Winlink Express
Windows 11
Signalink
Baofeng BF-F8HP

WK0C

https://wk0c.org/documents

Introduction

- Why Winlink?
- Exercises
- Gateways
  - ❑ Packet
  - ❑ Vara FM

Setup Issues

- PC Audio Settings
- Signalink TX and RX

Stystem Components

- Windows 11 System Software
  - Winlink Express
  - Soundmodem
  - Vara FM (optional)
  - EasyTerm (for Testing)
- Signalink "Modem"
  - Cable to Baofeng (Kenwood HT)
  - Jumper for Baofeng
  - Pigtail to antenna
  - Battery Replacement

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Hardware

Antenna: J-Pole

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Hardware

Manufacturer	Description	Cost
Baofeng	BF-F8HP	$45
TigerTronics	SLUSBHTW Signalink	$120
TigerTronics	SLCABHTW - Cable	$23
TigerTronics	SLMOD6PM- Jumper	$9
BMAX	Bmax B3 Mini PC	$120
Baofeng	AC to DC Converter	$10
Yelesley	Baofeng Battery Eliminator	$8
DHT Electronics	SMA Male to UHF SO-239	$7
	Total (w/o the king's tax)	$342

Software

Software	Purpose	URL
Soundmodem	Software TNC	https://uz7.ho.ua/packetradio.htm
EasyTerm	Packet Station - Test Connectioins	https://uz7.ho.ua/packetradio.htm
Vara FM	Vara TNC	https://downloads.winlink.org/VARA%20Products/
Winlink Express	Winlink Email	https://downloads.winlink.org/User%20Programs/

Software

Software	Install
Soundmodem	Unzip to C:\soundmodem\ - Make shortcut to Taskbar
EasyTerm	Unzip to c:\easyterm\ - Make shortcut to Taskbar
Vara FM	Unzip to temp folder - run VARA FM setup (Run as Administrator).exe
Winlink Express	Unzip to temp folder - run Winlink_Express_install.exe

The Hard Packet Part - Levels
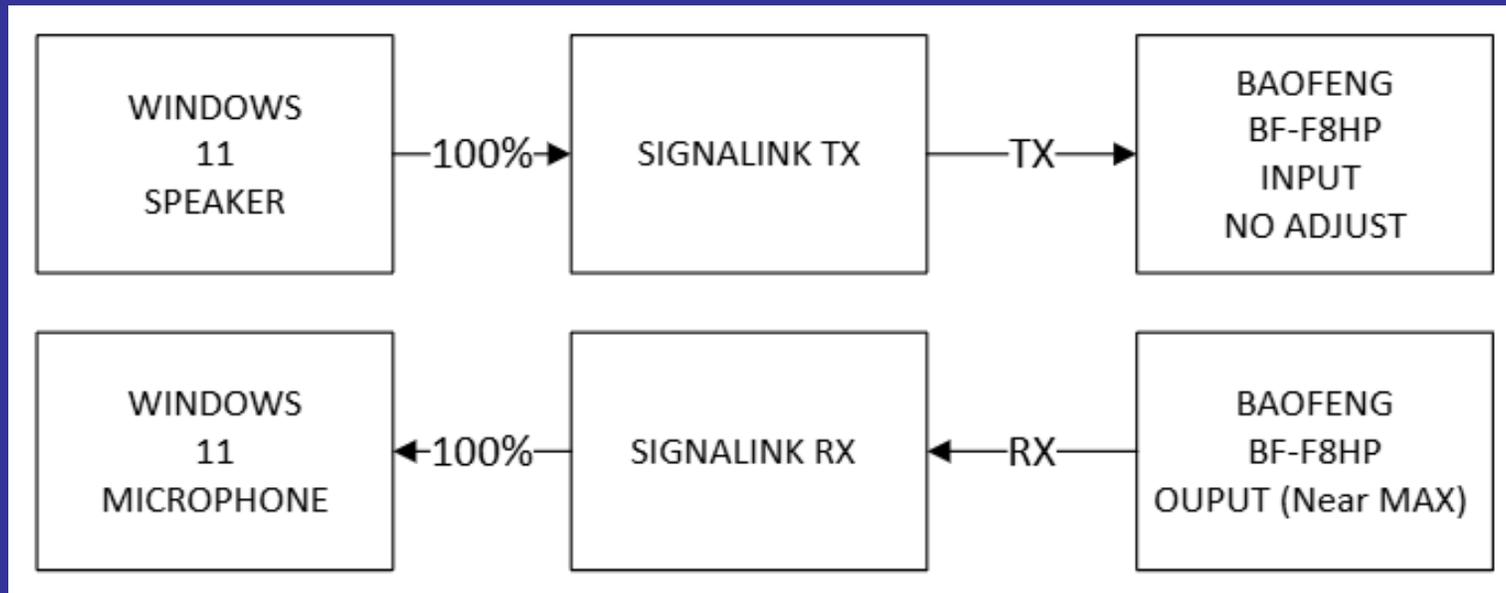
1. Adjust RX and Windows AUDIO LINE IN until Packet Traffic is VIEWED on Sound Modem

2. Adjust TX and Windows AUDIO SPEAKER until Packet Connection with Digipeater Occurs

Soundmodem Setup

Soundmodem Setup

INPUT----------
If Microphone (PC) and RX (Slink) set correctly, then you should start to see Packet Traffic in the Soundmodem window.

OUTPUT--------
Output is VOX Calibration tones should PTT the Radio. Test with Handheld

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Easyterm Setup (term.exe)

SCREST 145.010 mHz

Connecting to SCREST

- Connect to SCREST

- ? For command list

- Mheard to see stations heard

- B for Bye

- Video: 1_PACKET_TUNE_TEST.mp4

Final Packet Parameters

Final Packet Parameters

WINDOWS 11 SPEAKER —100%→ SIGNALINK TX —TX 5→ BAOFENG BF-F8HP INPUT NO ADJUST

WINDOWS 11 MICROPHONE ←100%— SIGNALINK RX ←RX 5— BAOFENG BF-F8HP OUPUT (Near MAX)
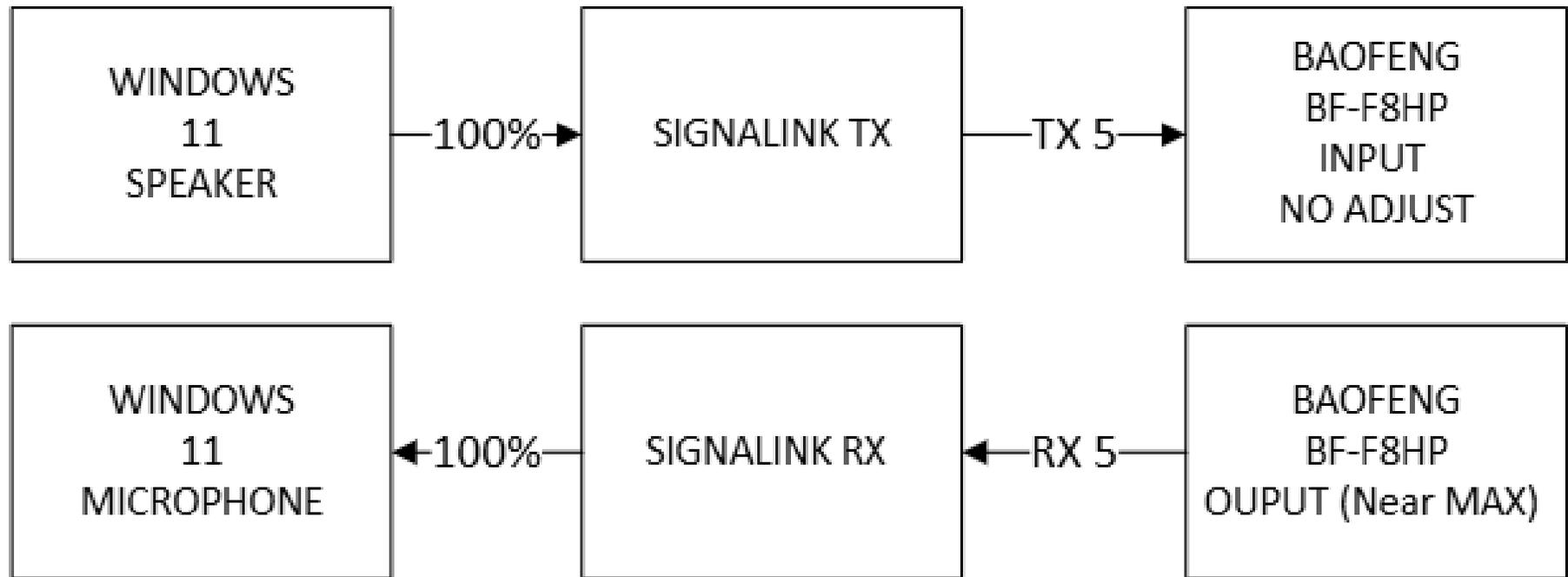
Winlink Express Setup

Main Menu Bar->Settings->Winlink Express Setup

Winlink Express New Message

Main Menu Bar->Messages->New

NOTE To: TEST and SCRIPT to go over the hill.

Send Message

Press Start

Message Sent

Press Start

Test Message comes back.
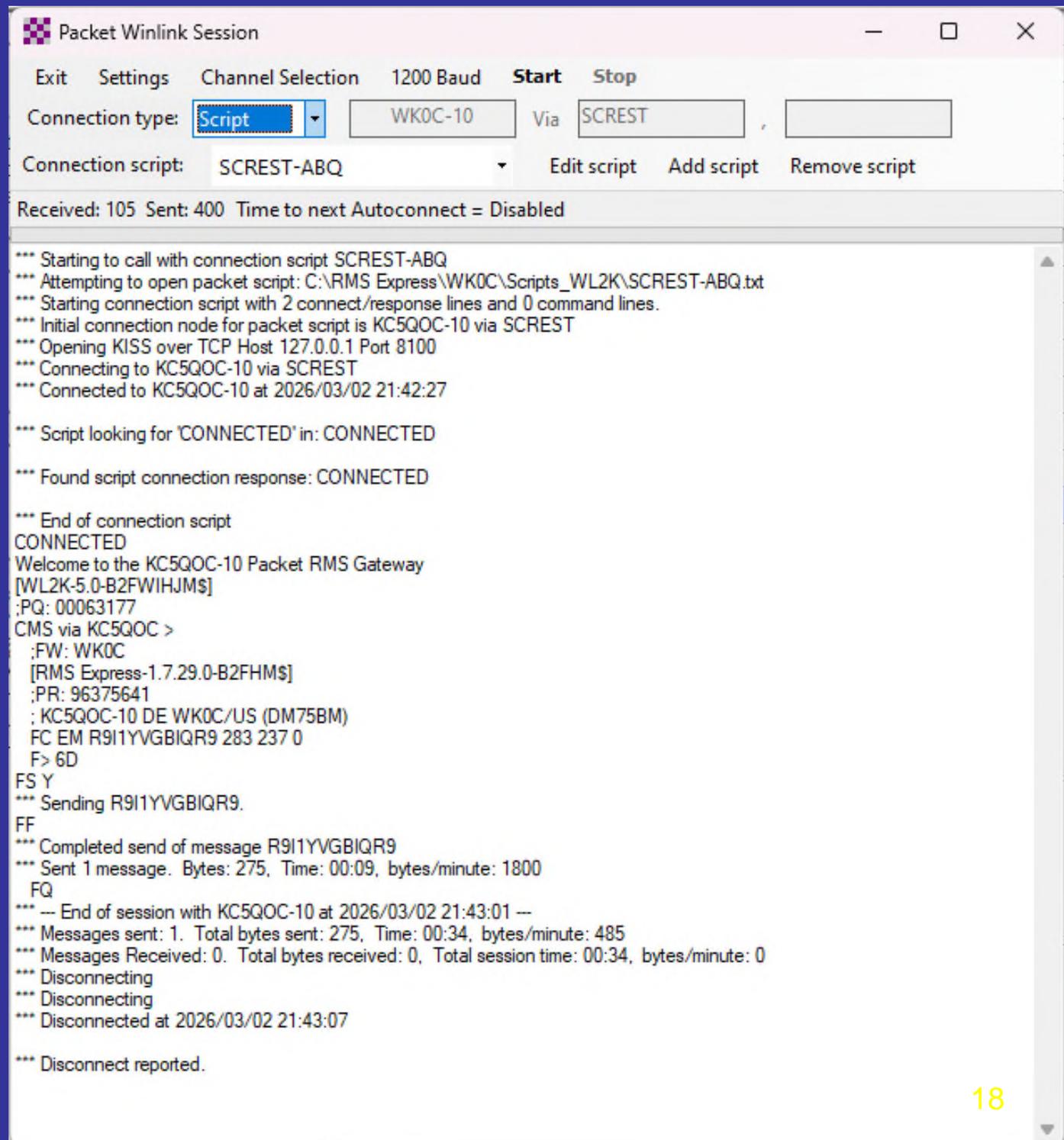
Packet Winlink Session

Exit   Settings   Channel Selection   1200 Baud   **Start**   Stop

Connection type: [Script ▾]   WK0C-10   Via   SCREST   [   ]

Connection script: SCREST-ABQ ▾   Edit script   Add script   Remove script

Received: 105 Sent: 400 Time to next Autoconnect = Disabled

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*** Starting to call with connection script SCREST-ABQ
*** Attempting to open packet script: C:\RMS Express\WK0C\Scripts_WL2K\SCREST-ABQ.txt
*** Starting connection script with 2 connect/response lines and 0 command lines.
*** Initial connection node for packet script is KC5QOC-10 via SCREST
*** Opening KISS over TCP Host 127.0.0.1 Port 8100
*** Connecting to KC5QOC-10 via SCREST
*** Connected to KC5QOC-10 at 2026/03/02 21:42:27

*** Script looking for 'CONNECTED' in: CONNECTED

*** Found script connection response: CONNECTED

*** End of connection script
CONNECTED
Welcome to the KC5QOC-10 Packet RMS Gateway
[WL2K-5.0-B2FWIHJM$]
;PQ: 00063177
CMS via KC5QOC >
  ;FW: WK0C
  [RMS Express-1.7.29.0-B2FHM$]
  ;PR: 96375641
  ; KC5QOC-10 DE WK0C/US (DM75BM)
  FC EM R9I1YVGBIQR9 283 237 0
  F> 6D
FS Y
*** Sending R9I1YVGBIQR9.
FF
*** Completed send of message R9I1YVGBIQR9
*** Sent 1 message.  Bytes: 275,  Time: 00:09,  bytes/minute: 1800
  FQ
*** --- End of session with KC5QOC-10 at 2026/03/02 21:43:01 ---
*** Messages sent: 1.  Total bytes sent: 275,  Time: 00:34,  bytes/minute: 485
*** Messages Received: 0.  Total bytes received: 0,  Total session time: 00:34,  bytes/minute: 0
*** Disconnecting
*** Disconnecting
*** Disconnected at 2026/03/02 21:43:07

*** Disconnect reported.
```

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Sending and Receiving Winlink Packet

- Sending Msg: KC5QOC-10 via SCREST on 145.010 mHz

- Using Script: SCREST-ABQ
  – C KC5QOC-10 VIA SCREST
  – CONN

- Video: 2_PACKET_MSG.mp4

Msg from Winlink Test Message Reflector
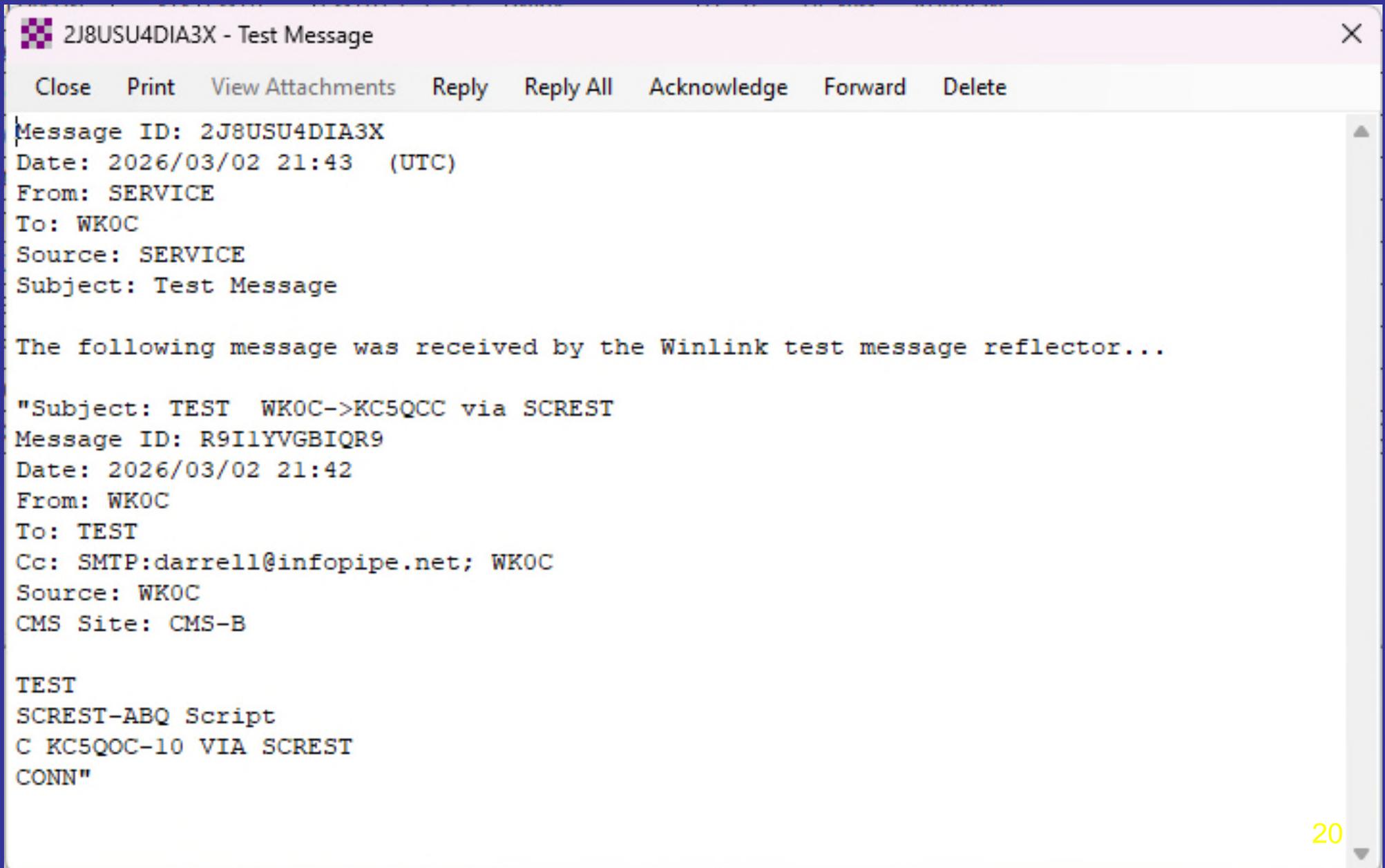

```
2J8USU4DIA3X - Test Message                                    X

Close    Print    View Attachments    Reply    Reply All    Acknowledge    Forward    Delete

Message ID: 2J8USU4DIA3X
Date: 2026/03/02 21:43  (UTC)
From: SERVICE
To: WK0C
Source: SERVICE
Subject: Test Message

The following message was received by the Winlink test message reflector...

"Subject: TEST  WK0C->KC5QCC via SCREST
Message ID: R9I1YVGBIQR9
Date: 2026/03/02 21:42
From: WK0C
To: TEST
Cc: SMTP:darrell@infopipe.net; WK0C
Source: WK0C
CMS Site: CMS-B

TEST
SCREST-ABQ Script
C KC5QOC-10 VIA SCREST
CONN"
```
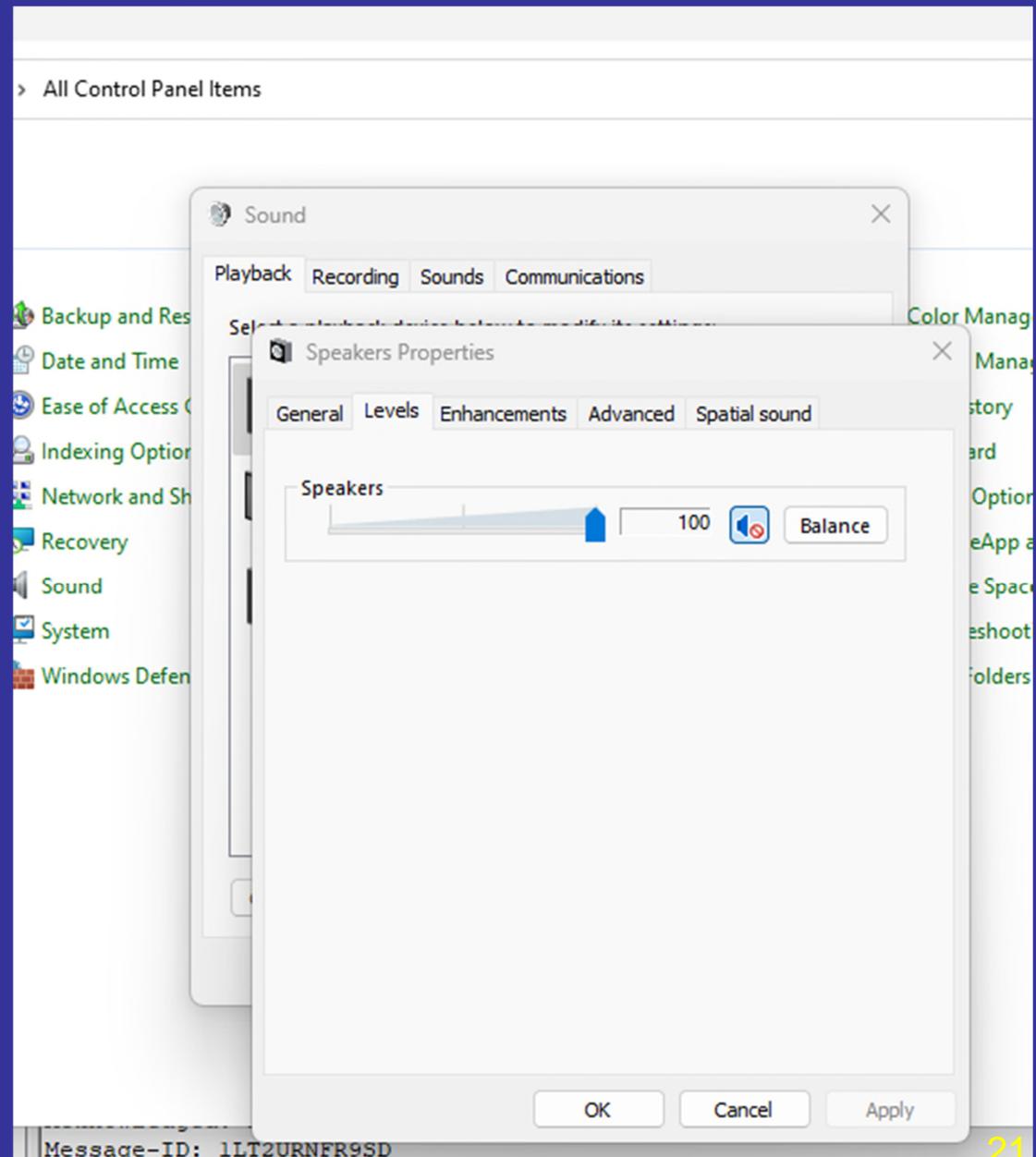
Weird Muting on Startup

Make sure Speaker and
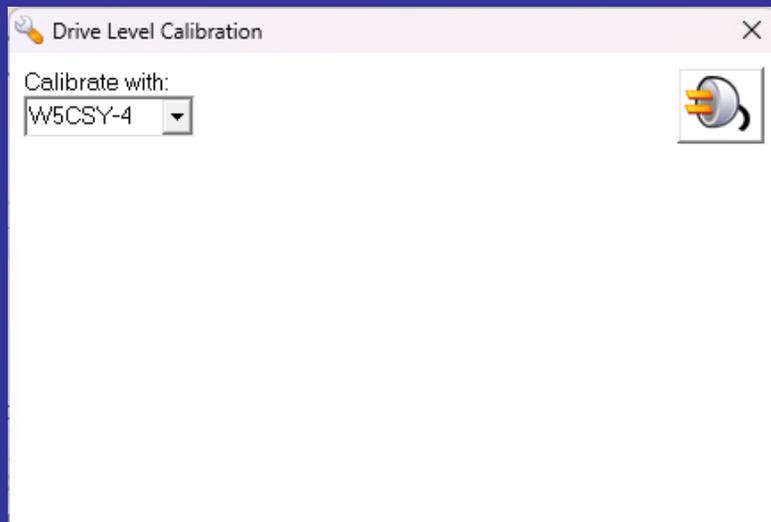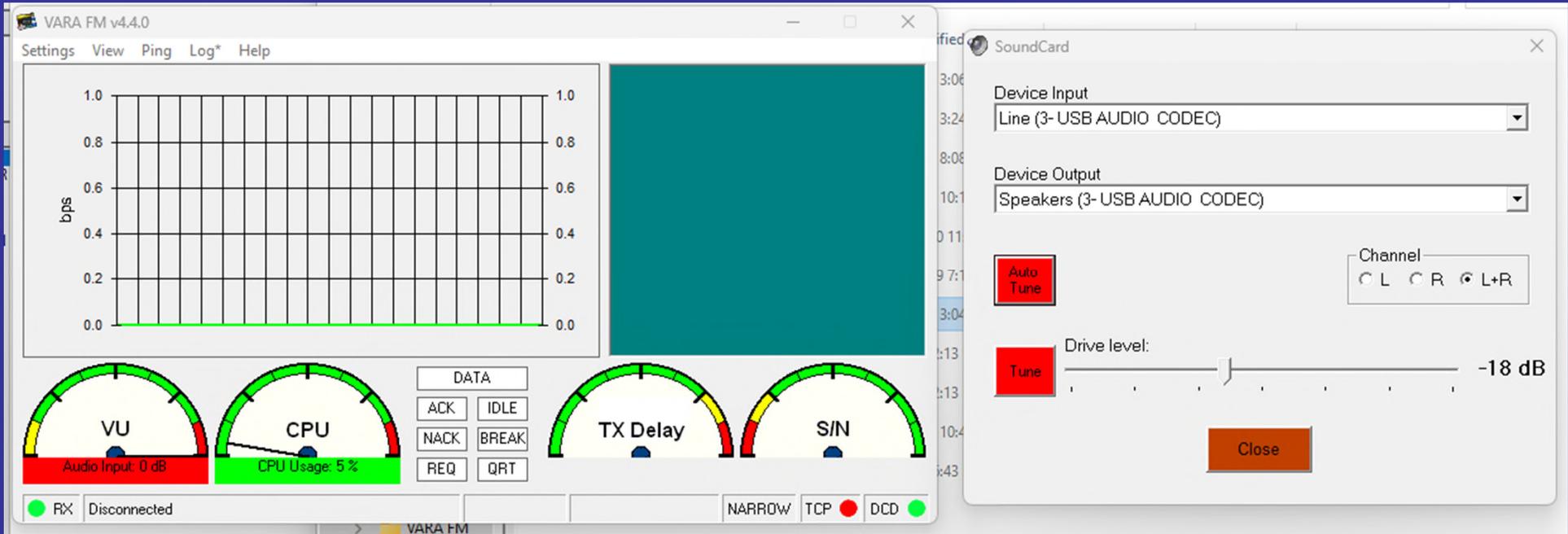Microphone (Line)
Don't get muted by

"SOMETHING"

Sometimes the system
stops communicating with
Signalink- REBOOT!

Vara FM – It's all in the Tuning

Open VaraFM.Exe from Install Loc ->Settings – Sound Card – Press Auto

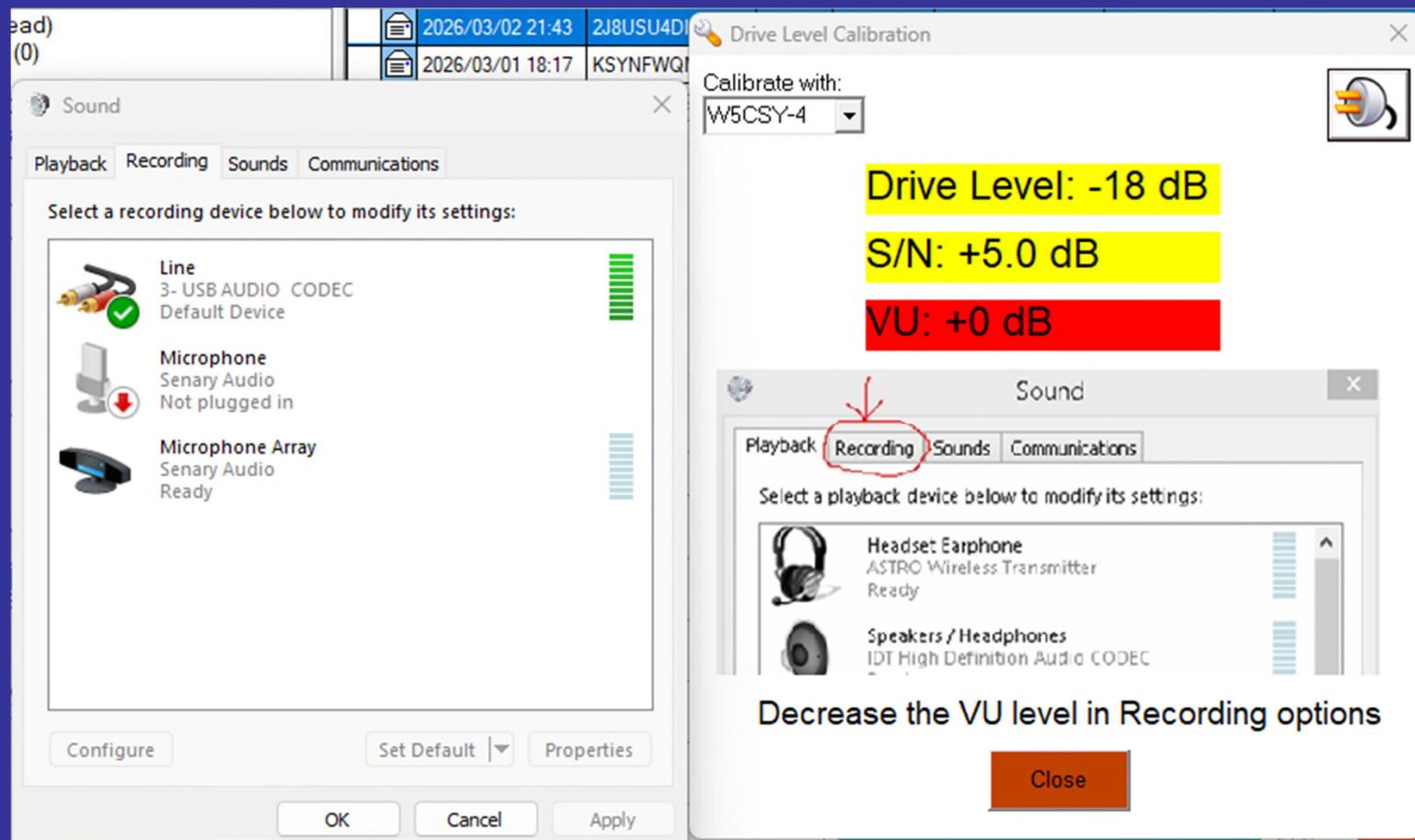Enter Vara Repeater on Sandia Crest
On 145.070 mHz

W5CSY-4

Press the Plug!

Vara FM – It's all in the Tuning

It opens the Recording Line Sound Panel and tells me to lower the VU Level.

I lowered from 100% to 50% and tried again.

Vara FM – It's all in the Tuning

Now it tells me to turn the TX knob to the left.
I move it to 9 o'clock from 12 o'clock and Try again.

Vara FM – It's all in the Tuning

You can now run a PING test.

Vara FM Tuning

- Tuning to Vara Digi on Sandia Peak: W5CSY-4 on 145.070 mHz

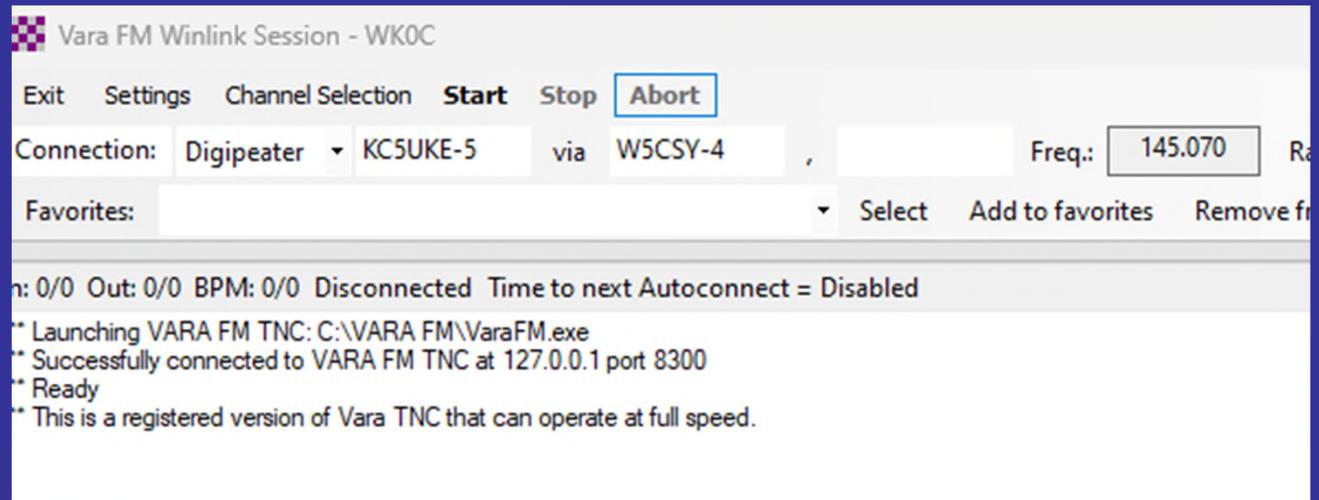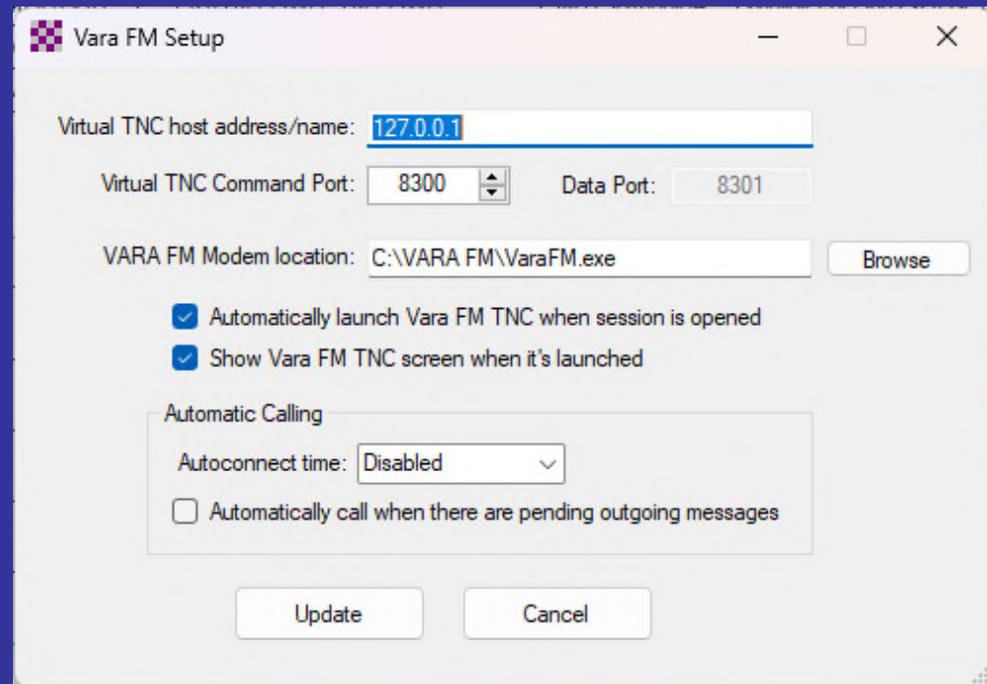- Video: 3_VAREFM_TUNING.mp4

Vara FM Final Parameters

Send Message Vara FM

Main Menu Bar->Choose Vara FM Winlink and Open Session

Add the location of the VaraFM.exe file in the Vara FM Setup. Update.

Setup Path as Digipeater KCUKE-5 via W5CSY-4 Press Start.

Magic Happens!!

Sending VARA FM Message

- Sending Msg: KC5UKE-5 via W5CSY-4 on 145.070 mHz

- Gateway: KC5UKE-5 in ABQ

- Vara Digi on Sandia Peak: W5CSY-4

- Video: 4_VARAFM_MSG.mp4

Summary

- Setup Softare
- Use Digipeaters for Tuning and Connections
- Packet harder to setup
- VARA FM helps you
- Signalink Modem stops sometimes (hours)

Questions? Comments?