

Msg Decoder Utility for WSJT-X or JTDX

Why we made this utility!

FT8 software, like **WSJT-X** does not show/highlight any incoming line, when a callsign was (already) worked before!
JTDX has a few more options, it does highlight the line when it finds the callsign inside the “**wsjtx_log.adi**” file.

On start the utility will look for the “**wsjtx_log.adi**” files used inside the **WSJT-X** and **JTDX** application folder.
The files will be loaded, then merged and followed by a cleanup to remove any **duplicates**.

To make this work on both FT8 Software packages, we need to collect the **callsign** data when a line is received.

All FT8 software packages use a complex messaging system, that allows us to load and analyze (all) incoming lines.

To compare we need to analyze every incoming line, and search for **Call Sign, Band and Mode** reported.

The line data will be combined and used to scan through the collect (callsign) data from “**adif**” files loaded before.

When a match is found, the utility will return a message to the FT8 software, and Highlight the **Call Sign** .

It will perform the same actions on both software packages, **WSJT-X** or **JTDX**.

The Utility runs in the background, and it will analyze all the incoming messages.

You do not really need the application, but it will prevent you from making the same connections repeatedly.

On the next pages you will find screen prints that indicate what it does when processing.

Ps. The software is tested on Windows 11.

This is how the MsgDecoder looks when it is running!

WSJT-X or JTDX Message Decoder Utility - Beta 1.20250908 - © 2025 J.Stoof (PE1FQF)

Menu Stop all UDP connections Send Clear message Send Stop Transmit Restart UDP (Multicast) Exit

- Set IP and Port
- Enable/Disable the usage of the JTDX Adif File
- Enable/Disable the usage of the WSJT-X Adif File
- Enable/Disable the usage of the Extra WSJT-X Adif File
- Enable/Disable the usage of the QRZ Logbook Adif File
- Load/Include JTDX Adif File
- Load/Include WSTJ-X Adif File
- Load/Include Extra-Storage Adif File
- Load/Include QRZ Logbook Adif File
- HighLight Background Color
- HighLight ForeGround Color

8-9-2025 08:56:13	2	JTDX	1	08:56:00	-5	0	1720	~	EA1NM MM/HA0DFV	0	0
8-9-2025 08:56:13	1	JTDX	7074	FT8	-15	FT8	0	0	1 2487 2487 PE1FQF JO21ps	0	0
8-9-2025 08:56:10	0	JTDX	3	2.2.159							
8-9-2025 08:55:59	1	JTDX	7074	FT8	-15	FT8	0	0	0 2487 2487 PE1FQF JO21ps	0	0
8-9-2025 08:55:58	2	JTDX	1	08:55:45	-24	0	1151	~	CQ F4ASJ JN08	0	0
8-9-2025 08:55:58	2	JTDX	1	08:55:45	-15	0	1213	~	ON3TLA F1IWH RR73	0	0
8-9-2025 08:55:58	2	JTDX	1	08:55:45	-19	0	221	~	LX1JH HB9EKJ 73	0	0
8-9-2025 08:55:58	2	JTDX	1	08:55:45	-10	0	1295	~	F/OT4N <...> RR73	0	0
8-9-2025 08:55:58	2	JTDX	1	08:55:45	0	0	1621	~	SQ1SDX F6BHK R-08	0	0
8-9-2025 08:55:58	2	JTDX	1	08:55:45	-18	0	533	~	<...> SP9JCN R-12	0	0

Local: 8-9-2025 10:56:16 UTC: 8-9-2025 08:56:16 Active: 00:00:50 51 51 51 51 3749 6 JTDX Active 6/15

This is how JTDX looks, when MsgDecoder is running!

The screenshot displays the JTDX software interface, version 2.2.159, running on a Windows operating system. The main window is titled "JTDX by HF community" and shows a log of received messages. The log is organized into columns: UTC, dB, DT, Freq, Avg, Lag, Band Activity, UTC, dB, DT, Freq, Message, and Rx Frequency. The messages are color-coded: blue highlights indicate call signs that have been worked before, and green highlights indicate call signs that have not. The log shows a series of messages received between 15:22:43 and 15:23:28 UTC on 02.09.25. The messages are from various countries, including AS Russia, EU Russia, Finland, Romania, Portugal, Bulgaria, Greece, Bosnia-Herzegovina, Moldova, and Ukraine. The messages are: CQ ROAX NO56, OH1NHX KP01, R3IX CT1DSV RR73, IN3GHP RD4AAK RR73, U8S LO71, YB1GRZ UA3WG 73, US3EW ID9/DL1YAF RR73, 4X5DF YO9PH RR73, CT1DSV R3IX 73, EG2SDC IN83, L212F KN22, R6TY LN14, R9FE LO76, ROAX NO56, MMODRA YO5QDI RR73, SV2HTW KN10, E70A JN94, DD0UM LZ3CB RR73, YB1GRZ OH2HAC KP20, OH1NHX KP01, ER1CW KN47, UG3B R9OEJ 73, R1AI KO59, M0RNR YO5PHL 73, U8S LO71, ID9/DL1YAF, R6TY LN14, EG2SDC IN83, CT1DSV IK2XDF RR73, L212F KN22, GI7AXB US31X 73, RDAX NO56, LZ3CB KN32, IK2XDF CT1DSV 73, MMODRA YO5QDI RR73, E70A JN94, SV2CJL KN10, YB1GRZ OH2HAC KP20, OH1NHX KP01, U8S LO71, ER1CW KN47, DL1TG EASHMM 73.

At the bottom of the window, there is a control panel with various buttons and sliders. The "AutoSeq" button is highlighted in green. The "Tx/Rx Split" button is also highlighted in green. The "AutoTX" button is highlighted in green. The "1 QSO" button is highlighted in green. The "Bypass" button is highlighted in green. The "AnsB4" button is highlighted in green. The "Spt" checkbox is checked. The "Enable Tx" button is highlighted in green. The "Halt Tx" button is highlighted in green. The "Tune" button is highlighted in green. The "Menu" button is highlighted in green. The "Rrr" checkbox is checked. The "SkipTx1" checkbox is checked. The "Tx 1" button is highlighted in green. The "Tx 2" button is highlighted in green. The "Tx 3" button is highlighted in green. The "Tx 4" button is highlighted in green. The "Tx 5" button is highlighted in green. The "Tx 6" button is highlighted in green. The "CQ PE1FQF JO21" button is highlighted in green. The "Pwr" slider is set to 15. The "SWL mode" is set to "Log QSO". The "Stop" button is highlighted in green. The "Monitor" button is highlighted in green. The "Decgde" button is highlighted in green. The "Erase" button is highlighted in green. The "Sync" button is highlighted in green. The "AGCc" button is highlighted in green. The "Filter" button is highlighted in green. The "127 dBm" button is highlighted in green. The "20m" button is highlighted in green. The "Receiving" button is highlighted in green. The "FT8" button is highlighted in green. The "WD 10m" button is highlighted in green. The "1/15" button is highlighted in green. The "Logd" button is highlighted in green. The "02.09.2025" button is highlighted in green. The "FT8 3512" button is highlighted in green. The "14,074 000" button is highlighted in green. The "15:23:31" button is highlighted in green.

The blue highlights are Call Sign's you have worked before.

The blue highlights are Call Sign's you have worked before.

This is how WSTJ-X looks, when MsgDecoder is running!

The screenshot displays the WSTJ-X v2.7.0 software interface. The main window is divided into two panes: 'Band Activity' on the left and 'Rx Frequency' on the right. Both panes show a list of decoded messages with columns for UTC, dB, DT, Freq, and Message. The messages are color-coded: blue for previously worked call signs, green for current activity, and orange for other categories. The 'Band Activity' pane shows messages from 152515 to 152530, while the 'Rx Frequency' pane shows a single message at 152445. Below the message lists is a control panel with buttons for 'Log QSO', 'Stop', 'Monitor', 'Erase', 'Decode', 'Enable Tx', 'Halt Tx', and 'Tune'. A frequency display shows 14,074 000. The interface also includes a 'Generate Std Msgs' section with a list of messages and a 'Pwr' control. The bottom status bar shows 'Receiving', 'FT710', 'FT8', and '12'.

Band Activity					Rx Frequency				
UTC	dB	DT	Freq	Message	UTC	dB	DT	Freq	Message
152515	10	0.3	1367	EA/EQR UA3A10 -05					
152515	-12	0.1	1479	YB1GRZ SP9SOF JO90					
152515	-3	0.2	2557	VK3GCD E70A R-18					
152515	19	0.2	789	WSORC LZ3CB R-24					
152515	-7	0.6	2813	CQ URSNOY KN48 Ukraine					
152515	3	-0.0	1589	MMODRA YO5QDI RR73 Romania	152445	-9	-0.1	1168	YB1GRZ RC2DD KO85
152515	-9	-0.1	465	CQ SV2HTW KN10 Greece					
152515	-12	0.4	2329	CQ LH CT1DSV IN51 Portugal					
152515	-12	0.4	2329	CQ R6TY LN14 EU Russia					
152515	-4	0.2	2117	G1OVA ROAX -16					
152515	-9	0.1	1685	CQ EG1SDC IN72 Spain					
152515	-13	0.2	1233	DB2GS/P UR4QWW 73 Ukraine					
152515	-17	0.0	2276	<...> UN7LEW -09					
152515	-18	0.2	1964	BG2EFX ER1CW -12					
152515	-17	0.1	525	CQ SV2CLJ KN10 Greece					
152515	-14	0.1	1089	CQ SA3SHN JP72 Sweden					
152515	-12	-0.9	2140	OZ9FF R2APC KO85					
152515	-12	0.1	1416	<...> YO4NF -03					
152515	-18	0.2	1925	RK9UM 4X5DF RR73 Israel					
152515	-18	0.4	655	MM/HA0DFV <R90EJ> RR73 CQ Zone 18					
152515	-10	0.3	838	R9SDJ R2AL KO85					
152515	-22	0.2	2598	CQ R4CHN LO31 EU Russia					
----- 20m -----									
152530	-2	0.2	1640	MOJAV EA3HMM JN00					
152530	-1	0.2	1541	CQ EC3A IN83 Spain					
152530	-11	0.3	1362	CQ EA5GKL IM98 Spain					
152530	-9	0.1	1719	R9SAP SV1CJF KM17					
152530	-8	0.1	1473	BD8CBX SP9YGD JO90					
152530	-5	0.1	2518	MOJAV UW8SM KN28					
152530	3	0.4	2170	YO3AHO R9FE RR73 EU Russia					
152530	-17	0.1	1924	4X5DF RK9UM 73 CQ Zone 18					
152530	-9	-0.0	2738	CQ ID9/DL1YAF Italy					
152530	-14	0.8	1062	CQ LZ1ZF KN22 Bulgaria					
152530	-12	0.1	2075	F6ICV OH5C -06					
152530	-1	1.0	2208	HL3IB EG2SDC RR73 Spain					

The blue highlights are Call Sign's you have worked before.

The blue highlights are Call Sign's you have worked before.

The utility can be combined with other FT8 software.

FT8 Software - WSTJ-X or JTDX

IP: **224.0.0.1** and UDP Port: **2237**
Automatically starts in **Multicast** Mode
Send, but also **Receives** messages

JT-Alert

IP: **224.0.0.1** and Port: **2237**
Automatically use **Multicast** Mode
Receive and **Send** to FT8 Software

Grid-Tracker

IP: **224.0.0.1** and UDP Port: **2237**
Need to setup in **Multicast** Mode
Only **receive** from FT8 Software

Internal network - local PC

LoopControl

IP: **224.0.0.1** and UDP Port: **2237**
Always used in **Multicast** Mode
Receive and **Send** to FT8 Software

MsgDecoder

IP: **224.0.0.1** and UDP Port: **2237**
Always used in **Multicast** Mode
Receive and **Send** to FT8 Software

General Control setup guidelines.

- **Download** the software and install it on your PC (the computer that runs the FT8 Software).
- The Installation software will allow to deviate from the default settings, but the defaults are recommended.
- You can start the software, and the next step is to teach the Path/Name were the “**wsjtx_log.adi**” files are located.
- These files are inside your personal AppData/local folder - **example**“**C:\Users\xxxx\AppData\Local\JTDX**”.
- In the **Menu** you can load **WSJT & JTDX, Extra storage and QRZ Logbook** files, but if you only use WSJT-X then load the others with the same location to avoid missing file reports when you start the application.
- You also can define the colors used for **Highlighting** the **Call Sign**.

