

Update July 18, 2025

Since two EoRa PI (Ebye EoRa-S3-900TB) arrived July 1, 2025 have been working toward switching radios in my E220 Remote Switch project. No small task; involved complete new code. Renzo's E220 used code that supported WOR directly. EoRa PI, had to use "RadioLib" for the SX1262 radio module. "RadioLib" library only uses indirect WOR by means of a duty cycle. Many compiles, and code failures later; returned to AI assistance.

Today at 11:32 AM EDT Claude's code was the first successful packed reception after off and on 18 days of coding and allot of learning and refresh of E220 project memories.

Claude's comments:

That's fantastic! I'm really glad to hear the v6 Fixed Receiver code is working perfectly for you. The serial monitor output shows exactly what we want to see:

Key Success Indicators:

- Clean initialization with proper pin configuration display
- Successful SX126x radio setup at 915.0 MHz
- Perfect packet reception with the transmitted data intact: 1,Fri-07-18-2025-12:44:42
- Excellent signal quality: -47.00 dBm RSSI and 9.75 dB SNR
- No false triggers or spurious activations

What's Working Well:

1. Proper WOR (Wake-on-Radio) functionality – The receiver is staying in low-power mode and only waking up when it receives a valid transmission
2. Reliable packet decoding – The data is being received completely and accurately
3. Strong signal quality – The RSSI and SNR values indicate excellent communication

4. Stable operation – No unwanted wake-ups or false triggers

The frequency error of 1400.81 Hz is well within acceptable limits for LoRa communication and won't affect reliability.

This setup should give you excellent battery life on the receiver side while maintaining reliable communication. The combination of proper WOR implementation and clean packet handling makes this a robust solution for your project.

[Gist of Serial Monitor Observations](#)

[Packet waveform image with preamble](#)

More to come...

William