

N1MM ...

What It Does

Getting Started

Radio Interfacing

Mike Furrey
WA5POK/4

N1MM – What it does

- Primarily a contest logging software
- All major contests are supported along with many minor contests.
- Can send SSB/CW/Digital
- Can control your radio
- Chose and point your antenna
- Easy log conversions, merging and log exporting

N1MM – What it does

- N1MM can function as general logging software
- DX4WIN is much better but at a cost of \$80
- Logger32 by K4CY works well and is free
- Both can input from N1MM to upload to LOTW
- N1MM is well supported and maintained
- Runs in Windows versions from 2000 to Windows 8; 32 and 64 bit systems

N1MM – Getting Started

- First Download the full installer

<http://n1mm.hamdocs.com/tiki-index.php?page=Full+Install>

- Next download and install the latest updates

http://n1mm.hamdocs.com/tiki-list_file_gallery.php?galleryId=15

- Two Icons will appear

- a. N1MM Icon for logging

- b. Grayline Icon for visual of sunset and sunrise

- You will also have a very thorough 931 page pdf manual!

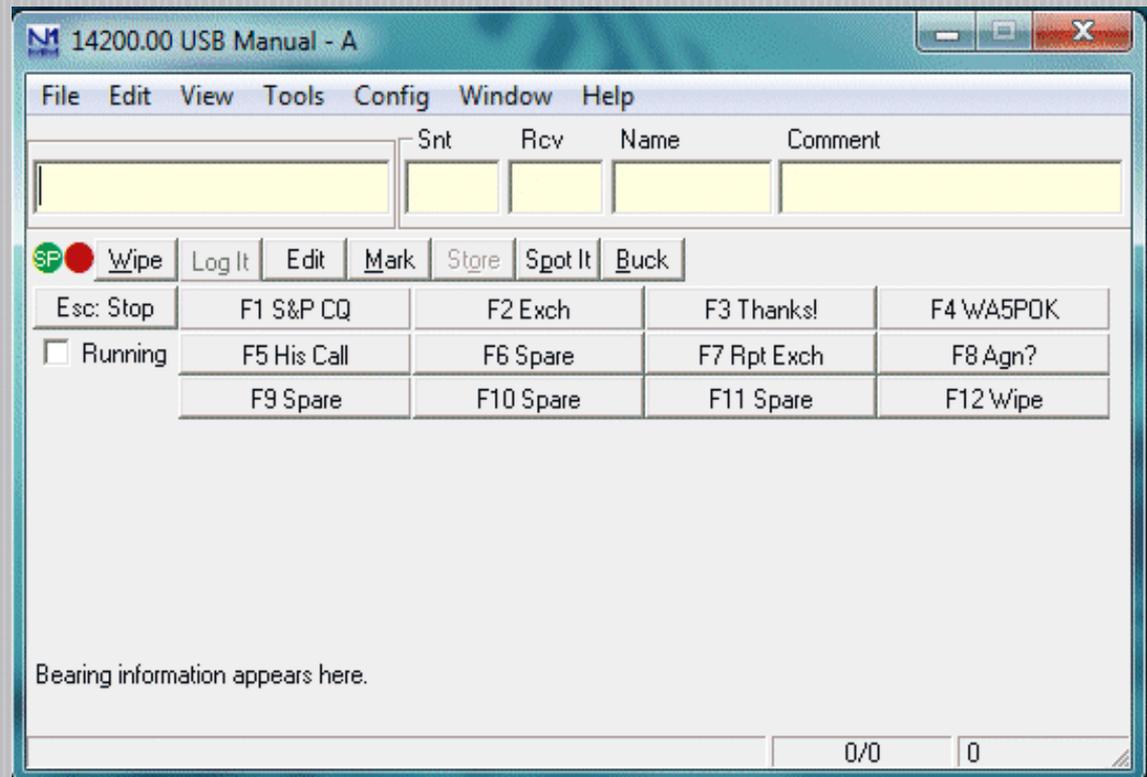
N1MM - Getting Started

- Click on the N1MM Icon



N1MM- Getting Started

General Logging
Dialog Box
Appears



N1MM – Getting Started

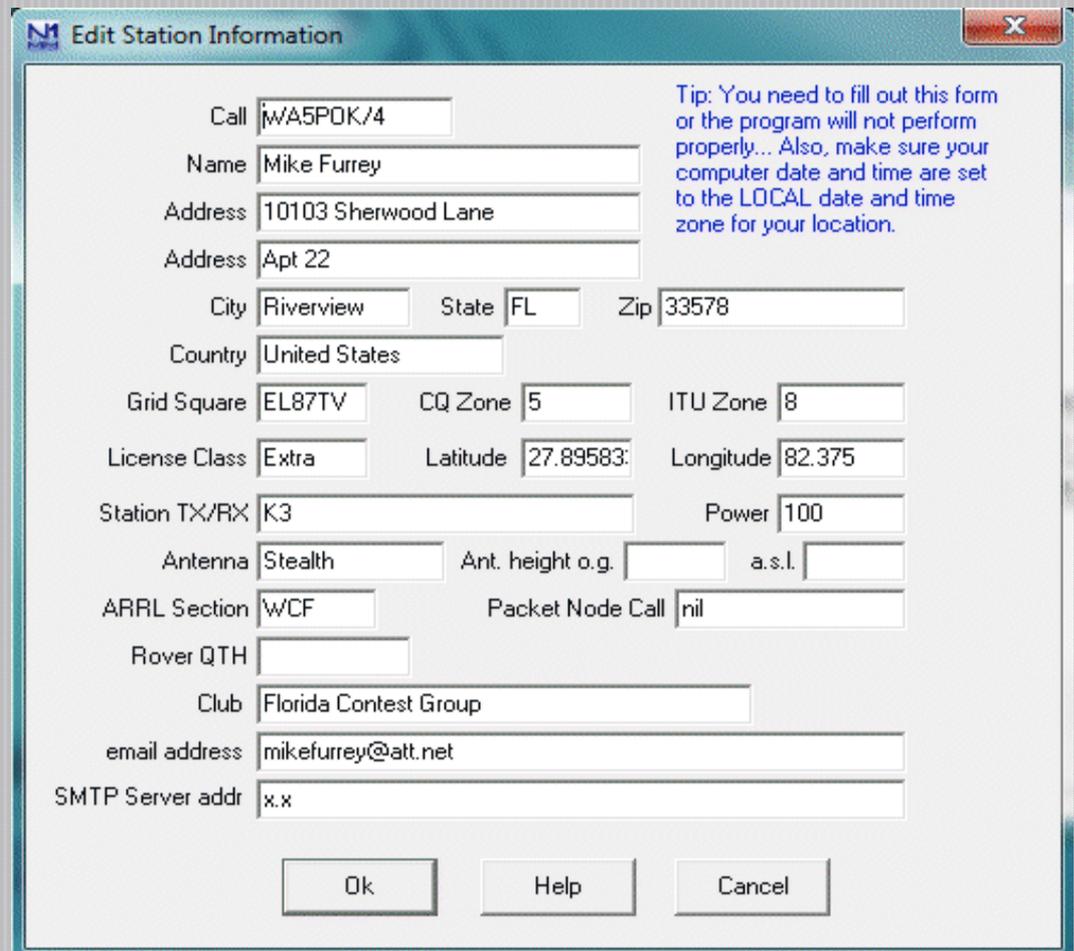
Click

“Config”

Then click:

**“Change Your
Station Data”**

and you will see ...



Edit Station Information

Tip: You need to fill out this form or the program will not perform properly... Also, make sure your computer date and time are set to the LOCAL date and time zone for your location.

Call	wA5POK/4				
Name	Mike Furrey				
Address	10103 Sherwood Lane				
Address	Apt 22				
City	Riverview	State	FL	Zip	33578
Country	United States				
Grid Square	EL87TV	CQ Zone	5	ITU Zone	8
License Class	Extra	Latitude	27.89583	Longitude	82.375
Station TX/RX	K3		Power	100	
Antenna	Stealth	Ant. height o.g.		a.s.l.	
ARRL Section	WCF	Packet Node Call	nil		
Rover QTH					
Club	Florida Contest Group				
email address	mikefurrey@att.net				
SMTP Server addr	x.x				

Ok Help Cancel

N1MM – Using

- Now you are ready to use N1MM to log general or non-contest QSOs.
- So ... What about Field Day? Or any other contest?

N1MM - Getting Started for FD

Click

“File”

Click

**“New Log
In Database”**

and you will see ...

C:\N1MM Logger\ham.mdb

Select Contest Type for New Log

Log Type

Start Date

Contest Associated Files

Operator Category

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

Power Category

Mode Category

Overlay Category

Station Category

Assisted Category Time Category

Xmitter Category

Sent Exchange Omit RST. E.g. CQWW: 05 SS: A 56 EMA

Operators Update Ops from Log

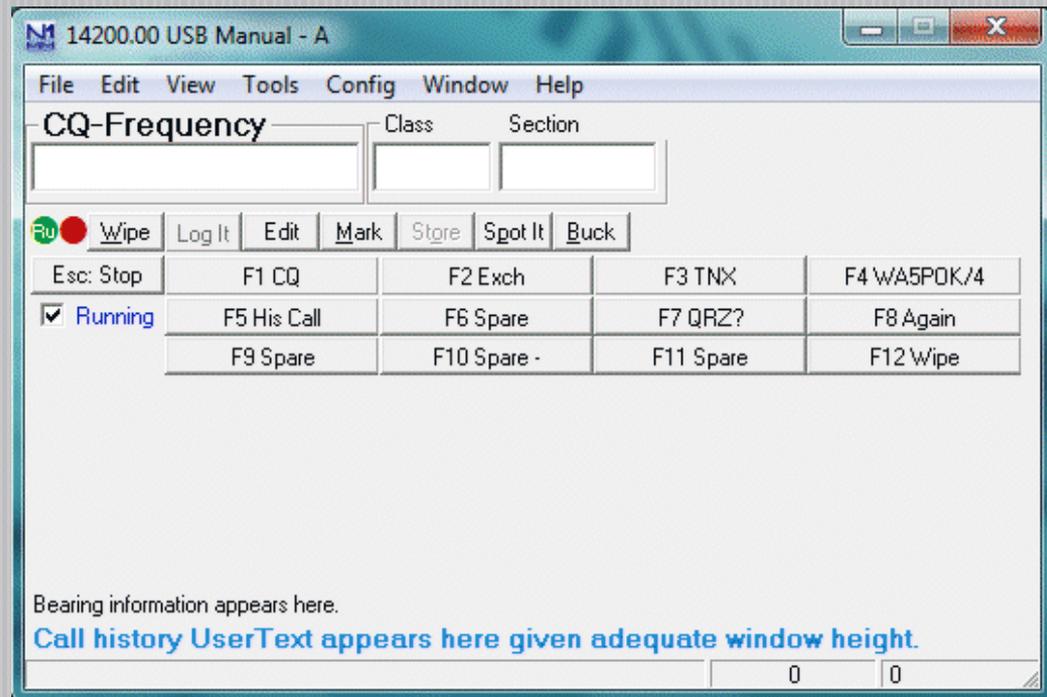
Soapbox Comments

Show Rules Show Setup Edit Off Times

OK Help Cancel

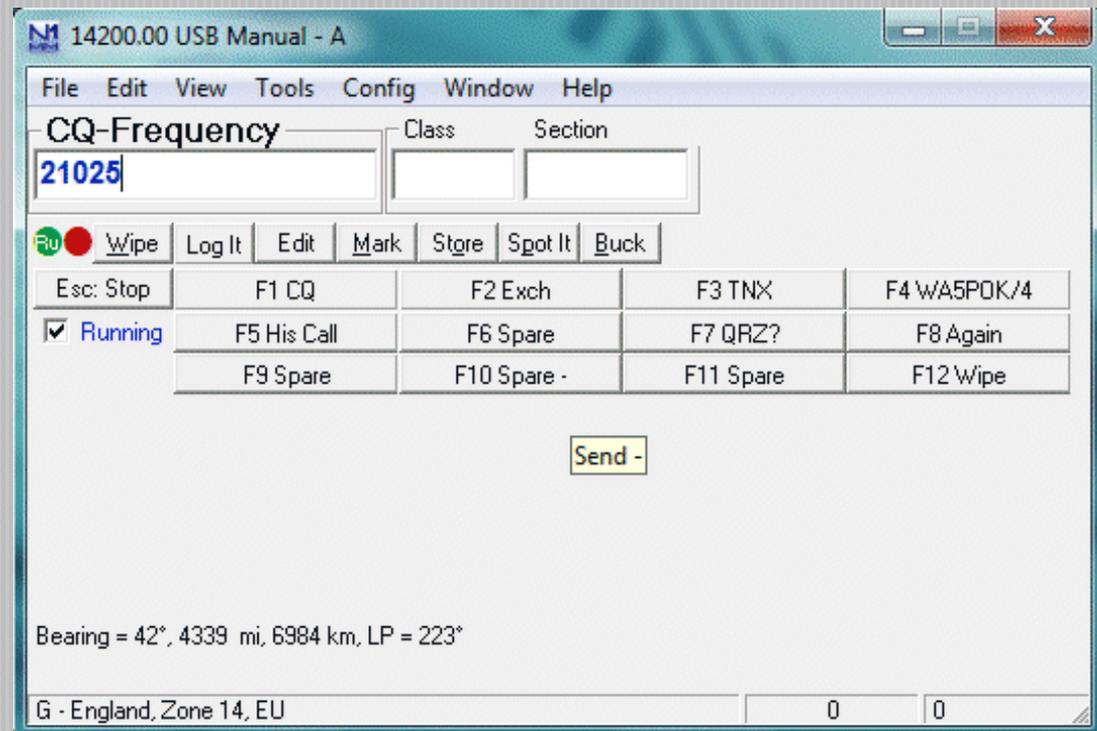
N1MM – Getting Started for FD

You are all ready to start on 20 meter SSB for FD! Move from box to box with either the “**TAB**” key or “**space bar**”. Press “**enter**” to log the QSO.



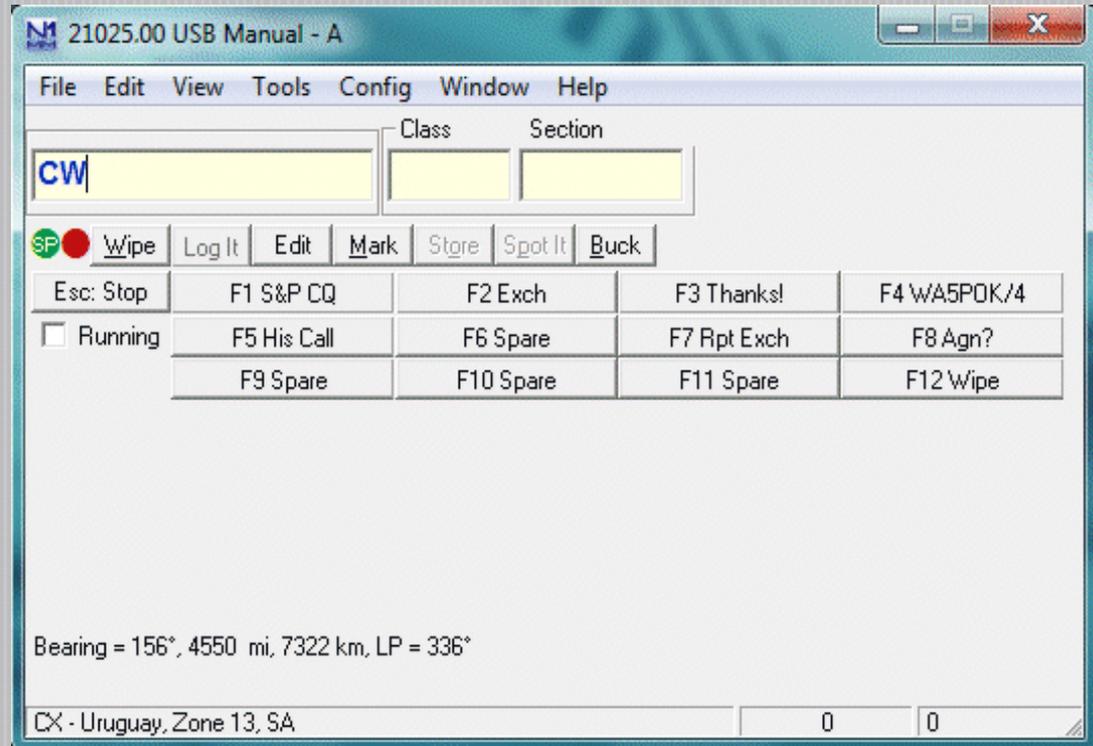
N1MM – Getting Started for FD

To change **Bands**
type the
Frequency in KHz
in the Call sign box
and hit “**Enter**”



N1MM – Getting Started for FD

To change **Mode**
type the Mode
CW, **SSB**, **RTTY**
in the Call Sign box
and hit “**Enter**”



N1MM – Getting Started for FD

The screenshot displays the N1MM software interface during a Field Day event. The main window, titled "Multipliers - Sections - 0 of 996", shows a grid of multipliers for various US states and sections, organized into 10 columns (0-9). The multipliers are listed as follows:

0	1	2	3	4	5	6	7	8	9
CO	CT	ENY	DE	AL	AR	EB	AK	MI	IL
IA	EMA	NLI	EPA	GA	LA	LAX	AZ	OH	IN
KS	ME	NNJ	MDC	KY	MS	ORG	EWA	WV	WI
MN	NH	NNY	WPA	NC	NM	PAC	ID		
MO	RI	SNJ		NFL	NTX	SB	MT		
ND	VT	VI		PR	OK	SCV	NV		
NE	WMA	WNY		SC	STX	SDG	OR		
SD				SFL	WTX	SF	UT		
				TN		SJV	WWA		
				VA		SV	WY		
				WCF					

Below the grid, there are controls for "Country", "ZN", "Sect", and "Other", along with "Auto" dropdowns and a "Reset" button.

Other windows visible include:

- 9/9/2013 13:43:00Z Field Day - ham.mdb**: A call log table with columns for TS, Call, Freq, Mode, Exch, Sect, and Points.
- 14200.00 USB Manual - A**: A manual window for the USB interface, showing a "Class" and "Section" dropdown, and a table of function keys (F1-F12) with their corresponding actions.
- Score - 0 Points**: A score display window showing "Band", "Mode", "QSOs", "Pts", "Total", "Both", and "Score".
- Check -**: A window displaying the word "Unique" in red text.

The Windows taskbar at the bottom shows the system time as 9:43 AM on 9/9/2013.

N1MM – Radio Interfacing

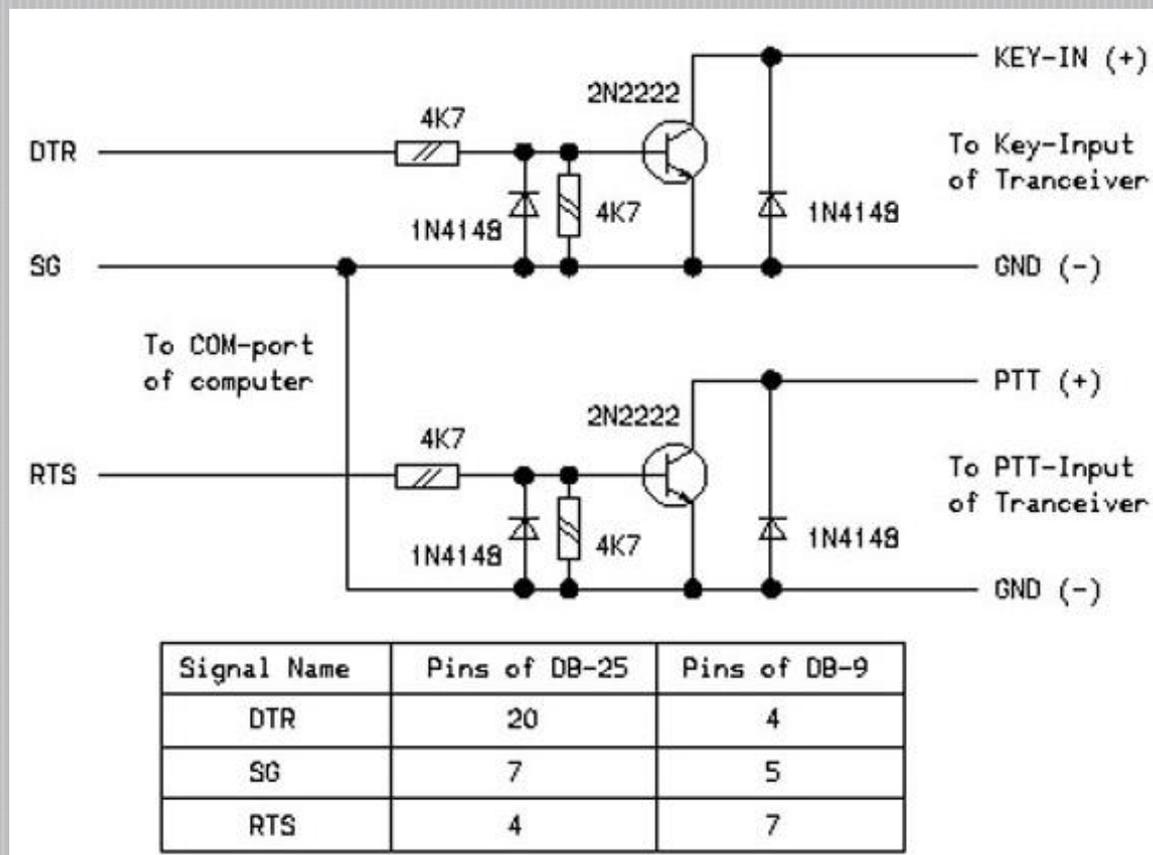
- Computer needs to talk with radio through one or two computer ports
- CW sending needs one port
- Radio Control (basic) needs another port
- Computer has serial ports – Easy
- Computer has only USB ports – Be Careful!
Use only USB-to-Serial adaptors built with “**FTDI**” chipset, “**Prolific**” chipset is very problematic

N1MM – CW Control

- The computer must be interfaced with the radio to send **CW**.
- The interface can be a pair of simple homebrew switching transistor circuits.
- The interface can be a more sophisticated commercial unit.

N1MM – CW Control

Schematic for Homebrew Interface



N1MM – CW Control

WinKeyer USB Interface kit - \$79



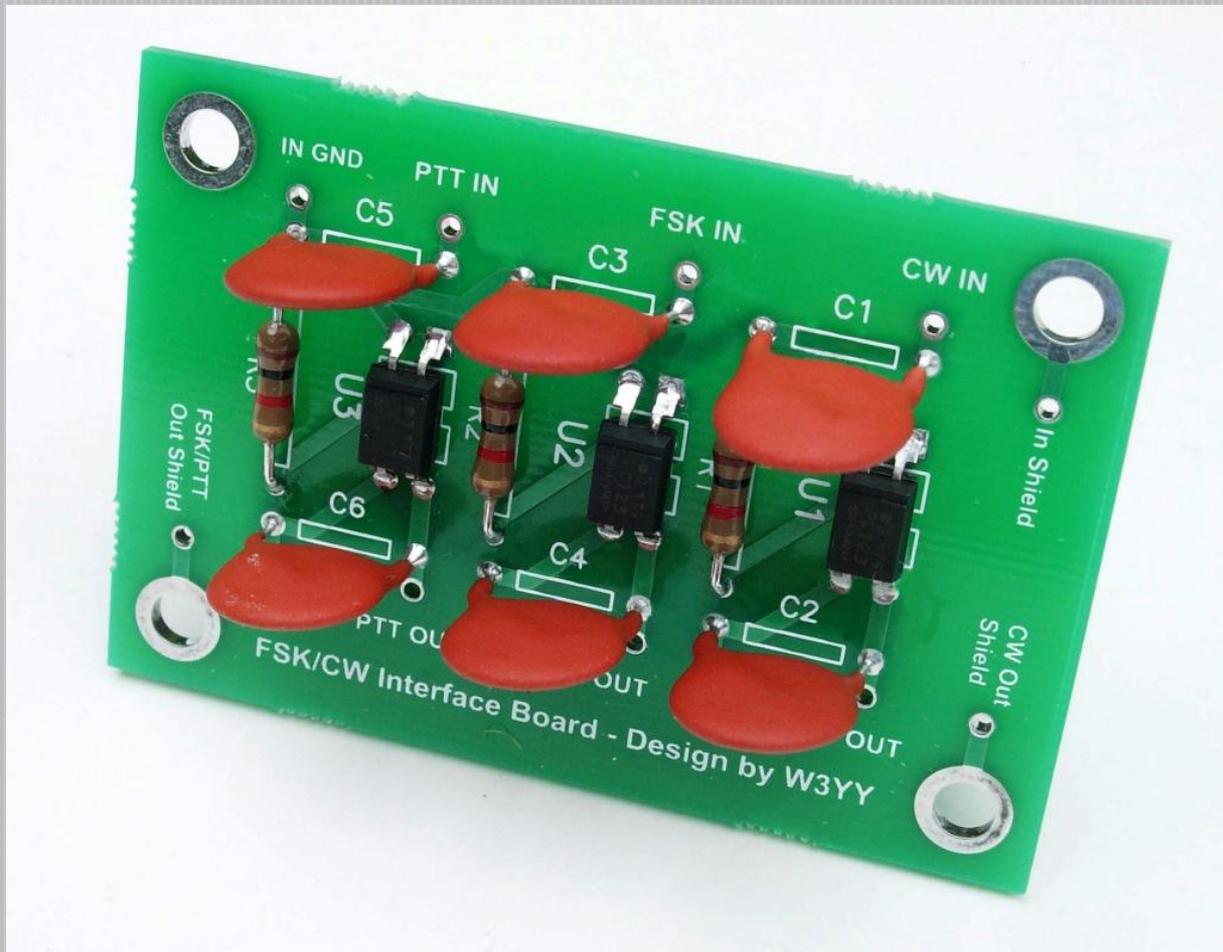
N1MM – CW Control

Signalink USB Interface Unit - \$109.95



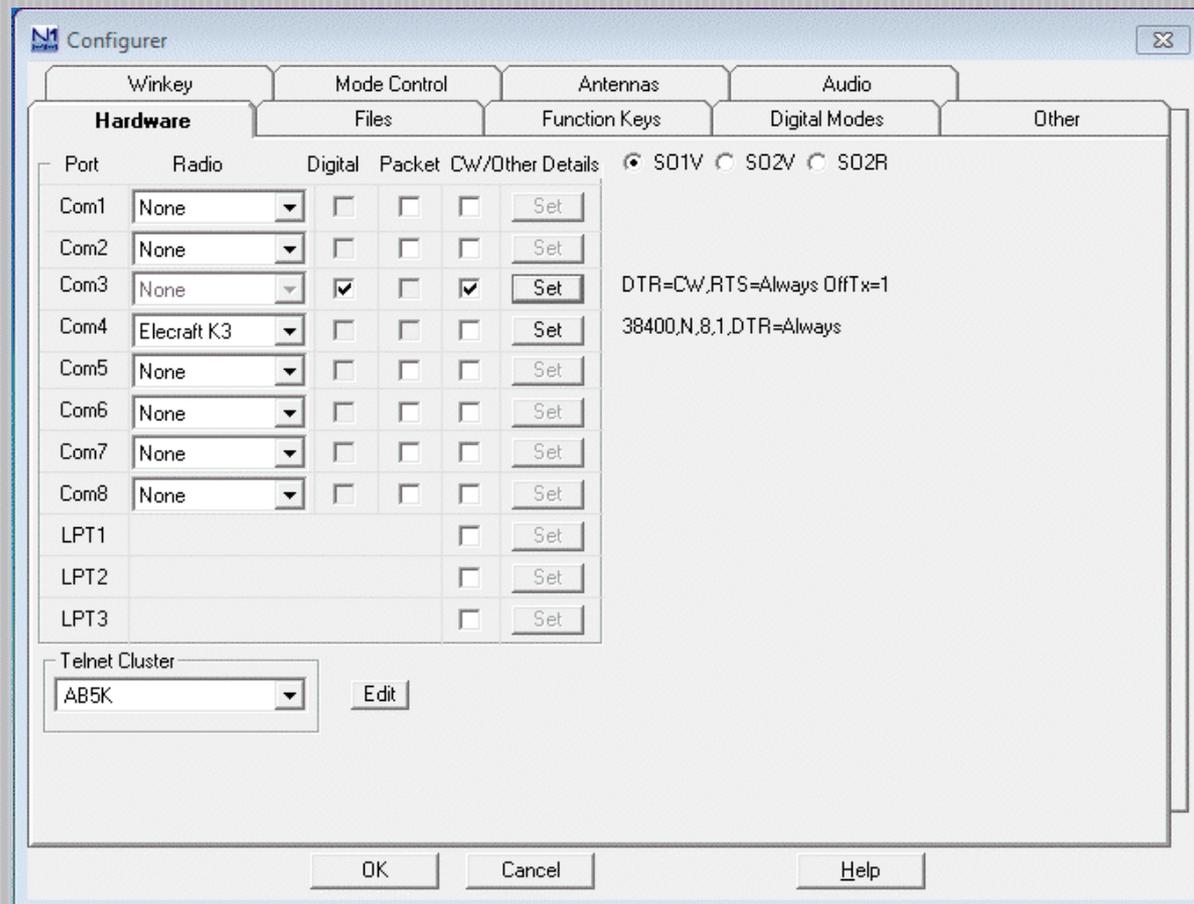
N1MM – CW Control

W3YY CW/FSK Optical Interface - \$29 + \$4 for shipping



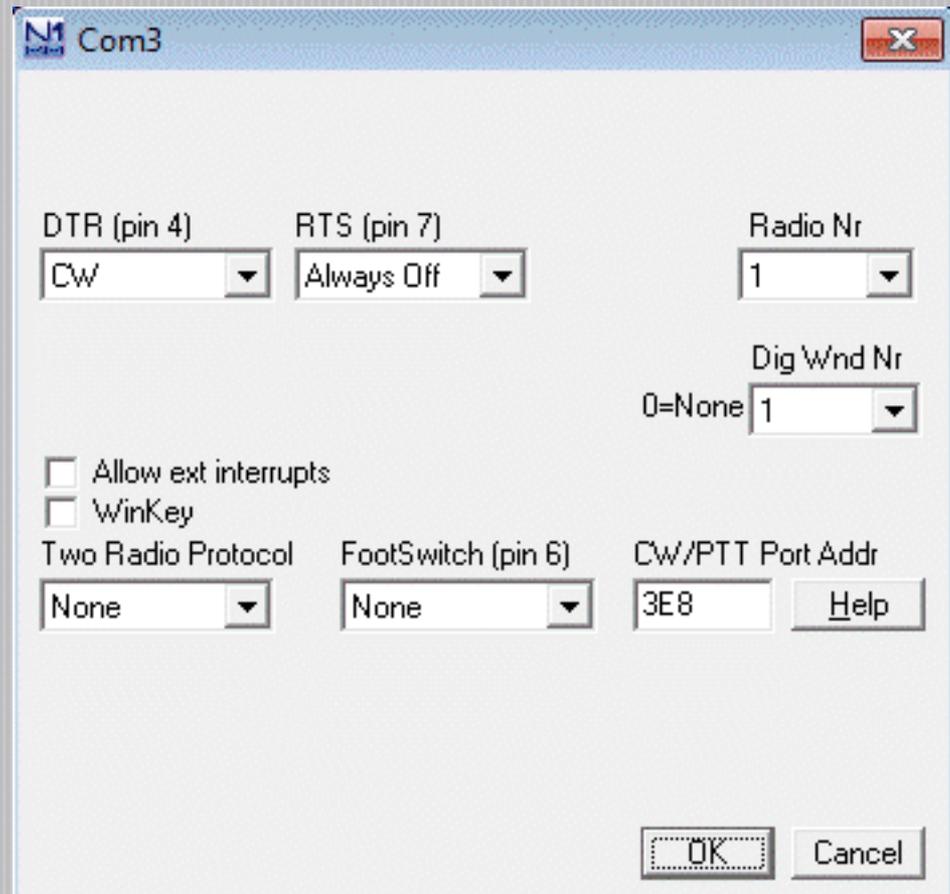
N1MM – Radio Interfacing

My laptop sets the USB-to-Serial port adaptors to com3 and com4. I set com3 for cw and digital control and com4 to my radio.



N1MM – CW Control Parameters

In the “**configurer**” screen shot, click “**set**” that is next to com3 port and set the pull-downs as shown to the right.



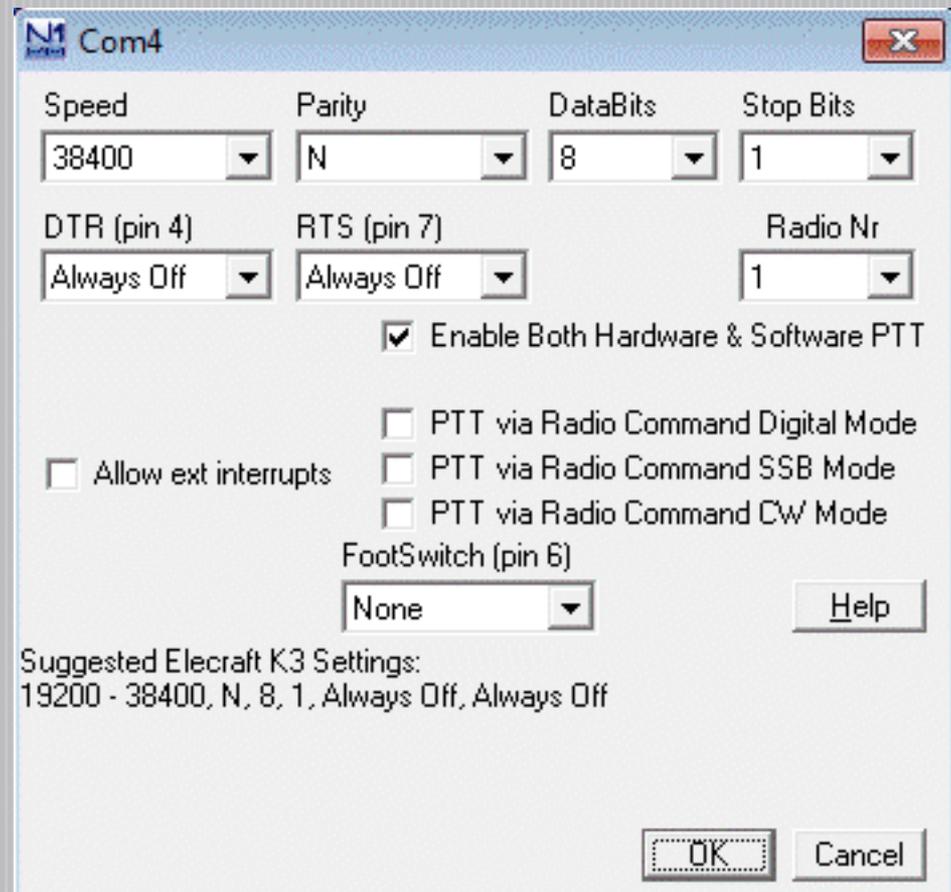
The screenshot shows the 'Com3' configuration dialog box in N1MM. The window title is 'Com3'. The settings are as follows:

Parameter	Value
DTR (pin 4)	CW
RTS (pin 7)	Always Off
Radio Nr	1
Dig Wnd Nr	1
Allow ext interrupts	<input type="checkbox"/>
WinKey	<input type="checkbox"/>
Two Radio Protocol	None
FootSwitch (pin 6)	None
CW/PTT Port Addr	3E8

Buttons: OK, Cancel, Help

N1MM – Radio Control Parameters

In the “**configurer**” window, click “**set**” that is next to com4 port and set the pull-downs as shown to the right.



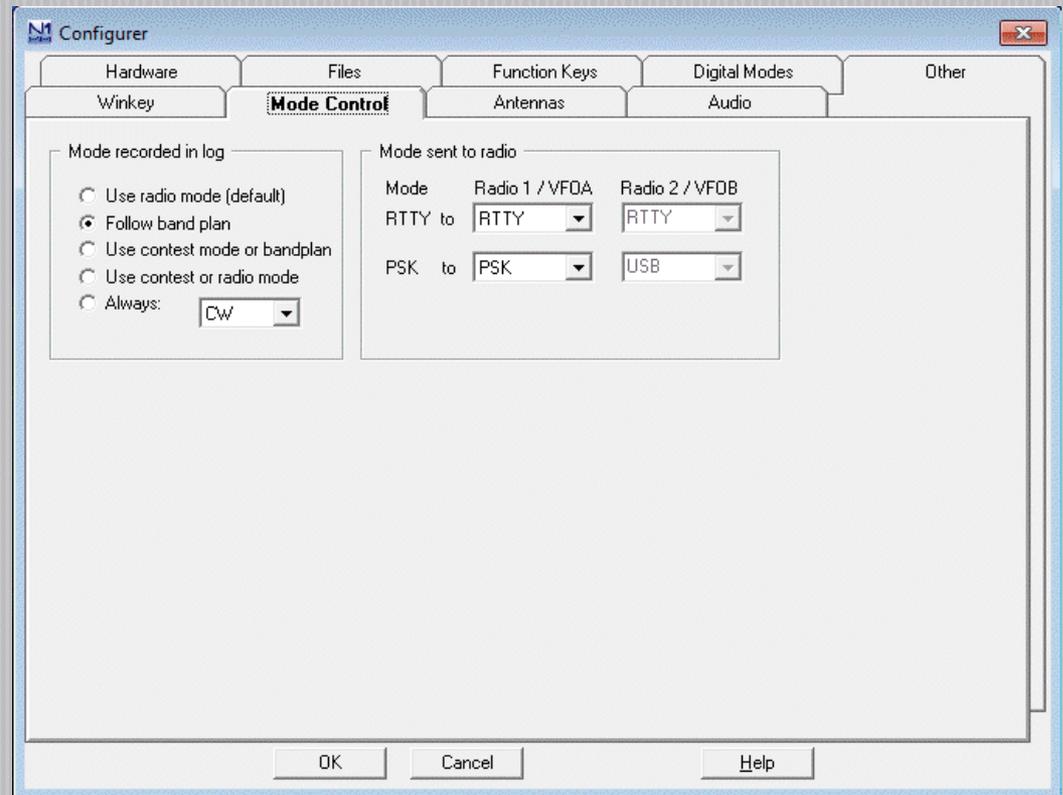
The screenshot shows the 'Com4' configuration window in N1MM. The window title is 'N1 Com4'. It contains several configuration options:

- Speed: 38400
- Parity: N
- DataBits: 8
- Stop Bits: 1
- DTR (pin 4): Always Off
- RTS (pin 7): Always Off
- Radio Nr: 1
- Enable Both Hardware & Software PTT
- PTT via Radio Command Digital Mode
- PTT via Radio Command SSB Mode
- PTT via Radio Command CW Mode
- Allow ext interrupts
- FootSwitch (pin 6): None

At the bottom, there is a 'Help' button and a 'Suggested Elecraft K3 Settings:' section with the text: '19200 - 38400, N, 8, 1, Always Off, Always Off'. At the very bottom right are 'OK' and 'Cancel' buttons.

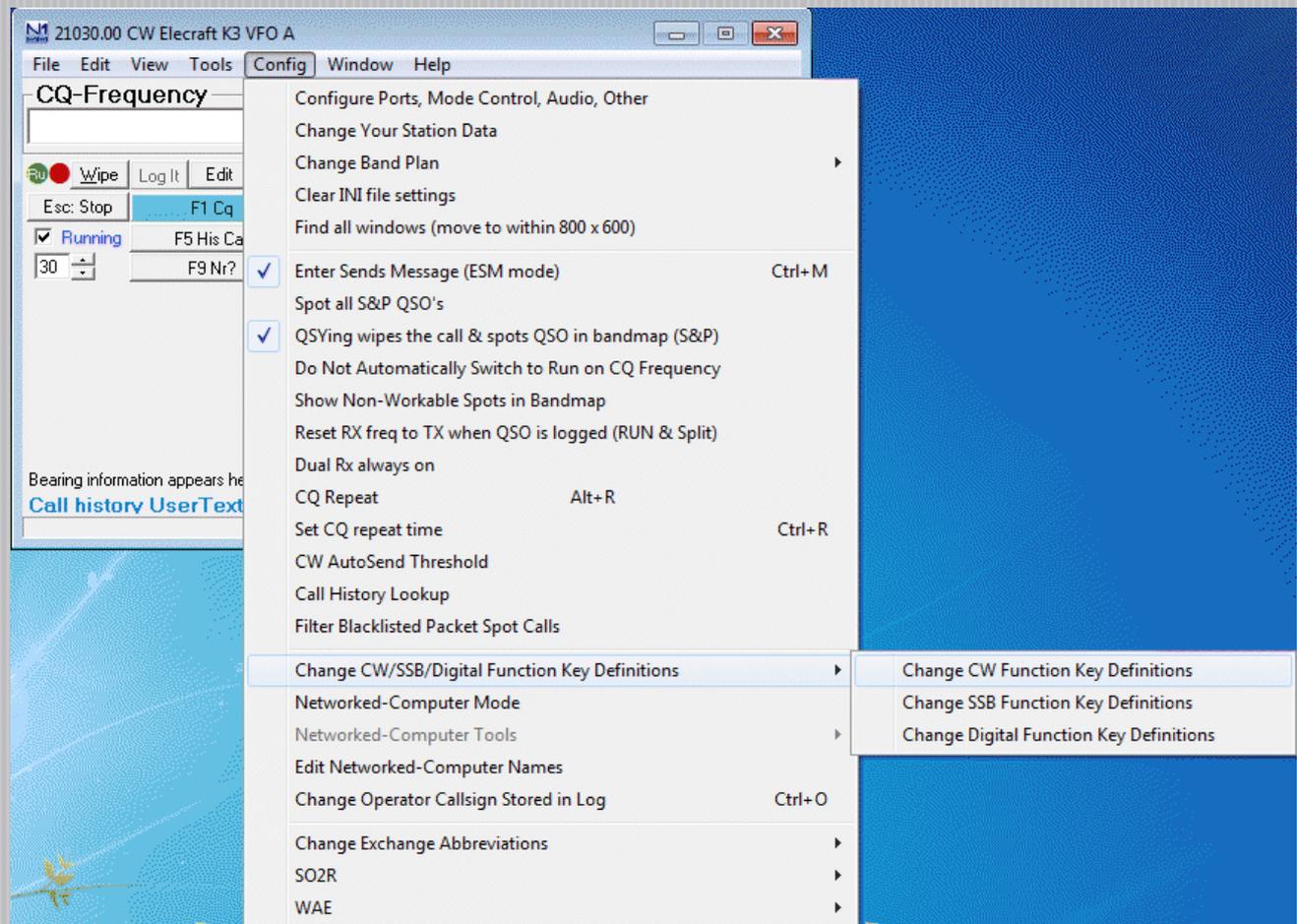
N1MM – Radio Control Parameters

In the “**configurer**” window, select “**Mode Control**” and set boxes as shown.



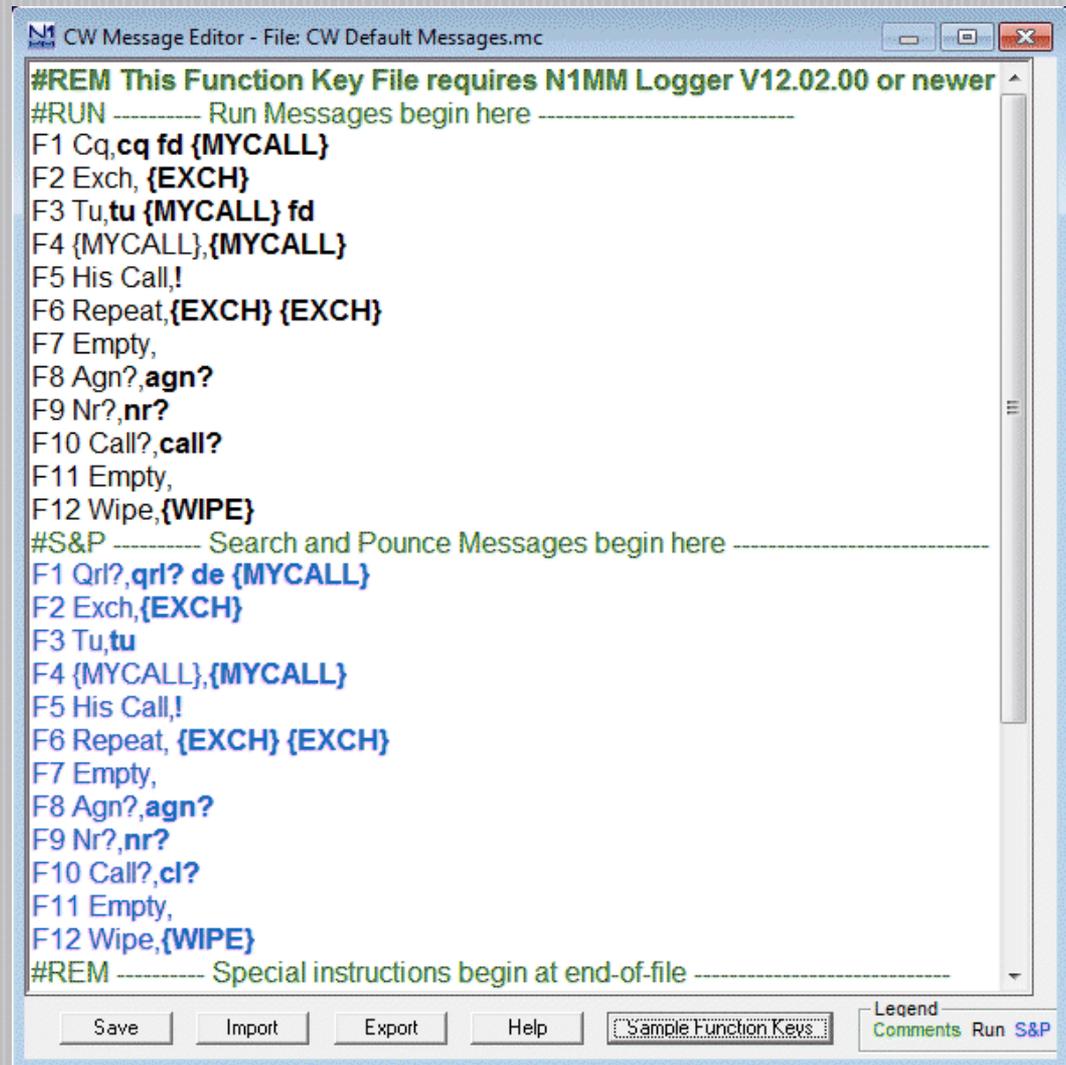
N1MM – CW Control

The **config** Pull-down shows where to define the function keys to send a CW Message. Notice the **ESM** line is checked.



N1MM – CW Control

Screen shot of how the function keys might be defined



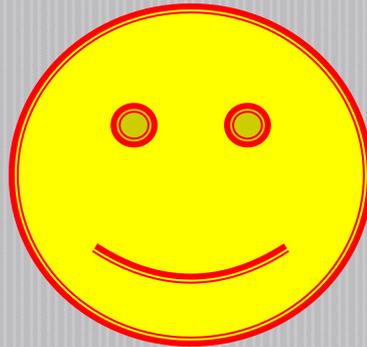
The screenshot shows a window titled "CW Message Editor - File: CW Default Messages.mc". The window contains a list of function key definitions for F1 through F12, organized into three sections: Run Messages, Search and Pounce Messages, and Special instructions. The text is as follows:

```
#REM This Function Key File requires N1MM Logger V12.02.00 or newer
#RUN ----- Run Messages begin here -----
F1 Cq,cq fd {MYCALL}
F2 Exch, {EXCH}
F3 Tu,tu {MYCALL} fd
F4 {MYCALL},{MYCALL}
F5 His Call,!
F6 Repeat,{EXCH} {EXCH}
F7 Empty,
F8 Agn?,agn?
F9 Nr?,nr?
F10 Call?,call?
F11 Empty,
F12 Wipe,{WIPE}
#S&P ----- Search and Pounce Messages begin here -----
F1 Qrl?,qrl? de {MYCALL}
F2 Exch,{EXCH}
F3 Tu,tu
F4 {MYCALL},{MYCALL}
F5 His Call,!
F6 Repeat, {EXCH} {EXCH}
F7 Empty,
F8 Agn?,agn?
F9 Nr?,nr?
F10 Call?,cl?
F11 Empty,
F12 Wipe,{WIPE}
#REM ----- Special instructions begin at end-of-file -----
```

At the bottom of the window, there is a toolbar with buttons for "Save", "Import", "Export", "Help", and "Sample Function Keys". To the right of the toolbar is a "Legend" section with "Comments", "Run", and "S&P" options.

N1MM – SSB and RTTY

**I am more than pleased
to let someone else
have some fun!**



N1MM

- Download it.
- Install it.
- Configure it.
- Give it a test drive in a contest.
- **IT's FREE!**

73 de WA5POK/4

N1MM

Websites Referenced:

- **N1MM Contest Logging Software Home Page**
- <http://n1mm.hamdocs.com/tiki-index.php?page=HomePage>

- **N1MM Logger Full Install**
- <http://n1mm.hamdocs.com/tiki-index.php?page=Full+Install>

- **N1MM Latest Updates**
- [http://n1mm.hamdocs.com/tiki-list file_gallery.php?galleryId=15](http://n1mm.hamdocs.com/tiki-list_file_gallery.php?galleryId=15)

N1MM

- **DX4win**
- <http://www.dx4win.com/>

- **Logger32**
- <http://www.logger32.net/>

- **Freeware Program for PSK31 and PSK63**
- <http://www.digipan.net/>

- **MMTTY BY JE3HHT**
- <http://hamsoft.ca/pages/mmtty.php>

N1MM

- **K1EL WinKey Product Page**
 - <http://www.k1el.com/>
- **Signalink USB Interface**
 - <http://www.tigertronics.com/index.htm>
- **West Mountain Radio – Rigblaster**
 - <http://www.westmountainradio.com/>
- **FSK/CW Optically Isolated PC Interface**
 - <http://w3yy.com/fsk.htm>
- **Schematic for Homebrew Interface**
 - http://py1wx.files.wordpress.com/2011/04/sstv_psk_cw-interfeice.jpg