

Winlink Workshop

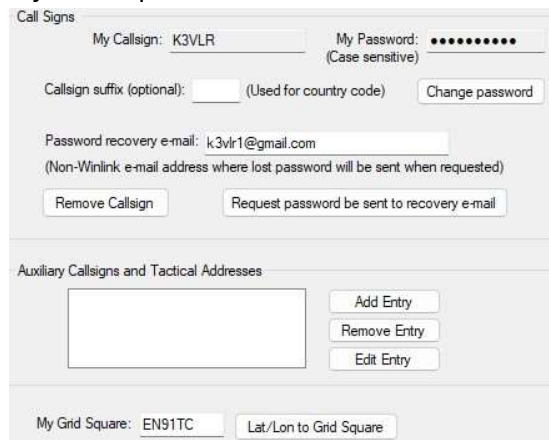
VARA FM P2P Setup

November 23, 2024

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

Winlink Settings:

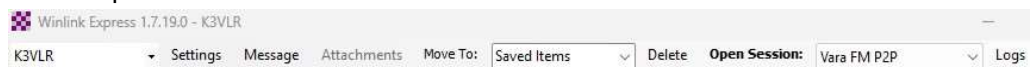
- Open “Winlink Express”
- Click “Settings”
- Select “Winlink Express Setup”
- Make sure the following fields are filled out
 - My Callsign
 - My Password
 - Password Recover E-mail
 - My Grid Square



The screenshot shows the Winlink Express Settings window. It is divided into several sections:

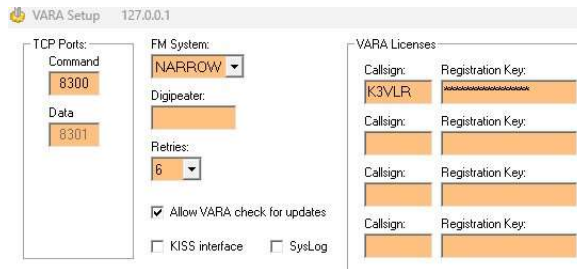
- Call Signs:** Contains fields for "My Callsign" (K3VLR), "My Password" (masked with dots), "Callsign suffix (optional)" (empty), and "Password recovery e-mail" (k3v1r1@gmail.com). There are buttons for "Change password", "Remove Callsign", and "Request password be sent to recovery e-mail".
- Auxiliary Callsigns and Tactical Addresses:** A large empty text area with buttons for "Add Entry", "Remove Entry", and "Edit Entry".
- My Grid Square:** A field containing "EN91TC" and a button for "Lat/Lon to Grid Square".

- Click “Update” to save
- 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”



The screenshot shows the VARA Setup window with the following configuration:

- TCP Ports:** Command: 8300, Data: 8301
- FM System:** NARROW (dropdown menu)
- Digipeater:** (empty text field)
- Retries:** 6 (dropdown menu)
- Allow VARA check for updates
- KISS interface
- SysLog
- VARA Licenses:** Four rows, each with a Callsign field (containing K3VLR) and a Registration Key field.

VARA FM PTT:

- Click “Settings”
- Click “PTT”
- Select “RA-Board”
- Click “Close”

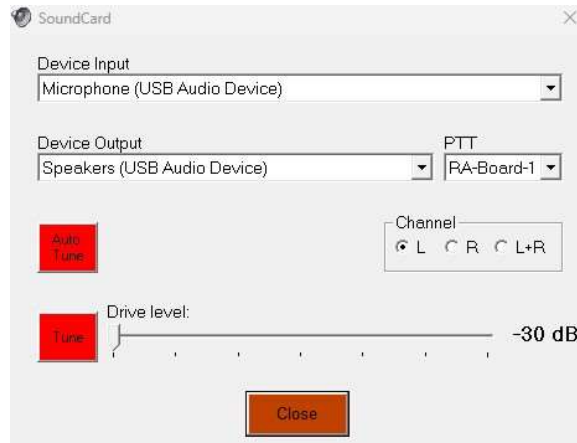


The screenshot shows the PTT dialog box with the following options:

- PTT Via:** CAT, COM, RA-Board (selected), VOX

VARA FM Sound Card (For the Digirig device):

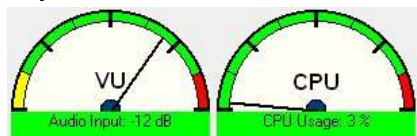
- Click “Settings”
- Click “Sound Card”
- Under “Device Input” select “Microphone (USB Audio Device)”
- Under “Device Output” select “Speakers (USB Audio Device)”
- Under “PTT” select “RA-Board-1”
- Under “Channel” select “L”



- Click “Close”

Radio settings for your HT:

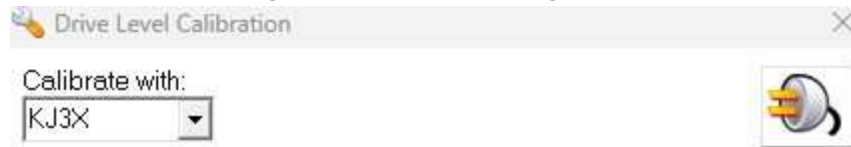
- Enter the simplex frequency of 145.030 MHz
- Set Radio to “Wide”
- Set squelch to “Zero”
- Set power level to “Low” (Since we will all be in the same room)
- Adjust volume on radio so “Audio Input” is in the green:



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Team up with a partner and test your setup:

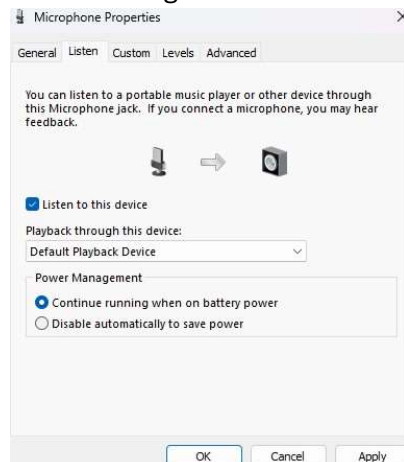
- From VARA FM Click “Settings”
- Click “Sound Card”
- Click “Auto Tune”
- Under “Calibrate with” enter your partners callsign
- Click button to the right to start transmitting



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- 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:

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



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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.