, limit fatigue
 - Improve your contest scores
 - Most all of the features are optional. You can choose what you want to use or not use. Some include:
 - QSO logging
 - Dupe checking
 - Score keeping
 - Callsign checking
 - DX Cluster viewing/spotting
 - Rotor control
 - CW Reading
 - CW Sending
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Running N1MM

Not too much detail here

- Download and Install it
- Start N1MM
- File > New Log in database
- Log Type - select the contest you want to operate
- Fill in associated fields



Select Contest Type for New Log

Log Type Start Date

Total number of contacts in database 1722

Contest

Category

Operator

State for Log Type QSOPARTY

Band

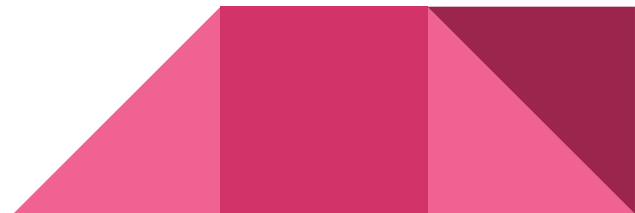
Note - the program does not validate categories. Check the contest rules for valid categories.

Power Mode Overlay Station Assisted Time Category Transmitter Sent Exchange Omit RST: CQWW: 05 SS: A 56 EMAOperators Soapbox

Rig Control with N1MM+

Varies by radio, I will described process with Yaesu FTDX-101D, which is fairly typical these days

- Modern radios with CAT control easiest
- Usually 2 cables, or one USB cable with using 2 virtual ports
- One is radio communication (enhanced port)
- One is CW keying (standard port)
- Setup in Config menu - Configure ports, mode control



S01V S02V S02R

Port	Radio	Digi	CW/Other	Details	IP Addr:Port
COM12	FTDX101D	<input type="checkbox"/>	<input type="checkbox"/>	Set	38400,N,8,2,Handshake,Tx=1
COM13	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Set	DTR=Always Off,RTS=CW,Tx=1
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set	
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set	
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set	
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set	
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set	
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set	
LPT1		<input type="checkbox"/>		Set	
LPT2		<input type="checkbox"/>		Set	
LPT3		<input type="checkbox"/>		Set	


OK

Cancel

Help

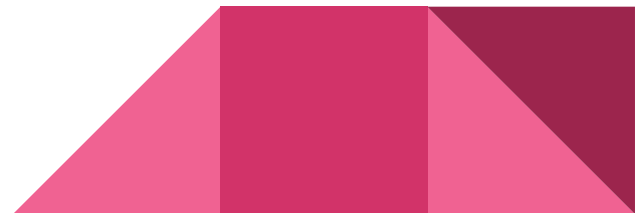
CW Reader

N1MM has 3 Options for CW Reader Integration

- Fldigi - I looked at this briefly, but didn't bother as I have CW Get already working.
 - CW Get - Method I use. Free, but with prompts to register.
 - <https://www.dxsoft.com/en/products/cwget/>
 - TNC
 - This is likely the method when using older radios. I have no knowledge relating to this. I'd suggest searching internet, YouTube for methods.
 - Go to Window menu > CW Reader to setup which method to utilize.
 - Can be changed later in CW Reader window setup menu.
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CW Get Tip

- In CW Get, when receiving CW signal, click on the Go to Max button.
 - Can also drag red line to the peak manually
 - I usually never mess with the other settings, but there is probably a lot to explore there if you want to experiment and see if decoding can improve.



Other Ways of Keying the Rig

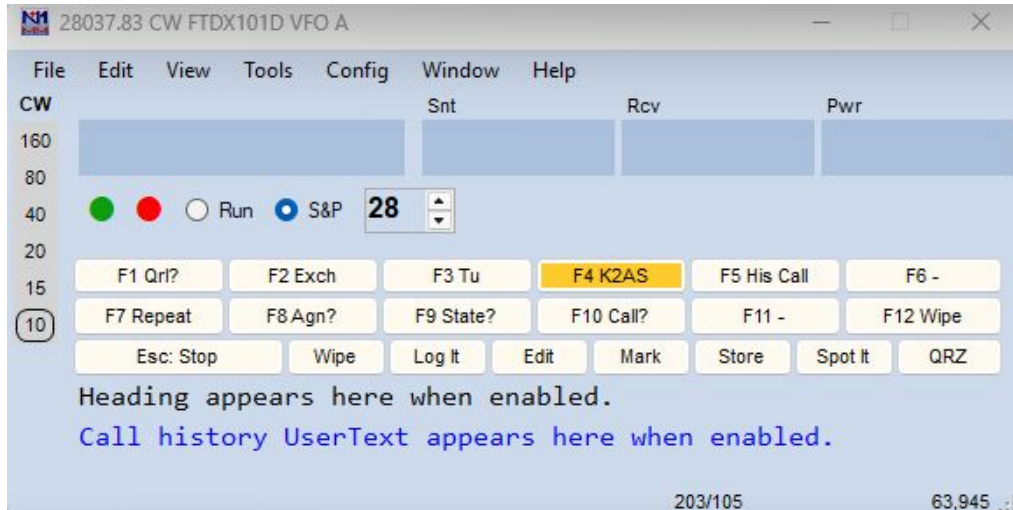
There are other ways to key a rig with a keyboard, They are really unnecessary, but if you are already setup for it, I'm sure there are ways to make it all work. In this presentation, we are focusing on N1MM+ by itself.



QSO Entry Window

S&P version

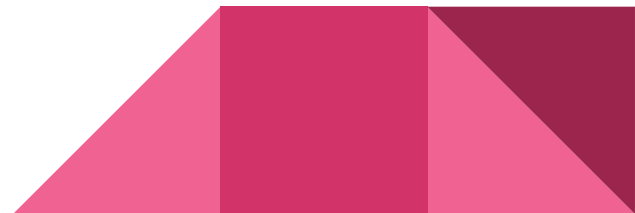
Specific by contest



Macros

This is where you setup your shortcuts for sending CW

- Search and Pounce, and Run have different settings.
- Some predefined variables and special characters are used.
- The standard ones are usually fine, but you can customize them as you like.
- Right click on any Macro button in the entry window, and this pops up:



File Edit Help

```
#RUN -----, Run Messages begin here -----  
F1 Cq,cq test {MYCALL} {MYCALL} test  
F2 Exch, {SENTRSTCUT} {EXCH}  
F3 Tu,tu {MYCALL} test  
F4 {MYCALL},{MYCALL}  
F5 His Call,!  
F6 -,-  
F7 Repeat,{SENTRSTCUT} {EXCH} {EXCH}  
F8 Agn?,agn?  
F9 State?,st?  
F10 Call?,c1?  
F11 -,-  
F12 Wipe,{WIPE}  
#S&P -----, Search and Pounce Messages begin here -----  
F1 Qr1?,qr1? de {MYCALL}  
F2 Exch,{SENTRSTCUT} {EXCH}  
F3 Tu,tu  
F4 {MYCALL},{MYCALL}  
F5 His Call,!  
F6 -,-  
F7 Repeat,{SENTRSTCUT} {EXCH} {EXCH}  
F8 Agn?,agn?  
F9 State?,st?  
F10 Call?,c1?  
F11 -,-  
F12 Wipe,{WIPE}  
#REM -----, Special instructions begin at end-of-file -----  
#REM, S&P F1 calls QRL? before placing the program in RUN mode for calling CQ  
#REM, Designed to work in either ESM or non-ESM mode  
#REM, F5 uses "!" macro for his callsign  
#REM, F2 F7 {SENTRSTCUT} macro defaults to 5NN or allows manual entry of sig report
```

Message Colors


Comment Run S&P

Cancel

Save

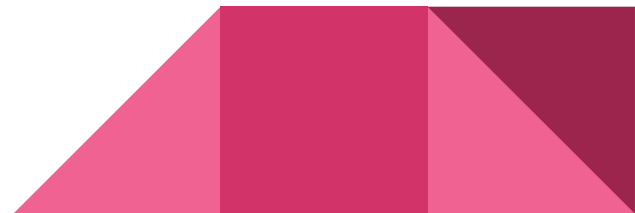
Making Contacts (S&P)

With CW Reader running (or not), and radio frequency and info showing up in N1MM, start looking for a station calling CQ or running a frequency.

- If running “assisted”, you can use DX spots/clusters or N1MM “bandmap” and click on a station and you rig will QSY to that frequency.
 - Type the callsign into the first field.
 - To call him, press F4 on keyboard or click the F4 button in the N1MM entry window. Your rig will xmit your callsign
 - Listen, watch CW reader for response. If he calls you, copy, his exchange (if you haven’t already heard it) press F2 to send your exchange.
 - Wait for tu. Listen for any other response, like agn? You may need to hit F2 again.
- 

Con't

- After confirming contact, press the “Log it” button in the Entry window.
 - NOTE: Any button highlighted in Yellow can be entered by hitting the Enter key on the keyboard. It usually follows the QSO, but be aware, it may not be the button you want to activate.
- The QSO will be entered in the log. The log window will refresh with the info.



100	CR3DX	23883.91	599	599	1000	CU	3
-----	-------	----------	-----	-----	------	----	---

Microsoft Word - CR3DX

File Edit View Tools Config Window Help

CR3DX

Page: 1 of 1

Regional: Reg: 857 AP: 2625 3296w 5984w SR: 87432-55 18-53T

100% 4480x3144px 24.7x

MI Contact Mode (RTTY) <> Contest mode (CW) !

File Edit View Tools Config Window Help

CW Snt Rcv Pwr

160 P49Y

80

40 Run S&P **Dupe**

20

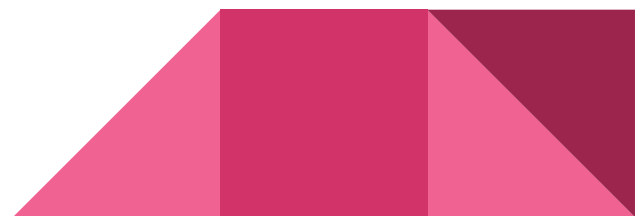
15 F1 S&P CQ F2 S&P Exch F3 S&P TU F4 S&P Call F5 His Call F6 K2AS

10 F7 My Exch F8 Agn? F9 Spare F10 Spare F11 Spare F12 Wipe

Esc: Stop Wipe Log It Edit Mark Store Spot It QRZ


Regional Hdg 166° LP 347° 2169mi 3491km SR 10:58Z SS
Call history UserText appears here when enabled.

P4: SA->ARUBA, Zn 9 203/105 63,945



If You Are Really Serious

N1MM has Morse Runner Integration

- For practicing CW Contesting
 - Only for “Run” mode
 - S&P mode is apparently too easy for a simulator
 - Create new database
 - Only works for CQ WW WPX and one other CQ contest (don't have info handy)
 - Run using Config menu > Config Ports etc. In the “Other” tab, select Morse Runner checkbox. There are many Youtube videos out there
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Weird CW Contesting Abbreviations

This caught me by surprise when I did my first DX CW Contest. The RST is always 599, usually abbreviated to 5NN. But since the exchange for this contest includes the DX stations power, all kinds of short hand gibberish is used. Many that were never taught in the ARRL books! I think they call these “cut numbers” Examples:

- k = 1000 watts
- kw = 1000 watts
- 5tt = 500 watts, sometimes e t t
- 1tt = 100 watts
- nn = 99 watts
- 67 = 67? I can't remember what he sent, maybe it was actually 67, but WHY???
- 04 = 04 - Like in CQ Zones

Things to Remember

In major contests, most of the stations you will contact are serious contesters. If you listen to how they operate, you can get the idea how they like to work:

- Efficiency - they are looking at making as many contacts as they can in the shortest amount of time
- Skip the niceties, maybe a TU
- Unless you are really proficient at high speed sending, consider using the N1MM keying features



CW Contests Can Be Fun

I sometimes do a mid-day Slow Speed or Medium Speed sprint using my paddle and keyer

I had done a small number of cw contacts in big contests with paddles, but never felt confident to try something serious, especially at higher speeds

Using N1MM makes it enjoyable for me. I can still reach for the paddle if I want or need to. The chase for more contacts and using my radios QRM controls gives me the needed satisfaction.

