

Winlink for EmComm

A Presentation to Kendall Co. Amateur Radio Society Mark S. Harris / K9YXF

- I. Introduction
What is Winlink?
Why is it important for Emergency Radio Communications?
- II. Primary Communication Protocols
Telnet, Peer to Peer (VHF), VARA FM, VARA HF
- III. Basic Client Setup – Winlink Express
Installation and Registration (Optional)
Folders
Contacts
- IV. VARA FM Sample Session
Simple Messaging (Radio Email through CMS servers)
Fill-out Forms
Attachments
- V. Emergency Use of an RMS Gateway
Sysop Requirements
RMS Relay Application Layer
Radio-only Hub Operations (Internet Not Required)
- VI. Resources, Training and Practice
Book:
Amateur Radio Digital & Voice Emergency Communications
Online Resources:
Winlink.org
WaveTalkers.com
Local Resources:
ARES
RACES
Volunteer Fire Departments
Practice:
EmcommTraining.org
Emcomm-Training@groups.io
*** Create a local Winlink hub with scheduled exercises ***

Winlink Express 1.7.13.0 - K9YXF

K9YXF Settings Message Attachments Move To: Saved Items Delete Open Session: Vara FM Winlink Logs Help

No active session...

System Folders	Date/Time	Message ID	Size	Source	Sender	Recipient	Subject
Inbox (0 unread)	2024/03/05 16:32	YNMH4E7A14DG	100133	KI5CYP	KI5CYP	K9YXF	Canyonlands
Read Items (0)	2024/03/04 16:39	AL7VHPBEEUVD	335	KI5CYP	KI5CYP	K9YXF	ACK: EXERCISE
Outbox (0)	2024/03/03 19:55	LJWOJC9IS5RH	474	KI5CYP	KI5CYP	K9YXF	ACK: //WL2K R/ Routine/ Field Situ
Sent Items (144)	2024/03/03 19:37	EM7DXUWEV7YD	378	KI5CYP	KI5CYP	K9YXF	ACK: TESTING

Personal Folders

- DR 999-21 (2)
- ETO (7)
- Winlink_Training (23)

Global Folders

Contacts

- HCARC_WINLINK_AL_ANDERSON
- HCARC_WINLINK_ALAN_CONE
- HCARC_WINLINK_BOB_BUCK
- HCARC_WINLINK_DAVID_KLEEB
- HCARC_WINLINK_DENNIS_ROBI
- HCARC_WINLINK_FRED_GILMO

Message ID: QVA2Y6JF3LZY
 Date: 2022/05/08 20:57 (UTC)
 From: WOLPD
 To: WOHIP; KC5RHF; K5AFC; K5HRB; K5HC; W5FBG; KI5BLI; N5GAN; K5EWS; W5MIG; KOMHC; KI5IQE; WB5THT; N5ZKK; KI5QWD; K9YXF; WB2GEU; K2PLM; N5RCT; W6FVO; AG6WD; W9STR; K5SWH; AF7BD
 Source: WOLPD
 Downloaded-from: RMS:W3XO-10
 Subject: Re:Antenna Moved

Hi Terry,
 Still takes high power from my location. But my antenna is only at roof level. Hopefully others will have better results.
 Fred/w0lpd

----- Message from WOHIP sent 2022/05/06 19:57 -----
 Message ID: JAKNYW5EFHNN
 Date: 2022/05/06 19:57
 From: WOHIP
 To: KC5RHF; K5AFC; K5HRB; K5HC; W5FBG; WOLPD; KI5BLI; N5GAN; K5EWS; W5MIG; KOMHC; KI5IQE;

Winlink Express Properties

Call Signs

My Callsign: K9YXF My Password: (Case sensitive)

Callsign suffix (optional): (Used for country code) Change password

Password recovery e-mail: (Non-Winlink e-mail address where lost password will be sent when requested)

Remove Callsign Request password be sent to recovery e-mail

Auxiliary Callsigns and Tactical Addresses

Add Entry Remove Entry Edit Entry

My Grid Square: EL09JX Lat/Lon to Grid Square

Winlink Express registration key:

Service Codes

PUBLIC EMCOMM (Use PUBLIC for ham call signs. Separate multiple service codes by spaces.) If you change service codes, you must update the list of channels.

Update Cancel Help

Contact Information (Optional)

Name: Mark Harris

Street address 1:

Street address 2:

City: Kerrville

State/Province: Texas

Country: USA

Postal code: 78028

Web Site URL (optional):

Phone number:

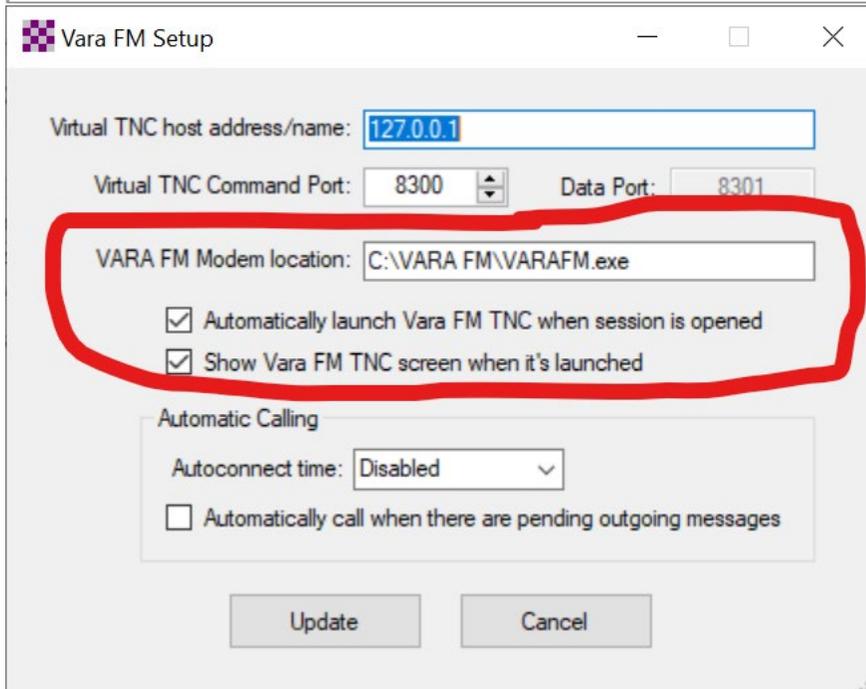
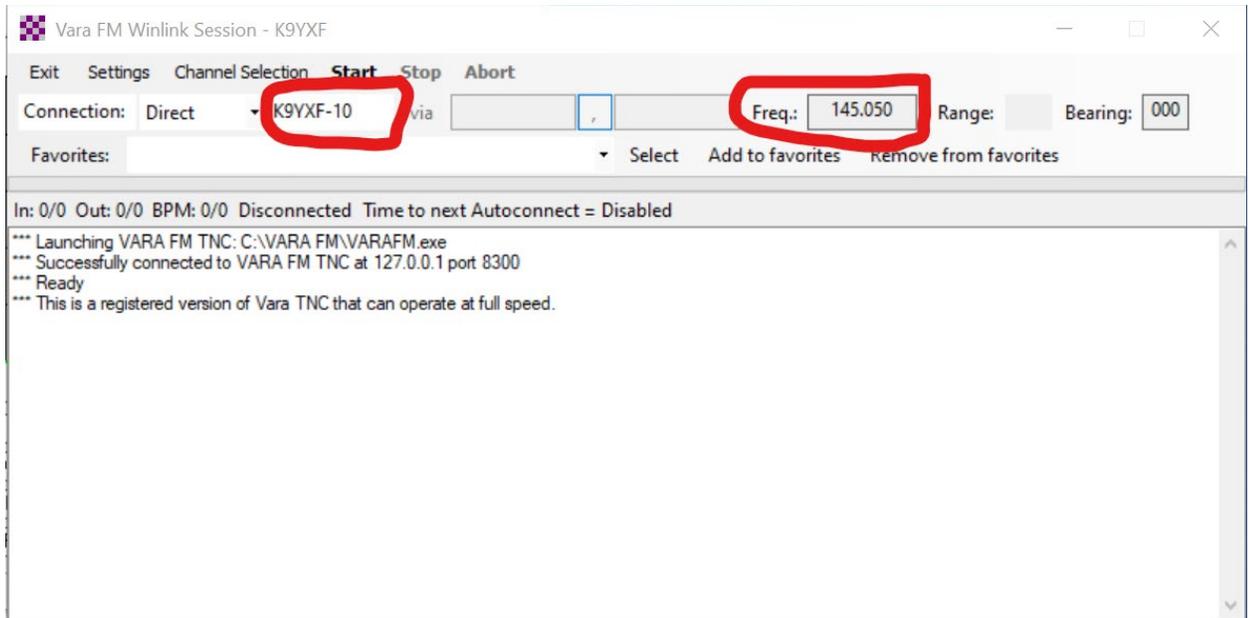
Non-Winlink e-mail:

Additional information (optional):

Recalculate HF path quality if SFI changes more than: 30

Keep logs for 2 weeks. Keep deleted messages for 30 days.

Display list of pending incoming messages prior to download
 Warn about connections to stations holding messages
 Automatically install field-test (beta) versions of Winlink Express
 Automatically install updates without prompting



VARA Setup 127.0.0.1

TCP Ports:

Command: 8300

Data: 8301

FM System: WIDE

Digipeater: []

Retries: 2

Allow VARA check for updates

KISS interface SysLog

VARA Licenses

Callsign: KI5CYP	Registration Key: []
Callsign: K9YXF	Registration Key: []
Callsign: []	Registration Key: []
Callsign: []	Registration Key: []

**42 baud Symbol Rate
Legal on 2 meters band**

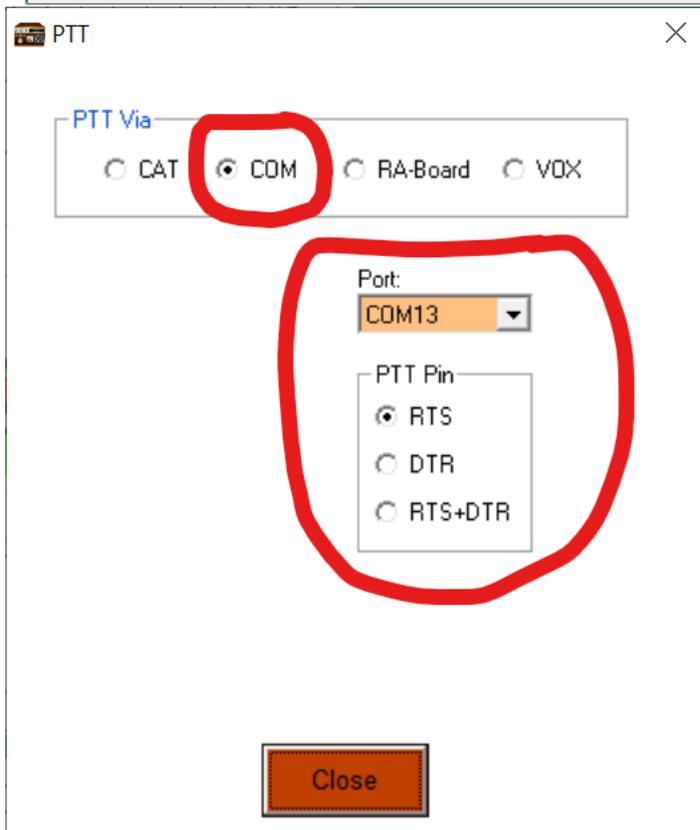
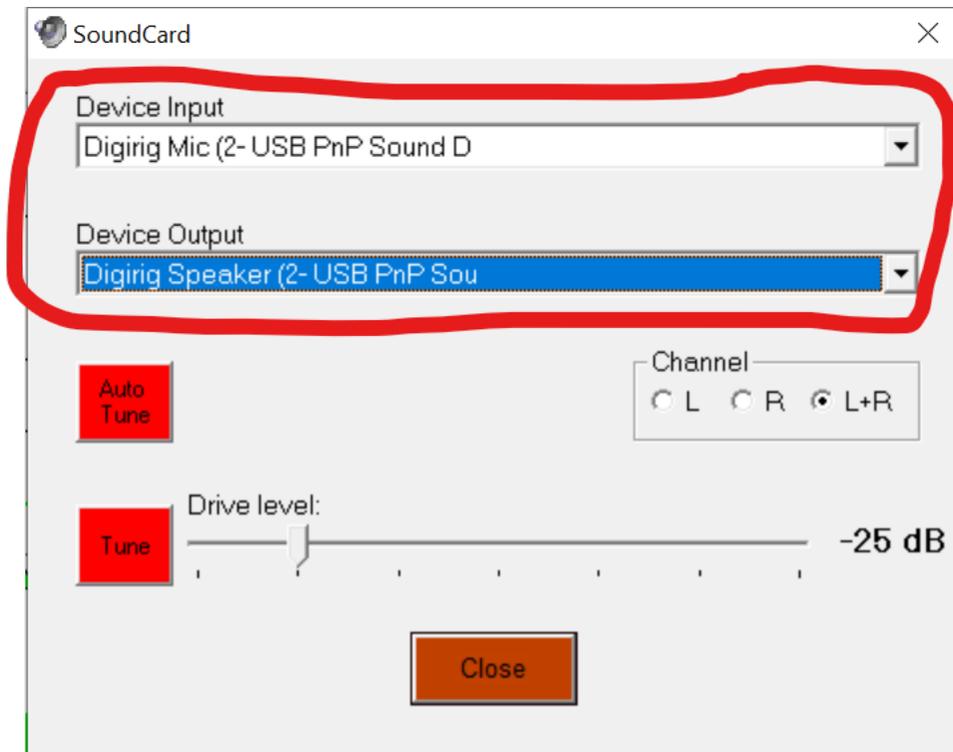
The diagram shows a circular rear panel connector with several pins. A blue box highlights the text '42 baud Symbol Rate Legal on 2 meters band'. A red box highlights the 'DATA OUT 9600bps' pin. Wires connect the 'DATA OUT 1200bps' pin to a 'to PC input' port and the 'DATA IN' pin to a 'from PC output' port. Other pins labeled include SQL, GND, and PTT.

* VARA FM WIDE needs a FM rig set for 9600 Packet operation, with a special soundcard interface (6 kHz BW) connected to rear panel: RA-Board, Signalink "Black" transforms, Modified Signalink (red audio transforms removed), homebrew interface (a simple direct cable)...

* In other case, you must select VARA FM NARROW

Close





PTT

PTT Via

CAT COM RA-Board VOX

Brand: Icom Port: COM9

Model: IC-7100 Bauds: 19200

RTS DTR

CI-V Address: 88

Close

Vara FM Winlink Session - K9YXF

Exit Settings Channel Selection **Start** Stop Abort

Connection: Direct K9YXF-10 via , Freq.: 145.050 Range: Bearing: 000

Favorites: Select Add to favorites Remove from favorites

In: 0/0 Out: 0/0 BPM: 0/0 Disconnected Time to next Autoconnect = Disabled

*** Connected to Winlink RMS: K9YXF-10 @ 2024/03/06 13:16:32 Freq: 145.050
Welcome to the Hill Country RMS Gateway
[WL2K-5.0-B2FWIHJMS]
:PQ: 93039681
CMS via K9YXF >
:FW: K9YXF
[RMS Express-1.7.13.0-B2FHMS]
:PR: 41904012
: K9YXF-10 DE K9YXF (EL09JX)
FF
FQ
*** -- End of session with K9YXF-10 at 2024/03/06 13:16:44 --
*** Messages sent: 0. Total bytes sent: 0. Time: 00:11, bytes/minute: 0
*** Messages Received: 0. Total bytes received: 0. Total session time: 00:11, bytes/minute: 0
*** Disconnected from Winlink RMS: K9YXF-10 @ 2024/03/06 13:16:44
*** Session: 0.2 min; Avg Throughput: 0 Bytes/min; 1 Min Peak Throughput: 0 Bytes/min

Enter a new message

Post to Outbox Select Template Attachments Spell Check Save in Drafts Close

From: K9YXF Send as: Winlink Message Request message receipt Set Defaults

To: KI5CYP;

Cc:

Subject: EXERCISE ONLY

Attach:

THIS IS A TEST



