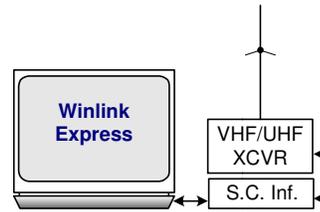


Winlink Express set-up for VARA-FM and C-Media sound card modem use - V0

This procedure applies to Vara FM sound modem and use of C-Media USB radio adapter with Winlink Express.

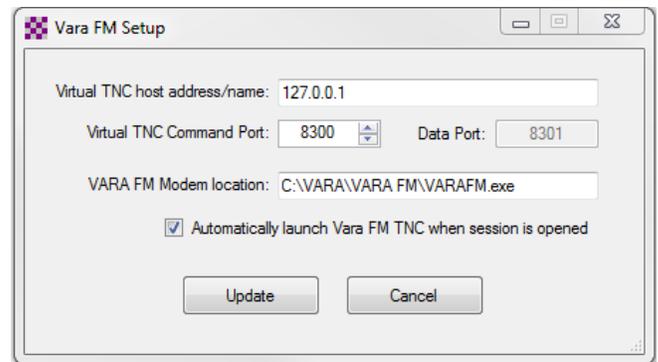


*** This procedure assumes the user has some experience with Winlink Express ***

- Connect your C-Media device between transceiver and computer. Refer to diagrams below.
- Download and install Vara FM per page 2. **Do this before setting up Winlink Express.**
- Download, install and open Winlink Express. < <https://downloads.winlink.org/User%20Programs/>> Install in a base folder such as C:\Winlink Express
- Set up Winlink Express Settings as normal with the following exceptions. (See HELP files as needed)

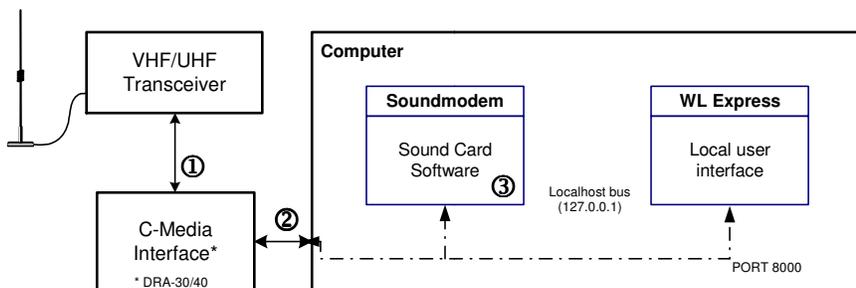
VARA FM settings ⇨

- From the Vara FM Winlink Session - [Call Sign] click on sttings then Vara TNC Setup to get this window
- Accept TNC settings but insert the path to your VARAFM.exe.
- Check the 'Automatically launch Vara FM NC when session is opened' if you would like Vara FM to auto start
- Click Update to save settings.

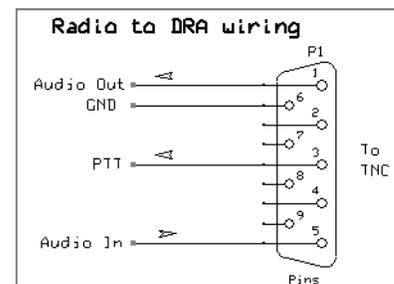


Note, If 'Automatically launch Vara FM TNC when session is opened' is checked, Vara FM will start when Open Session on main Winlink Express window is selected and closed when session is exited. Otherwise Start Vara FM before starting Winlink Express.

Winlink Express with C-Media Interface

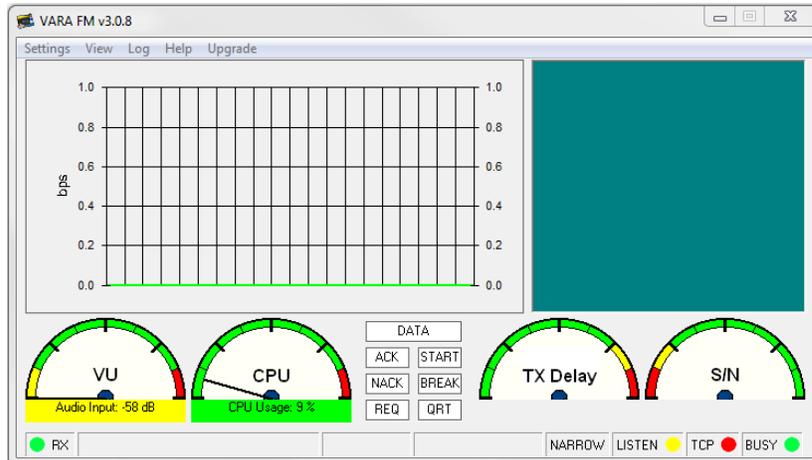


- ① KPC3+ Type Interface (DE-9)
- ② USB Interface
- ③ V-105 or better with PTT.DLL enabled

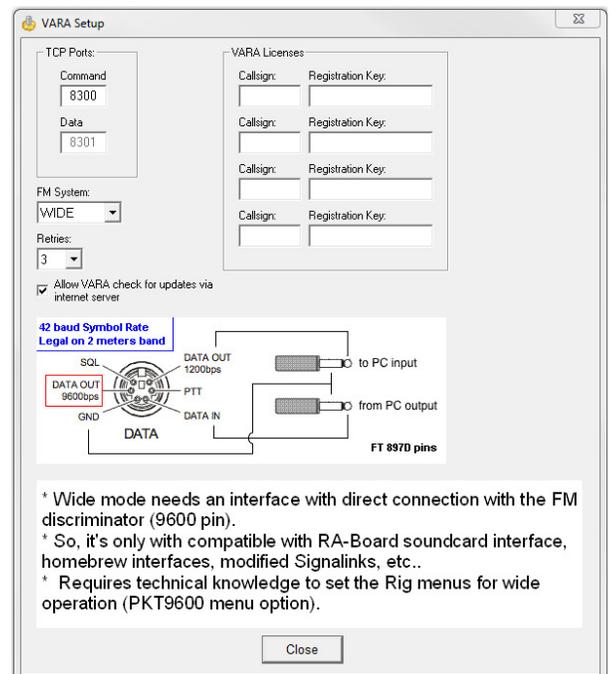


Vara FM Settings for C-Media device use with Winlink Packet

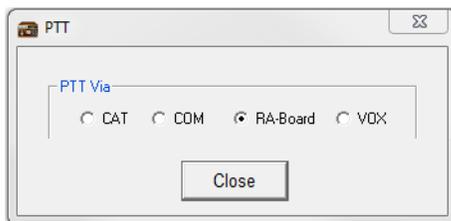
- Go to <https://rosmodem.wordpress.com/> and download 'VARA FM v3.0.8 (VARA for FM transceivers)'.
- Create a new folder (ex. C:\VARA_FM) and unzip the VARA zip file to the created folder. Run the VARA FM setup.exe file. Be sure to run as administrator. You may get a message from your Anti-Virus program. Ignore it or set allow.
- From the folder run VARAFM.exe. You will get the following window.



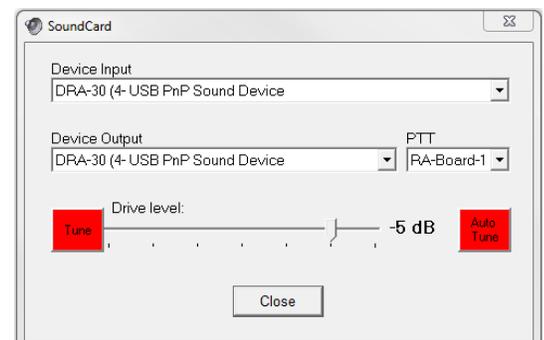
- Click on Settings to open the set up window and select VARA The following window will open
 - Accept the settings suggested, but change Retries to 3. You can adjust the settings once you get everything running to best communicate.
 - Insert your call sign and your license key if you have one.
- Note:** You can run Vara FM for free but you will get a nag screen and the max speed is throttled back.
- Select NARROW in the FM Systems window. If registered and your radio supports it use WIDE.
 - Click Close



Again from Settings, select PTT... This window will open.

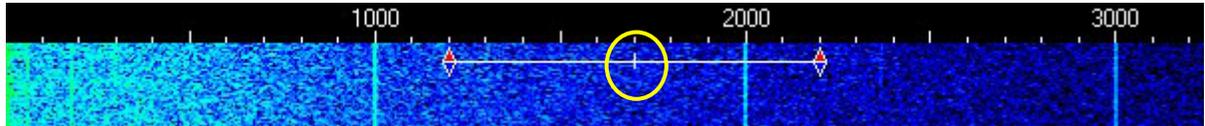


- Select RA-Board as that is the C-Media Interface.
- Click Close
- Now select Sound Card from Settings.
- Select your DRA board in the Device input and output windows
- Select the RA-Board for PTT.
- You can use the slider on the Tune bar or Auto Tune if you have a buddy to test with.

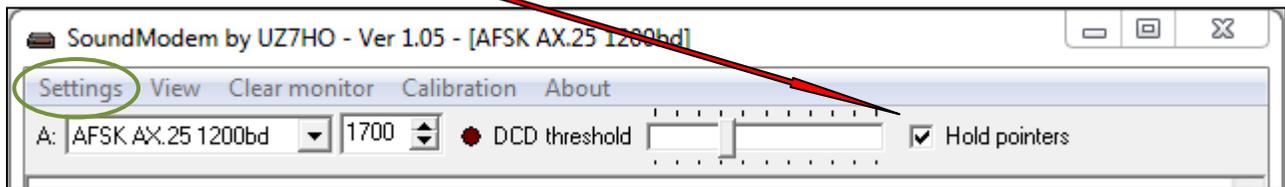


Soundmodem Settings for C-Media device use with Winlink Packet

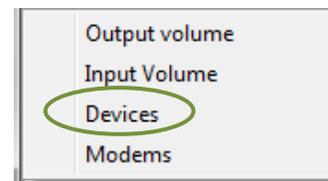
- Go to <http://uz7ho.ua/packetradio.htm> and download the latest soundmodemXXX.zip and ptt-dll.zip files. (The XXX refers to the version number) Unzip the files to a temporary location on your computer.
- Create a new folder (ex. C:\UZ7HO) and copy soundmodem.exe and PTT.dll from the temporary location into the new folder. (**soundmodem.exe and ptt.dll must be in the same folder**)
- Run the soundmodem.exe file. You may get a message from your Anti-Virus program. Ignore it or set allow.
 - * Soundmodem will find and enable the PTT.DLL file.



- For soundcard packet the signal bar on the waterfall should be centered at 1700.
- Check Hold Pointers on main window.



- In the Soundmodem window, click Settings then Devices.



Sound Card Settings

- Select Output and Input devices:
 - * C-Media interface: Select **USB PnP Sound Device**
- Uncheck – TX rotation
- Check – Single channel output
- Check – Color waterfall. This can use a lot of computer resources, so you may not want to check this. It will depend upon your computer's CPU. Optional
- Check – Stop waterfall on minimize.

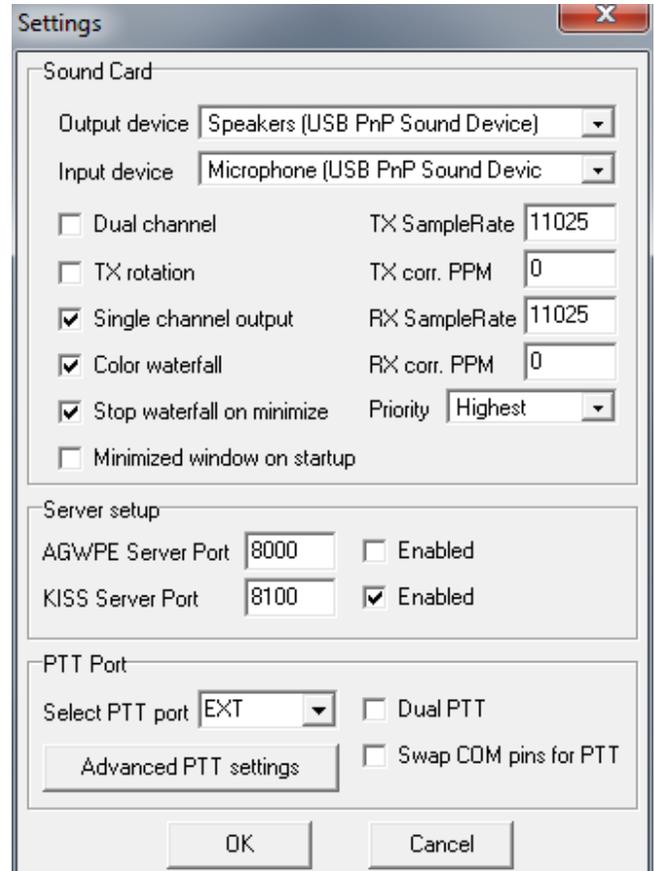
Server setup:

- Check – Enabled for Kiss Server Port (8100). Leave AGWPE Server Port unchecked

PTT Port:

- Uncheck Dual PTT & Swap COM pins for PTT
- Select EXT in the Select PTT port dropdown
- Click OK

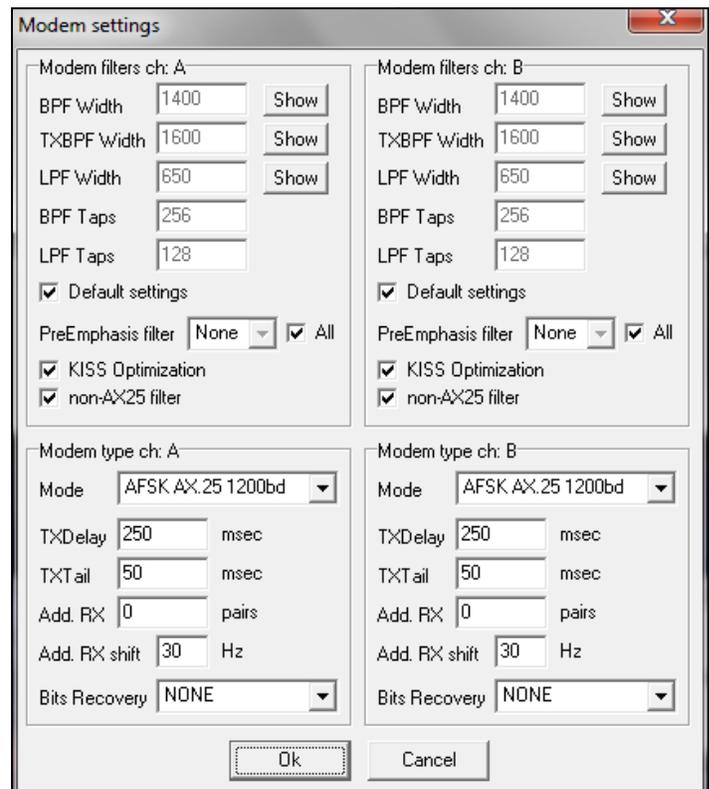
* Go to **Advanced PTT Settings** section to set up PTT options.



Modem Settings:

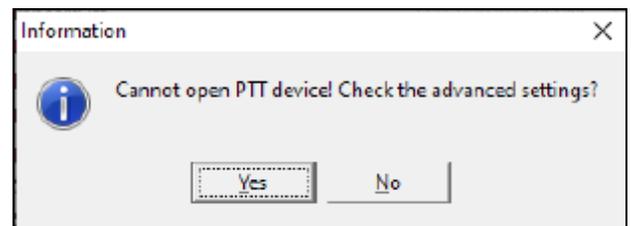
- Click – Settings/Modems
- Check – Default settings
- Check – KISS Optimization
- Check – non-AX25 filter
- Set ch: A Modem filters as shown (Channel B not used)
- Set Modem type ch: A settings as shown
- Click OK
- Close Soundmodem and restart.

Once set up, start before Winlink Express if auto start is not enabled.



Advanced PTT Settings

- From the Settings window, click on the Advanced PTT settings tab
- An Information window may pop up indicating to check the advanced settings. If so click Yes. This only occurs on the initial installation.
- An EXT Settings window should pop up allowing you to select the Device and to test the PTT.
- Note: Once set up is complete the Advanced PTT settings bar will be enabled In the settings window. You can go to this window and select TEST to test your PTT at any time.
- Click Apply to save settings



Tip: Set computer's internal microphone and speaker as default. Create a shortcut for sound settings.

Right click on Desktop ⇒ Select Create Shortcut ⇒ Type **control mmsys.cpl** for location: ⇒ Click Next ⇒ Type **Sound Settings** ⇒ Click Finish

Note: information provided here is believed to be correct. Use at your own risk.