



FT8 Made Simple: Quick start to your first QSO's

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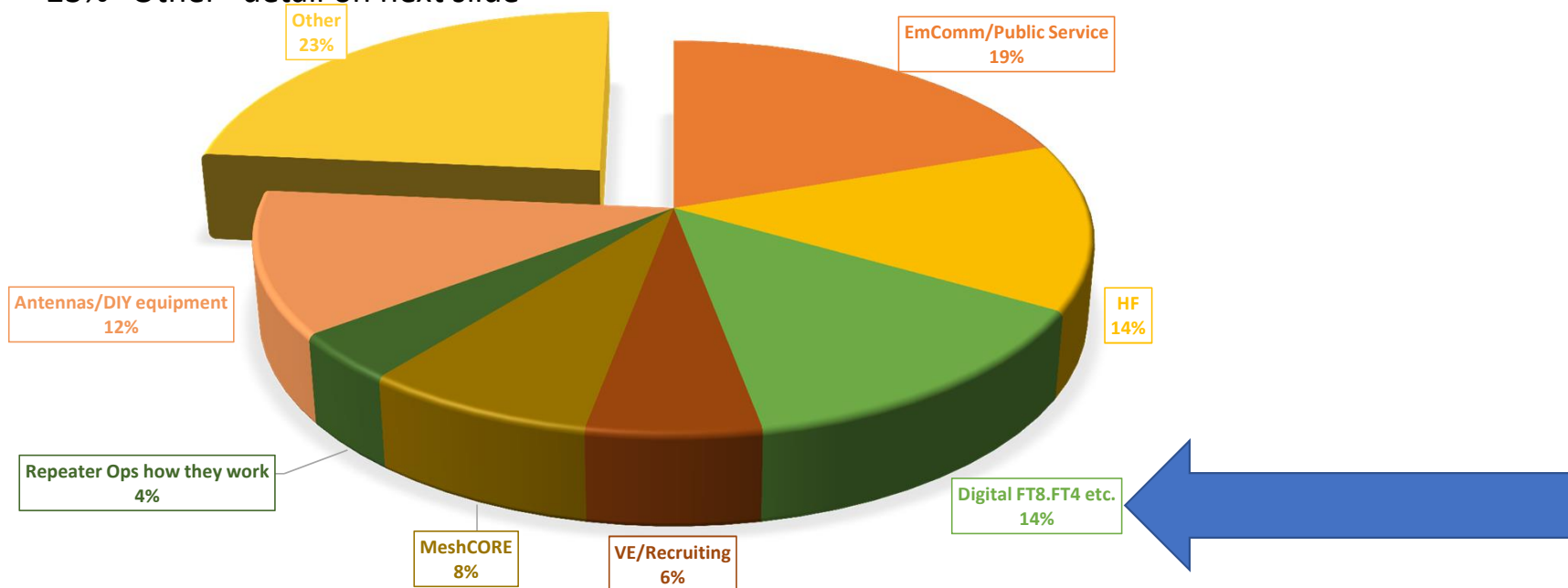
Date: 14 July 2026



Part 2: Top 3 topics of Interest

TOP 3 TOPICS OF MEMBER INTEREST

- 23% “Other” detail on next slide



Weak Signal Joe Taylor - X

Weak Signal Applications:

EME: JT4, JT65

EME/Moonbounce: Q65

Meteor Scatter: MSK144

HF/VHF: FT-8 (50 Hz, 15 sec.)-most popular

FT-4 (90 Hz, 7.5 sec)-contesting

LF/MF: FST-4 (Gaussian Shaped 4-GFSK)-extreme weak signal (-43dB possible), variable TX/RX slots 15-1800 sec.

WSPR: Beacon (6Hz) very low power FSK

What Is FT-8?

- Fastest growing form of ham communications.
- Digital communications protocol optimized for weak signals
- Developed by Joe Taylor, K1JT and Steve Franke, K9AN
- FT-8 Franke-Taylor design, 8-FSK modulation
- Narrow bandwidth - 50 Hz vs 2.8KHz (2800 Hz) for SSB
- Fixed time intervals-15 seconds Tx & Rx



FT8_Video.ogg



How FT-8 works:

- WSJT-X software suite
- Transmit very short structured messages (77 bits)
- 15 second cycles
 - 12.64 seconds Tx
 - 2.36 seconds for decoding.
- Time synchronization is critical to success
- Highly efficient:
 - Digital communications protocol optimized for weak signals
 - Decoding capable to -20 dB Signal-to-noise
 - 50 Hz bandwidth (fit 56+ signals into the bandwidth of SSB)
- 8-FSK modulation
- FEC- reliable down to -21dB below the noise floor

How do I start operating FT-8?

Only 3 items are required:

- PC running the WSJT-X (Free) software suite*
- Sound Card*
 - [Signalink](#)
 - [DigiRig](#)OR
 - Integrated into the radio
- Radio*
 - Audio TX, Rx
 - PTT (VOX)
 - Rig Control (CAT Control, CI-V, RS-232, etc.)



*Interface cables between the PC USB, sound card and radio USB or Serial
Verify RFI on Digi coiled cables (add ferrite(s) if needed)

Investment: Less than \$150

Radio Connections:

Radio

- CAT (Rig) Control
 - Frequency data, PTT
 - Logging
- Audio Tx/Rx
 - Tx and Rx audio
 - May be VOX (Signalink) for PTT
- What if my radio only has a serial (DB9) connection and not USB?
 - Rig Control
 - Option 1: use USB to serial cable with a null modem adapter at the radio end
 - Option 2: buy an [RT Systems USB-Serial programming cable](#)-they work great!
 - PTT (VOX)
- *Interface cables between the PC USB, sound card and radio USB or data port & Serial port

Use GOOD quality cables-it will save you headaches and RFI issues.

Required Resources:

- [Whatsmylocator.co.uk](https://whatsmylocator.co.uk)
 - Determine maidenhead locator
 - New Hope: DM44wg
- [Time.is](https://time.is)
 - Verify clock accuracy (± 0.4 sec)



Your time is exact!

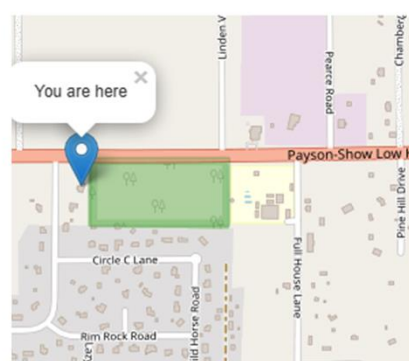
The difference from Time.is was +0.079 seconds (± 0.102 seconds).
Time in Phoenix, Arizona, United States now

- [PSK Reporter Map](https://pskreporter.info)
 - Signal reports
- [WSJT-X Software](https://wsjt-x.com)

Amateur Radio Ham Radio Maidenhead Grid
https://www.levinecentral.com/ham/grid_sq

pskreporter.info/pskmap.html

Monitoring AA7MC (the call sign) using FT8
There are 6787 active FT8 monitors: 2240 on 20m, 1788 on 6m, 1105 on 15m, 930 on 17m, 823 on 40m, 631 on 10m, 598 on 30m, 19 on 2.4Ghz, 13 on 70cm, 11 on 600m, 9 on 8m, 6 on 2200m, 6 on 10Ghz, 4 on 4m, 1 on 23cm. Show all on all bands



Search Location

989 cheney ranch loop, show low, az

Location Information

Save Location

Latitude: 34.2845806

Longitude: -110.1276073

OS Grid Reference: Not available

WAB Square: Not available

Maidenhead Gridsquare: DM44wg

CQ Zone: 4

ITU Zone: 7

Installation and Set-Up

- **Download & Install [WSJT-X](#)** (Free) software suite
 - Follow [setup instructions](#)
- **Connect Sound Card to PC and Radio (2 cables)**
 - Signalink (TX = 2, RX = 2.5~3, Delay = 0)
 - DigiRigOR
 - Integrated into the radio
- **Connect Radio (2 cables)**
 - Audio TX, Rx (VOX)
 - Rig Control PTT
- **Turn on Radio, Sound Card and PC and configure WSJT-X settings**

Helpful Tips-Radio Settings

- **Read your manual!**

- **Comm Port** settings (9600-1 for example, must match WSJT-X setting) Baud Rate, Stop Bits, etc.
- TX equalizer **OFF**
- Speech processor **OFF**
- Filter Bandwidth **OFF** (none)
- AF Input **MAX** (*control level with Signalink*)
- AF Output **MAX** (*control level with Signalink*)
- IF Filter **OFF**
- RX Equalizer **OFF**
- Preamp **OFF**
- AGC **NONE** or **FAST**
 - *Set TX level with Signalink for no or little ALC with full RF output*

WSJT-X General Settings (Tab 1)

- Call & Grid
- Display Distance In miles
- Show worked before status
- Blank line between periods
- Double click on call sets TX
- Allow TX freq. change while Transmitting

General	Radio	Audio	Tx Macros	Reporting	Frequencies	Colors	Advanced	Alerts	Filters
Station Details My Call: AA7MC My Grid: DM54CM ☐ AutoGrid IARU Region: All									
Message generation for type 2 compound callsign holders: Full call in Tx3									
Display									
☐ Start new period decodes at top ☒ Blank line between decoding periods ☒ Show blank line with time stamp									
☒ Display distance in miles ☐ Highlight DX Call in message Font...									
☒ Tx messages to Rx frequency window ☐ Highlight DX Grid in message Decoded Text Font...									
☒ Show DXCC, grid, and worked-before status ☐ Show principal prefix instead of country name ☐ Show DXCC for all messages									
Behavior									
☐ Monitor off at startup ☐ Enable VHF and submode features ☐ MSK144/Q65: Tx until 73 is received									
☐ Monitor returns to last used frequency ☒ Allow Tx frequency changes while transmitting ☐ Auto-open/close Astronomical data window									
☒ Double-click on call sets Tx enable ☐ Decode after EME delay ☐ kHz entry without k (restart required)									
☐ Disable Tx after sending 73 ☐ Single decode ☒ Turn progress bar red while transmitting									
☐ Calling CQ forces Call 1st ☐ CW ID after 73 ID Interval: 0									
☐ Alternate F1-F6 bindings ☒ Tune watchdog 90 seconds Tx watchdog: 6 minutes									
Additional features									
☒ Map Grid locator to U.S. State ☐ Erase decodes after band change ☒ Alternate Erase button behavior									
☒ Show U.S. States in messages with grid ☐ Set Rx frequency to Tx frequency after QSO ☒ Enable Wait features									
☐ Clear DX Call after QSO ☐ Clear DX Grid after QSO ☐ Less button coloring (restart required)									
☐ Show distance in messages with grid ☐ Show azimuth in messages with grid ☒ Align DXCC/distance/azimuth 2 0									

WSJT-X Radio Settings (Tab 2)

- CAT Control
 - Set com port
 - Baud rate
 - Data & stop bits
 - Handshake-Default
- PTT method
 - VOX for Signalink
 - CAT for Digirig
- Mode-None
- Split Op
 - RIG –moves VFO for best performance

General Radio Audio Tx Macros Reporting Frequencies Colors Advanced Alerts Filters

Rig: Kenwood TS-570D Poll Interval: 1 s

CAT Control

Serial Port: COM3

Serial Port Parameters

Baud Rate: 9600

Data Bits

☐ Default ☐ Seven ☒ Eight

Stop Bits

☐ Default ☒ One ☐ Two

Handshake

☒ Default ☐ None ☐ XON/XOFF ☐ Hardware

Force Control Lines

DTR: RTS:

PTT Method

☒ VOX ☐ CAT ☐ DTR ☐ RTS

Port: COM3

Transmit Audio Source

☐ Rear/Data ☒ Front/Mic

Mode

☒ None ☐ USB ☐ Data/Pkt

Split Operation

☐ None ☒ Rig ☐ Fake It

Test CAT Test PTT

Rig Data

☐ Read and display PWR and SWR ☐ Halt Tx when SWR > 2.5

Update Hamlib

☒ 64-bit ☐ 32-bit Update Hamlib Revert Update

In use: Hamlib 4.7.1 2026-04-15T20:20:01Z SHA=d042479 64-bit
Backed up: Hamlib 4.6.1 2025-01-21T09:43:13Z SHA=cb77f3 64-bit

WSJT-X Settings (Tabs 3, 4 & 5)

- **AUDIO**

- Input: USB Audio Codec
- Output: USB Audio Codec
- *PC: sound settings set USB Audio Codec to 100%*

- **Reporting Tab:**

- **Prompt me to log QSO** 
- **Enable PSK reporter spotting**
- **Use TCP/IP connection (verifies ACK)**

- **Advanced Tab**

- **Special Operating Activity**
 - Select FD if running field day
 - Enter exchange

WSJT-X v3.0.2 - Log QSO

Click OK to confirm the following QSO:

Call	Start	End
KA6S	7/6/2026 20:07:45	7/6/2026 20:08:45

Mode	Band	Rpt Sent	Rpt Rcvd	Grid	Name
FT8	20m	-02	-14	CM97	

Tx power: 100W ☒ Retain

Comments: OCF 80M dipole @ 40' TS-570D ☒ Retain

Operator:

Exch sent: Rcvd:

Prop Mode: ☐ Retain

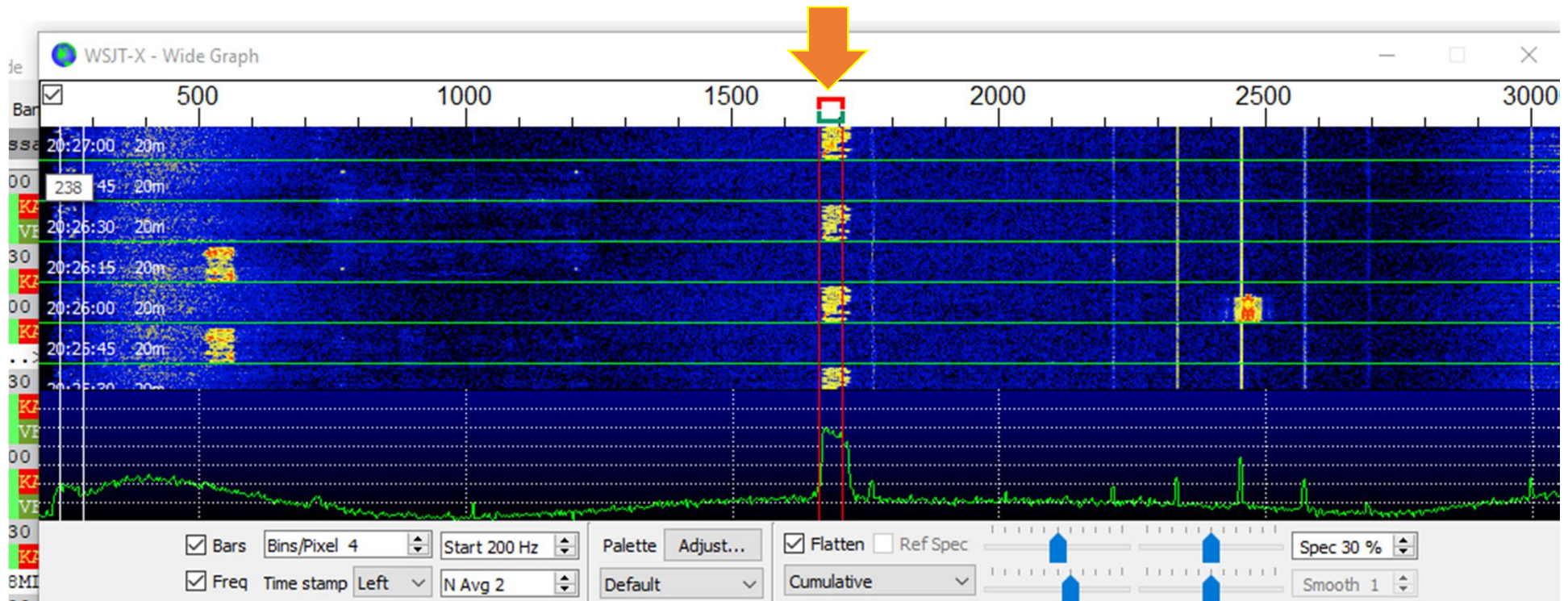
Satellite: ☐ Retain

Sat Mode: ☐ Retain

RX Frequency: ☐ Retain

WSJT-X Lets make a QSO!

- Waterfall
 - Displays band activity and your TX/RX selection (1661 Hz)



WSJT-X Lets make a QSO!

Band Activity

UTC	dB	DT	Freq	Message
2026-07-06 - 20:06:22 UTC - 20m - FT4				
200622	-21	0.2	1917	+ 4G5Z2G YV7WUG DD80
2026-07-06 - 20:07:30 UTC - 20m - FT8				
200730	-8	-0.4	1661	~ CQ KA6S CM97 U.S.A. CA
2026-07-06 - 20:08:00 UTC - 20m - FT8				
200800	-2	-0.4	1661	~ AA7MC KA6S -14
2026-07-06 - 20:08:30 UTC - 20m - FT8				
200830	0	-0.4	1661	~ AA7MC KA6S RR73
2026-07-06 - 20:09:00 UTC - 20m - FT8				
200900	1	-0.4	1662	~ CQ KA6S CM97

Rx Frequency

UTC	dB	DT	Freq	Message
200730	-8	-0.4	1661	~ CQ KA6S CM97 U.S.A. CA
200751	Tx		1661	~ KA6S AA7MC DM54
200800	-2	-0.4	1661	~ AA7MC KA6S -14
200815	Tx		1661	~ KA6S AA7MC R-02
200830	0	-0.4	1661	~ AA7MC KA6S RR73
			1661	~ KA6S AA7MC 73
	0.4		1662	~ CQ KA6S CM97 U.S.A. CA

WSJT-X v3.0.2 - Log QSO

Click OK to confirm the following QSO:

Call	Start	End
KA6S	7/6/2026 20:07:45	7/6/2026 20:08:45

Mode	Band	Rpt Sent	Rpt Rcvd	Grid	Name
FT8	20m	-02	-14	CM97	

Tx power: 100W ☒ Retain

Comments: OCF 80M dipole @ 40' TS-570D ☒ Retain

Operator:

Exch sent: Rcvd:

Prop Mode: ☐ Retain

Satellite: ☐ Retain

Sat Mode: ☐ Retain

RX Frequency: ☐ Retain

20m **S** **14.074 000**

FT8 **KA6S**

Az: 292 658 mi

Lookup Add Ignore ☒ Auto Seq CQ: None

2026 Jul 06 20:09:18

Generate Std Msgs

Next	Now
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐

Activate Windows Go to Settings to activate Windows

WSJT-X Lets make a QSO!

Band Activity					
UTC	dB	DT	Freq	Message	
-----	2026-07-06	-	20:06:22	UTC - 20m - FT4	-----
200622	-21	0.2	1917 +	4G5ZZG YV7WUG DD80	
-----	2026-07-06	-	20:07:30	UTC - 20m - FT8	-----
200730	-8	-0.4	1661 ~	CQ KA6S CM97	U.S.A. CA
-----	2026-07-06	-	20:08:00	UTC - 20m - FT8	-----
200800	-2	-0.4	1661 ~	AA7MC KA6S -14	
-----	2026-07-06	-	20:08:30	UTC - 20m -	
200830	0	-0.4	1661 ~	AA7MC KA6S RR73	
-----	2026-07-06	-	20:09:00	UTC - 20m -	
200900	1	-0.4	1662 ~	CQ KA6S CM97	

 WSJT-X v3.0.2 - Log QSO

Click OK to confirm the following C

Call

KA6S

WSJT-X Lets make a QSO!

Rx Frequency

UTC	dB	DT	Freq	Message
200730	-8	-0.4	1661	~ CQ KA6S CM97
200751	Tx		1661	~ KA6S AA7MC DM54
20m				
200800	-2	-0.4	1661	~ AA7MC KA6S -14
200815	Tx		1661	~ KA6S AA7MC R-02
200830	0	-0.4	1661	~ AA7MC KA6S RR73
			1661	~ KA6S AA7MC 73
0.4			1662	~ CQ KA6S CM97

WSJT-X v3.0.2 - Log QSO

Click OK to confirm the following QSO:

Call: KA6S Start: 7/6/2026 20:07:45 End: 7/6/2026 20:08:45

Mode: FT8 Band: 20m Rpt Sent: -02 Rpt Rcvd: -14 Grid: CM97 Name:

Tx power: 100W ☒ Retain

Comments: OCF 80M dipole @ 40' TS-570D Add ☒ Retain

Operator:

Exch sent: Rcvd:

Prop Mode: ☐ Retain

Satellite: ☐ Retain

Sat Mode: ☐ Retain

RX Frequency: ☐ Retain

OK Cancel

Ignore ☒ Auto Seq CQ: None

Generate Std Msgs

Next	Now
☐	☐ Tx 1
☐	☐ Tx 2
☐	☐ Tx 3
☐	☐ Tx 4
☐	☐ Tx 5
☐	☐ Tx 6

KA6S AA7MC DM54

KA6S AA7MC +00

KA6S AA7MC R+00

KA6S AA7MC RR73

KA6S AA7MC 73

CQ AA7MC DM54

Enable Tx Halt Tx Tune Menu

Activate Windows
Go to Settings to activate Windows.

WSJT-X Logging to other programs

Recent Contacts									
Call	Date / Time	Bnd	Mode	Power	Snt	Rec	Off	Country	
KA6S	2026/07/06 20:07	20	FT8	100W	-02	-14	20:08	USA	
K2G	2026/07/06 19:30	20	SSB	100W	59	59	19:30	USA	
W7AZY	2026/07/06 02:14	80	SSB	100W	59	59	02:14	USA	
KD7DY	2026/07/05 23:12	30	FT4	100W	599	599	01:24	USA	
KD7DY	2026/07/05 18:08	20	FT4	100W	-06	-08	18:08	USA	
K2E	2026/07/05 18:55	20	CW	100W	599	599	18:55	USA	
K2F	2026/07/05 15:55	17	CW	100W	599	599	15:56	USA	
K2K	2026/07/04 17:38	15	FT8	100W	-01	-19	17:45	USA	
K2I	2026/07/04 17:20	15	FT8	100W	+14	-15	17:32	USA	
K2L	2026/07/04 17:15	20	FT4	90W	+09	-09	17:16	USA	
ZL1PWD	2026/07/04 01:39	15	FT4	90W	-01	-08	01:41	New Zealand	
WM3PEN	2026/07/03 23:00	20	FT4	100W	+02	-18	23:01	USA	
K4C	2026/07/03 22:07	20	FT4	100W	+00	-16	22:07	USA	
JA7AKW	2026/07/03 20:54	20	FT4	100W	+01	-03	20:54	Japan	

- N1MM+
- N3FJP

- Use WSJT-X for CAT control
- Select settings > Application Program Interface (API)
- Check 'Listen for WSJT-X'
- DONE!
- NOTE the comment about color settings in WSJT

N3FJP API 2.2

Server API - Allow any properly coded program to connect

API Server Functionality - Use this section to enable other programs, including other N3FJP Software programs, to connect to this one.

I often receive requests from folks who would like to interface their digital or logging programs with my logging software. To accommodate those requests, I have added easily implemented Application Program Interface (API) functionality, to enable any other program to do just that!

If you have a program that you would like to see interfaced with my software, please contact the developer(s) and refer them to this page:

<http://www.n3fjp.com/help/aoi.html>

[Please click here for the detailed API specifications.](#)

☐ TCP API Enabled (Server) Port 1100

Server Runmode = False Port = 1100

WSJT-X Interface Sec Elapsed: 0

☒ Listen for WSJT-X

Configure

To color WSJT, in WSJT click Settings > Reporting > Check Accept UDP Request

Client - Only used from N3FJP contest software to AC Log

Band Activity

UTC	dB	DT	Freq	Message
-----	2026-07-05	19:09:07	UTC - 20m - FT4	-----
190907	-13	-0.2	940 +	K2B W7CAK EN80 OH
190907	8	-0.4	1286 +	K2E KF0FSJ DN80 CO
190907	-6	-0.2	1405 +	K2B W5LD EM31 TX-LA
190907	-11	-0.1	1517 +	WA2EIO N4GME RR73
190907	-2	-0.1	1714 +	AC9HP K210 EL88 FL
190907	-15	-0.5	1911 +	KE9AFW N5IF RR73
190907	-14	-0.1	2190 +	CQ VA3ZC FN03 Canada
190907	-9	-0.3	2435 +	VE6WWA KN4WOJ FM17 VA
190907	-14	-0.1	1017 +	K4C W3ON FN00 PA
190907	6	-0.2	1223 +	CQ N9W EN61 U.S.A. IL-IN-MI
190907	-16	-0.2	2382 +	K4C WD4RCG EM50 LA-MS-AL
-----	2026-07-05	19:09:15	UTC - 20m - FT4	-----
190915	8	-0.0	2278 +	W5LD K2B +09
190915	2	0.0	877 +	CQ K2J 13 COL U.S.A.
190915	-11	-0.3	1090 +	CQ K8SAW EN82 U.S.A. MI
190915	-10	-0.3	1328 +	CQ POTA AC9HP U.S.A.
190915	-9	-0.2	1746 +	N4GME WA2EIO R-14
190915	-12	-0.1	2577 +	CQ 3Z6I JO80 Poland
190915	-7	-0.1	2340 +	N5IF KE9AFW 73

Rx Frequency

UTC	dB	DT	Freq	Message
190630	-9	-0.0	2578 +	CQ 3Z6I JO80 Poland
190637	Tx		2576 +	3Z6I AA7MC DM54
190645	-11	-0.0	2578 +	PD2WL 3Z6I R+08
190652	-19	-0.2	2579 +	3Z6I KC0SZU EN12 NE-IA-SD
190700	-12	-0.0	2578 +	PD2WL 3Z6I R+02
190707	-13	-0.2	2579 +	3Z6I KC0SZU EN12 NE-IA-SD
190715	-13	-0.0	2578 +	PD2WL 3Z6I RR73
190722	-21	-0.2	2579 +	3Z6I KC0SZU EN12 NE-IA-SD
190730	-21	-0.0	2578 +	DL6LG 3Z6I -19
190800	-14	-0.0	2577 +	CQ 3Z6I JO80 Poland
190800	3	-0.2	2283 +	AA7MC KD7DY DN13 OR-ID
190815	6	-0.2	2283 +	AA7MC KD7DY DN13 OR-ID
190825	Tx		2576 +	KD7DY AA7MC +06
190830	6	-0.0	2278 +	CQ K2B FM07 U.S.A. VA
190830	1	-0.2	2283 +	AA7MC KD7DY R-02
190837	Tx		2576 +	KD7DY AA7MC RR73
190845	8	-0.2	2284 +	AA7MC KD7DY 73
190845	4	-0.0	2278 +	CQ K2B FM07 U.S.A. VA
190900	7	-0.0	2279 +	CQ K2B FM07 U.S.A. VA
190915	8	-0.0	2278 +	W5LD K2B +09

160 80 60 40 30 20 17 15 12 10 6 2

☐ CQ only
 ☐ BP

20m S 14.080 000

H

FT8

FT4

MSK

Q65

DX Call

KD7DY

Lookup

Add

Ignore

DX Grid

DN13

Report 1

Tx even/1st

Hold Tx Freq

Tx 2576 Hz

Rx 2283 Hz

Auto Seq

CQ: None

Best S+P

Generate Std Msgs

Next

KD7DY AA7MC DM54

KD7DY AA7MC +01

KD7DY AA7MC R+01

KD7DY AA7MC RR73

KD7DY AA7MC 73

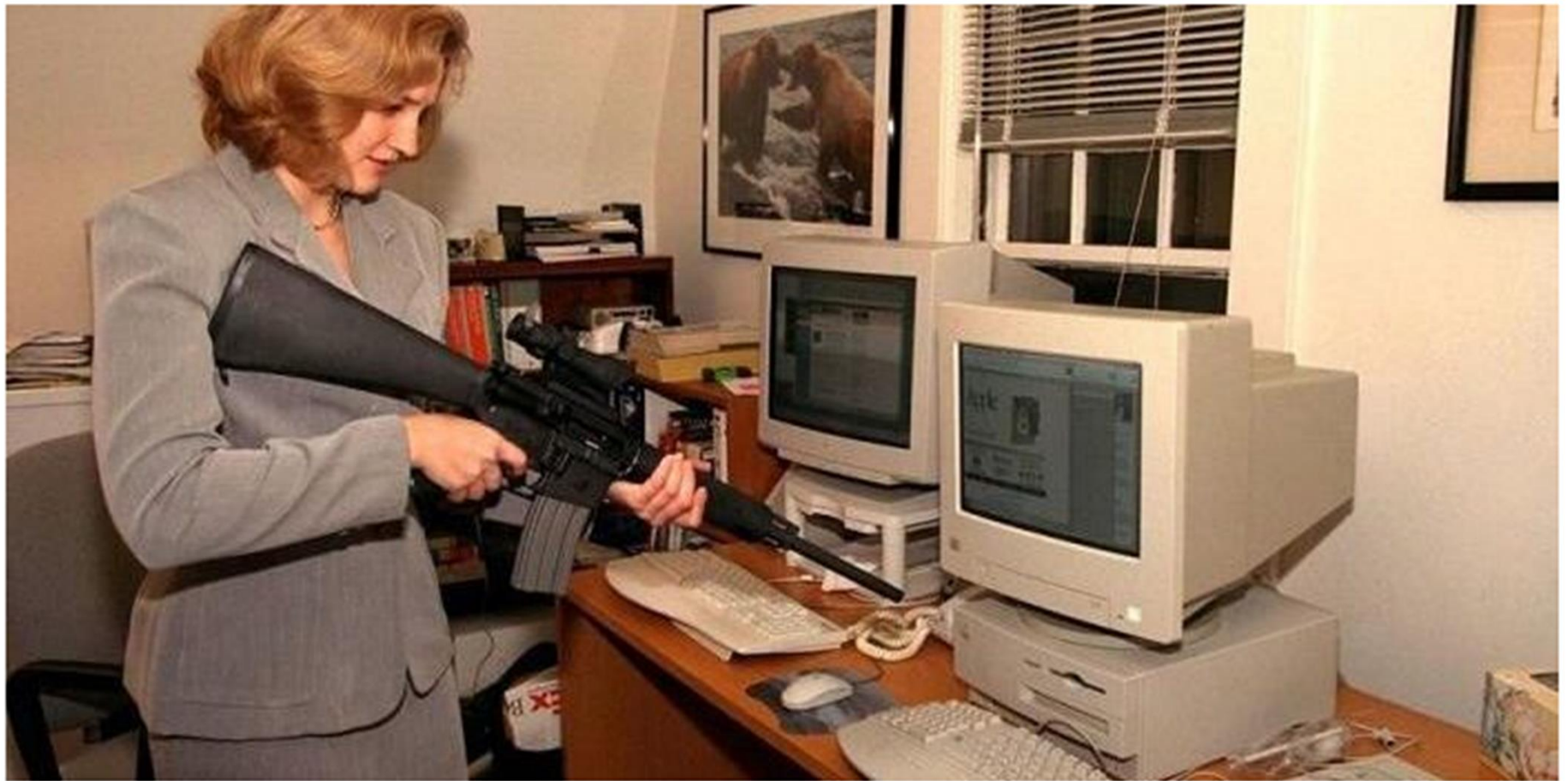
CQ AA7MC DM54

2026 Jul 05

19:09:26

Activate Windows
Activate Windows

Troubleshooting Digital Modes



Trouble Shooting:

Most issues are caused by sound card settings in the PC; some are radio settings.

READ your radio and sound card manual(s) for proper PC and radio settings!

- PC
 - Verify USB Audio CODEC is selected for Audio IN and Audio Out
 - Verify Audio levels for the USB CODEC app is set to max (100%)
 - Verify PC sounds do NOT route to the USB Audio Codec—you don't want PC beeps broadcasting over the air!
- Radio/Signalink
 - Verify Speech compression and processing is OFF Tx/Rx
 - Verify MAX RF output power is present with NO ALC
 - ALC causes clipping and distortion of the top and bottom of the tones
 - Verify RF/audio filters are OFF (set to wide->3KHz)
- CAT/RIG control issues
 - Verify the correct baud rate, stop bits, etc on the radio and WSJT-X MATCH
 - Verify interface cables between the PC USB, sound card and radio USB or data port & Serial port

Use GOOD quality cables-it will save you headaches and RFI issues.

Appendix

Technical Deeper dive into FT-8

Useful Resources:

- [DXSUMMIT.FI](https://dxsummit.fi)
 - Spotting site-users manually upload all modes
 - Useful for special events, DX spots
- [Reverse Beacon Network](#)
 - Spotters auto update-useful for propagation by band
- [PSK Reporter](#)
 - [Map](#) auto updates-useful to see where you are heard on FT-8

FT-8 Technical Details: A Deeper Dive

- **FT8** uses **8-FSK** (8 tones, shifted by frequency) modulation
- **Narrow bandwidth:** ~50 Hz, making it ideal for weak-signal HF and VHF communication.
 - CW @ 20WPM = 100 Hz
 - FT-4 = 90 Hz, 7.5 second bursts
 - PSK31 = ~ 31 Hz, uncontrolled duration-keyboard speed
- **Forward error correction (FEC):** Uses LDPC (Low Density Parity Check) coding to allow reliable decoding even at very low signal-to-noise ratios (down to -21 dB in a 2500 Hz bandwidth)
- **Weak-signal capability:** With FEC, it can decode signals far below the noise floor
- **Data rate:** ~6.09 bits/sec, equivalent to about 5 words per minute

How 8-FSK Works

- **8-FSK (8- Frequency Shift Keying)** is a digital modulation scheme where each symbol is represented by one of **eight distinct carrier frequencies**. In 8-FSK, the frequency of the carrier is shifted between these eight tones to encode digital data, with each tone corresponding to a unique symbol
- **Symbol mapping:** Each of the 8 tones represents a different 3-bit symbol (since $2^3=8$).
- **Tone spacing:** In the FT8 mode, tones are spaced at 6.25 Hz, giving a total occupied bandwidth of about 50 Hz
- **Orthogonality:** The spacing and duration of tones are chosen so that they are spectrally orthogonal, minimizing overlap and improving detection.
- **Duration:** Each tone lasts 0.16 seconds, allowing multiple symbols to be sent within a short time window

FT-8 Advantages

- **Band is 'dead':** Work stations that you can NOT hear!
 - FT-8 -21dB FT-4 -17.5 dB
- **Efficient use of spectrum:**
 - CW @ 20 WPM: 100Hz
 - FT-4: 90Hz, 7.5 second cycles, contesting
 - **FT-8:** 50 Hz, 15 second cycles, DX, contesting
 - PSK 31: 30~50 Hz unlimited 'key down' K2K comms
- **Noise resistance:** Frequency changes are less affected by amplitude noise than ASK, making it robust in noisy environments



FT8 Made Simple: **Quick start to your first QSO's** ***Thank You!!***

Presented by: Mark Cockson, AA7MC
President, Kachina Amateur Radio Club
Date: 14 July 2026