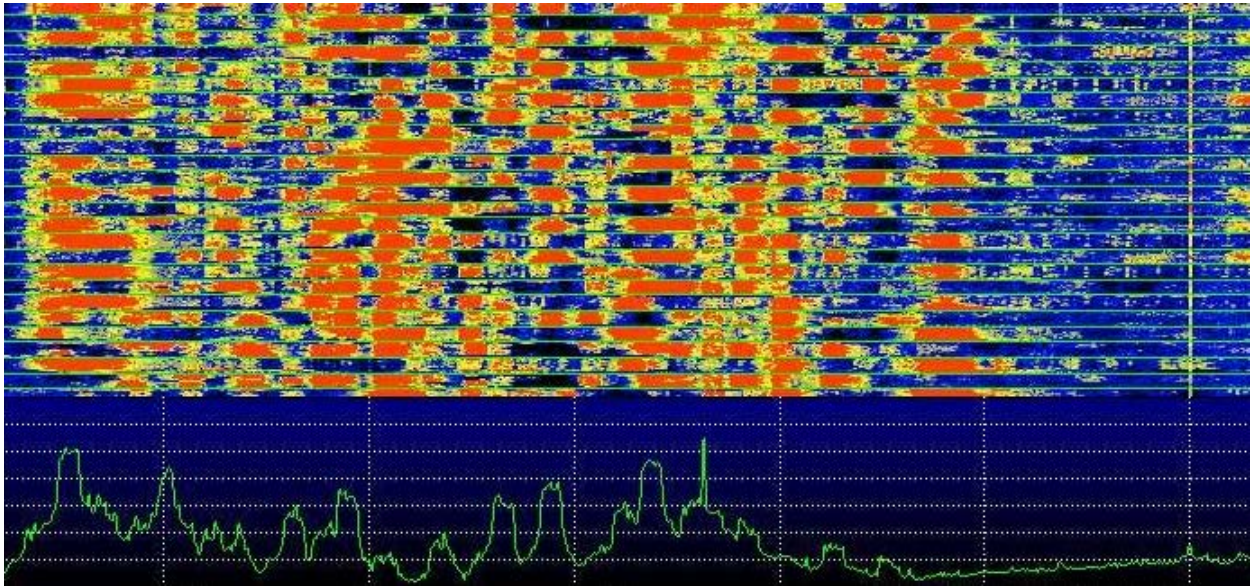


FT8 SETUP GUIDE

By WB9LIB



This FT8 setup guide is intended to serve as a reference to assist those who are setting up stations to operate in this relatively new weak signal mode of operation. It is based on tried and proven settings within **WSJT-X**, **GridTracker**, and the **N3FJP Amateur Contact Log**, which I am concurrently using to support FT8 operations. The features that will become available with the specified settings include:

- *Launch WSJT-X, GridTracker, & N3FJP with a single click*
- *Automatic QSO logging into N3FJP*
- *Automatic QSO uploads to LOTW, QRZ, & eQSL*
- *Highlighting stations, states, countries not yet worked*
- *Screen alert and alarm whenever your station is called*
- *Filter displayed stations by USA only or DX only*
- *Pop-up window & audible alert when your station is called.*

The settings noted on the following pages are those which work well for my application. Some adjustments may be needed to suit your own needs.

FT8 SETUP GUIDE

By WB9LIB

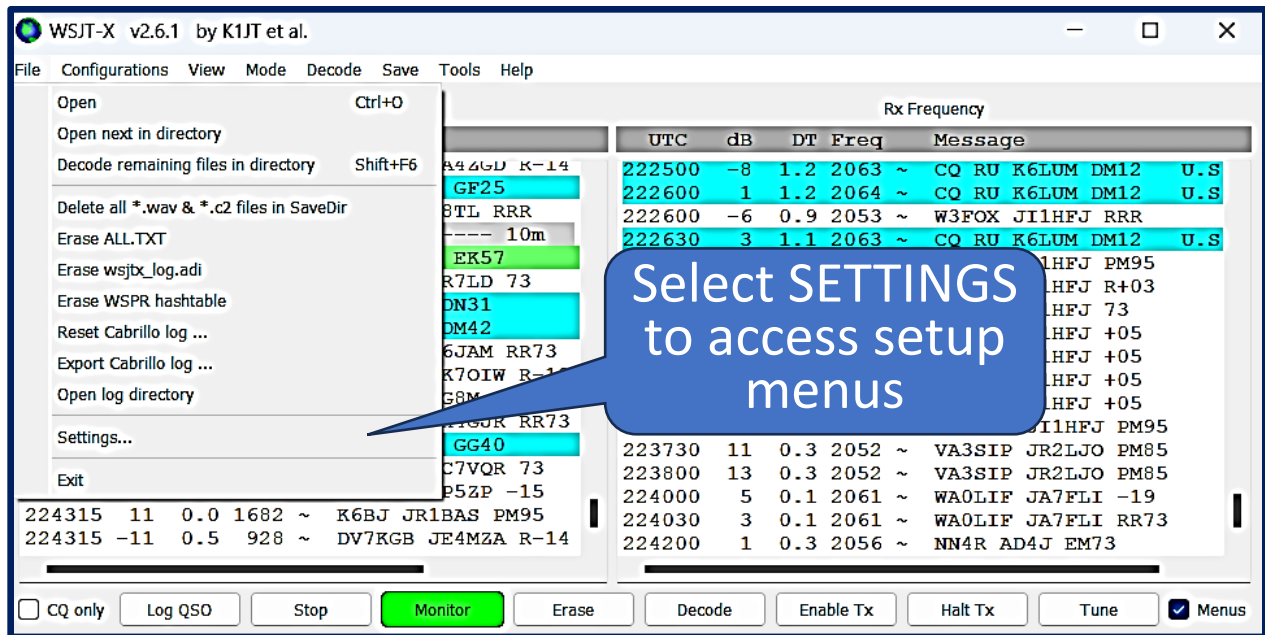
LAUNCH WSJT-X, GRIDTRACKER, & N3FJP WITH ONE CLICK

It can be quite cumbersome starting WSJT-X, GridTracker, and the N3FJP Amateur Contact Logger individually every time you want to run FT8. This process can be greatly simplified by using a batch file to launch all three programs. To accomplish this, create a file named FT8.BAT with the following contents and save it on your desktop:

```
echo off
start "" "c:\WSJT\wsjtx\bin\wsjtx.exe"
start "" "C:\Users\Gary\AppData\Local\Programs\GridTracker2\GridTracker2.exe"
start "" "C:\Program Files (x86)\N3FJP Software - Affirmatech\Amateur Contact Log\aclog.exe"
exit
```

Now whenever you want to operate FT8, **simply double click the FT8.BAT icon on your desktop** and it will automatically fire up WSJT-X, GridTracker, and N3FJP Amateur Contact Log.

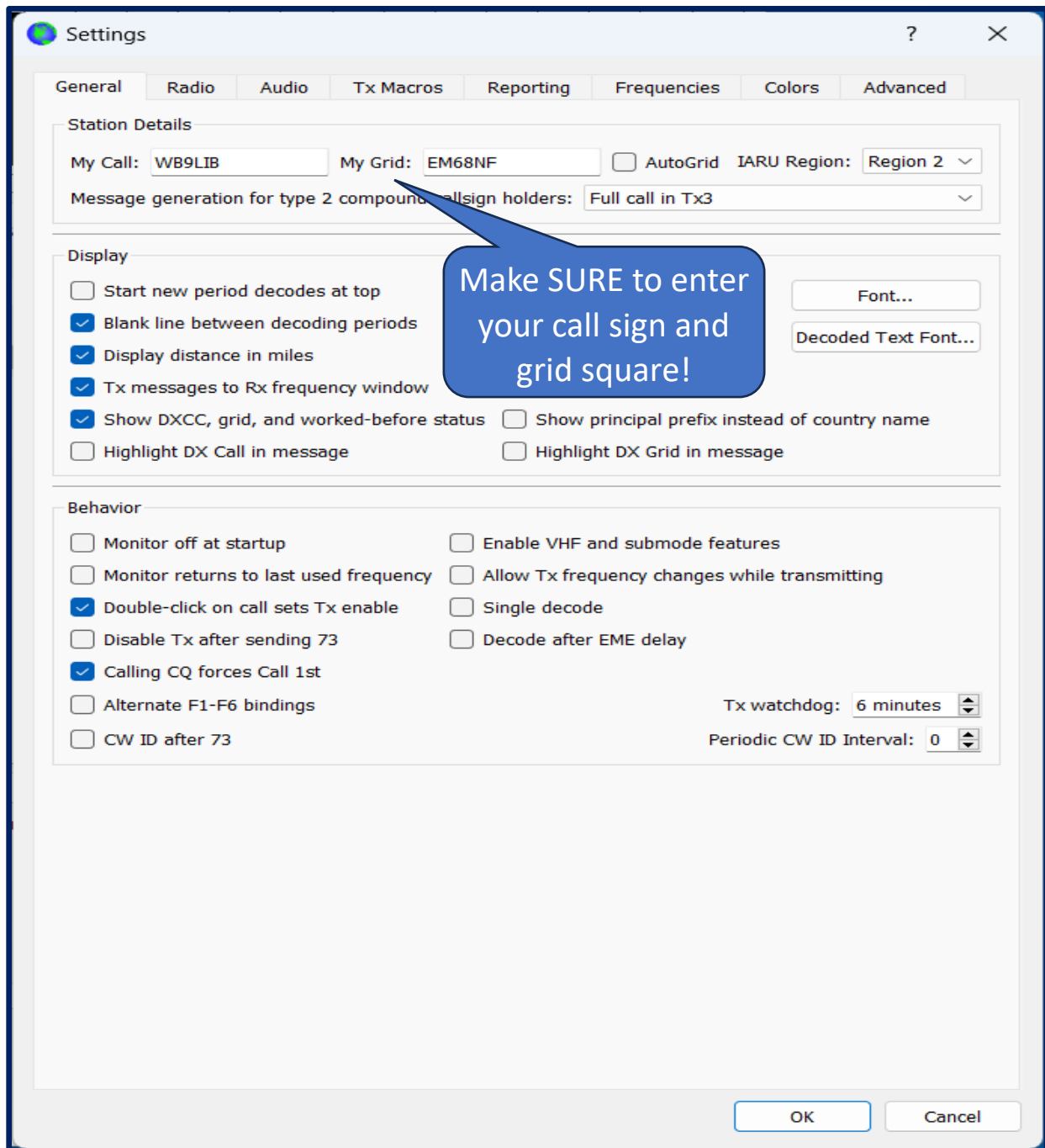
THE WSJT-X MAIN CONTROL PANEL



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THE WSJT-X GENERAL SETUP MENU

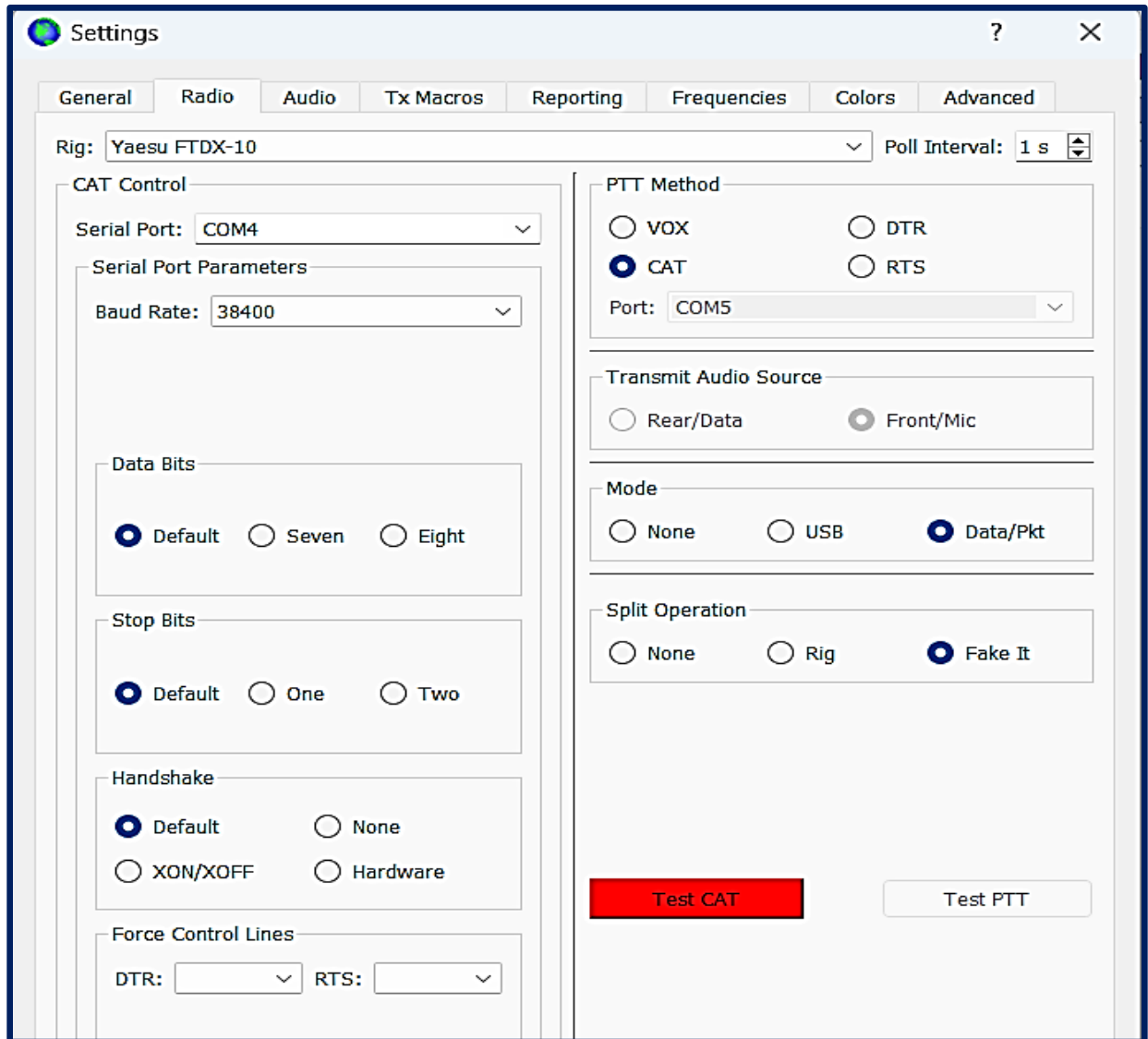


Set up the WSJT-X General menu as shown on above.

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THE WSJT-X RADIO SETUP MENU

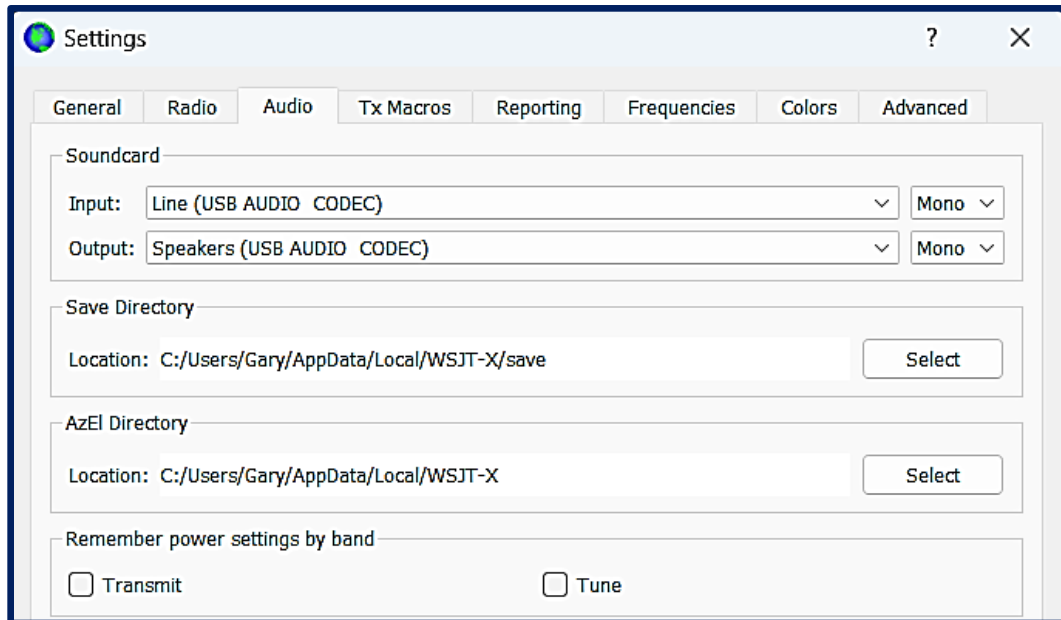


Set up the WSJT-X Radio menu as shown above. It is VERY important that you specify the radio you are using along with the serial port and Baud Rate. When the setup is complete, make sure to select TEST CAT and TEST PTT to ensure these functions are working.

FT8 SETUP GUIDE

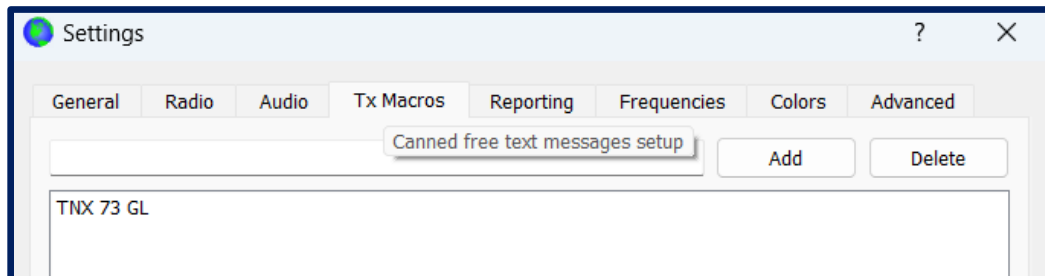
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THE WSJT-X AUDIO SETUP MENU



Set up the WSJT-X Audio menu as shown above. If your radio has a built-in sound card and you are using the USB interface, then your audio Input and Output should use the USB Audio Codecs as shown above.

THE WSJT-X TX MACROS SETUP MENU



No changes should be needed on this menu.

FT8 SETUP GUIDE

By WB9LIB

THE WSJT-X REPORTING SETUP MENU

The screenshot shows the 'Settings' window with the 'Reporting' tab selected. The window has a title bar with a question mark and a close button. The tabs are: General, Radio, Audio, Tx Macros, Reporting, Frequencies, Colors, and Advanced. The 'Reporting' tab is active and contains the following sections:

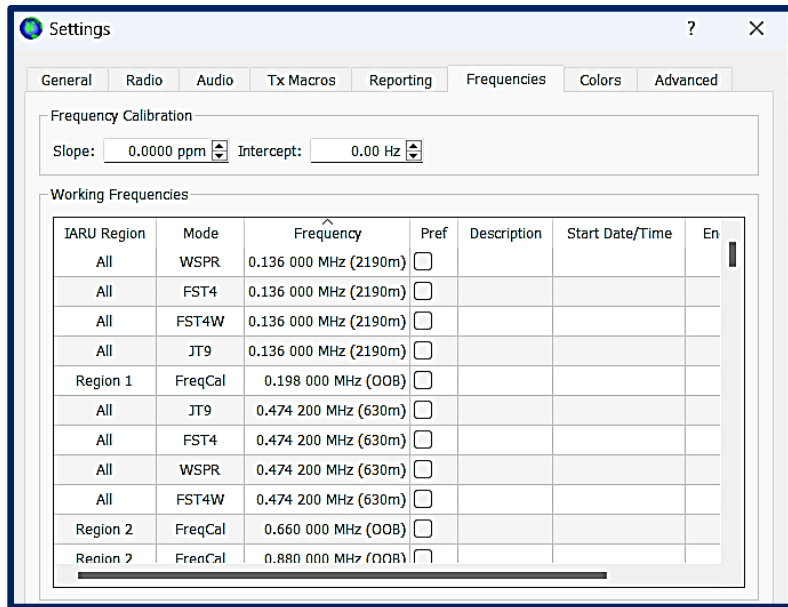
- Logging**
 - Prompt me to log QSO (Op Call:)
 - Log automatically (contesting only)
 - Convert mode to RTTY
 - dB reports to comments
 - Clear DX call and grid after logging
- Network Services**
 - Enable PSK Reporter Spotting
 - Use TCP/IP connection
- UDP Server**
 - UDP Server: Accept UDP requests
 - UDP Server port number: Notify on accepted UDP request
 - Outgoing interfaces:
 - Multicast TTL: Accepted UDP request restores window
- Secondary UDP Server (deprecated)**
 - Enable logged contact ADIF broadcast
 - Server name or IP address:
 - Server port number:

Set up the WSJT-X Reporting as shown above. The Network Services settings are **crucial** and allow WSJT-X to talk to GridTracker. The Secondary UDP settings **are also needed** to allow automatic logging of QSO's into the N3FJP Amateur Contact Log while running GridTracker.

FT8 SETUP GUIDE

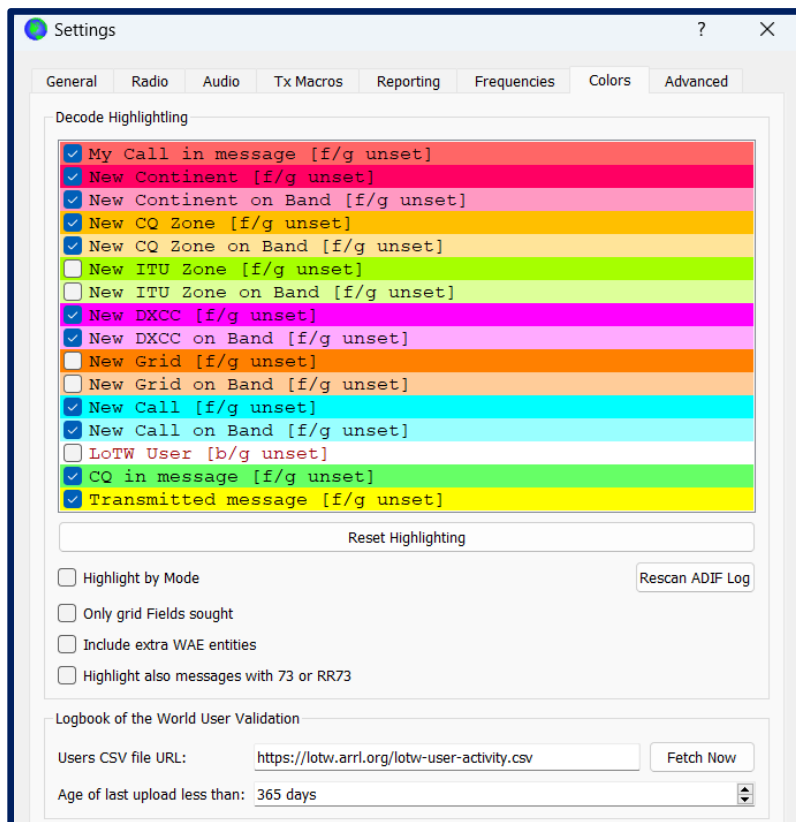
By WB9LIB

THE WSJT-X FREQUENCIES SETUP MENU



You do not need to make any changes to the WSJT-X Frequencies menu

THE WSJT-X COLORS SETUP MENU

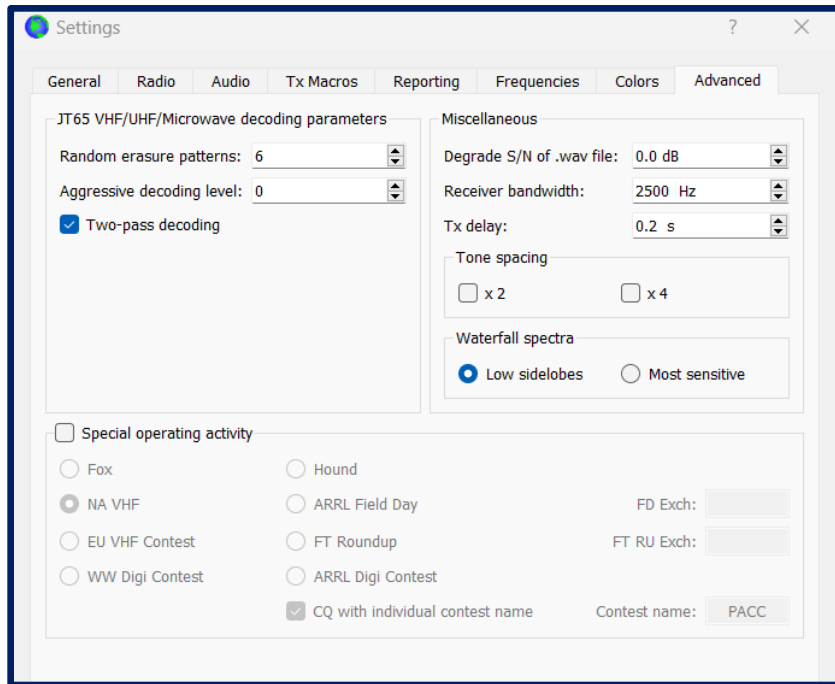


You do not need to make any changes to the WSJT-X Colors menu

FT8 SETUP GUIDE

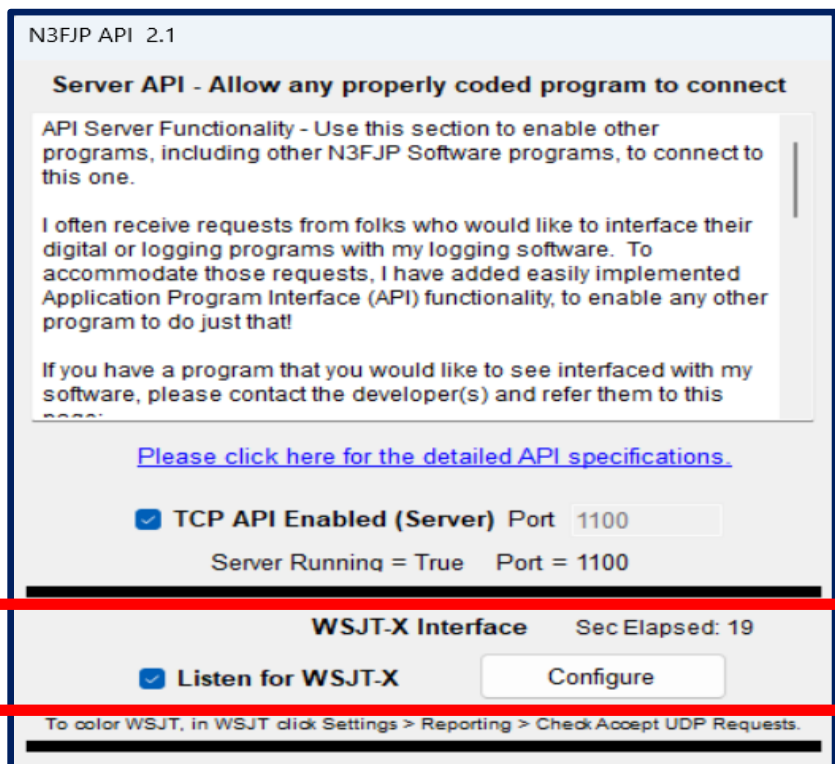
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THE WSJT-X ADVANCED SETUP MENU



You do not need to make any changes to the WSJT-X Advanced menu

THE N3FJP AMATEUR CONTACT LOG API MENU

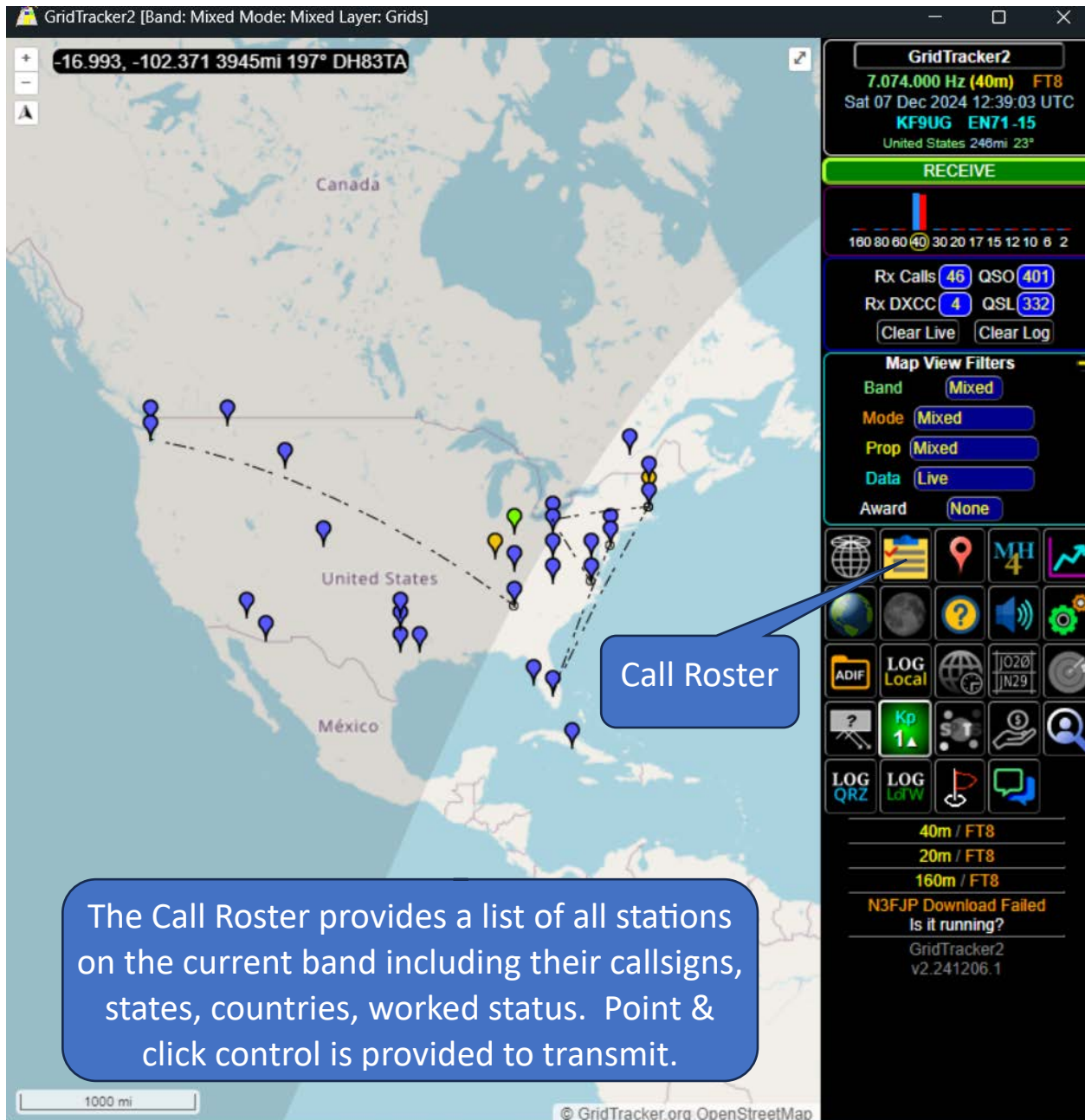


Make sure you have the WSJT-X Interface enabled within the N3FJP Amateur Contest Logger

FT8 SETUP GUIDE

By WB9LIB

THE GRIDTRACKER MAIN MENU



The screenshot shows the GridTracker2 main menu. The top status bar displays coordinates **-16.993, -102.371**, a distance of **3945mi**, and a call sign **197° DH83TA**. The right-hand panel shows the program is in **RECEIVE** mode on **7.074.000 Hz (40m) FT8** at **Sat 07 Dec 2024 12:39:03 UTC**. Statistics include **Rx Calls: 46**, **QSO: 401**, **Rx DXCC: 4**, and **QSL: 332**. Map View Filters are set to **Band: Mixed**, **Mode: Mixed**, **Prop: Mixed**, **Data: Live**, and **Award: None**. A call roster is visible on the right side of the map, and a status message at the bottom right reads **40m / FT8**, **20m / FT8**, **160m / FT8**, and **N3FJP Download Failed Is it running?**

Call Roster

The Call Roster provides a list of all stations on the current band including their callsigns, states, countries, worked status. Point & click control is provided to transmit.

This is the appearance of the GridTracker main menu when the program is running normally.

FT8 SETUP GUIDE

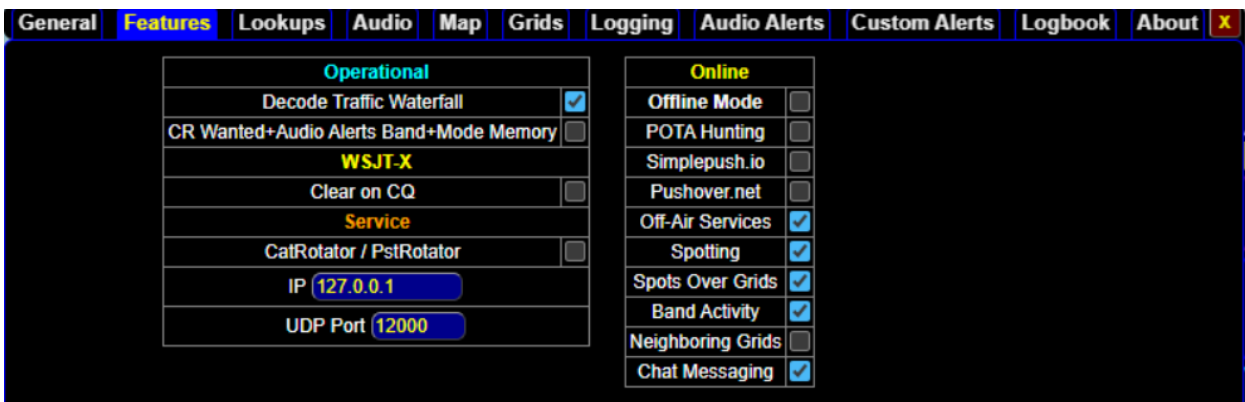
By WB9LIB

THE GRIDTRACKER GENERAL SETUP MENU



Set up GridTracker General Menu as shown above. Receive UDP Messages must be properly set up to allow communications with WSJT-X. Forward UDP Messages must be properly set up to automatically log QSO's into the N3FJP Amateur Contact Log.

THE GRIDTRACKER FEATURES SETUP MENU

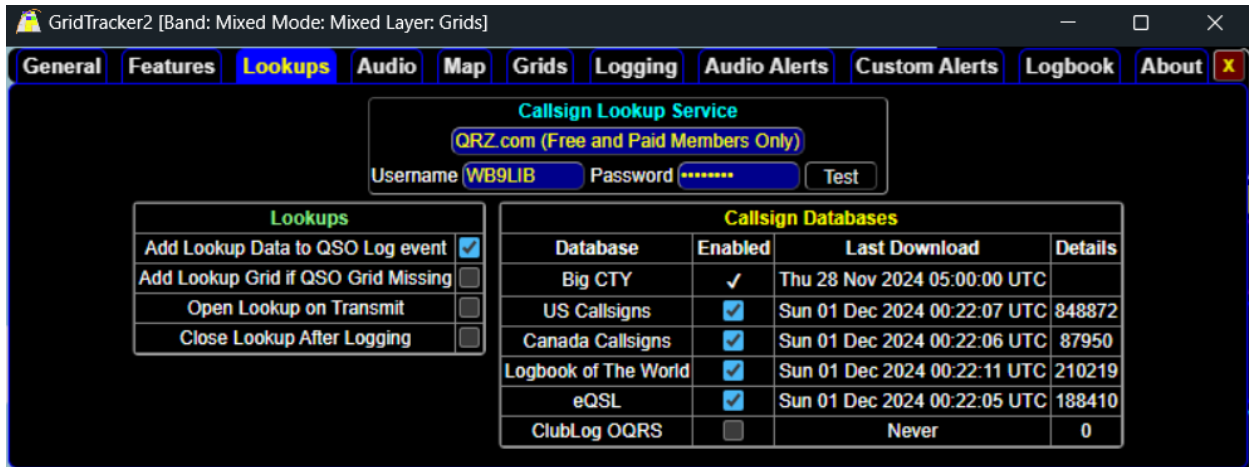


No changes should be needed on the GridTracker Features menu.

FT8 SETUP GUIDE

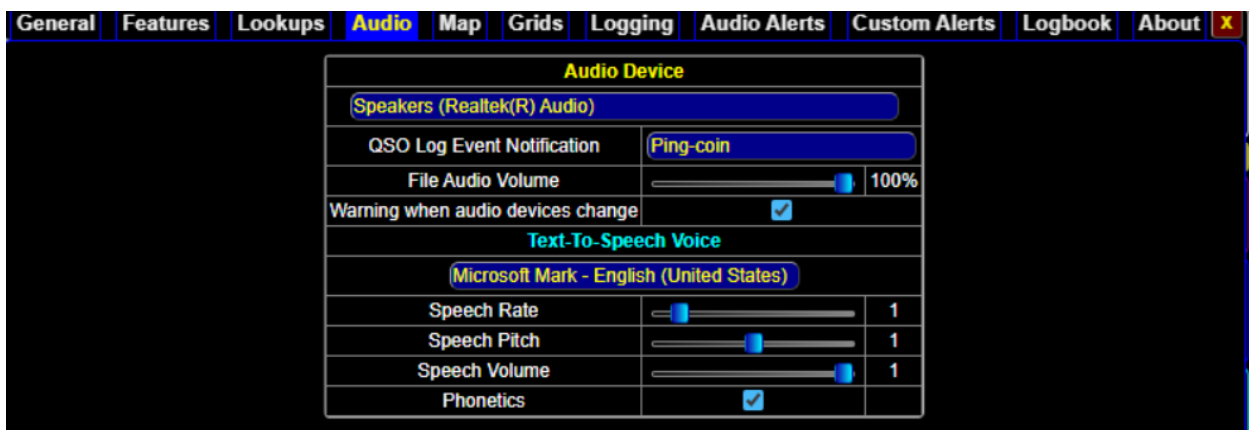
By WB9LIB

THE GRIDTRACKER LOOKUPS SETUP MENU



Make sure you specify an appropriate source (such as QRZ) for GridTracker to use when looking up and displaying callsign information.

THE GRIDTRACKER AUDIO SETUP MENU

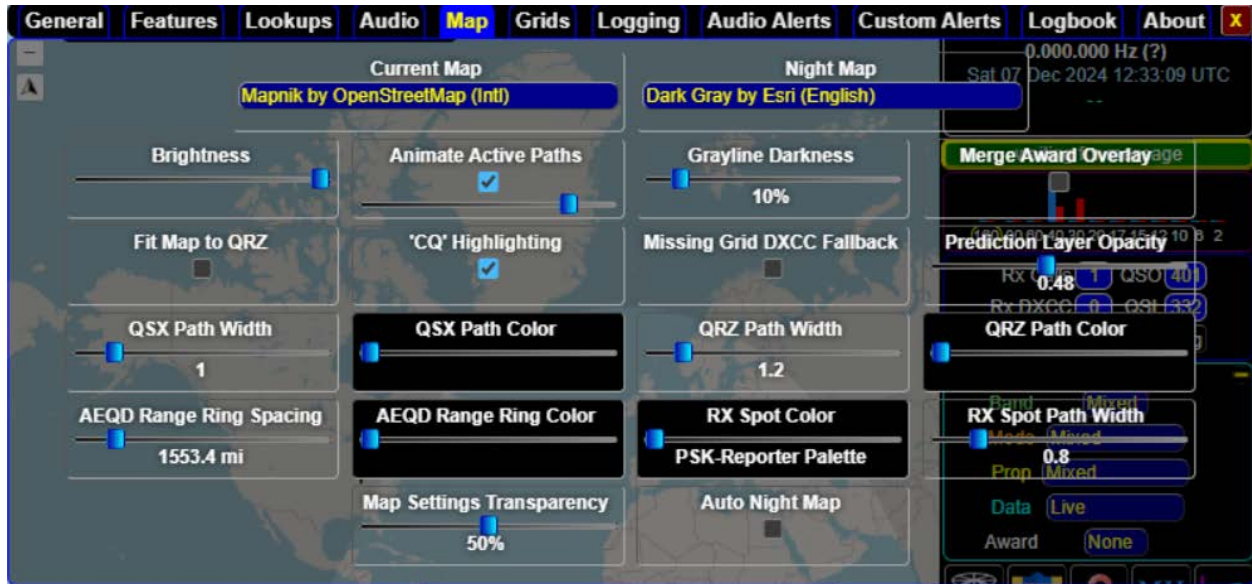


This menu specifies the sound that is made when you are prompted to log a QSO. No changes should be needed.

FT8 SETUP GUIDE

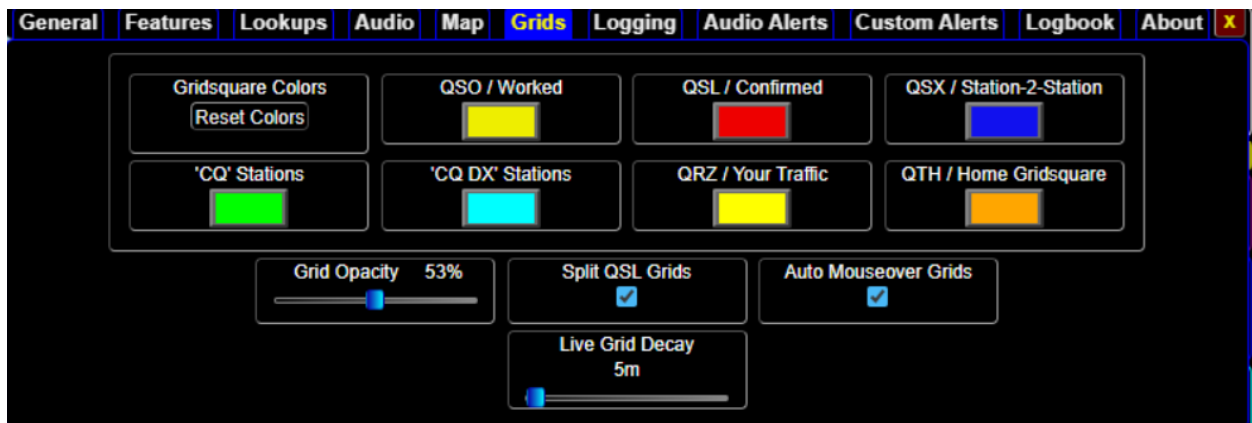
By WB9LIB

THE GRIDTRACKER MAP SETUP MENU



This menu specifies the appearance of the GridTracker map. No changes should be needed.

THE GRIDTRACKER GRIDS SETUP MENU



This menu specifies the coloration used for the grids on the GridTracker map.

FT8 SETUP GUIDE

By WB9LIB

THE GRIDTRACKER LOGGING SETUP MENU

Source/Sync	Connect?	Menu?	Startup?	Log?	Details	Test	Result
WSJT-X Log			<input checked="" type="checkbox"/>		<input type="text" value="wsjtx_log.adi"/>		
GridTracker2			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text" value="Backup Logs"/>		
Local File(s)		<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="button" value="Add File"/> No file(s) selected		
PSK-Reporter		<input type="checkbox"/>	<input type="checkbox"/>		24 Hour History		
QRZ.com		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	API Key <input type="text" value="*****"/>	<input type="button" value="Test"/>	
ClubLog		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Callsign <input type="text" value="WB9LIB"/> Password <input type="text" value=""/> Email <input type="text" value=""/>	<input type="button" value="Test"/>	
HRDLOG.net				<input type="checkbox"/>	Callsign <input type="text" value=""/> Upload Code <input type="text" value=""/> *** How to get upload code ***	<input type="button" value="Test"/>	
CloudLog				<input type="checkbox"/>	URL <input type="text" value="http://127.0.0.1"/> API Key <input type="text" value=""/> Station Profile <input type="text" value=""/>	<input type="button" value="Test"/>	
eQSL.cc				<input checked="" type="checkbox"/>	User <input type="text" value="WB9LIB"/> Password <input type="text" value="*****"/> QTH Nickname <input type="checkbox"/>	<input type="button" value="Test"/>	
LoTW		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Login <input type="text" value="wb9lib"/> Password <input type="text" value="*****"/> TQSL Path <input type="text" value="C:\Program Files ... tedQSL\tqsl.exe"/> TQSL Password <input type="text" value=""/> Station Name <input type="text" value="WB9LIB"/>	<input type="button" value="Test Download"/> <input type="button" value="Test TQSL"/>	
HamCQ.cn				<input type="checkbox"/>	API Key <input type="text" value=""/>	<input type="button" value="Test"/>	
N1MM Logger+				<input type="checkbox"/>	IP <input type="text" value="127.0.0.1"/> Port <input type="text" value="2333"/>		
Log4OM				<input type="checkbox"/>	IP <input type="text" value="127.0.0.1"/> Port <input type="text" value="2236"/>		
N3FJP Loggers	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	IP <input type="text" value="127.0.0.1"/> Port <input type="text" value="1100"/> QSL By <input type="text" value="Any"/>		
DXKeeper				<input type="checkbox"/>	IP <input type="text" value="127.0.0.1"/> Port <input type="text" value="52000"/>		
HRD Logbook				<input type="checkbox"/>	IP <input type="text" value="127.0.0.1"/> Port <input type="text" value="7826"/>		

This menu specifies the logging functions used by GridTracker. The settings shown above allow the following:

- WSJT-X log is loaded at startup
- GridTracker log is loaded at startup and automatically logs contacts
- Local Files appears as an option on the GridTracker front menu
- QRZ automatically logs contacts and appears on the GridTracker front menu
- eQSL automatically logs contacts
- LOTW log is loaded at startup, automatically logs contacts, and is on the GridTracker front menu
- N3FJP log is loaded at startup

Note that appropriate login and password information must be provided for QRZ, LOTW, and eQSL for those services to work.

FT8 SETUP GUIDE

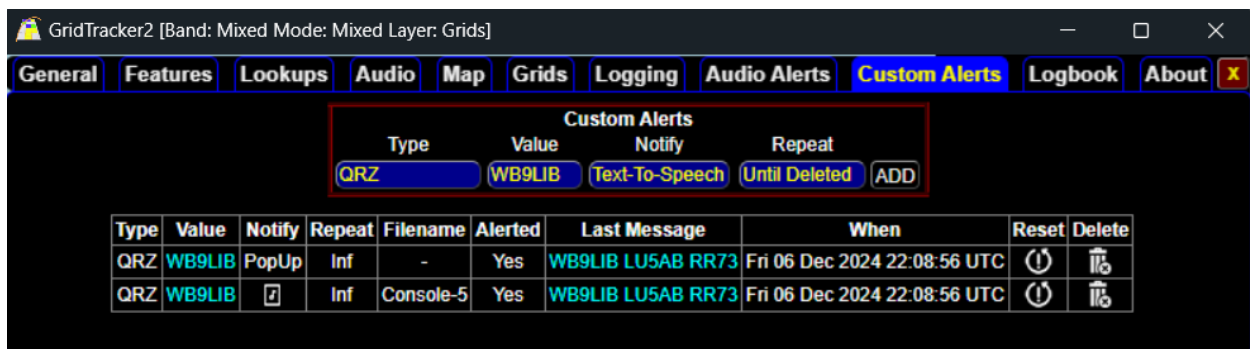
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THE GRIDTRACKER AUDIO SETUP MENU



No changes should be needed on the GridTracker Features menu. Audio alerts are not enabled (too many alerts can be annoying)

THE GRIDTRACKER CUSTOM ALERTS SETUP MENU

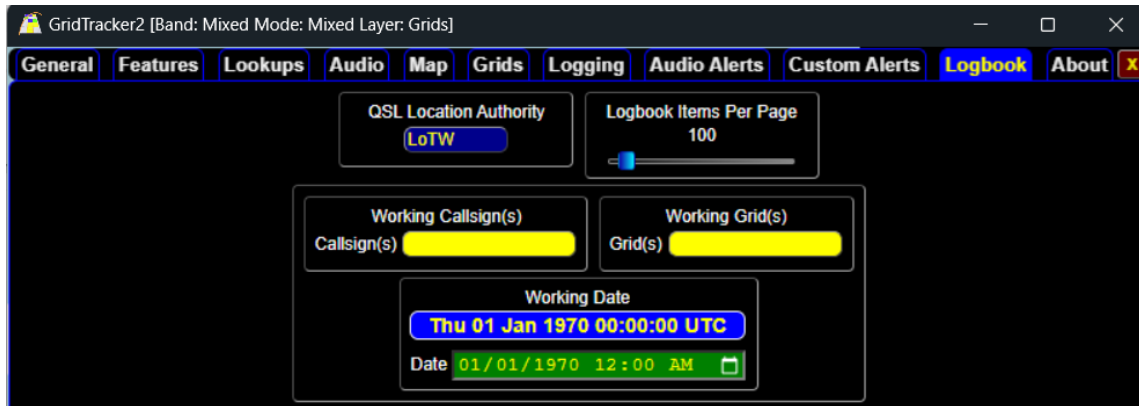


The settings above introduce a **POWERFUL** feature – a pop-up box will appear whenever any station gives you a call. An audible alert will also sound. This will help ensure you never miss a call.

FT8 SETUP GUIDE

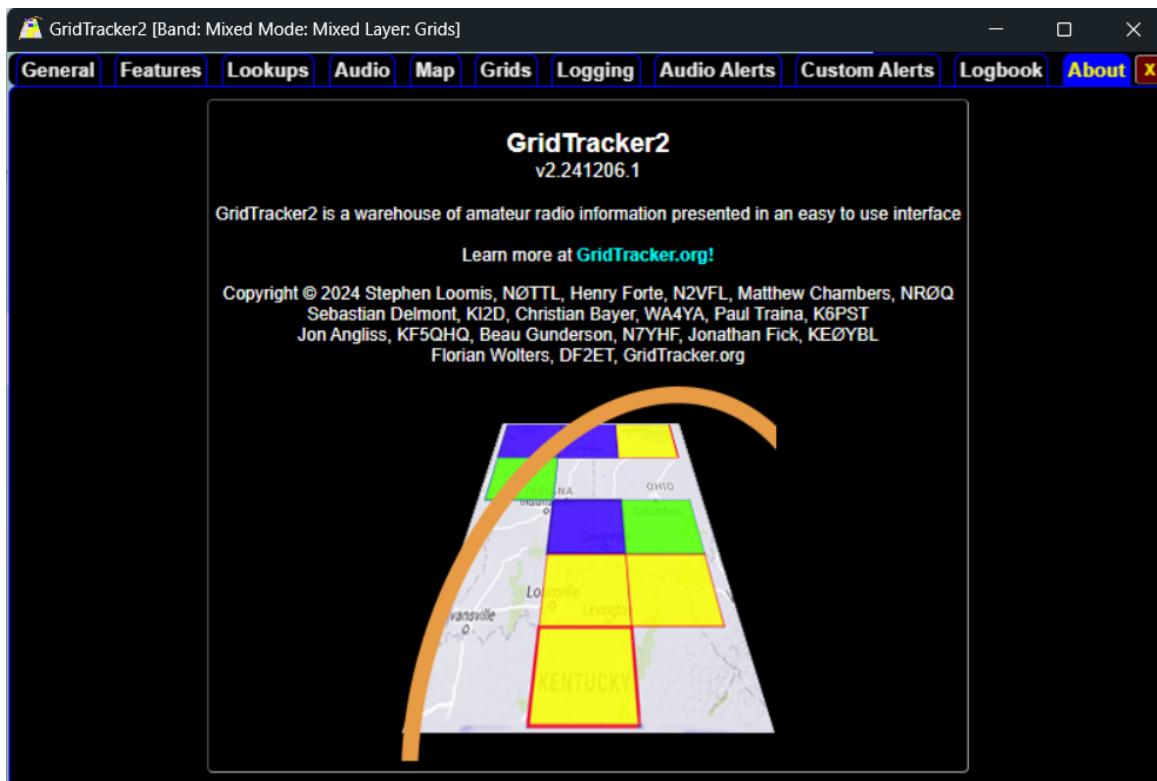
By WB9LIB

THE GRIDTRACKER LOGBOOK SETUP MENU



No changes should be needed on the GridTracker Features menu.

THE GRIDTRACKER ABOUT MENU



This provides the version of GridTracker when this manual was created.

FT8 SETUP GUIDE

By WB9LIB

THE GRIDTRACKER CALL ROSTER (UNFILTERED)

All WANTED options are selected to highlight everything not worked.

No filtering applied. Everything is being displayed.

The screenshot shows the 'Call Roster: 21 in roster' window. The 'Wanted' section has several options checked: Callsign, Grid, DXCC, Marathon, WPX, OAMS, CQz, ITUz, State, and County. The 'Exceptions' section has several options unchecked: Only Wanted, CQ Only, RR73 as CQ, New Calls, Has Grid, Not My DXCC, Only My DXCC, and Uses eQSL. The table below lists 21 call signs with their respective calling frequencies, grid squares, and other details.

Callsign	Calling	Grid	POTA	DXCC	Flag	DXM	State	County	Cont	dB	CQz	ITUz	PX	OAMS	Age	UTC
NM3B	KF9UG			United States			PA	Eik	NA	35	05	08	NM3		4s	12:42:15
W8ATE	W4WDK	EN81		United States			MI	Lenawee +1	NA	21	04	08	W8		4s	12:42:15
W1WWB	CQ	EM95		United States			NC	Alexander +1	NA	19	05	08	W1		4s	12:42:15
KC2DPF	W4WDK			United States			VA	King George +1	NA	19	05	08	KC2		4s	12:42:15
K7REH	CQ	DM43		United States			AZ	Maricopa	NA	16	03	06	K7		4s	12:42:15
AA1PQ	CQ	FN41		United States			RI	Providence	NA	13	05	08	AA1		4s	12:42:15
KQ4CTD	KI9DX			United States			AL	Limestone +1	NA	11	05	08	KQ4		4s	12:42:15
KI7SKT	JJ3GGA			United States			WA	Snohomish	NA	10	03	06	KI7		4s	12:42:15
KD1OW	KC2NJ			United States			ME	Androscoggin	NA	9	05	08	KD1		3s	12:42:15
N5LYJ	3D2USU	DN28		United States			MT	Oklahoma	NA	9	04	07	N5		4s	12:42:15
K8FAR	3D2USU	EN80		United States			OH	Licking	NA	4	04	08	K8		4s	12:42:15
KX9DX	KE8MJS			United States			IN	Madison +1	NA	2	04	08	KX9		3s	12:42:15
N1PCZ	CQ	FN32		United States			NH	Cheshire	NA	2	05	08	N1		4s	12:42:15
KF0LJM	W0YK	DM79		United States			CO	Douglas	NA	1	04	07	KF0		3s	12:42:15
CO6XE	CQ	FL01		Cuba					NA	-1	08	11	CO6		4s	12:42:15
KE7NLT	K2BRO	DN55		United States			MT	Yellowstone	NA	-4	03	06	KE7		4s	12:42:15
WB9NOE	AK5Q			United States			FL	Brevard	NA	-5	04	08	WB9		1s	12:42:15
KD9ZQN	KD7YOX	EM69		United States			IN	Greene	NA	-8	04	08	KD9		1s	12:42:15
W2MM	VE2MBS			United States			FL	Orange +1	NA	-11	05	08	W2		3s	12:42:15
W1WCI	W6ZD	FN42		United States			MA	Essex	NA	-11	05	08	W1		3s	12:42:15
KE0N	KQ4JSA			United States			MN	Hennepin	NA	-12	04	07	KE0		3s	12:42:15

Simply click on callsign to transmit & attempt contact

The GridTracker Call Roster is your PRIMARY FT8 control point for observing stations currently operating on the selected band, which states or countries they are in, and whether you have worked those stations, states, or countries before.

FT8 SETUP GUIDE

By WB9LIB

THE GRIDTRACKER CALL ROSTER (CQ ONLY)

All WANTED options are selected to highlight everything not worked.

CQ ONLY selected to only display stations calling CQ.

Callsign	Calling	Grid	POTA	DXCC	Flag	DXM	State	County	Cont	dB	CQz	ITUz	PX	OAMS	Age	UTC
AA1PQ	CQ	FN41		United States			RI	Providence	NA	18	05	08	AA1		1m 54s	12:43:45
VA3QK	CQ	FN04		Canada			ON		NA	16	04	04	VA3		9s	12:45:30
W5XO	CQ	EM10		United States			TX	Milam	NA	11	04	07	W5		9s	12:45:30
W0YK	CQ	CM97		United States			CA	Santa Clara	NA	9	04	07	W0		9s	12:45:30
N7RDJ	CQ	DM43		United States			AZ	Maricopa	NA	7	03	06	N7		9s	12:45:30
C06XE	CQ	FL01		Cuba					NA	2	08	11	C06		1m 53s	12:43:45
W2MM	CQ	FN41		United States			FL	Orange +1	NA	-5	05	08	W2		1m 53s	12:43:45
K0FO	CQ	EN34		United States			MN	Dakota	NA	-10	04	07	K0		8s	12:45:30
AG8M	CQ DX	DM33		United States			AZ	Maricopa	NA	-11	04	08	AG8		8s	12:45:30
KD7YOX	CQ DX	DM41		United States			AZ	Cochise	NA	-14	03	06	KD7		8s	12:45:30
K04FQW	CQ	FM18		United States			VA	Fauquier	NA	-14	05	08	KO4		35s	12:45:00

Simply click on call sign to transmit & attempt contact

By selecting **CQ ONLY** you only display those stations who are calling CQ, inviting stations to contact them.

FT8 SETUP GUIDE

By WB9LIB

THE GRIDTRACKER CALL ROSTER (USA ONLY)

All WANTED options are selected to highlight everything not worked.

ONLY MY DXCC selected to only USA stations

The screenshot shows the 'Call Roster' window with 22 stations listed. The 'Settings' tab is active, showing 'Wanted' options checked for Callsign, Grid, DXCC, Marathon, and WPX. 'Exceptions' are set to 'Only My DXCC'. The table below lists the stations with their call signs, calling frequencies, grid squares, and other details.

Callsign	Calling	Grid	POTA	DXCC	Flag	DXM	State	County	Cont	dB	CQz	ITUz	PX	OAMS	Age	UTC
KF0LJM	VA3QK			United States	🇺🇸		CO	Douglas	NA	19	04	07	KF0		3s	12:47:1
K8DID	K6VTY	EN63		United States	🇺🇸		MI	Mason	NA	17	04	08	K8		3s	12:47:1
KE8VC	JT1CO	EN83		United States	🇺🇸		MI	Allegan +1	NA	17	04	08	KE8		3s	12:47:1
K7REH	CQ	DM43		United States	🇺🇸		AZ	Maricopa	NA	15	03	06	K7		3s	12:47:1
KR0P	CQ	EN10		United States	🇺🇸		NE	Gage +1	NA	14	04	07	KR0		3s	12:47:1
WA2IBZ	KC2DPF			United States	🇺🇸		NJ	Gloucester	NA	13	05	08	WA2		3s	12:47:1
AA1PQ	CQ	FN41		United States	🇺🇸		RI	Providence	NA	9	05	08	AA1		3s	12:47:1
KJ4EB	KQ4JSA			United States	🇺🇸		NC	Buncombe	NA	7	05	08	KJ4	🗣️	3s	12:47:1
KE7NLT	JA6EXO	DN55		United States	🇺🇸		MT	Yellowstone	NA	6	03	06	KE7	🗣️	3s	12:47:1
WX4RLX	K7VP			United States	🇺🇸		WV	Kanawha	NA	4	05	08	WX4	🗣️	3s	12:47:1
W5GSF	K6VTY	EM20		United States	🇺🇸		TX	Trinity +1	NA	3	04	07	W5	🗣️	3s	12:47:1
N5LYJ	W0YK	DN28		United States	🇺🇸		MT	Oklahoma	NA	1	04	07	N5		0s	12:47:1
W7PP	JJ1TQM			United States	🇺🇸		AZ	Maricopa	NA	1	03	06	W7		2s	12:47:1
K1TTW	WA9LT	FN33		United States	🇺🇸		VT	Windsor	NA	-1	05	08	K1	🗣️	0s	12:47:1
KW4MB	WA9LT	EL87		United States	🇺🇸		FL	Hillsborough	NA	-1	05	08	KW4		2s	12:47:1
AK5Q	BD4XGP	EM00		United States	🇺🇸		TX	Hays +1	NA	-1	04	07	AK5		3s	12:47:1
N1PCZ	W4WDK	FN32		United States	🇺🇸		NH	Cheshire	NA	-1	05	08	N1		3s	12:47:1
AE4YL	W4WDK	EL99		United States	🇺🇸		FL	Flagler	NA	-1	05	08	AE4		3s	12:47:1
KI7SKT	DS2BQM			United States	🇺🇸		WA	Snohomish	NA	-3	03	06	KI7		2s	12:47:1
KE0N	WX5AMA/SRD			United States	🇺🇸		MN	Hennepin	NA	-5	04	07	KE0		0s	12:47:1
KA5RBZ	W0YK			United States	🇺🇸		TX	Collin	NA	-10	04	07	KA5		2s	12:47:1
K5VMA	JH1FNU	CN87		United States	🇺🇸		WA	Thurston	NA	-13	04	07	K5		0s	12:47:1

Simply click on callsign to transmit & attempt contact

By selecting ONLY MY DXCC you are able to display only stations calling from within the USA.

FT8 SETUP GUIDE

By WB9LIB

THE GRIDTRACKER CALL ROSTER (DX ONLY)

All WANTED options are selected to highlight everything not worked.

NOT MY DXCC selected to only USA stations

The screenshot shows the 'Call Roster' window with 19 heard stations and 6 in the roster. The 'Wanted' section has all options checked: Callsign, Grid, DXCC, Marathon, WPX, OAMS, CQz, ITUz, State, County, Continent, and Watcher. The 'Exceptions' section has 'Only Wanted', 'CQ Only', 'RR73 as CQ', 'New Calls', and 'Has Grid' unchecked, while 'Not My DXCC' is checked. The 'Fewer Controls' section has 'Only My DXCC' and 'Uses eQSL' unchecked. The station list below shows various international stations with their respective call signs, grids, and countries.

Callsign	Calling	Grid	POTA	DXCC	Flag	DXM	State	County	Cont	dB	CQz	ITUz	PX	OAMS	Age	UTC
VE3ETE	CQ	EN86		Canada	🇨🇦		ON		NA	33	04	04	VE3		22s	12:51:15
VA3PHP	K7S	FN04		Canada	🇨🇦		ON		NA	30	04	04	VA3		7s	12:51:30
VE2KTF	KM4RT	FN58		Canada	🇨🇦		QC		NA	30	05	04	VE2		22s	12:51:15
OH2ZZ	XV9T			Finland	🇫🇮				EU	10	15	18	OH2		51s	12:50:45
LA2JKA	JA8DKJ			Norway	🇳🇴				EU	-3	14	18	LA2		22s	12:51:15
RA0FF	UA7T			Asiatic Russia	🇷🇺	CQz			AS	-9	19	34	RA0		19s	12:51:15

Simply click on callsign to transmit & attempt contact

By selecting NOT MY DXCC you are able to display only DX stations calling from outside the USA.