

## East Alabama Amateur Radio Club

### Winlink 2M guide for local access to KQ4DKA-7

by KB9V February 6, 2025

This document aims to guide a new setup configuration using Windows 10 to access the local 2M Winlink Global Radio EMail node located in Opelika.

More info about Winlink can be found here: <https://winlink.org/>  
and a lot of instructions are here: [https://www.winlink.org/content/winlink\\_book\\_knowledge](https://www.winlink.org/content/winlink_book_knowledge)

This guide is focused on Winlink and VARA software installation and using a HandHeld 2M radio with a digital APRS USB2 interface cable. Because everyone has a different radio setup, this guide may not fully cover your situation, but there are already many great guides for popular hardware.

The following links offer more detailed information for specific rigs:

#### ***Signallink, "C-Media" or Radios with internal sound cards:***

[https://winlink.org/sites/default/files/RMSE\\_FORMS/quick\\_setup\\_guide\\_for\\_winlink\\_sound\\_card\\_packet\\_for\\_vhf-uhf\\_on\\_windows\\_v1.2.pdf](https://winlink.org/sites/default/files/RMSE_FORMS/quick_setup_guide_for_winlink_sound_card_packet_for_vhf-uhf_on_windows_v1.2.pdf)

or

[https://winlink.org/sites/default/files/RMSE\\_FORMS/quick\\_setup\\_guide\\_for\\_packet\\_winlink\\_with\\_signalink\\_on\\_windows\\_v4.1.pdf](https://winlink.org/sites/default/files/RMSE_FORMS/quick_setup_guide_for_packet_winlink_with_signalink_on_windows_v4.1.pdf)

#### ***Yaesu FT-991A:***

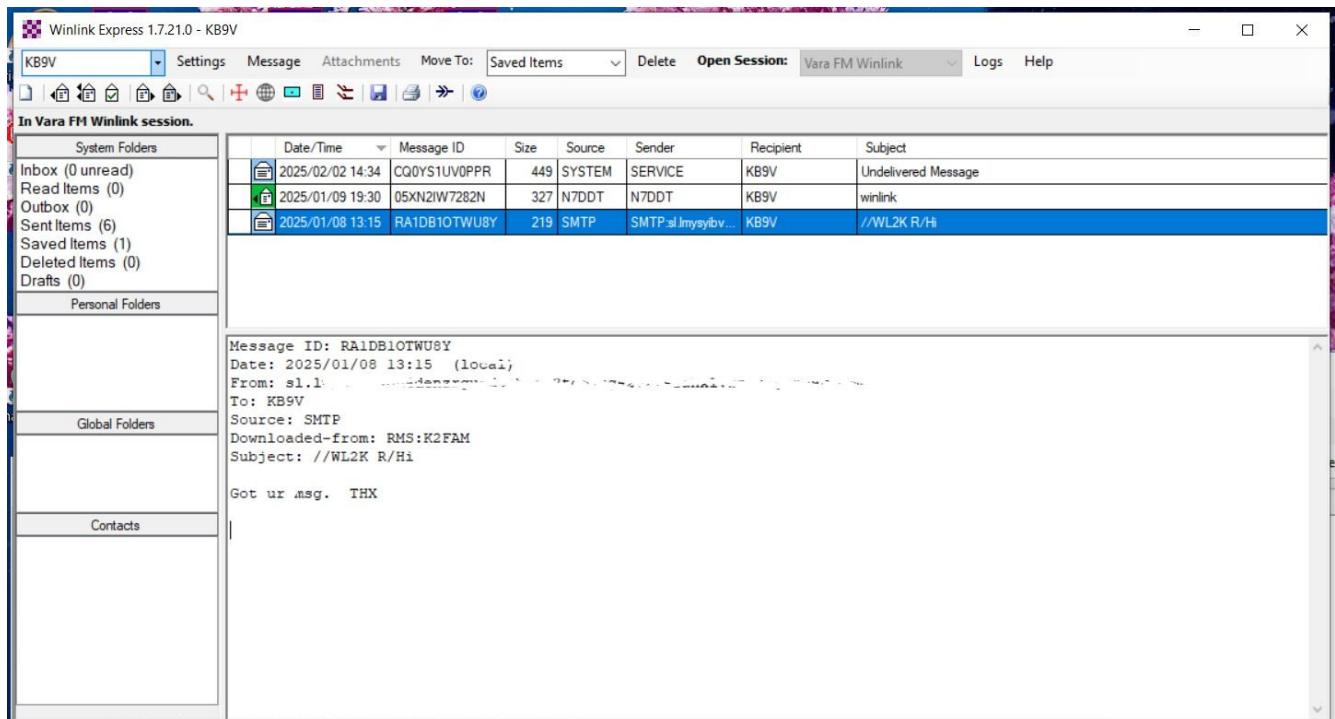
[https://winlink.org/sites/default/files/RMSE\\_FORMS/ft-991a-setup.pdf](https://winlink.org/sites/default/files/RMSE_FORMS/ft-991a-setup.pdf)

#### ***ICOM IC-7300/7610:***

[https://winlink.org/sites/default/files/RMSE\\_FORMS/ic-7300\\_7610\\_set-up.ver1\\_0.pdf](https://winlink.org/sites/default/files/RMSE_FORMS/ic-7300_7610_set-up.ver1_0.pdf)

#### **My VHF setup used for this setup demo:**

- Baofeng UV-S9X3
- BTECH APRS-K1-PRO USB to Kenwood K1 plug "APRS" adapter
- Windows Laptop
- Winlink Express (software)
- VARAFM (software)



#### Software Setup:

1. Download Winlink Express Install from <https://downloads.winlink.org/User%20Programs/>
2. Unzip the file and run the Winlink\_Express\_install.exe program. Follow through its instructions.
3. Download VARA FM from <https://downloads.winlink.org/VARA%20Products/>
4. Unzip the file and run the VARA\_FM\_setup.exe program. Follow through its instructions and make note of where you choose to install VARA FM. You may need this folder location later.

#### Account Setup:

Before using Winlink, you need an account. See <https://www.winlink.org/user>

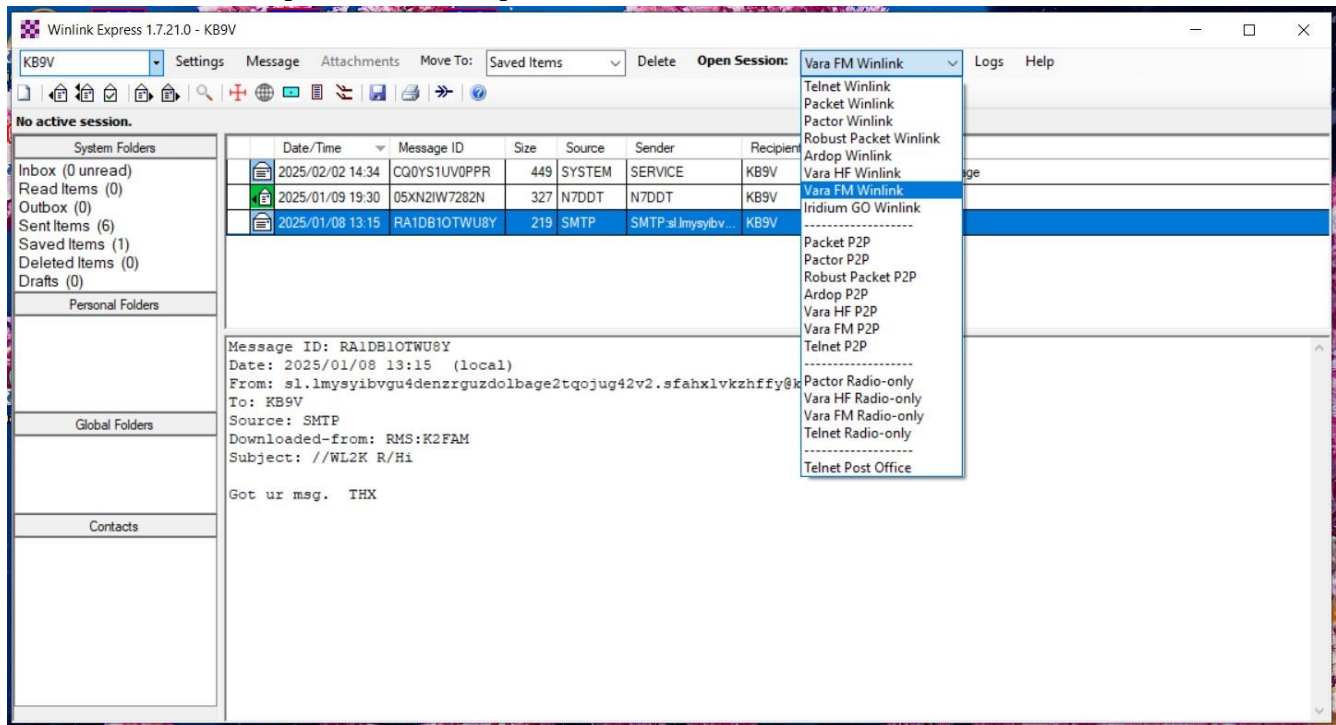
NOTE: You cannot create an account online like most would expect... you need to first contact Winlink using TELNET and the Winlink Express program. Your account will be *YourCALLsign@winlink.org*

Once you have setup your account, you can move forward with the Winlink email system. Although you can send emails to and from your Winlink account to any email, the system is primarily designed for winlink-to-winlink email. You also do not need to send/receive via radio, in fact, sometimes congestion on frequency is so bad, you may not be able to connect until everyone else is done using Winlink, therefore you can send via other Internet modes like Telnet and not tie up the radio waves.

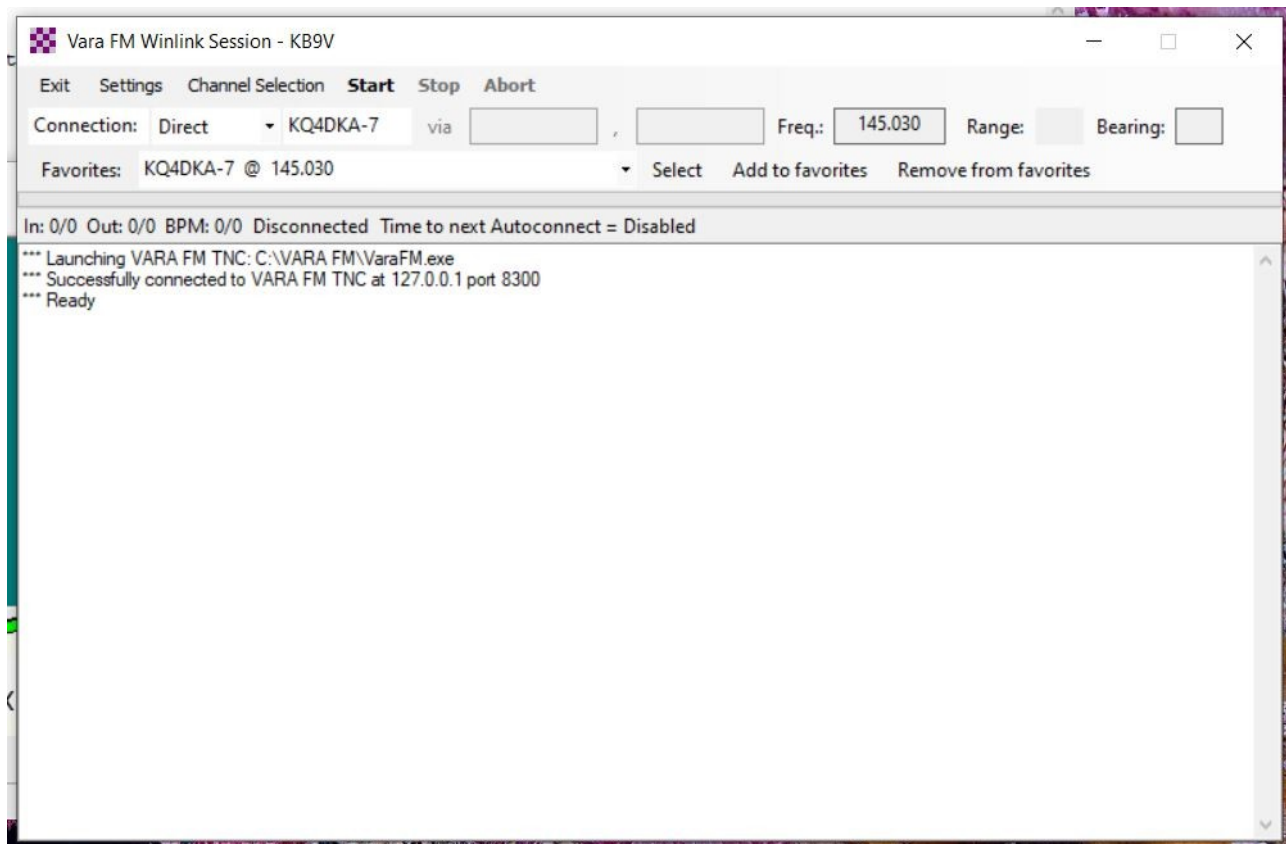
**ALSO NOTE: Winlink emails are not exactly private, or encrypted, just like your SSB QSOs. It would probably be best to not send sensitive information through Winlink.**

## Operation for our local VHF 2m Winlink node:

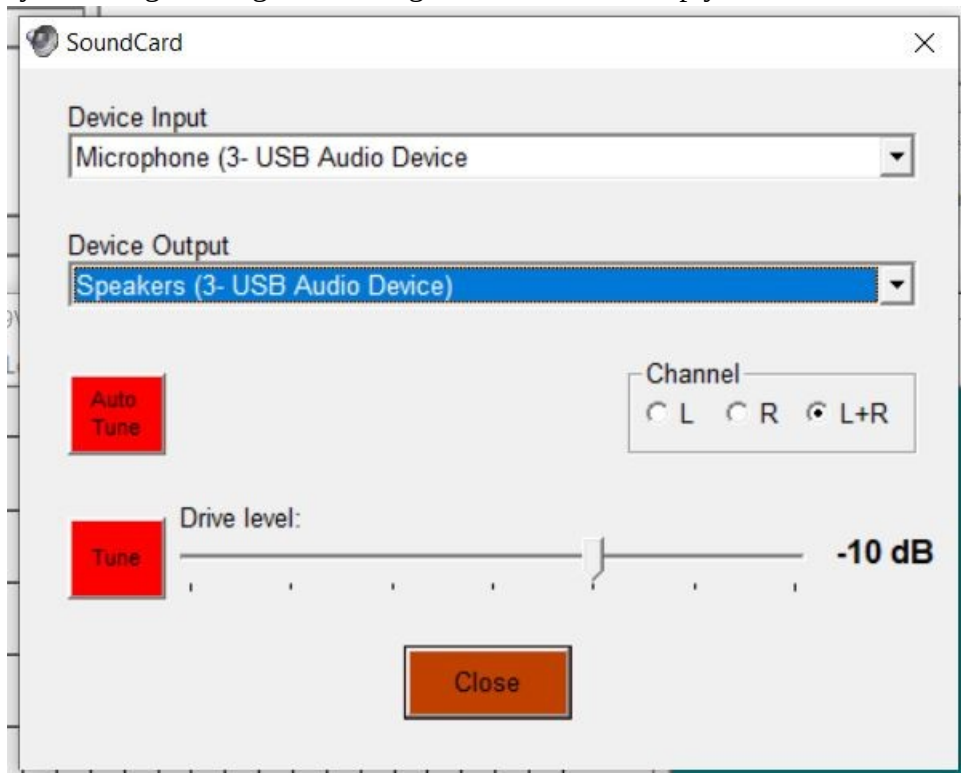
- Tune radio to 145.030 and listen for digital traffic. If you hear beeps and noises, another operator is currently using the system. Once the radio is quiet, you can proceed.
- Turn off radio. This will keep from accidental transmission as windows may start playing system bells and sounds.
- Plug in USB connection to radio and laptop
- Boot windows. If this is the first time, let “Drivers” finish installing.
- Launch/run Winlink Express
- In Winlink Express, next to “Open Session” button select Vara FM Winlink,

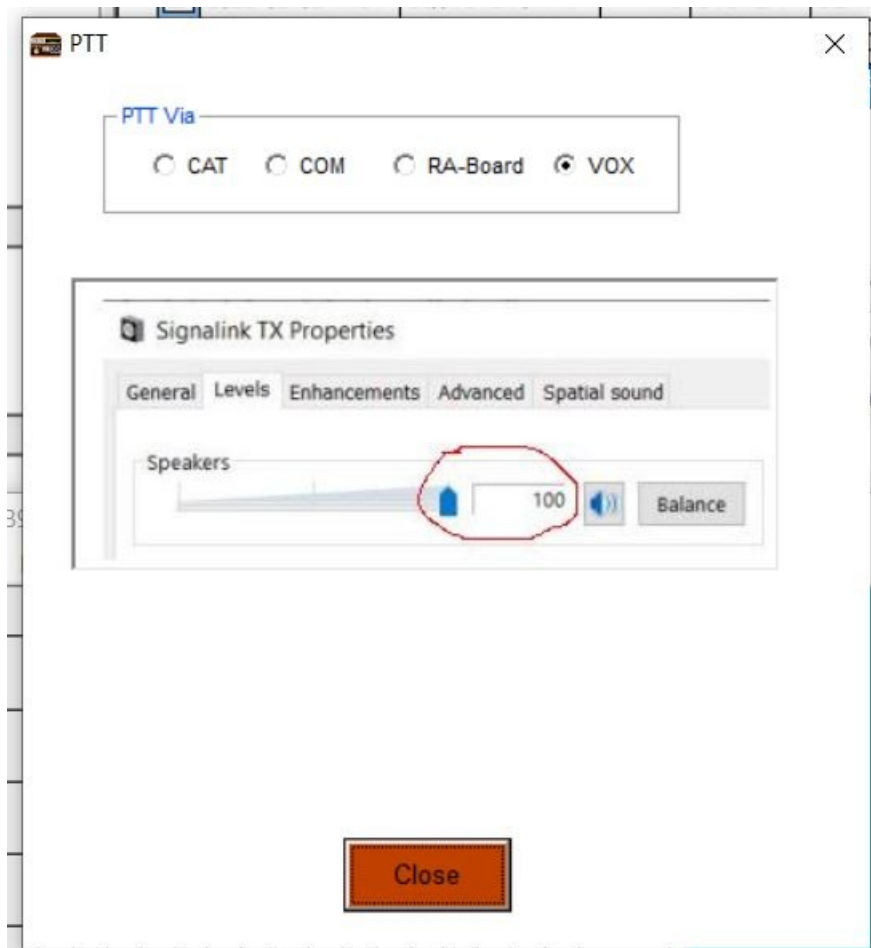


- Click Open Session. This will open VARA FM window.

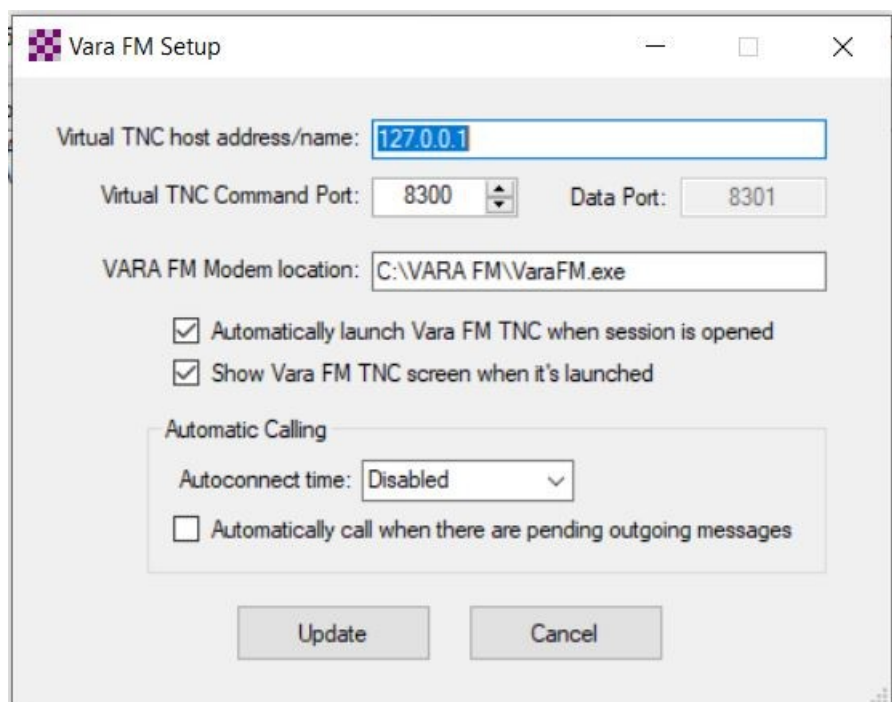


- Select Connection: Direct and type in the connection field **KQ4DKA-7**
- Set the Frequency field to “145.030”
- You may need to go through the settings on first run to setup your sound card and PTT

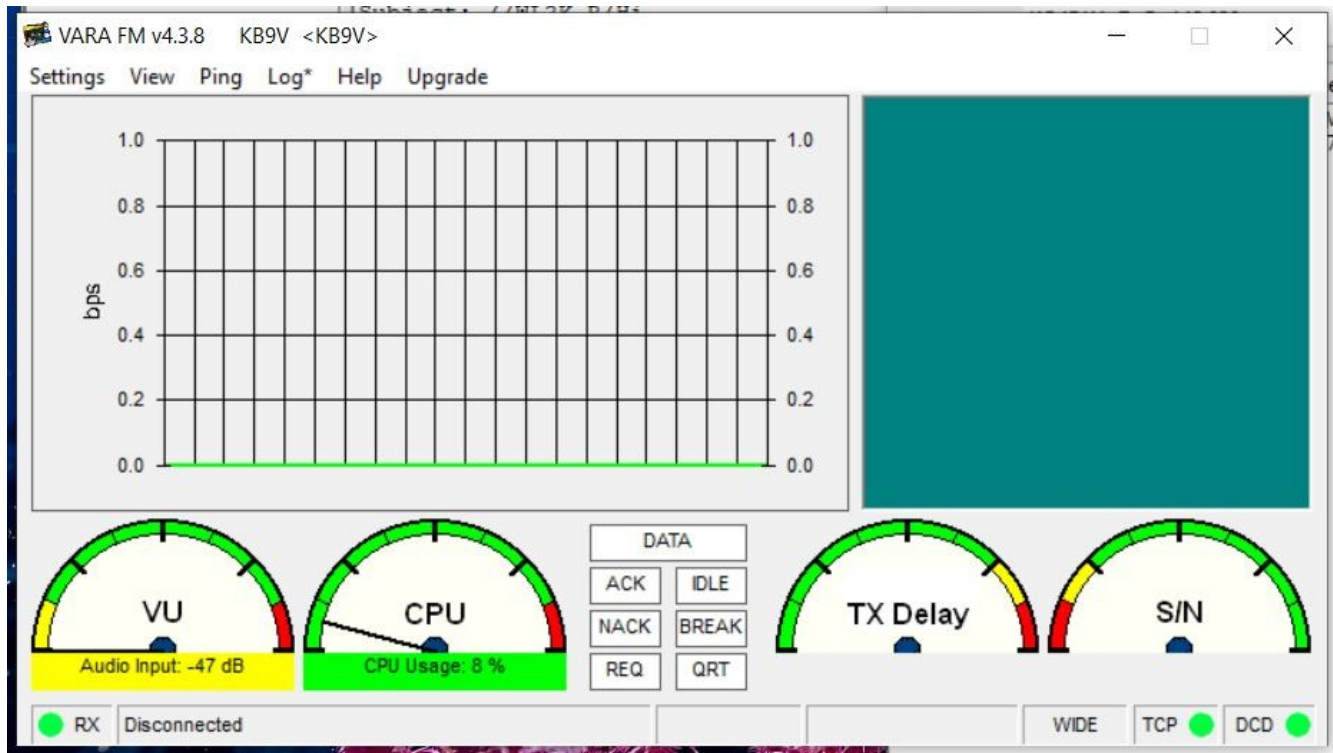




- You may also have to set the location of the VARAFM.exe as noted in the VARA install program. I had installed mine in <C:\VARAFM>. Yours may be in a different location!

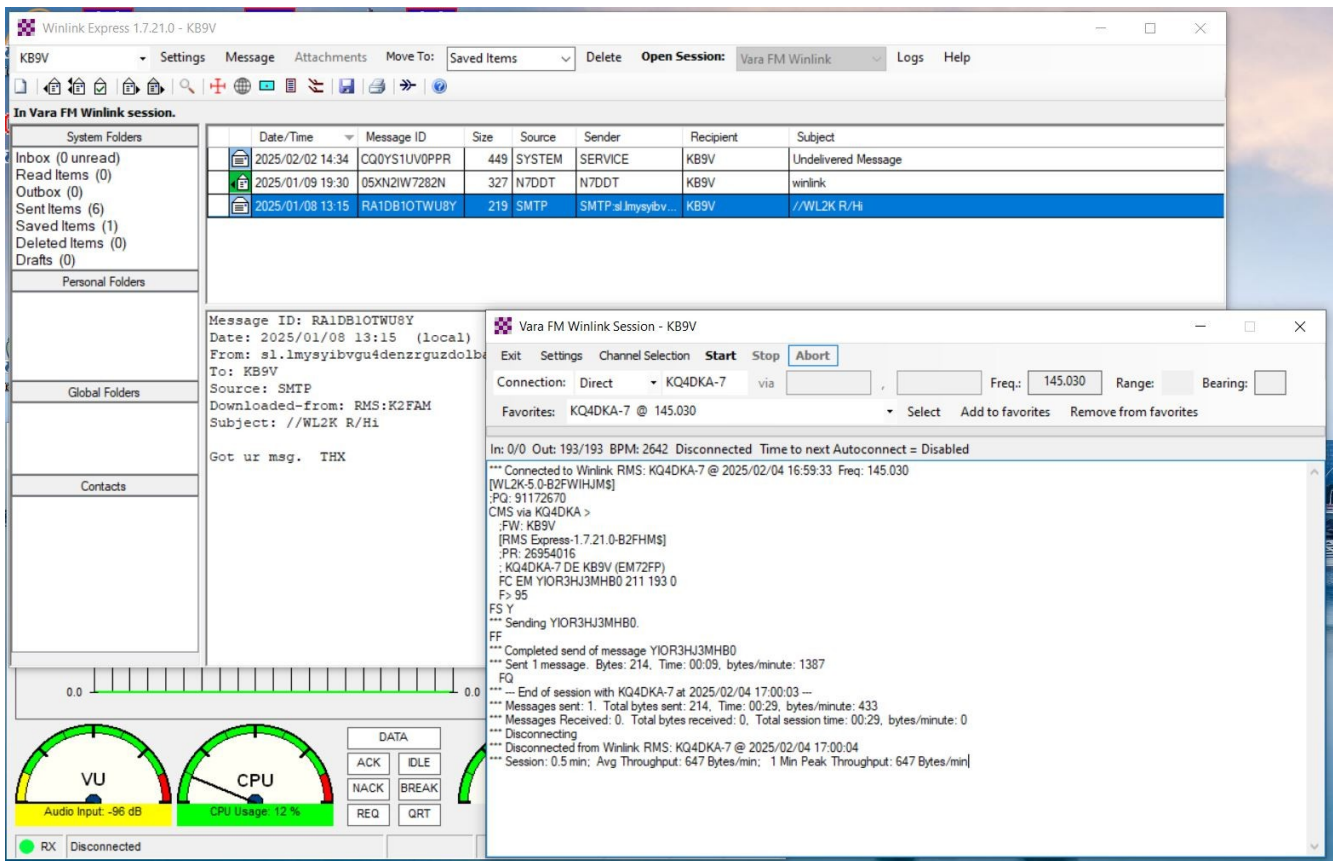


- Once you have all of the settings ready to go, Turn on your radio.
- If you are using a sound card or a TNC that dose not control PTT, make sure “VOX” is turned to ON in the radio settings. I set mine to VOX level 5 if I do not have PTT control from the computer.
- Adjust the volume of the radio so that the VU meter in VARA FM software is about in the middle of the GREEN zone is a good idea.



- TUNE the radio manually in simplex VFO mode to 145.030
- IMPORTANT, check the above step before going on!

- Press “Start” at the top of the in the Vara FM Winlink Session window.



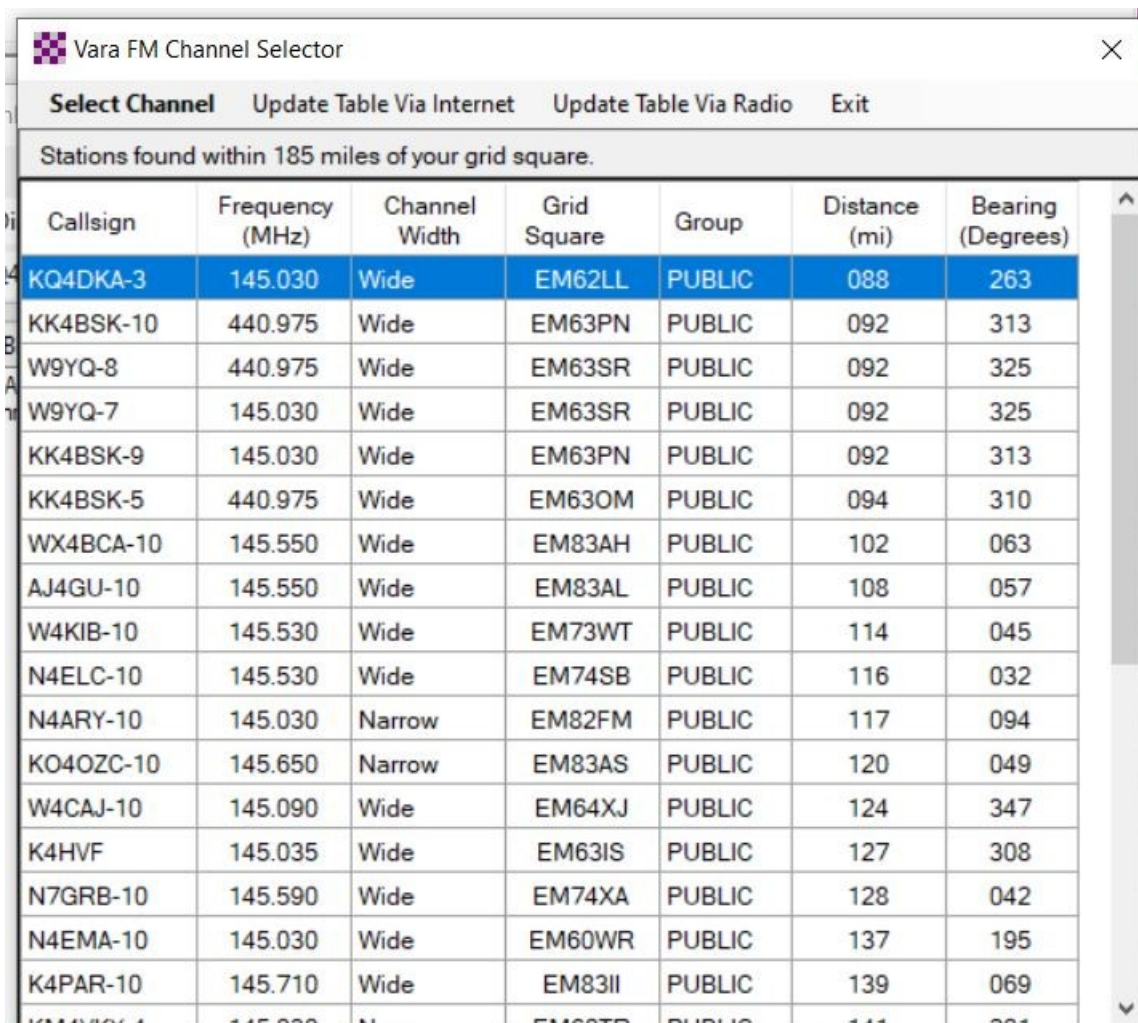
You should see your radio going in and out of transmit. VARA FM will attempt to connect several times and then quit if it cannot make connection.

If it tells you that it failed to connect, wait a few moments and try again. Sometimes the other station is busy or cannot hear you at the moment. It usually takes several tries.

When you finally connect, you will see it going through the process checking the connection and then asking if there are any messages waiting and sending any in you have in your Winlink Express outbox.

Also, it may popup a box if you have not registered your Winlink software. You should be able to continue to evaluate and finish the active session.

Hopefully you are able to follow these steps and connect to our local Winlink.  
If you are close to other nodes, you can try them too:



Vara FM Channel Selector

Select Channel    Update Table Via Internet    Update Table Via Radio    Exit

Stations found within 185 miles of your grid square.

Callsign	Frequency (MHz)	Channel Width	Grid Square	Group	Distance (mi)	Bearing (Degrees)
KQ4DKA-3	145.030	Wide	EM62LL	PUBLIC	088	263
KK4BSK-10	440.975	Wide	EM63PN	PUBLIC	092	313
W9YQ-8	440.975	Wide	EM63SR	PUBLIC	092	325
W9YQ-7	145.030	Wide	EM63SR	PUBLIC	092	325
KK4BSK-9	145.030	Wide	EM63PN	PUBLIC	092	313
KK4BSK-5	440.975	Wide	EM63OM	PUBLIC	094	310
WX4BCA-10	145.550	Wide	EM83AH	PUBLIC	102	063
AJ4GU-10	145.550	Wide	EM83AL	PUBLIC	108	057
W4KIB-10	145.530	Wide	EM73WT	PUBLIC	114	045
N4ELC-10	145.530	Wide	EM74SB	PUBLIC	116	032
N4ARY-10	145.030	Narrow	EM82FM	PUBLIC	117	094
KO4OZC-10	145.650	Narrow	EM83AS	PUBLIC	120	049
W4CAJ-10	145.090	Wide	EM64XJ	PUBLIC	124	347
K4HVF	145.035	Wide	EM63IS	PUBLIC	127	308
N7GRB-10	145.590	Wide	EM74XA	PUBLIC	128	042
N4EMA-10	145.030	Wide	EM60WR	PUBLIC	137	195
K4PAR-10	145.710	Wide	EM83II	PUBLIC	139	069

FINALLY:

If you turned VOX on above, and are done, do not forget to turn VOX off :)