WSJT-CB User Guide (EN)

A practical guide for operators moving from WSJT-X to WSJT-CB on 27 MHz.

This guide is written for users who already know WSJT-X and want to understand how WSJT-CB behaves in everyday use on the CB and 11 meter environment.
It focuses on what matters during operation: supported callsign styles, working frequencies, country information in decoded text, and smoother message flow when CB-style callsigns are involved.

Main fork author: 1AT106 / 1XZ001 Vash
Original software base: WSJT-X by Joe Taylor K1JT

1. What WSJT-CB is

WSJT-CB is a version of WSJT-X adapted for the CB and 11 meter environment. If you already know WSJT-X, the general workflow stays familiar. What changes is that the software feels more natural when used on 27 MHz and with CB-style callsigns.
In simple terms, it removes many of the little frictions that appear when standard WSJT-X is used with identifiers and operating habits outside the normal amateur-radio pattern.

2. Before you begin

This software is provided for educational purposes only. You are solely responsible for ensuring compliance with local, national, and international radiocommunication laws and regulations.
- Use the WSJT-CB package, not a standard WSJT-X build by mistake.
- Make sure your station is already ready for digital operation.
- Prepare audio and CAT settings if your setup uses them.
- Know what is allowed in your operating area.

3. What feels different from WSJT-X

- CB-style callsigns are accepted and handled more naturally.
- The 11 meter environment feels like part of the intended workflow.
- Many CB prefixes can display a practical country label.
- Long-call FT8 QSOs behave more smoothly with Auto Sequence.

4. Callsign support in normal use

One of the biggest practical differences is callsign handling. WSJT-CB accepts many CB-style callsigns that standard WSJT-X may reject or treat awkwardly.
The easy rule is this: a CB-style callsign should usually have a numeric prefix, then letters, then a numeric unit number. WSJT-CB supports more of these formats than standard WSJT-X, including some longer unit numbers.
- Accepted examples: 1A1, 26AT101, 21AT106, 1AT1000.
- Rejected examples: 26AT1000, AT1000.

Practical takeaway: the software is more forgiving with real CB callsigns, but format still matters. If a callsign is rejected, first check the numeric prefix and the final number.

5. Modes and working frequencies

- Modes you should mainly expect to use: FT8, FT4, FST4, and Q65.
- Main FT8 reference frequency: 27.265 MHz.
- Alternative FT8 frequency and default for FT4, FST4, and Q65: 27.045 MHz.

For the operator, the benefit is simple: the software no longer feels like it is being forced into a place it was not expecting. The 11 meter workflow is built in.

6. Country display for CB prefixes

WSJT-CB can use the numeric prefix of many CB-style callsigns to show a practical country label directly in decoded text.
So when you see callsigns such as 1AT106 or 26AT101, the decode window can give you more useful information than what standard amateur-radio prefix logic would normally show.
This does not replace your own judgment, but it makes the decode window easier to read and helps you recognize stations faster.

7. Why Auto Sequence matters more here

If both stations use longer CB-style callsigns, standard FT8 message flow can become fragile. This is one of the areas where WSJT-CB feels more stable than standard WSJT-X.

- The exchange is less likely to stall when both callsigns are long.
- Report messages, RR73, and 73 are handled more smoothly.
- The QSO is more likely to progress naturally from call to report to sign-off.

8. The practical FT8 flow

You do not need to know the internal message logic. From the operator point of view, the order still feels normal.

1. One station calls the other.
2. A signal report is exchanged.
3. A rogered report is sent back.
4. The QSO closes with RR73 or 73.

What matters is simply that WSJT-CB is better at keeping this flow alive when long CB callsigns are involved on both sides of the contact.

9. Why you may see <...> in decodes

When two non-standard or CB-style callsigns are exchanged in FT8, one of them may appear as <...> instead of showing in full.
If you see something like <...> 26AT016, it does not automatically mean there is a bug or an invalid QSO. It often only means the software has not yet learned the mapping needed to show the hidden callsign in full.
A later decode may reveal the full callsign, so the best approach is to judge the QSO by the flow of the exchange instead of the first unusual decode you notice.

10. Making your first contact

1. Start the WSJT-CB program from the correct package.
2. Enter your station details, including your CB-style callsign if you use one.
3. Choose the intended mode, usually FT8 for the main activity.
4. Move to 27.265 MHz for FT8, or 27.045 MHz for FT4, FST4, or Q65 if that matches your plan.
5. Watch the decode window for a few cycles before transmitting.
6. Answer a CQ or call a station when the timing is clear.
7. Let Auto Sequence help, but keep watching the QSO stage as you normally would in WSJT-X.

11. First-day operating checklist

- Check that your callsign format is one the software accepts.
- Use the right reference frequency for the mode you want.
- Give the software a few decode cycles before you answer activity.
- If you see <...>, remember that it may be normal FT8 behavior with non-standard callsigns.
- Trust Auto Sequence more than in standard WSJT-X, but still monitor the contact normally.

12. Common situations

If your callsign is accepted, the format fits what WSJT-CB expects and you can continue normally.
If your callsign is rejected, the structure is probably outside the supported CB style, so check the numeric prefix and unit number first.
If a country appears next to a CB callsign, use it as a practical operating aid.
If a long-callsign QSO keeps moving smoothly, the improved sequence handling is doing its job.

13. Frequently asked questions

Do I need to learn a new program? No. If you already know WSJT-X, WSJT-CB should feel familiar.
Do I need to understand the code changes? No. The point is to understand the practical differences, not the internals.
Why do some decodes still look strange? Because FT8 can still hide or compress non-standard callsigns even in this improved fork.

14. Contacts and credits

- Telegram group: https://t.me/wsjtcb
- Developer contact: info@xzgroup.net

WSJT-CB is based on WSJT-X by Joe Taylor K1JT and adapted for CB / 11 meter use by 1AT106 / 1XZ001 Vash.

Final note: the value of WSJT-CB is that it feels more natural on 27 MHz for operators who already know WSJT-X and want a smoother experience with CB-style activity.