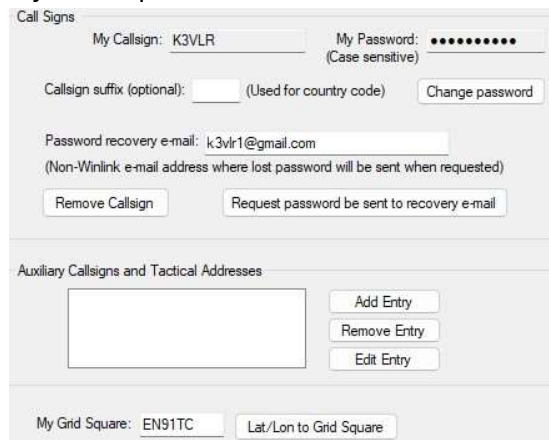# Winlink Workshop

VARA FM P2P Setup

November 23, 2024

This document was created by Greg K3VLR, John KJ3X, and Craig KB3JDL.

## Winlink Settings:

- o Open "Winlink Express"
- o Click "Settings"
- o Select "Winlink Express Setup"
- o Make sure the following fields are filled out
    - My Callsign
    - My Password
    - Password Recover E-mail
    - My Grid Square

    - Click "Update" to save
- o To switch from Telnet to VARA FM P2P
    - On the main Winlink Express window find "Open Session" on the top right.
        - Click the drop down menu next to "Open Session"
        - Select "VARA FM P2P"
        - Click "Open Session"

        - VARA FM will launch
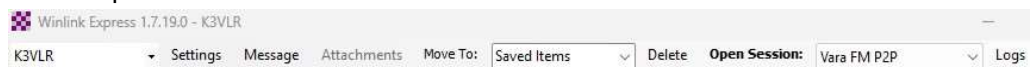
VARA FM Settings:

- Click "Settings"
- Click "VARA Setup"
- Set "Command" to "8300"
- Set "FM System" to "Narrow"
- Set "Retries" to "6"
- Click "Close"
-

VARA FM PTT:

- Click "Settings"
- Click "PTT"
- Select "RA-Board"
- Click "Close"
-

VARA FM Sound Card (For the Digirig device):

- Click "Settings"
- Click "Sound Card"
- Under "Device Input" select "Microphone (USB Audio Device)"
- Under "Device Output" select "Speakers (USB Audio Device)"
- Under "PTT" select "RA-Board-1"
- Under "Channel" select "L"
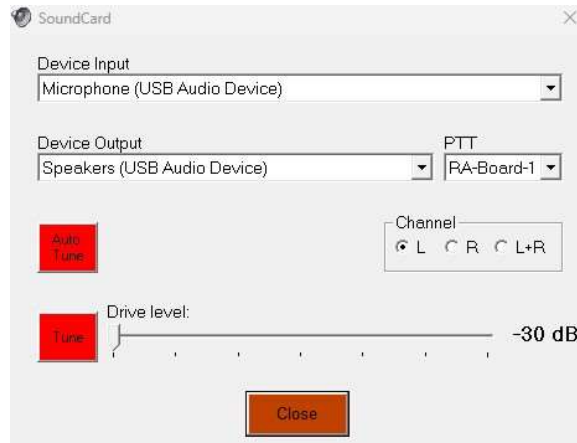
-
- Click "Close"

Radio settings for your HT:

- o Enter the simplex frequency of 145.030 MHz
- o Set Radio to "Wide"
- o Set squelch to "Zero"
- o Set power level to "Low" (Since we will all be in the same room)
- o Adjust volume on radio so "Audio Input" is in the green:

- o
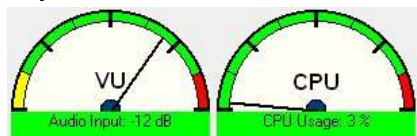
Team up with a partner and test your setup:

- o From VARA FM Click "Settings"
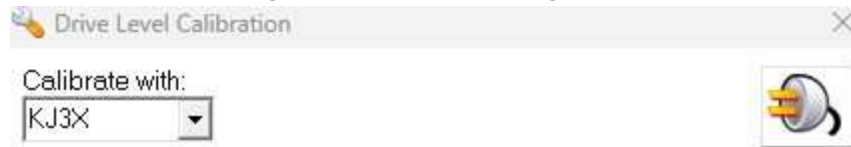- o Click "Sound Card"
- o Click "Auto Tune"
- o Under "Calibrate with" enter your partners callsign
- o Click button to the right to start transmitting

- o
- o Once it is done you will receive a Calibration Report
- ○ Review settings and Click "Close"
- ○ **Please Note:** If your HT power level is set to high the test may not work. Set your power level to low and have some distance between the two radios.

A good troubleshooting tool is to monitor the audio from your HT on the computer speakers. This is not needed if everything is working:

- o Go to Control Panel.
- o Double click on "Sound"
- o Click the "Recording" Tab
- o Select "Microphone (USB Audio Device)"
- o Click "Properties"
- o Click the "Listen" tab
- o Check the box "Listen to this device"
- o Click "OK"
- o Click "OK" again

- o
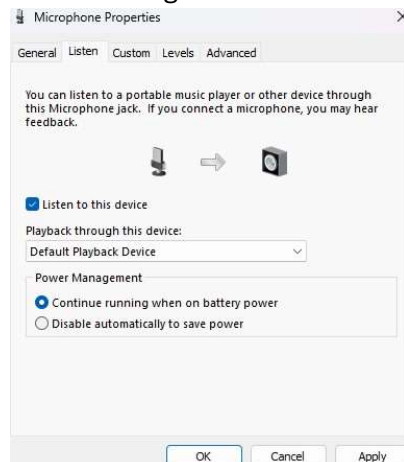
For this setup I am using a Dell laptop running Windows 11 and a Kenwood TH-D72 handheld radio. I also purchased the items listed below:

- Digirig Lite: https://digirig.net/product/digirig-lite/
- Digirig cable for Baofeng/Kenwood/Wouxon HT: https://digirig.net/product/baofeng-cables/
- VARA FM: https://rosmodem.wordpress.com/
- You can use the free version of VARA FM if you are using P2P. In order to use the digipeater function you must have the paid version. I emailed the author, and he confirmed that a single VARA license can be used for VARA FM and VARA HF. You can also use the license on your desktop and your laptop computers.