



Introduction to FT8 using WSJT-X

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An Introduction to FT8 using WSJT-X

1. How to set it up.
2. What else you might need for best results.
3. How to make a contact.

No Radio specific settings

Facts about WSJT-X and FT8

- ▶ WSJT-X was developed by Steven Franke, K9AN, and Joe Taylor K1JT in 2017 and uses 8 tone FSK modulation
- ▶ Needs accurate timing +/- 1.0 seconds to UTC
- ▶ Shows signal strength (-26 dB to +30 dB)
- ▶ Designed for **QSO's** not “Rag Chewing”

- ▶ Logs contacts in ADIF format within the program
- ▶ Generates appropriate TX messages to complete QSO
- ▶ 75-bit message with 12-bit forward error correction
- ▶ 50 Hz bandwidth at 6.25 baud

- ▶ Exchanges call signs, grid square and signal report
- ▶ Multiband – standardized Frequencies on all supported bands
- ▶ **Weak Signal** mode – **low power** mode, 100 W typical
- ▶ Computer Aided Transceiver – (CAT) Compliant
- ▶ 10 different modes: FT4, FT8, JT4, JT9, JT65, QRA64, ISCAT, MSK144, WSPR, and Echo
- ▶ Fox/Hound Mode for DXPeditions

FT8 System Requirements

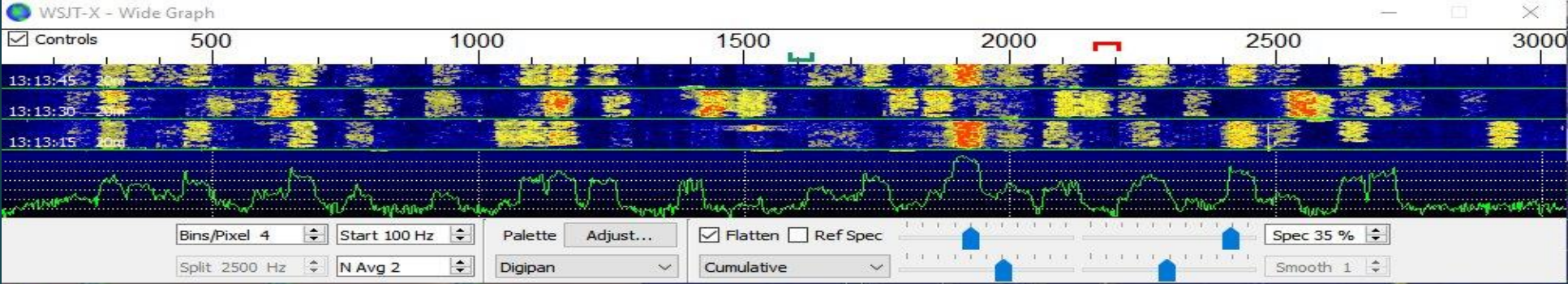
- ▶ SSB transceiver and antenna
- ▶ Computer running Windows 7 or later, macOS 10.13 or later, or Linux
- ▶ 1.5 GHz or faster CPU and 200 MB of available memory; faster machines are better
- ▶ Monitor with at least 1024 x 780 resolution
- ▶ Computer-to-radio interface using a serial port or USB device for T/R switching, or **CAT** control

- ▶ **Audio input and output soundcard** supported by the operating system
- ▶ Audio or equivalent USB connections between transceiver and computer
- ▶ A means for synchronizing the computer clock to UTC within ± 1 second or better

Aids for WSJT-X and FT8

- ▶ **WSJT-X** –The main program ([WSJT Home Page \(sourceforge.io\)](https://sourceforge.io))
- ▶ **Dimension 4** – to keep your time synced (https://download.cnet.com/dimension-4/3000-2094_4-10039998.html)
- ▶ **HRD, N3FJP, DXLabs Suite** – Log your contacts
- ▶ **JT Alert** – (Hamapps.com) – handy dashboard

- ▶ **GridTracker** – (Gridtracker.org)
- ▶ **PSK Reporter** – (<https://pskreporter.info/pskmap.html>)
- ▶ **Groups.io** – (<https://groups.io>) Email group for FT8, Radios, etc.
- ▶ **ARRL - LoTW Quick Start**- VERY helpful (arrl.org/quick-start)



WSJT-X v2.6.0 by K1JT et al.

File Configurations View Mode Decode Save Tools Help

Band Activity

UTC	dB	DT	Freq	Message
131330	6	-2.2	2562	OV1T F5SJJH IN87
131330	-13	0.1	1763	CQ F4JGI IN94 France
131330	-14	0.1	2735	HS8AFA HZ1SF LL34
131330	-6	0.2	2149	CQ SA0POW J099 Sweden
131330	-2	0.1	1448	CQ UR5UX K050 Ukraine
131330	-13	0.2	1954	SV1GSP BX5AA RR73 Taiwan
131330	-14	0.1	452	CQ DX F4HRG IN87 France
131330	-13	0.1	1077	N3IZ EA7LU -05
131330	-10	-0.9	808	C6AGU F4HRU JN07
131330	-11	0.1	2624	UA6AHR DF1KW R+10
131330	-19	0.1	2716	OE5EIN OV1T -09
131330	-16	0.3	1980	PD2GCM G3DR -10
131330	-18	0.0	484	IZ8PPI F5RMK 73 France
131330	-13	0.1	550	DL2BS HA1VG JN87
131330	-17	0.1	543	N0FW PD2SHB J021
131330	-21	-0.0	2091	CQ EA1EAS IN70 a7 Spain
131330	-5	-0.2	1129	CQ R7BL LN06 a7 EU Russia
----- 20m -----				
131345	7	0.1	2416	CQ ES1KK K029 Estonia
131345	6	0.2	1137	F6ARS HA3PT R+14
131345	6	-0.1	2680	RC1BP <UE23NY> -12
131345	16	0.2	1897	VU2RS LY3AB K005
131345	2	0.1	2624	DF1KW UA6AHR RR73 EU Russia
131345	2	0.2	1215	YC1LIN SV1FA KM18
131345	3	0.4	1084	DK1AN EA3IGB -05
131345	2	0.1	2251	E74K Y02NAA KN05
131345	5	0.2	648	CQ DX LA6ZFA J059 Norway

Rx Frequency

UTC	dB	DT	Freq	Message
131030	-13	0.1	1584	JE6WKY DU3CQ RR73 Philippines
131055	Tx		2242	DU3CQ DG2YCB J042
131130	-14	-0.1	1574	C6AGU DL6ZFG -18
131130	-17	0.2	1584	JK3DJX DU3CQ -14
131200	-18	0.4	1584	JK3DJX DU3CQ RR73 Philippines
131200	-18	-0.1	1574	C6AGU DL6ZFG -18
131230	-11	-0.1	1574	C6AGU DL6ZFG -18
131230	-18	0.2	1585	CQ DU3CQ PK04 Philippines
131245	-18	0.8	1575	N9TF C6AGU 73 Bahamas
131330	-20	0.1	1585	VR2ZDA DU3CQ -09

CQ only

 Menus

20m
 S
14,074 000

H

FT8

FT4

MSK

Q65 2022 Dez 29

JT65 13:13:57

Tx even/1st Hold Tx Freq

Tx 2160 Hz

Rx 1584 Hz

Report -13

Auto Seq CQ: None

Generate Std Msgs

Next	Now	Pwr
DU3CQ DG2YCB J042	<input checked="" type="radio"/>	Tx 1
DU3CQ DG2YCB -13	<input type="radio"/>	Tx 2
DU3CQ DG2YCB R-13	<input type="radio"/>	Tx 3
DU3CQ DG2YCB RR73	<input type="radio"/>	Tx 4
DU3CQ DG2YCB 73	<input type="radio"/>	Tx 5
CQ DG2YCB J042	<input type="radio"/>	Tx 6

Receiving
 DG2YCB
FT8
 13
12/15 WD:3m

Signal / Noise Ratio

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SSB	+10 dB
CW	-15 dB
FT8	-21 dB
JT65	-25 dB
JT9	-27 dB
WSPR	-31 dB

2500 Hz bandwidth

Doubling power results in a 3 dB increase in SNR
31dB difference is about $2^{10} = 1,024$

1W FT8 vs 1,024W SSB

Settings changes are made on the following tabs

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WSJT-X v2.4.0 by K1JT, G4WJS, K9AN, and IV3NWW

File Configurations View Mode Decode Save Tools Help

- Open Ctrl+O
- Open next in directory
- Decode remaining files in directory Shift+F6
- Delete all *.wav & *.c2 files in SaveDir
- Erase ALL.TXT
- Erase wsjtx_log.adi
- Erase WSPR hashtable
- Reset Cabrillo log ...
- Export Cabrillo log ...
- Open log directory
- Settings...**
- Exit

Rx Frequency

UTC	dB	DT	Freq	Message
-----	----	----	------	---------

CQ only Log QSO Menus

80m 3.573 000 Tx even/1st Hold Tx Freq

Tx 1500 Hz

Rx 1500 Hz

Report -15

Auto Seq Call 1st

DX Call: KM6SO DX Grid: CN87

Az: 313 695 mi

Lookup Add

2021 Aug 16 23:34:14

61 dB

Generate Std Msgs

Next	Now	Pwr
<input type="radio"/>	<input type="button" value="Tx 1"/>	
<input type="radio"/>	<input type="button" value="Tx 2"/>	
<input type="radio"/>	<input type="button" value="Tx 3"/>	
<input type="radio"/>	<input type="button" value="Tx 4"/>	
<input type="radio"/>	<input type="button" value="Tx 5"/>	
<input checked="" type="radio"/>	<input type="button" value="Tx 6"/>	

Receiving FT8 0 14/15 WD:6m

General Radio Audio Tx Macros Reporting Frequencies Colors Advanced

Station Details

My Call: KC1EO

My Grid: DN31WC



AutoGrid

IARU Region:

Region 2

Message generation for type 2 compound call sign holders: Full call in Tx3

Display

 Start new period decodes at top

Font..

 Blank line between decoding periods

Decoded Text Font..

 Display distance in miles Tx messages to Rx frequency window Show DXCC, grid, and worked-before status Show principal prefix instead of country name

Behavior

 Monitor off at startup Enable VHF and submode features Monitor returns to last used frequency Allow Tx frequency changes while transmitting Double-click on call sets Tx enable Single decode Disable Tx after sending 73 Decode after EME delay Calling CQ forces Call 1st Alternate F1-F6 bindings

Tx watchdog: 6 minutes

 CW ID after 73

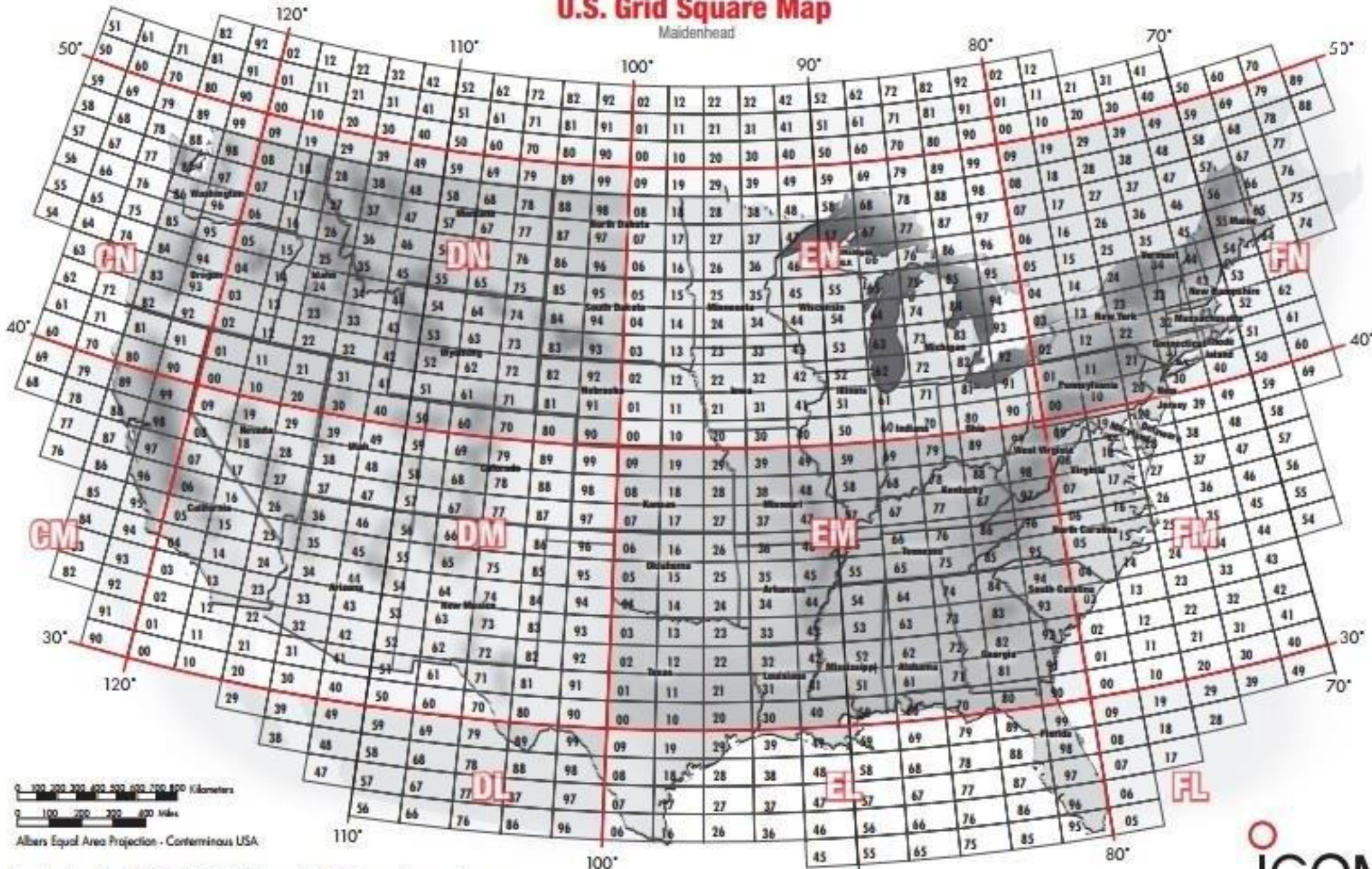
Periodic CW ID Interval: 0

OK

Cancel

U.S. Grid Square Map

Maidenhead



Albers Equal Area Projection - Continental USA





Settings



General | **Radio** | Audio | Tx Macros | Reporting | Frequencies | Colours | Advanced

Rig: Icom IC-7300 Poll Interval: 1 s

CAT Control

Serial Port: COM5

Serial Port Parameters

Baud Rate: 115200

Data Bits

Default Seven Eight

Stop Bits

Default One Two

Handshake

Default None
 XON/XOFF Hardware

Force Control Lines

DTR: [v] RTS: [v]

PTT Method

VOX DTR
 CAT RTS

Port: COM5

Transmit Audio Source

Rear/Data Front/Mic

Mode

None USB Data/Pkt

Split Operation

None Rig Fake It

Test CAT

Test PTT

OK

Cancel

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Settings

General Radio Audio Tx Macros Reporting Frequencies Colors Advanced

Soundcard

Input: Microphone (2- USB Audio CODEC) Mono

Output: Speakers (2- USB Audio CODEC) Mono

Save Directory

Location: C:/Users/wmcgo/AppData/Local/WSJT-X/save Select

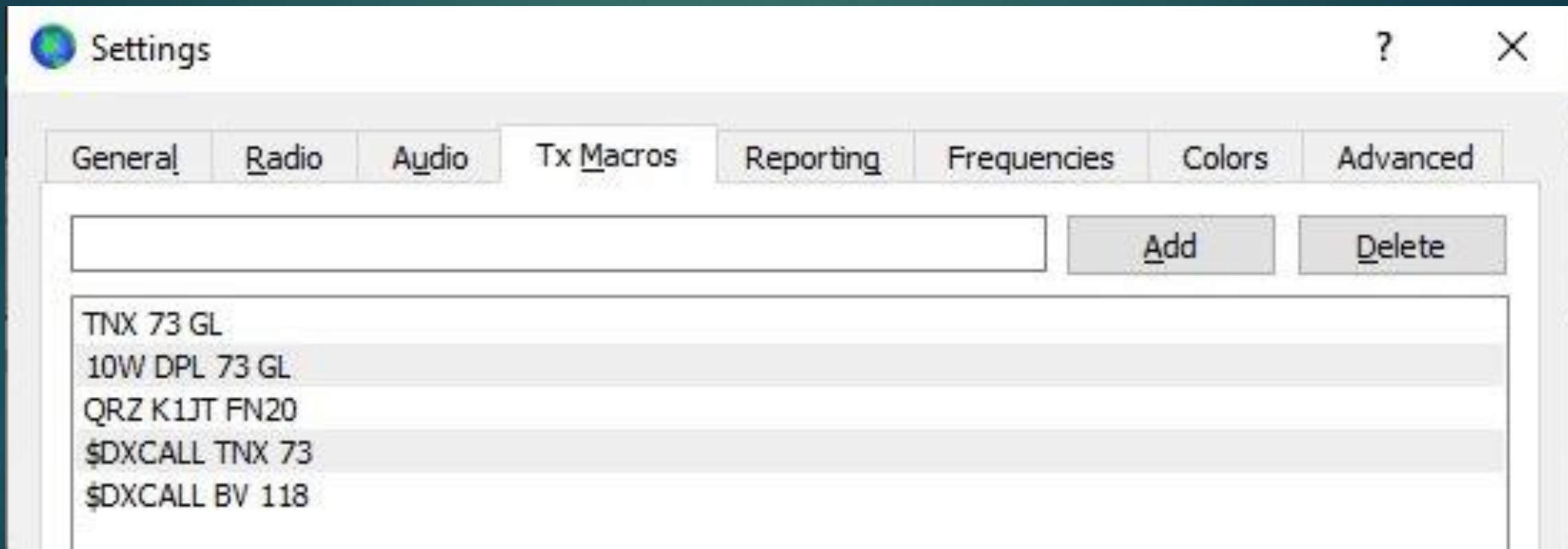
AzEl Directory

Location: C:/Users/wmcgo/AppData/Local/WSJT-X Select

Remember power settings by band

Transmit Tune

OK Cancel



Tx Macros are an aid for sending brief, frequently used free-text messages.

- General
- Radio
- Audio
- Tx Macros
- Reporting**
- Frequencies
- Colors
- Advanced

Logging

Prompt me to log QSO Op Call:

Log automatically (contesting only)

Convert mode to RTTY

dB reports to comments

Clear DX call and grid after logging

Network Services

Enable PSK Reporter Spotting Use TCP/IP connection

UDP Server

UDP Server: Accept UDP requests

UDP Server port number: Notify on accepted UDP request

Accepted UDP request restores window

Secondary UDP Server (deprecated)

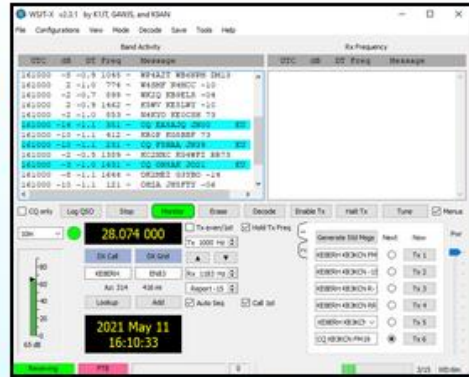
Enable logged contact ADIF broadcast

Server name or IP address:

Server port number:

WSJT-X Data to One Application

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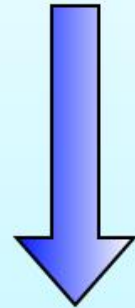
WSJT-X

UDP Server

UDP Server: Accept UDP requests

UDP Server port number: Notify on accepted UDP request

Accepted UDP request restores window



Local Unicast

WSJT-X sends to one local application



ACLog

Listen for WSJT

WSJT Configuration

IP:

Port:

WSJT-X Data to Multiple Applications



WSJT-X

UDP Server

UDP Server: Accept UDP requests

UDP Server port number: Notify on accepted UDP request

Outgoing interfaces: Accepted UDP request restores window

Multicast TTL:



Multicast

WSJT-X sends to all applications both locally and on Local Area Network

If another station operator is on the same network, use a different port as to not interfere



ALog

Listen for WSJT

WSJT Configuration

IP

Port



Grid Tracker



JTAAlert

General

Radio

Audio

Tx Macros

Reporting

Frequencies

Colors

Advanced

Frequency Calibration

Slope: 0.0000 ppm

Intercept:

0.00 Hz

Working Frequencies

IARU Region	Mode	Frequency	Pref	Description	Start Date/Time
All	FT4	10.140 000 MHz (30m)	<input type="checkbox"/>		
All	FT8	14.074 000 MHz (20m)	<input checked="" type="checkbox"/>		
All	JT65	14.076 000 MHz (20m)	<input type="checkbox"/>		
All	JT9	14.078 000 MHz (20m)	<input type="checkbox"/>		
All	FT4	14.080 000 MHz (20m)	<input type="checkbox"/>		
All	FT8	14.090 000 MHz (20m)	<input type="checkbox"/>	ARRL Contest	

Station Information

Band	Offset	Antenna Description
6m	0.000 000 MHz	7 el at 85 ft
2m	0.000 000 MHz	4 x 14 el Xpol
3cm	-10,224.000 000 MHz	2 m offset dish

Decode Highlighting

- My Call in message [f/g unset]
- New Continent [f/g unset]
- New Continent on Band [f/g unset]
- New CQ Zone [f/g unset]
- New CQ Zone on Band [f/g unset]
- New ITU Zone [f/g unset]
- New ITU Zone on Band [f/g unset]
- New DXCC [f/g unset]
- New DXCC on Band [f/g unset]
- New Grid [f/g unset]
- New Grid on Band [f/g unset]

Reset Highlighting

- Highlight by Mode
- Only grid Fields sought
- Include extra WAE entities
- Highlight also messages with 73 or RR73

Rescan ADIF Log

Logbook of the World User Validation

Users CSV file URL:

Fetch Now

Age of last upload less than:

Controls for Logbook of the World user lookup.

OK

Cancel

JT65 VHF/UHF/Microwave decoding parameters

Random erasure patterns: 6

Aggressive decoding level: 0

Two-pass decoding

Miscellaneous

Degrade S/N of .wav file: 0.0 dB

Receiver bandwidth: 2500 Hz

Tx delay: 0.2 s

Tone spacing

x 2 x 4

Waterfall spectra

Low sidelobes Most sensitive

Special operating activity

Fox Hound

NA VHF ARRL Field Day FD Exch: 6A SNJ

EU VHF Contest FT Roundup FT RU Exch: NJ

WW Digi Contest ARRL Digi Contest

CQ with individual contest name Contest name: PACC

Synchronize Computer Clock

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21:44:02 - Dimension 4

Server

Server	Location	Protocol
utcnist.colorado.edu	US CO: JILA Laboratory, Universi...	SNTP
time.nist.gov	US CO: National Center for Atmo...	SNTP
time-a.timefreq.bldr...	US CO: NIST Boulder Laboratori...	SNTP
time-h.timefreq.bldr...	US CO: NIST Boulder Laboratori...	SNTP

Server:

Location:

Protocol:

Notes: Access Policy: Open to stratum-2 servers, others by arrangement; please use only one of the servers as primary with the other as a backup.

How Often

Load Dimension 4 at startup

Once loaded, wait until online

Synchronize once, then exit

Every

Correction

Maximum correction

Visibility

Start minimized

Hide when minimized

Display icon in tray

Synchronized:

Current Status:

Server Status:

THE ARRL

LOGBOOK

OF THE WORLD™

YAESU

The radio

**PRINCIPAL
SPONSOR**

of the LoTW Website

25 Records Shown (1-25)

Sorted by QSO Date (0.005168 seconds elapsed)

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	Call sign	Worked	Date/Time	Band	Mode	Freq	QSL
Details	KC1EO	W1WSF	2023-10-30 13:57:15	17M	FT8	18.10120	UNITED STATES OF AMERICA
Details	KC1EO	KE3ZT	2023-10-30 13:49:45	20M	FT8	14.07523	UNITED STATES OF AMERICA
Details	KC1EO	KC1QYD	2023-10-30 13:47:00	20M	FT8	14.07523	
Details	KC1EO	KB8YTD	2023-10-30 13:42:15	30M	FT8	10.13713	UNITED STATES OF AMERICA
Details	KC1EO	KT7N	2023-10-30 13:38:30	40M	FT8	7.07510	
Details	KC1EO	K5CM	2023-10-30 13:37:00	40M	FT8	7.07510	
Details	KC1EO	K1LEC	2023-10-30 13:32:45	40M	FT8	7.07510	UNITED STATES OF AMERICA
Details	KC1EO	KD5ZLR	2023-10-30 13:31:45	40M	FT8	7.07510	UNITED STATES OF AMERICA
Details	KC1EO	KQ0Q	2023-10-30 13:29:45	40M	FT8	7.07510	UNITED STATES OF AMERICA
Details	KC1EO	K4TER	2023-10-29 14:09:15	20M	FT8	14.07520	UNITED STATES OF AMERICA
Details	KC1EO	K5LVC	2023-10-29 14:04:45	20M	FT8	14.07510	
Details	KC1EO	VE3UIN	2023-10-29 14:03:45	20M	FT8	14.07510	
Details	KC1EO	KO4DBP	2023-10-29 14:01:15	20M	FT8	14.07510	UNITED STATES OF AMERICA
Details	KC1EO	JM8BPM	2023-10-29 13:54:45	30M	FT8	10.13750	
Details	KC1EO	N7BFO	2023-10-29 13:51:45	30M	FT8	10.13750	UNITED STATES OF AMERICA
Details	KC1EO	7N4WPY	2023-10-29 13:45:15	40M	FT8	7.07547	JAPAN
Details	KC1EO	JH7AUL	2023-10-29 13:41:45	40M	FT8	7.07547	JAPAN
Details	KC1EO	AA0HJ	2023-10-29 13:41:00	40M	FT8	7.07547	UNITED STATES OF AMERICA
Details	KC1EO	K0KDO	2023-10-29 13:38:45	40M	FT8	7.07547	
Details	KC1EO	JQ7BQT	2023-10-29 13:37:00	40M	FT8	7.07547	JAPAN
Details	KC1EO	N7CEE	2023-10-29 13:36:56	40M	FT8	7.07547	
Details	KC1EO	JA1QOW	2023-10-29 13:33:15	40M	FT8	7.07547	
Details	KC1EO	N0NIY	2023-10-29 13:28:00	40M	FT8	7.07540	UNITED STATES OF AMERICA
Details	KC1EO	KJ7ZHG	2023-10-29 13:26:00	40M	FT8	7.07540	
Details	KC1EO	JO4JDU	2023-10-29 01:59:00	17M	FT8	18.10140	

Most recent QSO record received 2023-10-30 14:10:51Z

Select QSOs to List		Submit Query Form
Call sign worked:	<input type="text"/>	<input type="button" value="Submit"/>
Your call sign:	- Any - <input type="button" value="v"/>	Common Queries
		Most Recent QSOs

Your Logbook DXCC Account (- UNITED STATES OF AMERICA)

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Account Status

DXCC Award	New LoTW QSLs	LoTW QSLs in Process	DXCC Credits Awarded	Total (All)	Total (Current)
Mixed *	19	0	252	271	266
CW	0	0	12	12	12
Phone	15	0	245	260	255
Digital	103	0	0	103	103
80M	6	0	2	8	8
40M	42	0	2	44	44
30M	77	0	0	77	77
20M	57	0	106	163	159
17M	53	0	0	53	53
15M	50	0	110	160	160
12M	6	0	0	6	6
10M	62	0	92	154	151
Challenge	353	0	305	---	658

* = Award has been issued

[View Award Credit Matrix](#)

This account includes credits for the following:

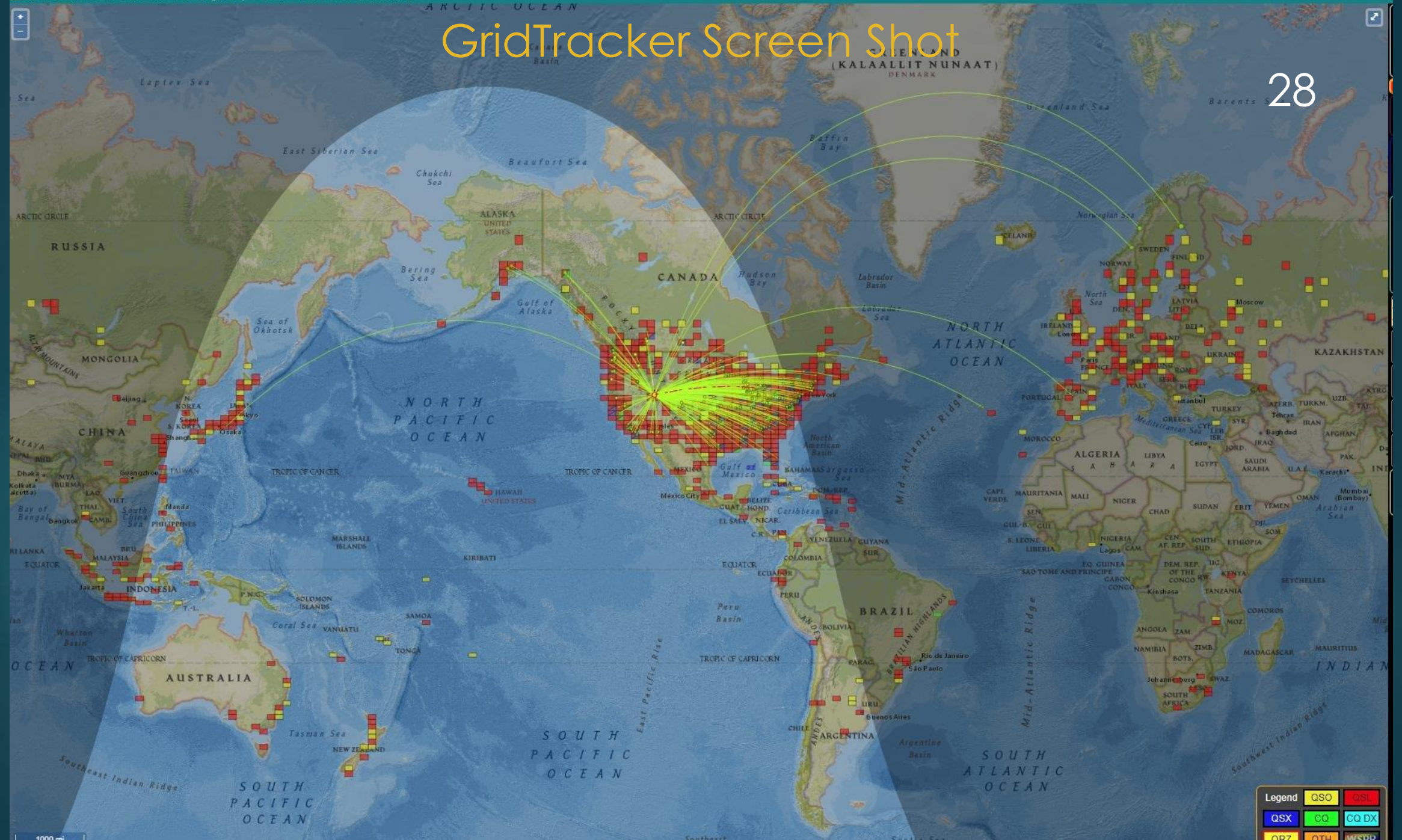
- UNITED STATES OF AMERICA

This account is linked with DXCC record:

Notes

- Click on the **Awards** item in the menu at the top of the page to select a different LoTW award account.
- You can click on the links in the Account Status table to view the credit list for an individual award.
- When you are ready to apply your LoTW credits to your DXCC record, use [Application](#)
- To view the present and past applications you have submitted, use [Application History](#).
- For an ADIF download with the details of all QSLs in your DXCC record use [DXCC QSL Download](#).

GridTracker Screen Shot



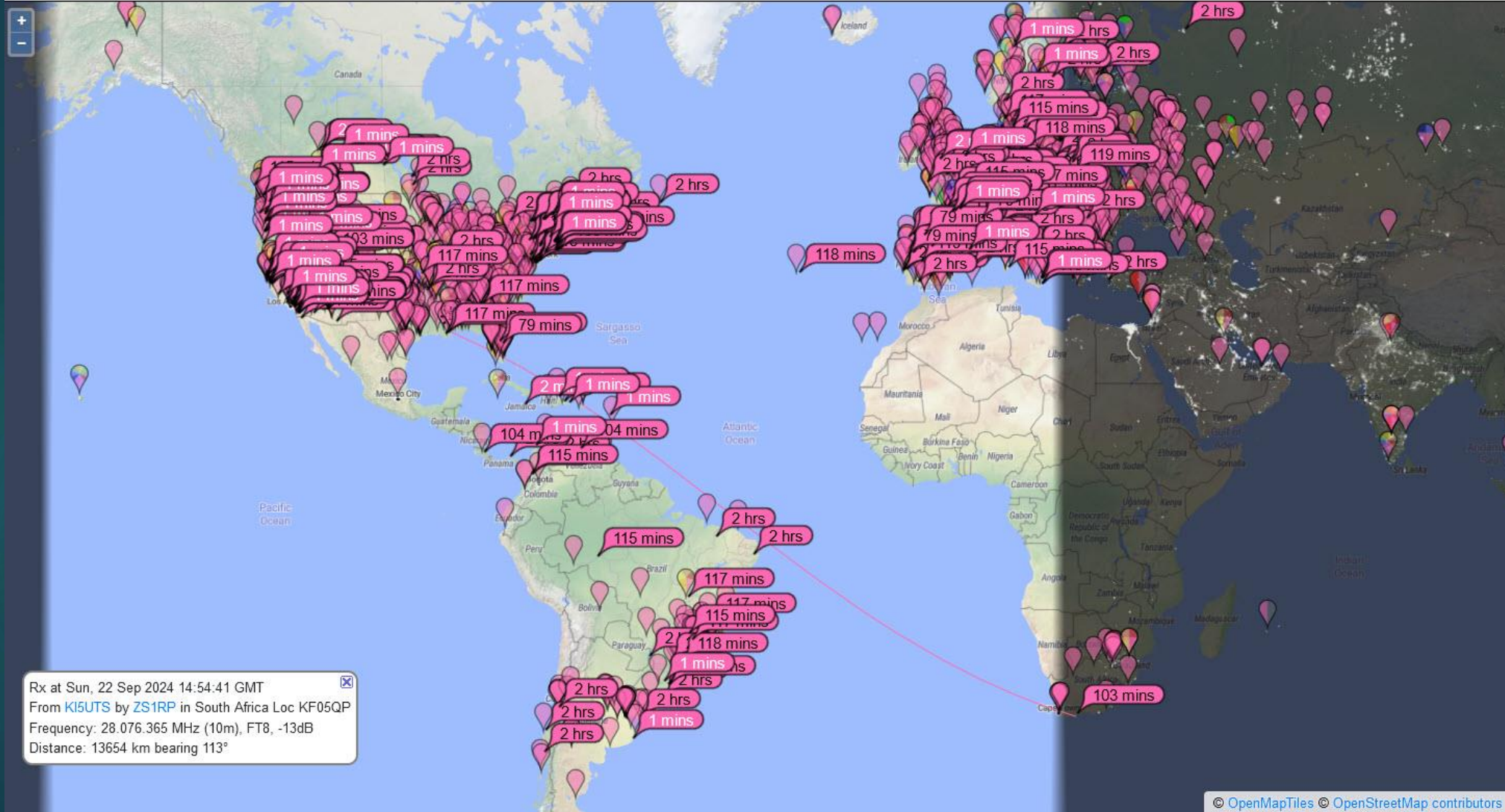
Legend	QSO	QSL
QSO	QSL	QSL
QSX	CC	CO DX
QRZ	QTH	WSPR

PSK Reporter Screen Shot

On **10m** show **signals** sent by **the callsign** **ki5uts** using **FT8** over the last **3 hours** Go! [Display options](#) [Permalink](#)

Monitoring KI5UTS (last heard 1 mins ago). Automatic refresh in 5 minutes. 383 reception reports for KI5UTS are shown as times ([show logbook](#)).

There are 2362 active FT8 monitors: 2341 on 10m, 271 on 15m, 269 on 20m, 238 on 12m, 224 on 17m, 163 on 40m, 144 on 30m, 63 on 80m, 52 on 6m, 52 on 60m, 47 on 2m, 14 on 160m, 12 on 11m, 5 on 2.4Ghz, 3 on 10Ghz, 1 on 600m. [Show all on all bands.](#) [Legend](#)



There is A LOT going on.

You must decide whose CQ you want to return. Have you worked them before? How strong are they to your QTH?

Do you need them for a Prefix or DXCC or WAS? You have 15 seconds to decide tick..tick..tick..

TIME'S UP!!!!!!!!!!

Can we do anything to help us decide????????? Easiest way is to reduce the number of decodes you see by checking the **CQ only** box.....OR.....use the "JT Alert" program

The screenshot shows the WSJT-X v2.4.0 interface. The main window displays a list of received messages under the 'Band Activity' tab. The messages are sorted by UTC, dB, DT, and Freq. The 'CQ only' checkbox in the control panel is highlighted with a red circle.

UTC	dB	DT	Freq	Message
223900	-7	0.4	1710	~ YS1JW N5XFW -12
223900	0	0.5	1075	~ DL2LI NL7XT +15
223900	4	0.1	1183	~ EA1IEQ VE3WVX EN93
223900	-12	0.4	1518	~ KJ7ZPJ K4EWR FM18
223900	3	0.5	1820	~ HA3FFR NY4NC 73
223900	-3	0.4	1997	~ 5X3R KFO XU RR73
223900	12	0.4	2061	~ CQ N3UPY EN90 U.S.A.
223900	-3	0.4	1262	~ DD1UN N8GZ EN90
223900	-3	0.8	917	~ CQ WB4YTG EL49 U.S.A.
223900	-5	0.4	2181	~ IZ1JMN KI5FTB EM40
223900	-11	1.0	703	~ KB0DEU KF4RAF EM60
223900	-5	0.4	497	~ KJ7RGW KB4SGA -15
223900	11	0.4	2089	~ CQ VE3BTT EN82 Canada
223900	-5	0.4	1953	~ CQ HC5T FI07 CQ Zone
223900	-5	0.4	1287	~ NK0V KZ2T EM15
223900	-6	0.8	1777	~ W7CFR KE8OSX -17
223900	-15	0.4	694	~ DL2LI N7WFK EM15
223900	-16	0.4	2198	~ W0JNH I8OCA R-14
223900	-8	0.3	1794	~ AK9B CT1DIZ -14
223900	-5	1.4	801	~ CQ VE3EJP FN14 Canada
223900	-5	0.6	2121	~ IK4LZH N9YBA RRR

Control Panel:

- CQ only
- Log QSO
- Stop
- Monitor
- Erase
- Decode
- Enable Tx
- Halt Tx
- Tune
- Menus

Frequency: 14.074 000

Mode: 20m

TX: 1452 Hz

RX: 1452 Hz

Report: -15

Auto Seq: Call 1st:

DX Call: W9RJ DX Grid: EN60

Az: 83 1315 mi

Lookup Add

2021 Aug 15 22:39:17

Receiving FT8 21

2/15 WD:5m

JT Alert

Helps make better informed decisions quickly. Incoming calls can be sorted by signal strength. Countries and US counties are identified as well as needed prefixes.

Strong SNR decodes

KF9UG B4 +09 U.S.A. IN	N4ZZ TN +06 U.S.A. TN	JG2CNZ +01 Japan	W9YSX B4 +01 U.S.A. IN
W2IRT NJ DX +01 U.S.A. NJ	JA4EPE 00 Japan	KC3Y PA CQ 00 U.S.A. PA	JJ3JHP -01 Japan
KQ4LQL 73 -02 U.S.A.	K4WLG KY -02 U.S.A. KY	KB7RUQ UT -02 U.S.A. UT	KJ8H OH 73 -04 U.S.A. OH
NN4R AL -05 U.S.A. AL	K4ZO NC -05 U.S.A. NC	JA70ZW -05 Japan	JH6RKI -05 Japan
JA0UH -05 Japan	JA0FMU -07 Japan	WA4TED TN -07 U.S.A. TN	JE1LET -07 Japan
KY4CRC KY -07 U.S.A. KY	KB8FLI AR -08 U.S.A. AR	JA0KNM -08 Japan	JA0DAI -09 Japan
JJ1RDX -09 Japan	W4AFB FL -10 U.S.A. FL	JI0VIF -11 Japan	JR1BAS -11 Japan
JF1JEQ -12 Japan	W4GHW GA -12 U.S.A. GA	WA6EZV OH -12 U.S.A. OH	JR8ALJ -13 Japan
JK2XJE -13 Japan	ND4X KY -13 U.S.A. KY	KS40T B4 73 -14 U.S.A. GA	N6RW AZ -14 U.S.A. AZ

Callers : Alert

Alerts Only

JK2XJE -13 Japan

QSO in progress

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Band Activity					Tx Frequency				
UTC	dB	DT	Freq	Message	UTC	dB	DT	Freq	Message
----- 40m -----					043130	4	0.4	871 ~	CQ PT7ZZ HI06 CQ
043400	15	0.2	797 ~	CQ AK9B DM61 U.S.A.	043148	Tx		871 ~	PT7ZZ KC1EO DN31
043400	3	-0.1	584 ~	W4NRG XE2JS RR73	043200	-7	0.4	871 ~	CQ PT7ZZ HI06 CQ
043400	4	-1.4	1593 ~	K7NWT KD9OFJ 73	043215	Tx		871 ~	PT7ZZ KC1EO DN31
043400	3	0.5	1298 ~	CQ KI6NAZ DM03 U.S.A.	043230	-5	0.4	870 ~	CQ PT7ZZ HI06 CQ
043400	6	0.1	2050 ~	N0POH KD2QAR FN02	043230	8	0.1	797 ~	CQ AK9B DM61 U.S
043400	0	-0.1	1689 ~	LY1CX K9TF EN63	043245	Tx		797 ~	AK9B KC1EO DN31
043400	-3	0.2	2250 ~	CQ DX KO4DCR EL98 U.S.A.	043300	15	0.1	797 ~	KC1EO AK9B -13
043400	-7	0.7	1492 ~	CQ VE3ELL FN04 Canada	043315	Tx		797 ~	AK9B KC1EO R+15
043400	1	0.2	1385 ~	CQ N0YEP EN33 U.S.A.	043330	6	0.1	797 ~	KC1EO AK9B RR73
043400	0	0.1	2117 ~	SP1MGM KG4AKV -16	043345	Tx		797 ~	AK9B KC1EO 73
043400	-4	0.9	1001 ~	W0L W1BUS CN85	043400	15	0.2	797 ~	CQ AK9B DM61 U.S
043400	-7	0.2	1780 ~	CQ EA7CK IM76 CQ Zone					
043400	5	0.1	1931 ~	CQ DX N9TNY EN51 U.S.A.					
043400	-1	0.4	2168 ~	KB6OQJ F5LOW -14					
043400	4	0.2	1953 ~	<S5030XX> KU0G EM38					
043400	-1	0.1	748 ~	G6MND KB9JJA EM48					
043400	-15	0.1	692 ~	ZL1VAH WA6GXQ FM06					
043400	-6	0.2	1386 ~	M3FON N4MEC FM06					
043400	-14	0.2	1557 ~	N0POH K4NDN FM08					
043400	-22	0.1	480 ~	<...> KN4JCD R-15					
043400	-18	0.2	1544 ~	XE1YO YS1RS -09					
043400	-17	0.3	2637 ~	CQ W7OK CN86 U.S.A.					

Here is a typical QSO

- AK9B calls CQ with callsign and grid.
- KC1EO answers with call sign and grid
- AK9B responds with signal report
- KC1EO returns signal report
- AK9B sends RR73
- KC1EO sends 73
- AK9B sends CQ looking for next QSO

How do we make a contact: **Search and Pounce** or **Call CQ** or **Fox/Hound**)

Search and Pounce

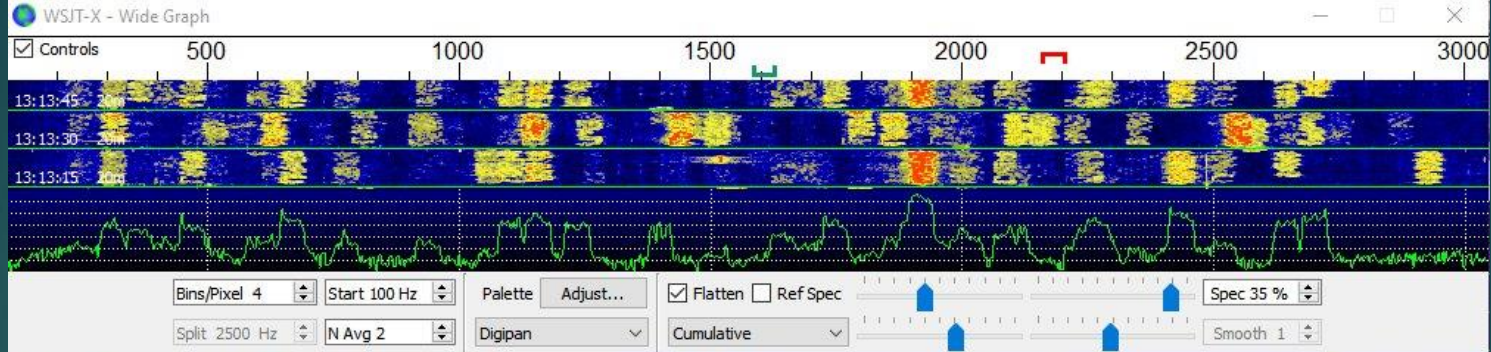
Double click on either the “WSJT-X” call you want to work or “JT-Alert” Callsign box

Calling CQ

Calling CQ is a bit more involved initially. Find an unused frequency. Move both the Red and Green frequency marker to the unused space on the waterfall. Move the Red marker by holding down the Shift key while clicking. Move the Green Marker by clicking on the same open space. Next, click the TX6 radio button. Now merely select Enable TX on the menu bar located above the “Generate Standard messages” line on the main screen.

Fox and Hound Mode Operation -Typically DXpeditions

- Select the “H” on the lower half of the WSJT-X screen to select “HOUND” mode
- Set Transmit (**Red** goal post) to any frequency that is clear but must be ABOVE 1000 on the Waterfall.
- Enter the DX’s call into the DX Call box
- Select “Generate Standard Messages”
- Click on Enable Transmit



WSJT-X v2.6.0 by K1JT et al.
 File Configurations View Mode Decode Save Tools Help

Band Activity					Rx Frequency				
UTC	dB	DT	Freq	Message	UTC	dB	DT	Freq	Message
131330	-13	0.1	1763	~ CQ F4JGI IN94 France	131030	-13	0.1	1584	~ JE6WKY DU3CQ RR73 Philippines
131330	-14	0.1	2735	~ HS8AFA HZ1SF LL34	131055	Tx	2242	~ DU3CQ DG2YCB JO42	
131330	-6	0.2	2149	~ CQ SA0POW J099 Sweden	131130	-14	-0.1	1574	~ C6AGU DL6ZFG -18
131330	-2	0.1	1448	~ CQ URSUX K050 Ukraine	131130	-17	0.2	1584	~ JK3DJX DU3CQ -14
131330	-13	0.2	1954	~ SV1GSP BX5AA RR73 Taiwan	131200	-18	0.4	1584	~ JK3DJX DU3CQ RR73 Philippines
131330	-14	0.1	452	~ CQ DX F4HRG IN87 France	131200	-18	-0.1	1574	~ C6AGU DL6ZFG -18
131330	-13	0.1	1077	~ N3IZ EA7LU -05	131230	-11	-0.1	1574	~ C6AGU DL6ZFG -18
131330	-10	-0.9	808	~ C6AGU F4HRU JN07	131230	-18	0.2	1585	~ CQ DU3CQ PK04 Philippines
131330	-11	0.1	2624	~ UA6AHR DF1KW R+10	131245	-18	0.8	1575	~ N9TF C6AGU 73 Bahamas
131330	-19	0.1	2716	~ OE5EIN OV1T -09	131330	-20	0.1	1585	~ VR2ZDA DU3CQ -09
131330	-16	0.3	1980	~ PD2GCM G3DR -10					
131330	-18	0.0	484	~ IZ8PPI F5RML 73 France					
131330	-13	0.1	550	~ DL2BS HA1VG JN87					
131330	-17	0.1	543	~ N0FW PD2SHB JO21					
131330	-21	-0.0	2091	~ CQ EA1EAS IN70 a7 Spain					
131330	-5	-0.2	1129	~ CQ R7BL LN06 a7 EU Russia					
----- 20m -----									
131345	7	0.1	2416	~ CQ ES1KK K029 Estonia					
131345	6	0.2	1137	~ F6ARS HA3PT R+14					
131345	6	-0.1	2680	~ RC1BP <UE23NY> -12					
131345	16	0.2	1897	~ VU2RS LY3AB K005					
131345	2	0.1	2624	~ DF1KW UA6AHR RR73 EU Russia					
131345	2	0.2	1215	~ YC1LIN SV1FA KM18					
131345	3	0.4	1084	~ DK1AN EA3IGB -05					
131345	2	0.1	2251	~ E74K YO2NAA KN05					
131345	5	0.2	648	~ CQ DX LA6ZFA J059 Norway					

CQ only Log QSO Stop Menus

20m S 14,074 000 Tx even/1st Hold Tx Freq

H DX Call DX Grid Tx 2160 Hz ▲ ▼ Rx 1584 Hz Report -13 Auto Seq CQ: None

FT8 DU3CQ

FT4 MSK Q65 JT65 2022 Dez 29
13:13:57

Generate Std Msgs Next Now Pwr

DU3CQ DG2YCB JO42	<input checked="" type="radio"/>	Tx 1
DU3CQ DG2YCB -13	<input type="radio"/>	Tx 2
DU3CQ DG2YCB R-13	<input type="radio"/>	Tx 3
DU3CQ DG2YCB RR73	<input type="radio"/>	Tx 4
DU3CQ DG2YCB 73	<input type="radio"/>	Tx 5
CQ DG2YCB JO42	<input type="radio"/>	Tx 6

Receiving DG2YCB FT8 13 12/15 WD:3m

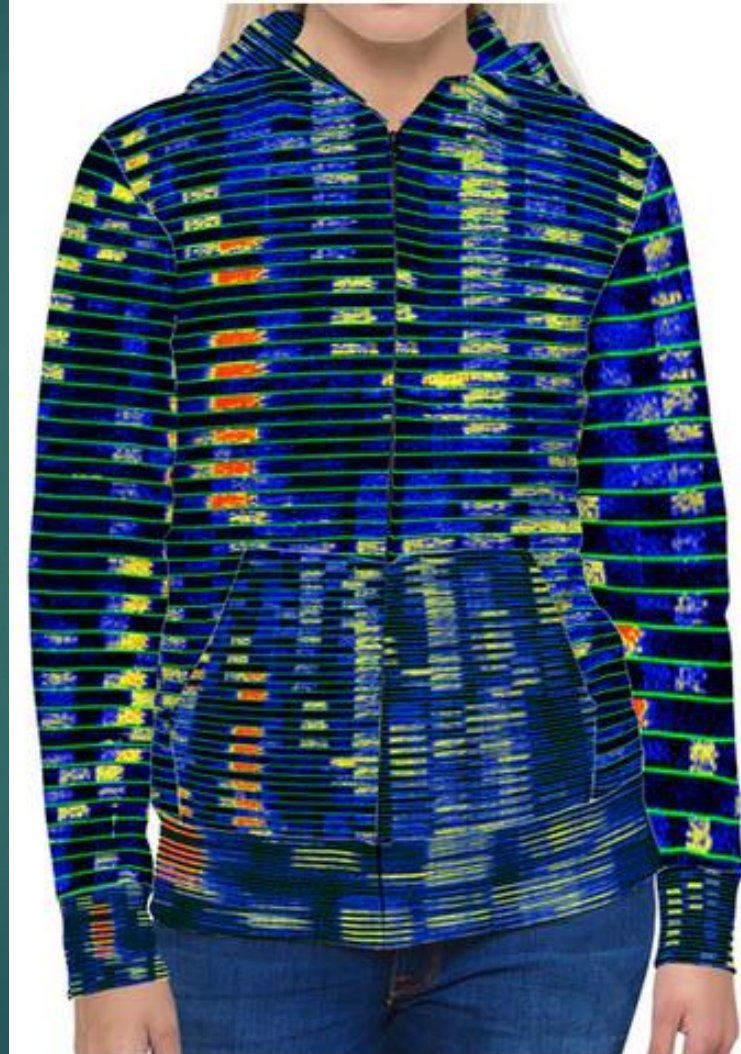
Summary

1. We've reviewed what kind of **radio** hardware you need to run the program
2. We've reviewed what **computer** hardware you need to run the program
3. We've reviewed what **ancillary programs** are useful when running the program.
4. We've reviewed the **initial settings** on WSJT-X as to how to set up the program – but read the manual - [wsjtxmain-2.6.1.pdf \(sourceforge.io\)](#)
5. We've reviewed the main WSJT-X screen and identified major sections
6. We've reviewed "How to call "CQ" or answer "CQ"

Questions?

FT8 Waterfall Hoodie

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<https://hamtactical.com/collections/ft8>