#### N1MMPlus Use for CMARA Field Day

By Terry G. Glagowski / W1TR updated 6/7/15 19:28

- •N1MMplus Overview
- Software Installation
- •Hardware / Software Setup
- Database Setup
- Contest Log Setup
- Band Setup
- QSO logging
- Log Consolidation and Submittal
- •User Support
- •Summary
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#### N1MMplus Overview

- Totally FREE ! (no license fee)
- Runs on Windows XP, Vista, Win7, Win8 (32 or 64 bit) (no Win95 / Win98)
- Does NOT run on other operating systems (MAC, Linux)
- Nearly ALL Versions are compatible with one another (same file format)
- Supports almost EVERY contest
- Used by nearly ALL big-time contesters (and small timers)
- Actively Supported, User Groups
- Stand-Alone operation (no connection to radio required)
- Automatic Computer-Aided-Transceiver (CAT) control available
- CW Keyer with PTT (keyboard window CTRL-K)
- Voice Keyer with PTT (prerecorded phonetics & messages)
- Interface to MMTTY, MMVARI, FLDIGI, and other software
- Export to ADIF and Cabrillo Format, Import from ADIF

#### N1MMplus Network Block Diagram





### Software Installation

- N1MM Logger + Website <u>http://n1mm.hamdocs.com/tiki-index.php</u>
- Select "Files"
- Download and Install "N1MMplus Full Install" Install by clicking on the self-installing .exe file
- Download and Install "N1MMplus Latest Update" use latest version W1TR will provide the standard update to use at FD meeting or FD site Install by clicking on the self-installing .exe file
- Use the default directories for everything (unless...)
- The N1MMplus Full Install and Standard Update are on thumb drive. Networking requires everyone to use the SAME EXACT version. Networking requires everyone to start with the same FD LOG.
- Copy the 2015 CMARA FD Log (2015 CMARA Field Day.s3db ) to C:\Users\<USERNAME>\Documents\N1MM Logger+\Databases directory.
- **Read the manual!** There is plenty of documentation:
- N1MMplus Logger Manual.pdf
   N1MMplus Quick Start Guide.pdf
   N1MMplus User Guide.pdf
- N1MM References (crib sheets)
- Help Files (some are on the Internet, you will need a connection)

#### Hardware / Software Setup (1)

- Set the Computer Local Time / Zone (Eastern Daylight Time) Listen to WWV on 2.5, 5.0, 10.0, 15.0, 20.0 MHz or CHU on 3.330, 7.850, 14.670 MHz Extremely Important to DO !!!, Otherwise Log Data Will Be Garbage, NO WAY to FIX! The N1MMplus Logger will override this when your station is connected to the network. Set the time anyway in case we have a problem with networking.
- Station Data will Already be Set in Standard FD Log
- Configure CAT Control
- Open Necessary N1MMplus Windows
- Enable Networking

# Hardware / Software Setup (2) Set Computer Clock

- Click on Desktop Clock (lower right of desktop)
- Set the Date (local time)
- Set the Time (local time)
- Set the Time Zone (eastern daylight time)
- Internet Time Will Not Work (no internet)
- With N1MMplus, Master will set time for SLAVES

#### Hardware / Software Setup (3)



### N1MMplus QSO Entry Form

When you start N1MMplus, the Main Window opens. Close ALL other N1MMplus windows (for now). Select the File Menu Item to Open the FD Log.

71	.38.68 L	SB TS-2000			-		×				
<u>F</u> ile	<u>E</u> dit	t <u>V</u> iew Tool	s <u>C</u> onfig W	i <u>n</u> dow Help							
cw	PH			Class	S	ection	1				
160	160										
80	80	1									
40	40	🔴 🔴 🔘 R	lun 💿 S&P								
20	20	<b>F4 C3D CO</b>	[ F0 Fuch	<b>53 Carro</b>	EA WATE	EE Uin Coll					
15	15	FTSAPCU	F2 EXCN	F3 Spare	F4 WITR	F5 HIS Call	FOWTIR				
10	10	F7 Rpt Exch	F8 Agn?	F9 Zone	F10 Spare	F11 Spare	F12 Wipe				
		Esc: Stop	Wipe	Log It	Edit Mark	St <u>o</u> re	Spot It QRZ				
	Heading appears here when enabled.										
	Call history UserText appears here when enabled.										
0 spo	ts loade	ed after filtering.				8	20 .;;				

# Open Database Select: Open Database

N	713	38.68 LSI	B TS-200	0							x			
	<u>F</u> ile	<u>E</u> dit	<u>V</u> iew	Tools	<u>C</u> onfig	Wi <u>n</u> dow	Help							
		New Lo	g in Data	abase: Fie	ldDayTest.	s3db								
		Open L	og in Dat	tabase: Fi	eldDayTest	t.s3db								
		New Da	atabase											
	(	<u>O</u> pen D	atabase.											
		Conver	t N1MM	Database	to N1MM	+								
		Сору Т	his Cont	est to And	other Datab	oase								
		Genera	te Cabrill	lo File										
		Import												•
		Export												•
		<u>1</u> FD (20	015-04-18	8 18:00:00	))									
0		<u>2</u> DX (1	900-01-0	1 00:00:00	))									
-		<u>3</u> ARRL	DXCW (2	015-02-2	1 00:00:00)	in C:\Users\	TGlagow	/ski\Documents\N1	MM Logger+	\Databases\2	2014 ARRL [	DX CW W1TR	.s3db	
		4 DX (19	900-01-0	1 00:00:00	)) in C:\Use	ers\TGlagow	ski\Docu	iments\N1MM Log	ger+\Databas	ses\2014 ARR	L DX CW W	1TR.s3db		
		<u>5</u> DX (2	015-02-0	7 00:00:00	)) in C:\Use	ers\TGlagow	ski\Docu	iments\N1MM Log	ger+\Databas	ses\General L	ogging.s3d	Ь		
		6 ARRL	VHFJAN	(2015-01-	-24 18:00:00	)) in C:\User	s\TGlago	wski\Documents\N	11MM Logge	r+\Databases	\2014 ARRI	. VHF Jan W1	TR.s3db	
		<u>7</u> DX (1	900-01-0	1 00:00:00	)) in C:\Use	ers\TGlagow	ski\Docu	iments\N1MM Log	ger+\Databas	ses\General L	ogging.s3d	Ь		
		8 ARRL	RTTY (20	15-01-03	18:00:00) ir	n C:\Users\T	Glagows	ki\Documents\N1N	/M Logger+\	Databases\20	14 ARRL R	TTY Roundu	o W1TR.s3d	lb
		<u>9</u> DX (1	900-01-0	1 00:00:00	)) in C:\Use	ers\TGlagow	ski\Docu	iments\N1MM Log	ger+\Databas	ses\2014 ARR	L RTTY Rou	ndup W1TR.	s3db	
		Exit	A	t+F4										

#### Select Log

Open Existing Database		Use your own USERNAME i	nstead of TGlag	owski			x
OO V S (C:) Vsers	Glagowski	My Documents + N1MM Logger+ + Dat	abases 🕨	<b>-</b>	Search Databases		٩
Organize 👻 New folder			8== 👻		0		
☆ Favorites	^	Name	Date modified	Туре	Size		
		TransactionLogFiles	2015-04-16 04:58	File folder			
🥽 Libraries		2014 ARRL 10 W1TR.s3db	2015-01-03 11:40	S3DB File	96 KB		
Documents		2014 ARRL 160 CW W1TR.s3db	2014-12-13 02:24	S3DB File	321 KB		
HAM		2014 ARRL DX CW W1TR.s3db	2015-03-15 10:03	S3DB File	115 KB		
J Music		2014 ARRL SS CW W1TR.s3db	2014-12-05 07:36	S3DB File	138 KB		
Pictures		2014 ARRL VHF Jan W1TR.s3db	2015-02-11 09:06	S3DB File	85 KB		
Software	E	2015 ARRL RTTY Roundup W1TR.s3db	2015-01-28 07:10	S3DB File	214 KB		
UConn		2015 CMARA Field Day.s3db	2015-06-06 06:20	S3DB File	56 KB		
USAF_MARS		Do_Not_Use_Or_Erase.s3db	2014-10-11 10:40	S3DB File	51 KB		
Users		FieldDayTest.s3db	2015-06-06 06:19	S3DB File	56 KB		
Videos		General Logging.s3db	2015-04-16 04:41	S3DB File	57 KB		
		ham.s3db	2015-02-04 09:21	S3DB File	88 KB		
🜏 Homegroup		N1MM Admin.s3db	2015-06-06 06:20	S3DB File	3,381 KB		
		N1MM Packet Spots.s3db	2015-06-05 09:37	S3DB File	23 KB		
1 Computer							
	•						_
File <u>n</u> ame: 2015 Cl	MARA Field	Day.s3db		-	SQLite (*.s3db)		•
					Open 😽 🔽	ancel	

### Log Database Is In a Standard Place

- Log Database Folder Name
   C:\Users\<USERNAME>\Documents\N1MM Logger+\Databases
- Log Database File Name 2015 CMARA Field Day.s3db
- How to Determine <USERNAME> (next slide)
- The MASTER computer in the N1MM network will have the ENTIRE log at end of contest (W1TR)
- So will all the SLAVE computers !

#### How To Determine <USERNAME>

- Open Command Prompt Window from Start Button
- Type SET command





#### Use SET to Get Environmental Parameters

#### Command Prompt



### **Open Log in Database**

2015 CMARA Field	d Day.s3db	×
-Select Existing	) Log	
Contest	Start Date	
FD	2015-04-18 18:00:00	
DX	1900-01-01 00:00:00	
DELETEDQS	1900-01-01 00:00:00	
Contest Assoc	ciated Files W1TR will set ALL station information	
Catego	DO NOT CHANGE	
Operate	8 Contacts	
Operation	State for Log Type QSOPARTY	
Ban	does not validate	
Powe	er LOW   categories. Check the contact rules for valid	
Mod	de MIXED categories.	
Overla	ay N/A Show Rules Show Setup	
Statio	n FIXED -	
Assiste	ASSISTED Time Category N/A	
Transmitte		
Sent Exchang	This may change by FD	
Operator	rs W1TR	
oporator	CMARA Test Log W1TR will take	
Soapbo	ix care of this	
	OK Help Cancel	

#### CAT Control Setup (1)

71	38.68	LSB TS-2000				
<u>F</u> ile	<u>E</u> d	it <u>V</u> iew Tools	<u>C</u> onfig	Wi <u>n</u> dow Help		
~			Co	nfigure Ports, Mode Control, Audio, Other		
160	160		Ch	ange Your Station Data		
160	20		Us	e Logger+ Audio		
40	40	🔵 🛑 🔘 Run	En	er Sends Message (ESM mode)	Ctrl+M	
20	20		Sp	ot All S&P QSO's		
15	15	F1 S&P CQ	🖌 QS	Ying Wipes the Call & Spots QSO in Bandmap	(S&P)	F6 W1TR
10	10	F7 Rpt Exch	Gra	b Focus From Other Apps When Radio is Tun	ed	F12 Wipe
		Esc: Stop	✓ Do	Not Automatically Switch to Run on CQ Frequencies	uency	QRZ
		Heading app	🖌 Sh	ow Non-Workable Spots and Dupes in Bandma	ар	
		Call histor	Re	set RX Freq to TX when QSO is Logged (Run &	Split)	
This d	lataba	se is for W1TR	Su	b Receiver Always On		20 .::
			<ul> <li>CQ</li> </ul>	Repeat	Alt+R	
			Set	CQ Repeat Time	Ctrl+R	
			CV	/ / PH AutoSend Threshold		
			En	able Call History Lookup		
			Ch	ange CW/SSB/Digital Function Key Definitions	5	•
			Ch	ange Band Plan		•
			Ma	nage Skins, Colors and Fonts		
			Ch	ange Operator Callsign Stored in Log	Ctrl+O	
			Ch	ange Exchange Abbreviations		•
			SO	2R		•
			W	λE		•
			Cle	ar *.ini File Settings		
			SO	2V Dual Receive		<b>F</b>

#### CAT Control Setup(2)

M Configu	irer							×
		I	Radio	Туре				
Hardware	Function Keys	Digital Moder	Other	Winkey	Mode Control	Anten	nas Score Reporting	Audio
Port	CAT Port Radio		Diai — C'	W/Other	Details		@ S01V	○ \$02V
COM6		00 -			Set		57600,N,8,2,DTR=Alwa	vs On,RTS=Always On,Tx=1
COM7	<ul> <li>None</li> </ul>	-		/	Set	1	DTR=CW,RTS=PTT,Tx=1	1
СОМ8	- None				Set			
COM3		00 👻			Set	:	57600,N,8,2,DTR=Alwa	ys On,RTS=Always On,Tx=2
COM4	- None	-		/	Set	I	DTR=CW,RTS=PTT,Tx=2	2
None	None	-			Set			
None	None	-			Set			
None	<ul> <li>None</li> </ul>	-			Set			
LPT1	CW / PTT	Port			Set			
LPT2				_	Set			
LPT3	Use su				Set			
•	Setup	Radio	ο Τγρ	be				
•	Setup	CAT P	ort					
•	Setun	CW/P		Port	(ontio	nal	if compu	ter CW)
		taile f	in C	отс ` л т і	Dort		n compa	
•	Set De	etails f	or C	.VV/I		rt		
		ок		Cancel			Help	

#### **Details for CAT Port**

- Set Speed (Baud Rate) for YOUR Radio For some radios (ICOM) you may need to set HEX address On Radio and on N1MM •
- •

M Com6			×								
SpeedParityDataBitsStop Bits57600▼N▼82											
DTR (pin 4) RTS (pin 7) Radio Nr Always On  Always On  Left Window											
Allow ext inter	Enable     PTT via     PTT via     PTT via     PTT via     PTT via     FootSwitch (p     None	Both Hardware Radio Comman Radio Comman Radio Comman pin 6) T	e & Software nd Digital Mode nd SSB Mode nd CW Mode								
Radio Polling Rate	Radio Polling Rate										
Suggested TS-2000 38400, N, 8, 2, Hand	Kenwood Settings Ishake, Handshake	s: e									
Help		ОК	Cancel								

#### Details for CW/PTT Port

- Set DTR = CW
- Set RTS = PTT

M Com7	×
DTR (pin 4) RTS (pin 7) CW V PTT V PTT Delay (msee) 100	Radio Nr [1 → Left Window
Allow ext interrupts WinKey Two Radio Protocol FootSwitch (pin 6) None	
Help	OK Cancel

### Activate N1MMplus Windows

#### All Stations Use

- Entry Window (Default Window, already set up)
- Network Status to enable networking and know what other stations are doing
- Log Window to see what has been logged
- Optional Windows
  - Info shows QSO rate
  - Score Summary shows score by band and mode
  - Check determine if there might be callsign typos
- CW Stations Use CW Key for ad-lib transmissions (CTRL+K)
- Digital Stations Use Digital Interface



### **Entry Window**

#### This window shows current QSO information

Callsign, Class, Section (these vary with contest type)

Title Bar at Top of Window shows Frequency and Radio Type.

Indicator for current band and mode

Indicator for Run / S&P

Function Keys for use with Mouse, legend key for using F-Keys on Keyboard

Call History when Available

Azimuth Heading when Available

N1 76	1630.50 USB TS-2000										
<u>F</u> ile	<u>E</u> dit	: <u>V</u> iew Tool	s <u>C</u> onfig W	i <u>n</u> dow Help							
cw	РН			Class	5	Section	1				
160	160										
80	80										
40	40	🔴 🔴 🔘 R	un 💿 S&P								
20	20										
15	15	F1 S&P CQ	F2 Exch	F3 Spare	F4 W1IR	F5 His Call	F6 W1IR				
10	10	F7 Rpt Exch	F8 Agn?	F9 Zone	F10 Spare	F11 Spare	F12 Wipe				
		Esc: Stop	<u>W</u> ipe	Log It E	dit <u>M</u> ark	Store Sp	ot It QRZ				
	Heading appears here when enabled.										
	Call history UserText appears here when enabled.										
Settin	ig up ra	dios _bandmaps				8	20 .::				

### Network Status Window (1)

This window shows computers currently on the network Computer Name, IP, Pass Freq, Run/S&P, QSO Stats, Freq, Op, Msg, Send, Recv, Master

If the Network Status Window Looks Like This, Click on the Orange Button to Start Networking. Do NOT check MASTER, your station is a SLAVE!

Ν	letwork Status W1TR 192.	.168.9.244 ((( * )))											<b>×</b>
1	Stations Resynchronize	Rescore Options Actions	Messages										
	Computer	IP Address	Pass	Run	10	100	Freq	Ор	Msg	Send	Receive	Master	* *
			Ne	tworke Cli	ed Cor ck he	nputer M re to tu	ode is o Irn on	ff					

#### Network Status Window (2) This window shows computers currently on the network

Computer Name, IP, Pass Freq, Run/S&P, QSO Stats, Freq, Op, Msg, Send, Recv, Master

Ν	etwork St	atus W1TR 192.1	68.9.244 - 1 Stations in n	etwork										-
Γ	Stations	Resynchronize	Rescore Options Actions	Messages										
Ì	Compu	ter	IP Address	Pass	Run	10	100	Freq	Ор	Msg	Send	Receive	Master	*
	W1TR		192.168.9.244	0.00	S&P	60	60	7630.50	W1TR		0k	0k	<b>V</b>	
			Normally the	re would b	be othe	er con	npute	rs listed w	/hen ne	twork	is fully	populate	ed	

Network Status W1TR 192.168.9.244 - 1 Stations in netwo	k Options Should Be Set as Shown	×
Stations Resynchronize Rescon Options Actions Me	ssages	
8 Run 1 Run 2/Mult Don't automatically change	e to S&P mode Force ALL other stations to stop transmitting when I transmit	l
Log QSOs at all Stations Wipe callsign when logged	d by stack target 📃 Block my Tx only if other station transmitting on same band and mode (multi-one)	
Don't work non-mults Trace Networked Computer	er Messages	

ſ	Network Status W1TR 192.168.9.244 - 1 Stations in network Use This to Send Text Messages to Other Computers	
	Stations Resynchronize Rescore Options Actions Messages	
	Talk (QI-E)         Stop Networking         Force Time Sync         Reset Serial Numbers at all Stations	
	Set Your Pass Frequency Edit Computer Addresses	

	Network Status W1TR 192.168.9.244 - 1 Stations in n	etwork	Use This to View Messages	E
	Stations   Resynchronize   Rescore   Options   Actions	Messages		
Ľ				

### Log Window

#### This window shows stations CMARA has worked Date, Time, Call, Frequency, Mode, Section, Points, Computer, Operator. Title Bar at Top of Window shows Date/Time, Contest Name, Database Name.

2015-0	6-07 00:03:11Z Field Day -	2015 CMARA Field	Day.s3db						
DD-MM	HH:MM	Call	Freq	М	Ε	Sect	Pts	Computer	Ор 🚊
16-04	20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR
16-04	20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR
16-04	21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR
17-04	00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR
17-04	00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR
17-04	00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ
17-04	01:01	W1AW	7066.00	CW	4F	СТ	2	TERRYTRAVEL	W1TR
17-04	01:12	W6IOP	28400.00	USB	1A	SCV	1	TERRYTDY	WA1ALZ

### Info Window

This window shows QSO rate statistics versus goals.

10 – rate for last 10 QSOs

100 – rate for last 100 QSOs

60m – rate for last 60 minutes

40m - rate for last 40 minutes



#### Score Summary Window

This Window Shows Current Score by Band and Mode, and Total

Score - 20	) Points			×
Band	Mode	QS0s	Pts	▲
7	CW	2	4	<b>_</b>
7	LSB	1	1	
14	USB	1	1	
28	USB	3	3	
50	USB	1	1	
Total	Both	8	10	
Score:	20			
1 Mult	= 1.0	Q's		
		-		
P				

#### **Check Window**

This Window Shows Partial Matches of Callsign in QSO Entry Window with Log, Master Callsign Database, Telnet Window, Call History File. Use to check for TYPOs or mis-copied callsigns.



#### CW Transmit Window

Use this Window to send CW Messages not Preset in Macros. Particularly Useful if NO Paddle or Key is Connected to Radio. ENTER Key Ends Transmission and Closes Window. Window must be closed before other actions can be taken.



### Band Map Window

This Window Shows Spots from

- 1. Self
- 2. Others
- 3. Packet Cluster

Station Callsigns will be Shown Next to Frequency. Click on Callsign to Move VFO to Frequency Note: we are NOT using Packet Cluster!



### **Multiplier Window Selection**

Select an Appropriate Multiplier Window.

Field Day uses Sections.

However, Sections are NOT a Field Day Contest Score Multiplier. Use for Information ONLY.

76	30.50 (	JSB TS-2000		1 - 2	-	-				
<u>F</u> ile	<u>E</u> di	t <u>V</u> iew Tools <u>C</u> or	ifig	Wi <u>n</u> dow	Help					
					able Mult's	s & Q's	e	Section		
CW	PH			<u>B</u> and	map		ſ			
160	160			Chec	k					
80	80		SEP	CW K	ey	Ctrl+K				
40	(40)		Jai	CW F	eader					
20	20	F1 S&P CQ F2 E	xch	Digita	al Interface	:		F5 His Call F6 W1TR		
15	15	F7 Rpt Exch F8 A	.gn?	Entry	Window			F11 Spare F12 Wipe		
10	10	Esc: Stop	Wip	Gray Line Store Spot It QRZ						
		Heading appears	s he	Info						
1		Call history Us	ser	<u>L</u> og		Ctrl+L		enabled.		
Pass F	requer	ncy = 0		Multi	pliers		•	Countries 20	:	
			_	Netw	ork Status			Grid Squares	_	
				Score	Summary	r		Grid Square Map		
				Telnet				Sections/States		
				Visible Dupesheet Zones				Zones		
								Counties/Other		

# Multiplier Window This Window Shows Sections Worked versus Band and Mode



#### **Telnet Window**

This Window Shows Spots from Internet DX Clusters We do NOT Plan to Use DX Clusters for Spotting / Assisted Mode

M Telnet	Telnet											
Type:							Re	econnect			÷	
KITTT C	Clusters	Bands/Modes	Filters	Spot Com	nent Ba	andPlans						
DX de R	N4F:	7012.7	RM4F	/P	Field	Day			0134Z			
DX de R	R6LCG:	14076.0	TI3V	LM	tnx d	r Victor!	73!-1	11	0134Z			
DX de U	JR3EL:	10108.1	OX/D	J6TF	tnx	UP1			0135Z			
DX de E	B5ILJ:	14195.0	EG5D	EL	S-61	SUBMARINE	TORRE	EVIEJA	0135Z			
DX de N	IP3DM:	14070.0	W3MM	U					0135Z			
DX de N	IZ30:	7039.4	N4ZZ		CHIL				0135Z			
DX de W	I3LPL-3:	18072.0	4320	15BAKU	Heard	in NC			0136Z			
DX de O	H4SS:	18140.0	NE2Q		cq dx				0136Z		=	
DX de K	(6XT:	14026.6	E74A						0136Z			
											-	
B	BYE CONN			DVN SH/C			(	USERS		wwv		
Clea	Clear NE Yes DX			NE onl	y )	No DX	(	No VHF		W1TR		

### Grey Line Window

This Window Shows

- 1. The Grey Line between Day Time and Night Time
- 2. Spots from Internet DX Clusters by Location
- We do NOT Plan to Use DX Clusters for Spotting / Assisted Mode

A Setup Menu Provides a Choice of What to Display



#### **Band Setup**

#### This Year, CMARA is using CAT Control ©

So THIS should NOT Be Necessary, But Just In Case! 🙁 Use the N1MMplus QSO Entry Form to set Frequency and Mode

#### • Set Frequency

Type Frequency in <u>KHz</u> (e.g. 3550 or 21350) into callsign field Extremely Important to DO !!!, Otherwise Log Data Will Be Garbage. With CAT control, simply use your bandswitch and VFO.

#### • Set Mode

Type Mode (e.g. CW, USB, LSB, AM, FM, RTTY, PSK31) into callsign field Extremely Important to DO !!!, Otherwise Log Data Will Be Garbage. With CAT control, simply use your mode switch.

#### • Very Important to Set These Items

It is possible to correct all other items later *except*: Date/Time (computer clock) – Computer Should Synchronize with Master Frequency – Should Be Using CAT Control Mode – Should Be Using CAT Control <u>Operator – Whenever Change of Operator Occurs (CTRL-O)</u>

#### **Frequency Setup**

Eile	32.00 C	c <b>W</b> TS-2000 t <u>V</u> iew Tools	s <u>C</u> onfig Wi	ndow Help		_					
cw	РН			Class		Section					
160	160	3825			I						
80	80		-		_						
40	40	🔴 🛑 🔘 R	un 💿 S&P 24	÷							
20	20	F1 Qrl?	F2 Exch	F3 Tu	F4 W1TR	F5 His Call	F6 Repeat				
10	10	F7 Empty	F8 Agn?	F9 Nr?	F10 Call?	F11 Empty	F12 Wipe				
10	10	Esc: Stop	Wipe	Log It	Edit <u>M</u> ark	Store Sp	ot It QRZ				
	Call history UserText appears here when enabled. 8 20										

To Set or Change Frequency:

type the Frequency in KHz in the Callsign Field (left).

Use a typical Phone or CW Frequency if NOT CAT Controlled, but N1MMplus only needs to know the Band.

NO NEED to CHANGE it as you tune up and down the band. Note: the Title Bar of the Main Window will reflect the change

38	25.00	CW TS-2000					
<u>F</u> ile	<u>E</u> di	it <u>V</u> iew Too	ls <u>C</u> onfig Wi	i <u>n</u> dow Help			
cw	РН			Class	S	ection	
160	160						
80	80				_		
40	40	🔴 🌒 🔘 F	Run 💿 S&P 24	×.			
20	20	F1 Qrl?	F2 Exch	F3 Tu	F4 W1TR	F5 His Call	F6 Repeat
15	15	F7 Empty	F8 Agn?	F9 Nr?	F10 Call?	F11 Empty	F12 Wipe
10	10	Esc: Stop	Wipe	Log It E	dit <u>M</u> ark	Store Sp	ot It QRZ
		Call histo	ory UserTex	t appears	here when	enabled.	
						8	20 🤢



To Set or Change Mode:

Type the Mode (CW, USB, LSB, AM, FM, RTTY, PSK31) into the Callsign Field (left).

Note: the Title Bar of the Main Window will reflect the change

38	121 3825.60 LSB TS-2000												
<u>F</u> ile <u>E</u> dit <u>V</u> iew Tools <u>C</u> onfig Wi <u>n</u> dow Help													
cw	PH			Class	S	Section	1						
160	160												
80	80												
40	40	🔴 🔴 🔘 F	🔵 🛑 🔿 Run 🐵 S&P										
20	20	F1 S&P CQ	F2 Exch	F3 Spare	F4 W1TR	F5 His Call	F6 W1TR						
15	15	E7 Rot Exch	E8 Aon?	E9 Zone	E10 Spare	E11 Spare	F12 Wine						
10	10	Eec: Stop	Wine		dit Mark	Store Sn							
		Lac. Stop											
		0-11-1-1-1-1											
		Call histo	bry Userley	ct appears	nere when	enabled.	20.1						
						8	20 .;;						

#### **Operator Setup**

3825.60

		Configure Ports, Mode Control, Audio, Other	
3825.60 LSB TS-2000		Change Your Station Data	
File Edit View Tools Config		Use Logger+ Audio	
		Enter Sends Message (ESM mode)	Ctrl+M
CW PH	-	Spot All S&P QSO's	
160 160	~	QSYing Wipes the Call & Spots QSO in Bandmap	o (S&P)
40 40 • • • Run • S&P		Grab Focus From Other Apps When Radio is Tur	ned
20 20	~	Do Not Automatically Switch to Run on CQ Freq	uency
F1 S&P CQ F2 Exch	~	Show Non-Workable Spots and Dupes in Bandm	пар
10 10 F7 Rpt Exch F8 Agn?		Reset RX Freq to TX when QSO is Logged (Run 8	د Split)
Esc: Stop		Sub Receiver Always On	
	~	CQ Repeat	Alt+R
Call history User		Set CQ Repeat Time	Ctrl+R
		CW / PH AutoSend Threshold	
	-	Enable Call History Lookup	
		Change CW/SSB/Digital Function Key Definition	s
		Change Band Plan	
		Manage Skins, Colors and Fonts	
		Change Operator Callsign Stored in Log	Ctrl+0
		Change Exchange Abbreviations	
		SO2R	
		WAE	
		Clear *.ini File Settings	
		SO2V Dual Receive	

#### Use your own PERSONAL CALLSIGN here

Operator Change	×
Enter Operator Call (Min 3 characters, only numbers and letters)	OK
W1TR	

# QSO Logging (1)

- Enter
  - Callsign
  - Class
  - Section
  - New in 2012 Ontario is no longer ON ARRL made 4 sections out of Ontario (ON): ONE – Ontario East ONN – Ontario North ONS – Ontario South GTA - Greater Toronto Area (West)
- Dupes will be Indicated



### QSO Logging (2)

2015-0	6-07 02:13:37Z Field Day -	2015 CMARA Field	Day.s3db						
DD-MM	HH:MM	Call	Freq	м	Ε	Sect	Pts	Computer	Op
16-04	20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR
16-04	20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR
16-04	21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR
17-04	00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR
17-04	00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR
17-04	00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ
17-04	01:01	W1AW	7066.00	CW	4F	СТ	2	TERRYTRAVEL	W1TR
17-04	01:12	W6IOP	28400.00	USB	1A	SCV	1	TERRYTDY	WA1ALZ
16-04	20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR

Note: the LOG Contains Some Contacts, but NOT W2TR To log W2TR 1B NNJ, type the information as follows: Note: the ? Indicates Callsign is NOT in Log, Master Database, Telnet, or Call History File

N1 7:	145.00	LSB TS-2000	8							
<u>F</u> ile	e <u>E</u> di	it <u>V</u> iew Tools	<u>C</u> onfig W	/i <u>n</u> dow Hel	р					
cw	PH			Class	S	ection	1			
160	160	W2TR		? 1B		CNV				
80	80			- UL						
40	(40)	🔵 🔴 🔘 Ru	un 🎯 S&P							
20	20	F1 S&P CQ	F2 Exch	F3 Spare	F4 W1TR	F5 His Call	F6 W1TR			
15	15	F7 Rpt Exch	F8 Agn?	F9 Zone	F10 Spare	F11 Spare	F12 Wipe			
10	10	Esc: Stop	Wipe		Edit Mark	Store Sp				
	Hdg 258° LP 78° 129mi 208km									
		Call histo	ry UserTex	xt appea	rs here when	enabled.				
K: N/	VUNITI	ED STATES, Zn 5				8	20 .;;			

# QSO Logging (3)

2015-06-07 02:23:592	Z Field Day - 2015 CMARA Field	d Day.s3db							x
DD-MM HH:MM	🔺 Call	Freq	М	Ε	Sect	Pts	Computer	Ор	<u>*</u> *
16-04 20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR	
16-04 21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR	
17-04 00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR	
17-04 00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR	=
17-04 00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ	-
17-04 01:01	W1AW	7066.00	CW	4F	СТ	2	TERRYTRAVEL	W1TR	
17-04 01:12	W6IOP	28400.00	USB	1A	SCV	1	TERRYTDY	WA1ALZ	
07-06 02:23	W2TR	7145.00	LSB	1B	NNJ	1	W1TR	W1TR	-
07-06 02:23	W2TR	7145.00	LSB	1B	СИИ	1	W1TR	W1TR	
			_						

the LOG NOW Contains W2TR 1B NNJ Note:

The Orange Color Indicates W2TR is NOT in Master Database, Callsign History File Dates / Times are Fictitious here, It's a Demo!

# QSO Logging (4) – Dupe Check

2015-06-07 02:13	:37Z Field Day - 2015 CMARA Field	Day.s3db						
DD-MM HH:MM	▲ Call	Freq	м	Ε	Sect	Pts	Computer	Ор
16-04 20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR
16-04 20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR
16-04 21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR
17-04 00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR
17-04 00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR
17-04 00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ
17-04 01:01	W1AW	7066.00	CW	4F	СТ	2	TERRYTRAVEL	W1TR
17-04 01:12	W6IOP	28400.00	USB	1A	SCV	1	TERRYTDY	WA1ALZ
16-04 20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR

Note: We already worked W1XX on 40 LSB, that station is IN THE LOG. If we try to LOG him again, same band, same mode,

the DUPE! message will show.

N1MM handles dupes OK by not scoring them.

If the other station insists, work him anyway, don't waste time arguing!

7:	145.00	LSB TS-2000	8								
<u> </u>	e <u>E</u> di	t <u>V</u> iew Tool	s <u>C</u> onfig \	Wi <u>n</u> dow Help							
cw	РН			Class	5	Section					
160	160	W1XX		$\checkmark$							
80	80		-								
40	(40)	D 🕒 🕒 🔿 Run 🔍 S&P Dupe									
20	20	F1 S&P CQ	F2 Exch	F3 Spare	F4 W1TR	F5 His Call	F6 W1TR				
15	15	F7 Rpt Exch	F8 Agn?	F9 Zone	F10 Spare	F11 Spare	F12 Wipe				
	10	Esc: Stop	<u>W</u> ipe	Log It E	dit <u>M</u> ark	Store Sp	ot It QRZ				
	Hdg 62° LP 242° 49mi 79km										
	Call history UserText appears here when enabled.										
K: N/		ED STATES, Zn 5				8	20 .::				

#### Edit Log – Make Corrections (1) Right Click on Log Entry to be Edited

Help

2015-0	6-07 03:33:54Z Field Day -	2015 CMARA Fiel	d Day.s3db			2	- 1	-		x
DD-MM	HH:MM	Call	Freq	М	Ε	Sect	Pts	Computer	Ор	× *
16-04	20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR	
16-04	21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR	
17-04	00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR	
17-04	00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR	=
17-04	00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ	
17-04	01:01	W1AW	Edit Contact					RYTRAVEL	W1TR	
17-04	01:12	W6IOP	Delete Contact					RYTDY	WA1ALZ	
07-06	02:23	W2TR	Play Contact					R	W1TR	-
07-06	02.23	W2TR	Jump to this freq	uency				R	W1TR	
07 00	02.25	1211	www.qrz.com						MI III	
			Change Timestar	mps of the		_				
			Change Operator	r						
			Change Mode							
			Add/Change Not	te						
			Change Station N	x Frequen	icy					
			Show rates to the	orne	ofo Wind	0.44				
				s Q30 III 1		000				
			Set Start Interpola	ation Time	e & Row					
			Set Stop Interpola		e & row					
			Rescore from this	s point on						
			Auto-Set Column	n Widths						
			Delete custom co	olumn wid	iths					
			Show Mode							
			Select All							
			Сору					•		

#### Edit Log – Make Corrections (2) Make Changes in Edit Contact Form

M Edit Contact												
General Contact Information												
Call	W2TR		Timestamp	2015-06-07 02:23:44								
Rx	7145	Тх	Frequency	7145								
Mode	LSB	Co	intest Name	FD								
RST Sent	59	RS	T Received	59								
Country	к		Station Call	W1TR								
Name			QTH									
Comment												
Contest Inform	nation					ĥ						
Nr	0	Ir Sent	17 Po	pints 1	Power							
Zone	5 5	Section	NNJ	Mult	Band 7							
Che	0 Prece	edence		Mult	WPX W2							
Exchange	1B	Run1	1/ 1	Mult	Radio 1							
Grid		Ор	W1TR	Misc								
Rover QTH												
Update Delete Help Exit 🛧 🗲												

### Restarting N1MM Mid Contest

- If a Computer Fails, Substitute a NEW computer.
   Do NOT Name the NEW Computer Same as the OLD.
   Use a DIFFERENT Name.
- If the Generator Goes Out, or Station (Computer) is Shut Down Normally...
  - N1MMplus should REMEMBER
     what Database and Log it is using and restart OK.
  - After Restart, or Changing Operators
     Check the Network Status Window to see
     Who is on What Bands and Modes Before Operating
  - The Database and Log Name Appear at the Title Bar at the TOP of the Log Window
  - IF NOT Correct:
    - File / Open Database instead of New Database
    - File / Open Log in Database instead of New Log In Database

### At End of Field Day ...

- Close N1MMplus Logger
- Wait for the Field Day Chairman (W1TR) to check that the FD Log seems OK on Master ALL QSOs should be in the log on everyone's computer, including the MASTER.
- Any Questions, Ask the Field Day Chairman (W1TR)

#### Log Consolidation and Submittal

This is what the Field Day Chairman will do to submit FD Logs to ARRL:

- 1) Check that Log is OK on Master Computer
- 2) Give OK to Shut Down Computers, Stations
- If NOT OK, Problem Resolution will Begin Computers stay ON Stations can Begin Tear Down
- 4) The Field Day Log, \*.s3db, will be Loaded into N1MMplus
- 5) The Log will be Exported to Cabrillo Format for ARRL Submission
- 6) The Cabrillo File will be sent to ARRL via EMAIL



### **User Support**

• N1MMplus Web

http://n1mm.hamdocs.com/tiki-index.php Home source of information about N1MM, downloads, documentation, etc.

#### • N1MMplus Email User Groups

<u>http://n1mm.hamdocs.com/tiki-index.php?page=Overview#N1MM\_Logger\_Discussion\_Groups</u> Get notification of bugs and hints & kinks on how to use N1MM Post questions, comments, and report BUGS to the developers

### Summary

- Free !! 🙂 🙂
- Widely Used and Supported 😳
- Works on Microsoft Windows (only), XP thru Win 8 😕
- Supports nearly EVERY contest 🙂
- Works with most radios, coupled, or stand alone 🙂
- CW automatic keying
- Digital Voice Keying (uses computer sound card)
- Digital sound card modes: MMTTY, MMVARI, FLDIGI
- Easy to setup
- Easy to use
- Remember to Setup:
  - Operator CTRL+O

Frequency and Mode are Automatic – CAT Control Date / Time are Automatic – N1MMplus Networking

#### **Extra Topics**

- W1TR Go-Kit Diagram
- CAT Control
- CW Keying
- Digital Voice Keying (DVK)
- Audio Files
- Audacity Audio Editor
- Digital Modes (RTTY, PSK, Etc.)

#### W1TR Go-Kit Diagram Keyer Paddle i ų. -Headset with Boom Microphone 110 vac Power Strip 12 vdc Power Supply Level Construction Portable XCVR (IC-7000) RigBlaster USB RJ-45 to mini-phono 14.100.00



#### CAT Control

- USB or RS-232 to CI-V translator to Rig (ICOM)
- RS-232 directly to Rig (Kenwood)
- RS-232 to TTL converter to Rig (Yaesu)
- USB to RS-232 converter may be needed Most USB to RS-232 converters work OK for CAT control and for PTT, CW, FSK RTTY using EXTFSK
- CAT Control Monitors Rig Data (frequency, mode)
- CAT Control Can Control Rig Data (frequency, mode)
- Other items can be Monitored / Controlled Mic Gain, CW Speed, RF Gain (depends on RIG)

# CW Keying

- RS-232 or LPT used
- USB to RS-232 may be needed
- RS-232 DTR for CW Keying
- RS-232 RTS for PTT
- RS-232 TXD for RTTY FSK
- Need RS-232 (± 12 VDC) to TTL (0/+5 vdc) Level Converter (RigBlaster Provides This)
- Function Key Macros Automatically Send CW
- Ctrl-K Keyboard Window Eliminates Need for Keyer Paddle Most Operators Keep the Keyer Paddle Anyway, Just In Case !!

### **Digital Voice Keying**

- Use Computer Sound Card
- Computer Microphone to Rig Speaker Output
- Computer Speaker Out to Rig Microphone Input
- Isolation Transformer for Both (RigBlaster Provides This)
- All Modulation and Demodulation in Software (Digital Modes)

#### **Digital Modes Equipment Interconnect**



# Audio Files

- Pre-Recorded Messages (CQ, This Is..., etc)
- Letters (Phonetics) and Numbers, Pieced Together
- N1MMplus can play back messages as defined in macro files associated with program function keys (Function Keys)
- N1MMplus can play back internal data items
   Callsign of other station
   Your callsign
   Signal report
   Contest exchange
   using letter phonetics and numbers pieced together
- It is possible to work a phone contest without ever saying a single word into the microphone

#### Audacity Audio Editor

- Use Audacity to Edit Audio Phrases
- Audacity Web Site

http://audacity.sourceforge.net/download/

# Digital Modes (RTTY, PSK, Etc.)

- N1MMplus does NOT do Digital Modes by Itself
- N1MMplus works with MMTTY for RTTY (FSK) Use of USB to Serial Device for FSK MAY need EXTFSK driver (software) http://mmhamsoft.amateur-radio.ca/
- N1MMplus works with MMVARI for Digital Modes <a href="http://mmhamsoft.amateur-radio.ca/">http://mmhamsoft.amateur-radio.ca/</a>
- N1MMplus works with FLDIGI for Digital Modes http://www.w1hkj.com/Fldigi.html

# N1MMplus Quick Sheet

- Set Date/Time on Computer to WWV (2.5,5,10,15,20 MHz) CHU on 3.330, 7.850, 14.670 MHz N1MM Networking should take care of this.
- Install N1MMplus Software (Full Install then a Recent Update)
- Recent Update will be provided by the Field Day Chairman (W1TR)
- Open Existing Database ...\2015 CMARA Field Day.s3db
- Open Log In Database FD
- All Station and Contest Parameters are Already Setup
- Set Operator Callsign (KB1VUA, etc) not to be confused with Station Callsign CTRL-O
- Set Frequency in KHz (e.g. 3550, 3850) use typical CW or SSB frequency accordingly
- Set Mode (USB, LSB, CW, AM, FM)
- With CAT Control, just dial up Frequency and Mode with Bandswitch, VFO, Mode Switch
- Enter QSO: Callsign, Class, Section while logging
- Remember ON (Ontario) is now ONN, ONE, ONS, GTA starting Fall 2012
- Edit or Quick Edit to fix Errors
- Delete to Remove bad QSOs