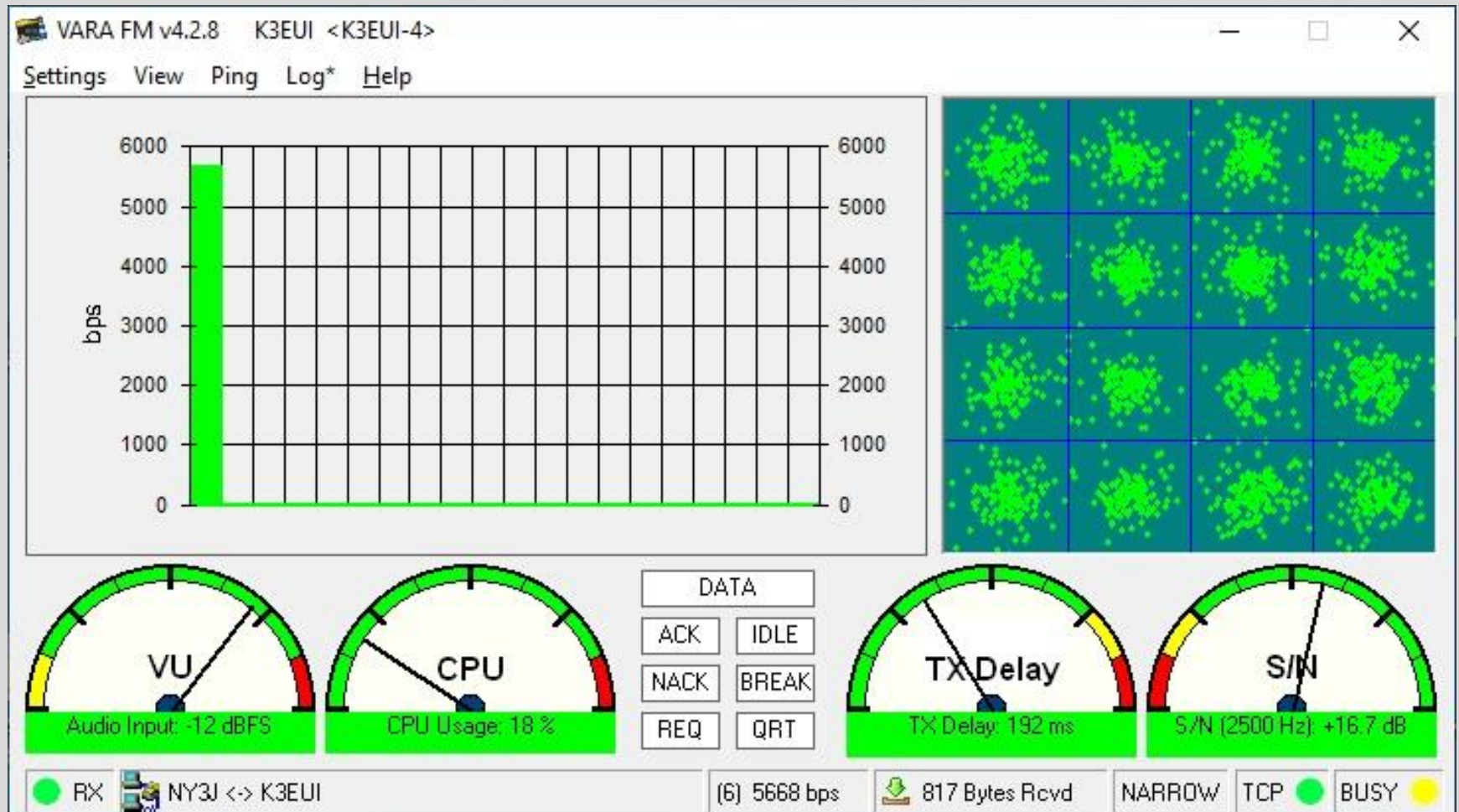


VARA

overview with k3eui
updated June 2026



VARA FM modem & VARA HF modem VARA Chat VARA Terminal VAR SAT <https://rosmodem.wordpress.com/>

EA5HVK

Weak signals Software

VARA Modem

10 January, 2011

-  **VARA HF v4.9.0 (High Performance HF Modem)**
-  **VARA FM v4.4.0 (VARA for FM transceivers)**
-  **VARA SAT v4.4.5 (VARA for QO-100 geostationary SAT)**
-  **VARA Chat v1.4.2 (Easy Text and File transfer chat)**
-  **VARA Terminal v1.2.2 (VARA dumb terminal for BBS's)**

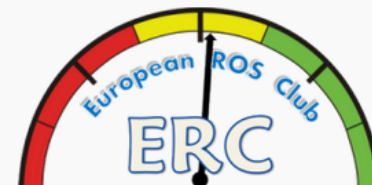


Buy a VARA License

Email: nietoros@hotmail.com



Terms of use



Recent Posts

- » VARA HF Modem
- » New ROS v7.4.0
- » (no title)
- » ROS WEEKEND HF AWARD 2016
- » 1 ST 27Mhz ROS WEEKEND AWARD

Recent Comments



José Alberto Nieto R... on
[New ROS v7.4.0](#)



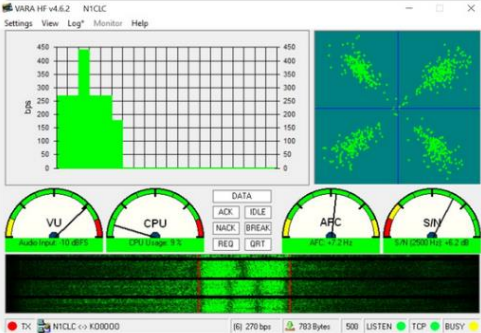
Benjamin ON5BGO on
[New ROS v7.4.0](#)

Purchase license to get full features

VARA

Buy a VARA License

\$75.00



Email

Callsign

Payment method

☐  Card 

☐  Alipay

Pay

Powered by  | [Terms](#) [Privacy](#)

VARA client apps

VARA chat

VARA sat

VARA terminal

VAR AC

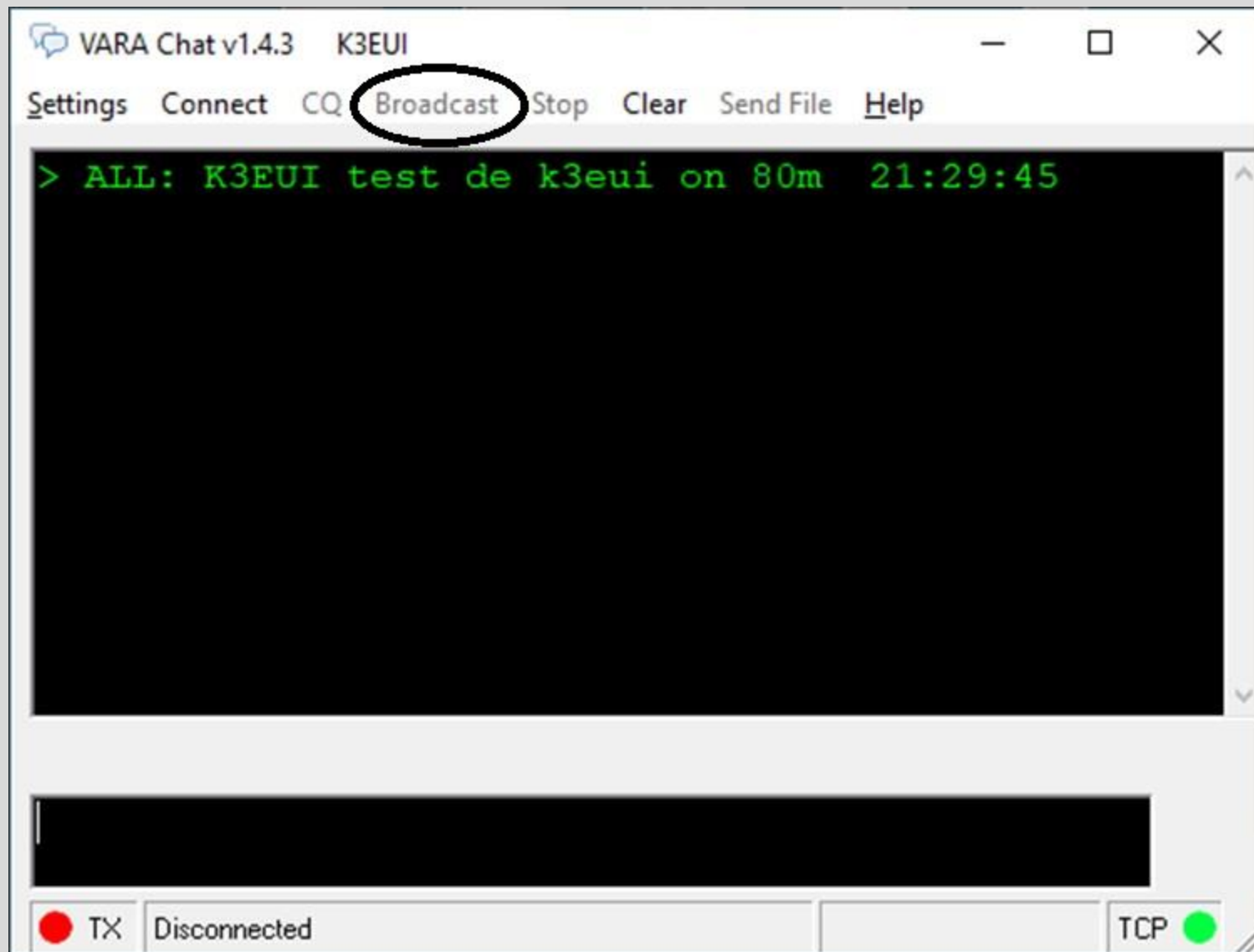
Winlink Express

VARA Setup options

The screenshot shows the VARA Setup window with the following fields and annotations:

- VARA FM TCP**
 - Command Port: 8300
 - Data Port: 8301
 - Host: localhost
- VARA Mode**
 - ☐ VARA HF
 - ☒ VARA FM (Annotated with "select mode" and an arrow pointing to it)
 - ☐ VARA SAT
- My Call Sign**
 - K3EUI (Annotated with "call" and an arrow pointing to it)
- Downloads**
 - C:\Users\bhfei\Desktop\VARA CHAT (Annotated with "downloads" and an arrow pointing to it)
 - Change button
- VARA FM Modem location**
 - C:\VARA FM\VARAFM.exe (Annotated with "VARA modem" and an arrow pointing to it)
- KISS TCP**
 - Port: 8100
 - Host: localhost
 - ☒ Automatically launch and close VARA TNC
 - ☐ Disconnect automatically after sending file
 - ☒ Save Log File
- Buttons**
 - Update
 - Cancel

VARA CHAT broadcast mode uses low speed modulation

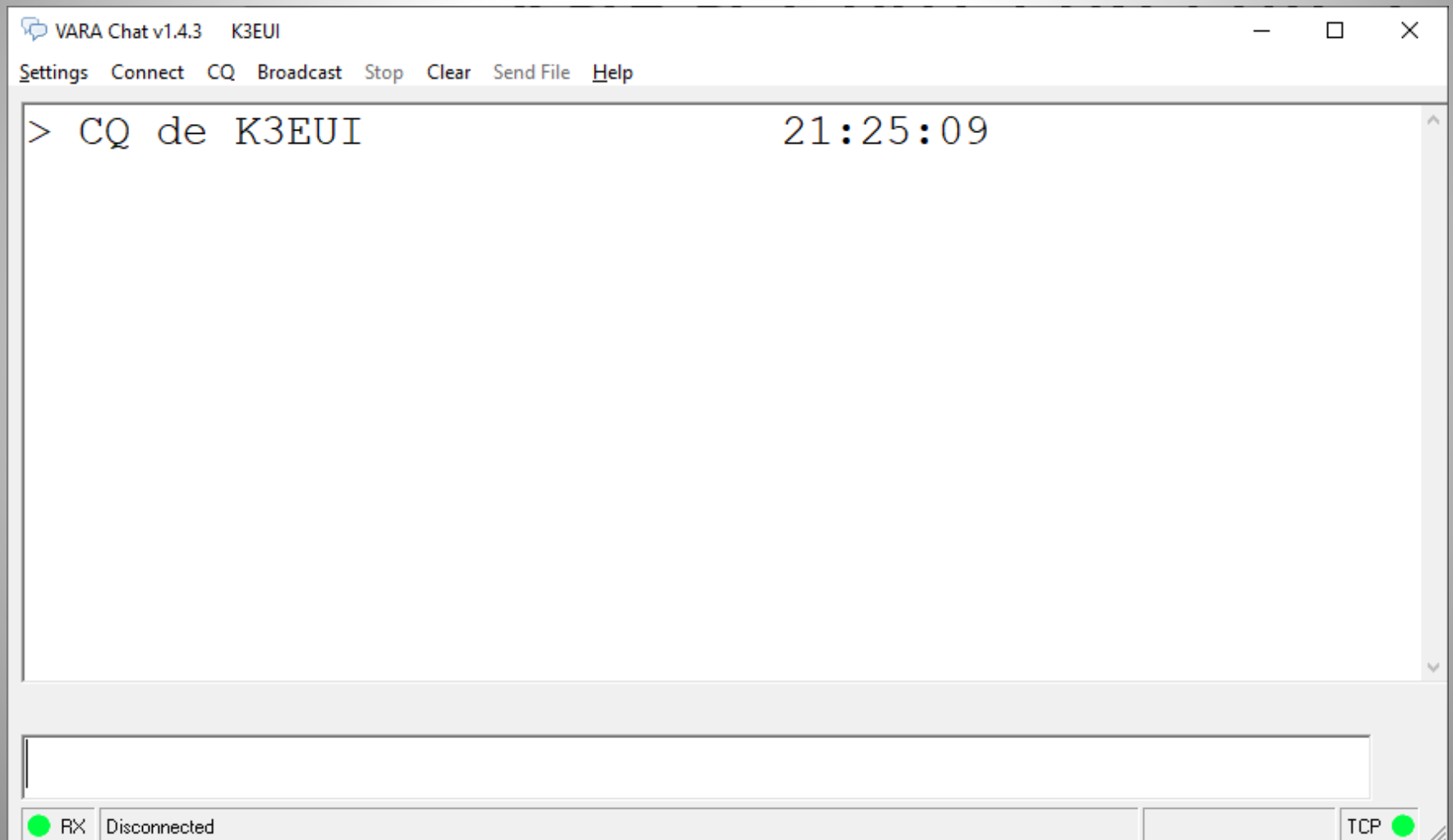


VARA Chat "broadcast" mode

This allows many ops to share the same frequency chatting with each other

A few of us have tried this on 80m SSB and of course there is no "error correction" but VARA on HF is robust

VARA Chat can call CQ



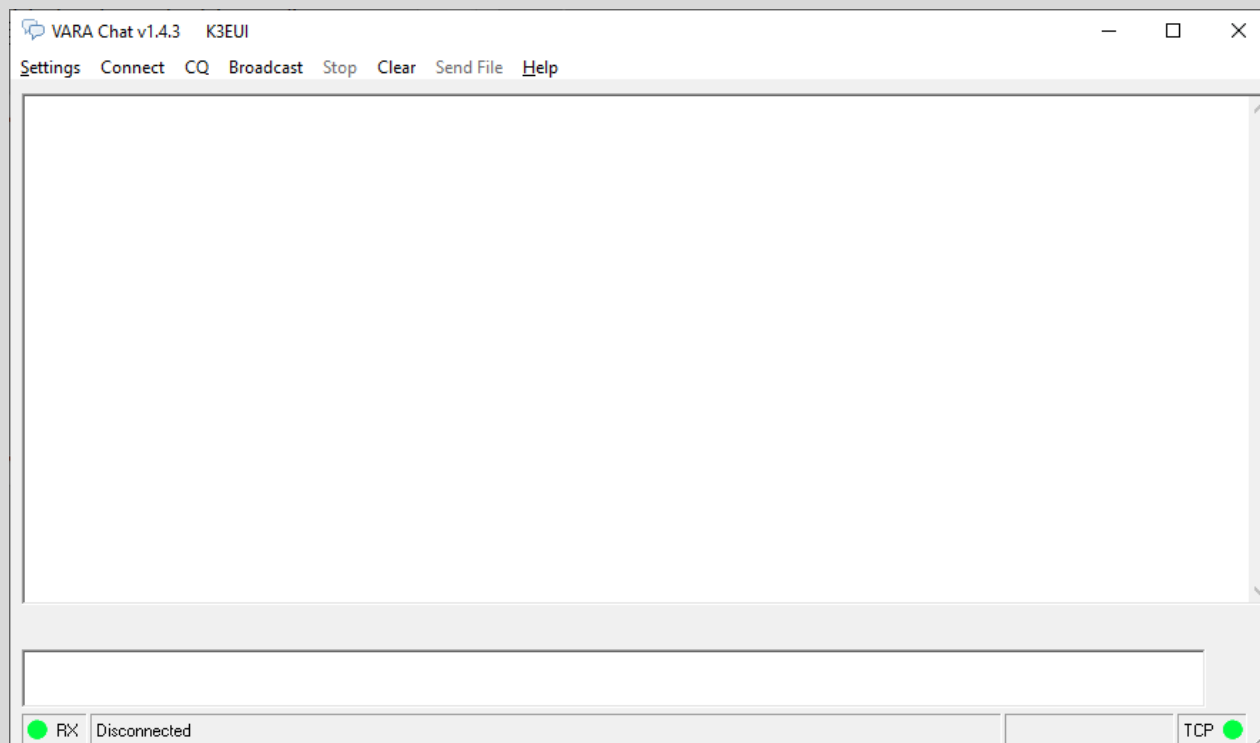
VARA in "linked" mode

VARA can do a "link" with one other station using error detection & correction

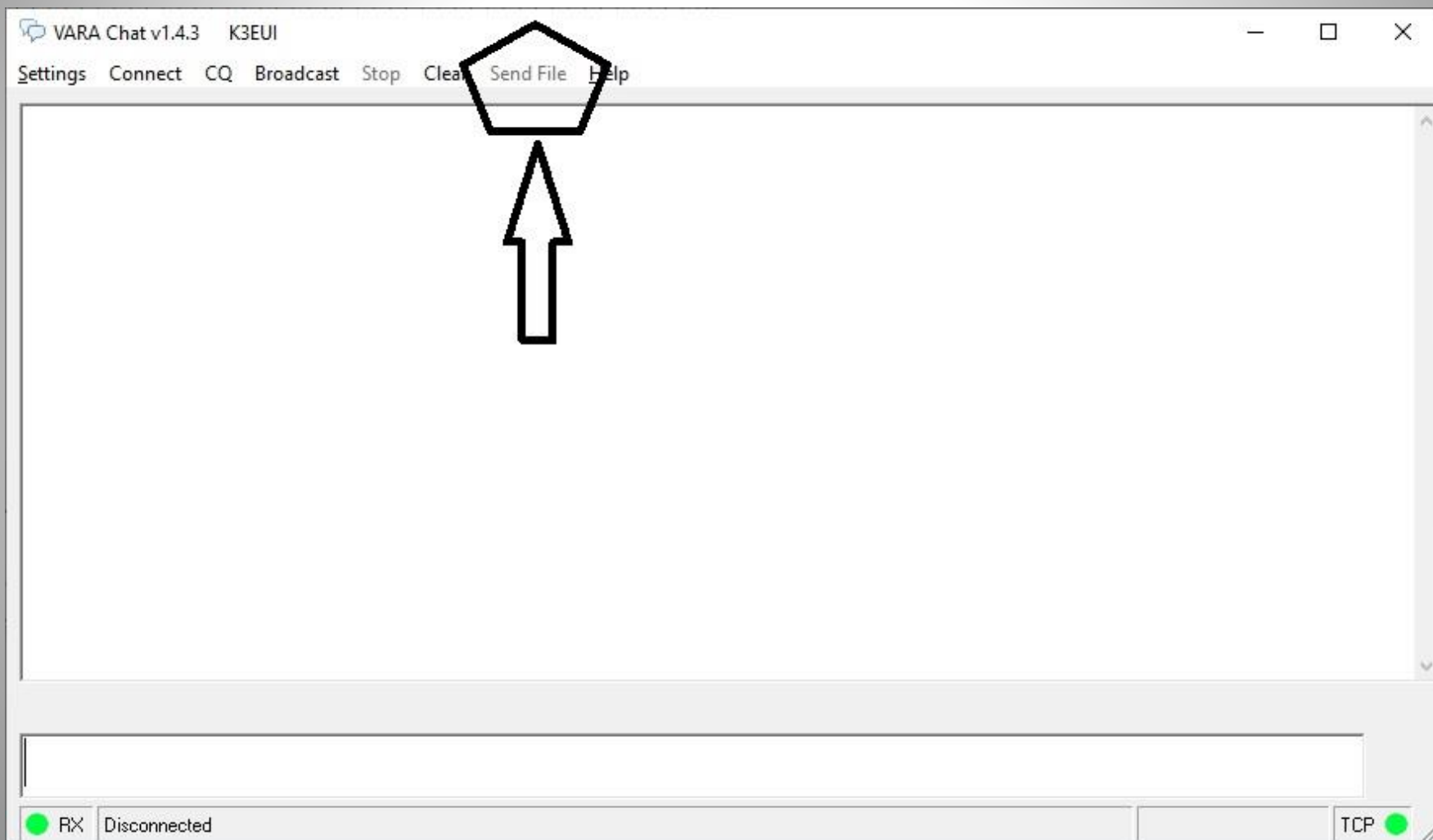
This means two stations ONLY are exchanging data on Winlink Express or VAR AC or VARA Terminal

Linked modes are best for sending EMCOMM style files

VARA Chat 1.4.3 - create a "link" to another station



VAR Chat can send files once a link is made



VarAC. HF/FM/SAT Digital Chat Reinvented

For fun, for [EmComm](#) or for [Email-Radio gateway](#)

VarAC (for the VARA modem) is available FREE of charge to amateur radio operators (and CBers) only

For a **FACTOR** version or a **commercial** license,
please visit the **SafecomLink** website:

[Factor for Hamradio](#)

[Non-Hams](#)

[Download VarAC V13.2.7 Now](#)

Want to become a VarAC Master in no time?

[Join the VarAC Academy](#)

VARAC

VarAC Windows / Linux prerequisites

Windows 8.1 and above (some hams reported that Win7 also works)
with .NET framework 4.X or above

Or **Linux** With Wine

VARA-HF 4.8.7 or higher / VARA-FM 4.3.7

Optional: FLRig / Hamlib (Rigctld) / OmniRig (V1.2 only)

1280 X 800 screen resolution or higher & 50MB of disk space.

Being open to real conversations with fellow ham radio operators, not just exchanging reports like in FT8 🙌

Download VarAC

Please fill this Download form.

Please note:

- A download link and quick start guide will be sent to your email address. It may take a minute to arrive.
- If you don't see it, please check your Spam or Gmail Promotions folder, mark it as not spam/promotional, and then click the download link.

By submitting your email, you permit its use for VarAC news and marketing. For more information, please see our [Terms of Service & Privacy Policy](#).

Name *

Callsign *

Email *

Download

VAR AC more options

VarAC (V13.2.7) Settings Tools Logs Resources About UTC: 2026-05-25 21:48:28 Mode: Advanced

FREQUENCY: 14.105.000 Profile: VarAC VarAC Beacons CQ calls

SLOT: 500Hz 2300Hz CF CONNECT MODEM DISCONNECT MODEM TUNE CONNECT PING DISCONNECT ABORT CALL CQ END CQ SEND BEACONS

☐ PTT Disabled

Bnd	TΔ	Callsign	SNR	Bnd	TΔ	Callsign	SNR	Slot

In QSO with: Live SNR SNR: Last Avg Mine dB

Bnd	Time	From	To	SNR	Broadcast message

Time	Callsign	Datastream message	Image	Reaction	Reply
14:12:30	NY3J	de NY3J <R-02>			
14:12:46	K3EUI	de K3EUI <R+12>			
		looks good now ron			
14:13:55		QSO SUMMARY: Frequency: 7.070.000 (40m)			
		Duration: 00:01:33			
14:13:55		DISCONNECTED FROM NY3J			

Currently sending: CLR In queue: CLR EDIT

CALLSIGN	SNR-S	SNR-R	BAND	NAME	LOC	QTH	MyPWR	START TIME	END TIME

New message: Gestures/Tags Load canned message: LOG CLR QSL SPOT ☐ Enter to send SEND CLR

TX RX 0/0 IDLE K3EUI FM29EW EMAIL GATE ALERT NO NEW VMAIL RELAY Outbox: 0 Parking: 0

VAR AC connect request pick bandwidth and frequency

 VarAC (V13.2.7)

Settings Tools Logs Resources About

FREQUENCY ◀▶

14.105.000 ▼

SLOT 

CF 

CONNECT MODEM

DISCONNECT MODEM

 TUNE

☐ PTT Disabled

Profile: VarAC

FREQ SCHEDULE N/A

☒ 500Hz ☐ 2300Hz

NY3J ▼

CONNECT PING

DISCONNECT ABORT

CALL CQ END CQ

SEND BEACONS

License your call for VARA

Upgrade to a licensed version to allow full access to all features of VARA

Hardware needed

RADIO - VHF/UHF FM mobile rig or HF SSB rig

TX: input port - DATA port or MIC jack

RX: output port - DATA port or ext speaker jack

Sound Card - analog/digital conversions

INPUT - Rx **analog** audio from radio to sound card

OUTPUT - Tx **analog** audio from sound card to radio

PTT - COM port or VOX (voice relay)

GND - common ground cable

Interface Requirements

Goals: set proper RX and TX levels,
provide a means to SEND (PTT)
avoid RF feedback

Optional Rig Control (CAT)

Packet vs. VARA

Which bike would you want to ride up and down a mountain?



One-speed Packet



VARA FM and VARA HF
changes speed based on S/N



Goals for VARA FM / VARA HF

Adapt speed to a changing propagation

Send data with error detection

Efficient use of bandwidth on HF

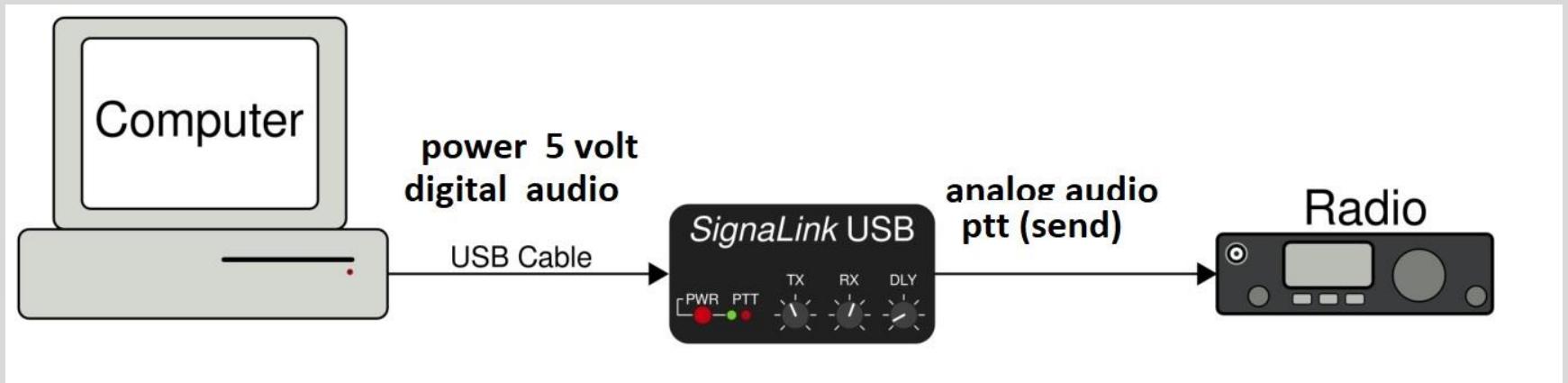
Be inexpensive and easy to learn to use

VARA (the modem)
requires a "sound card"

Typical setup with external usb sound card

digital audio - computer to/from sound card

analog audio - radio to/from sound card



TYPICAL 6 pin "MINI-DIN" DATA port

one TX audio pin

one PTT pin

TWO RX audio pins on FM: 1200 or 9600 baud

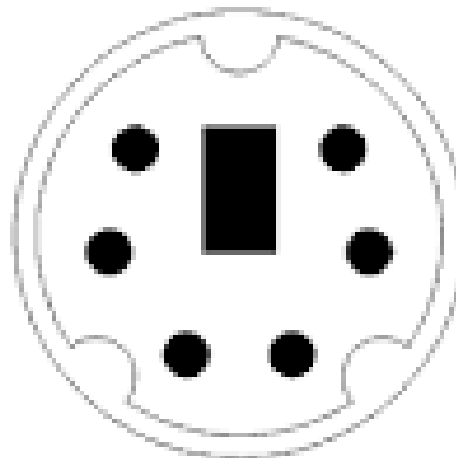
9600: FLAT audio

1200: filtered and processed audio similar to speaker audio

"Data Out 1200"
(Receive Audio)

PTT

"Data In"
(Transmit Audio)



Squelch/COR

"DATA Out 9600"
(FM Discriminator)

GND/COM

Looking into Male Plug
(Soldering end of Female Jack)

Many modern rigs have built-in sound cards

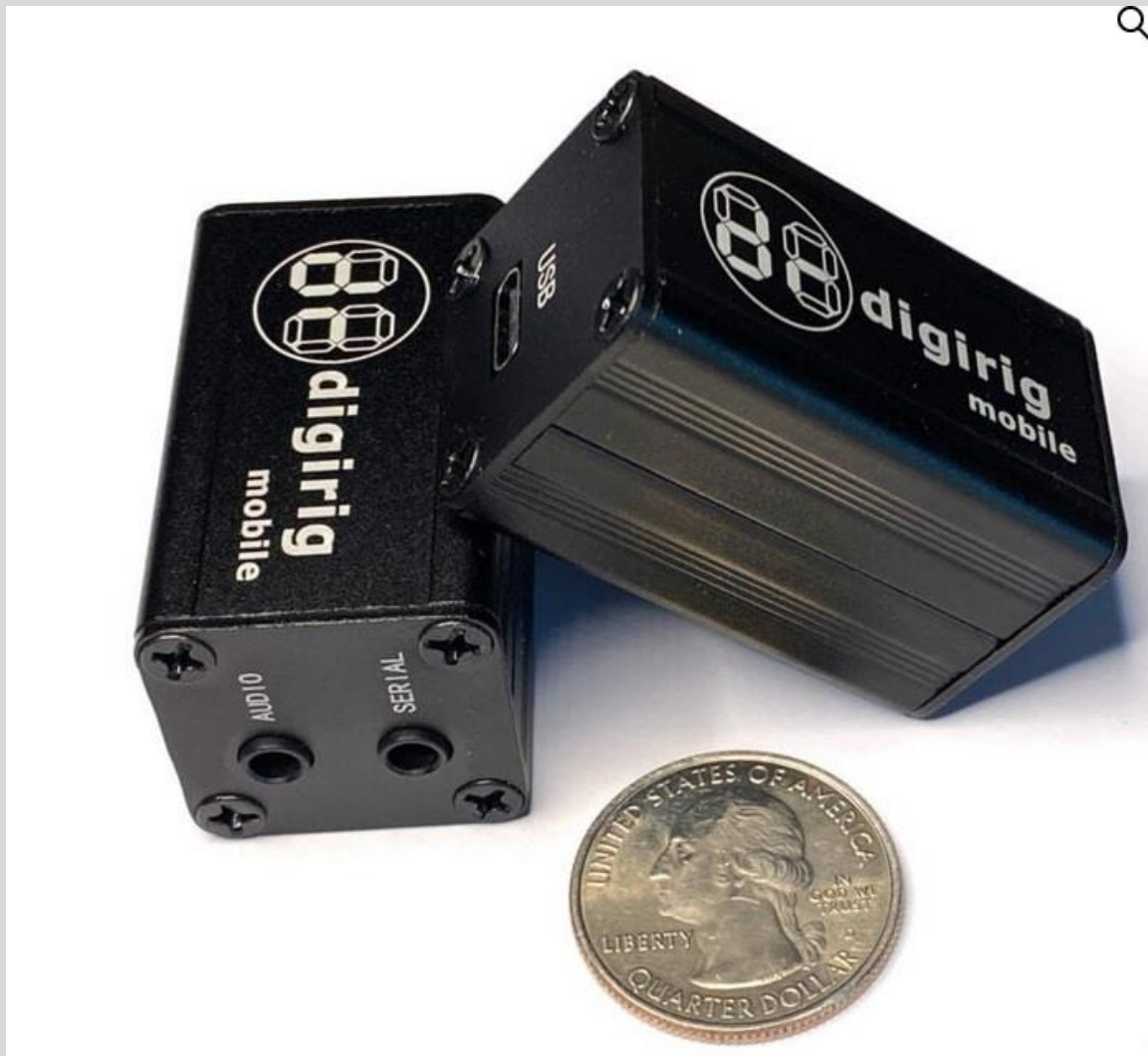


Modern DRA sound card
every feature you might need

DRA-100 Series Black



Ultra small **DigiRig** with serial COM ports for PTT and Tx/RX audio port via 3.5mm TRRS pins
(unique cable sets for variety of radios)



USB sound - getting smaller and smaller
MIC input and HEADPHONE output
VOL control, MONO/STEREO



Tigertronics - Signalink

(no COM port and one channel audio)

Has its own VOX circuit for PTT and Delay (hang time)

Rx and TX front knob audio level adjustments

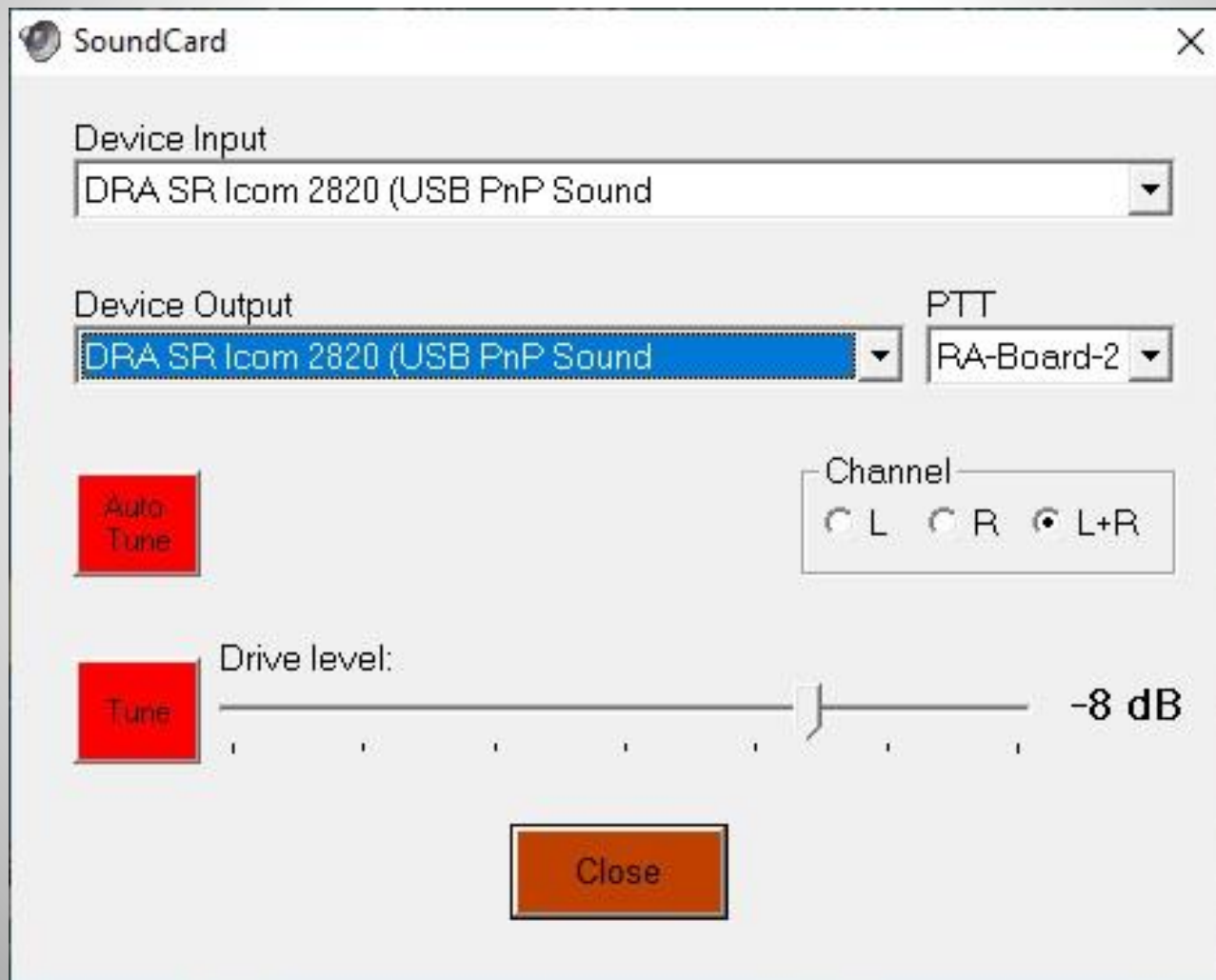


TWO MODEMS

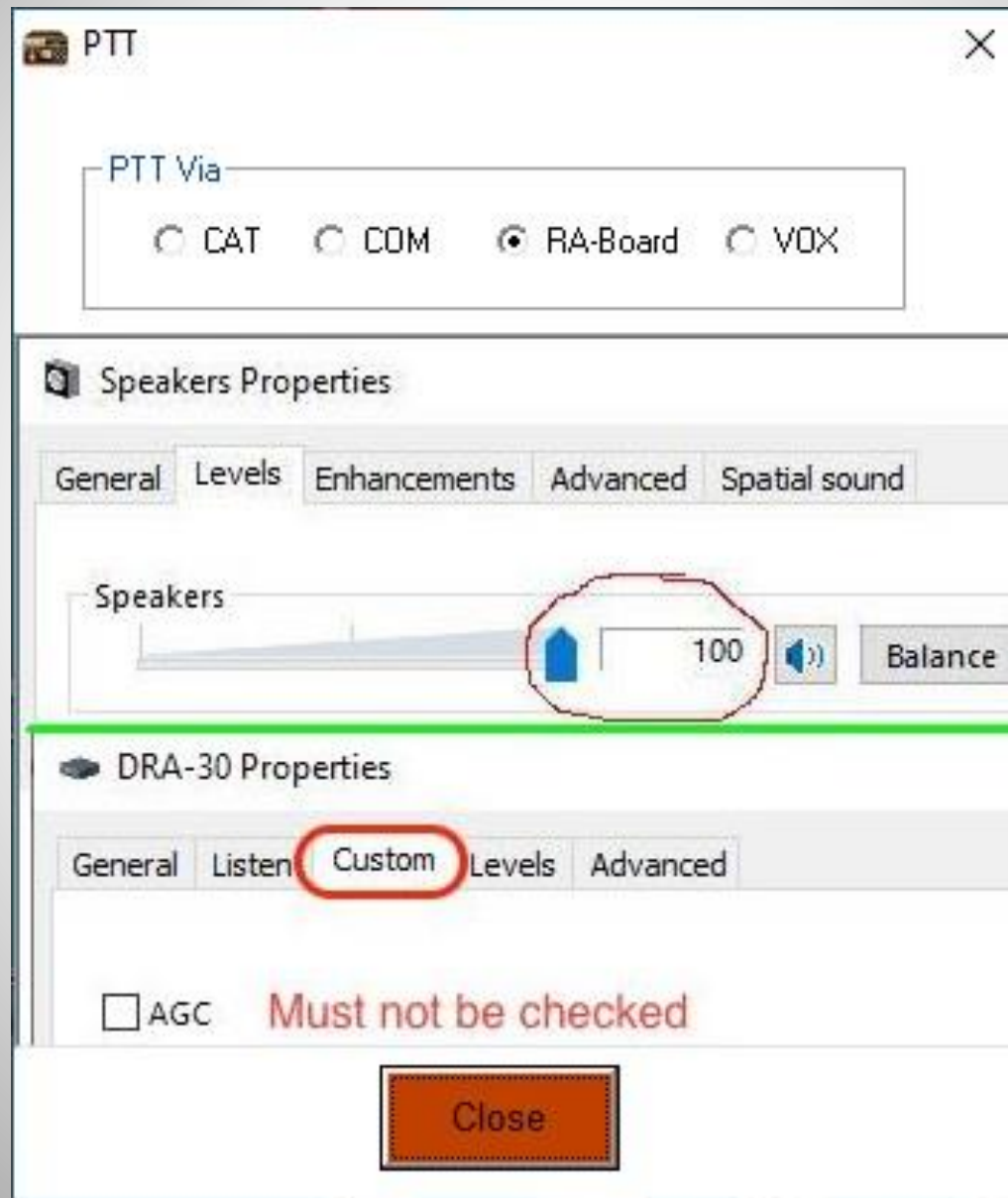
VARA FM used on VHF/UHF

VARA HF used on SSB

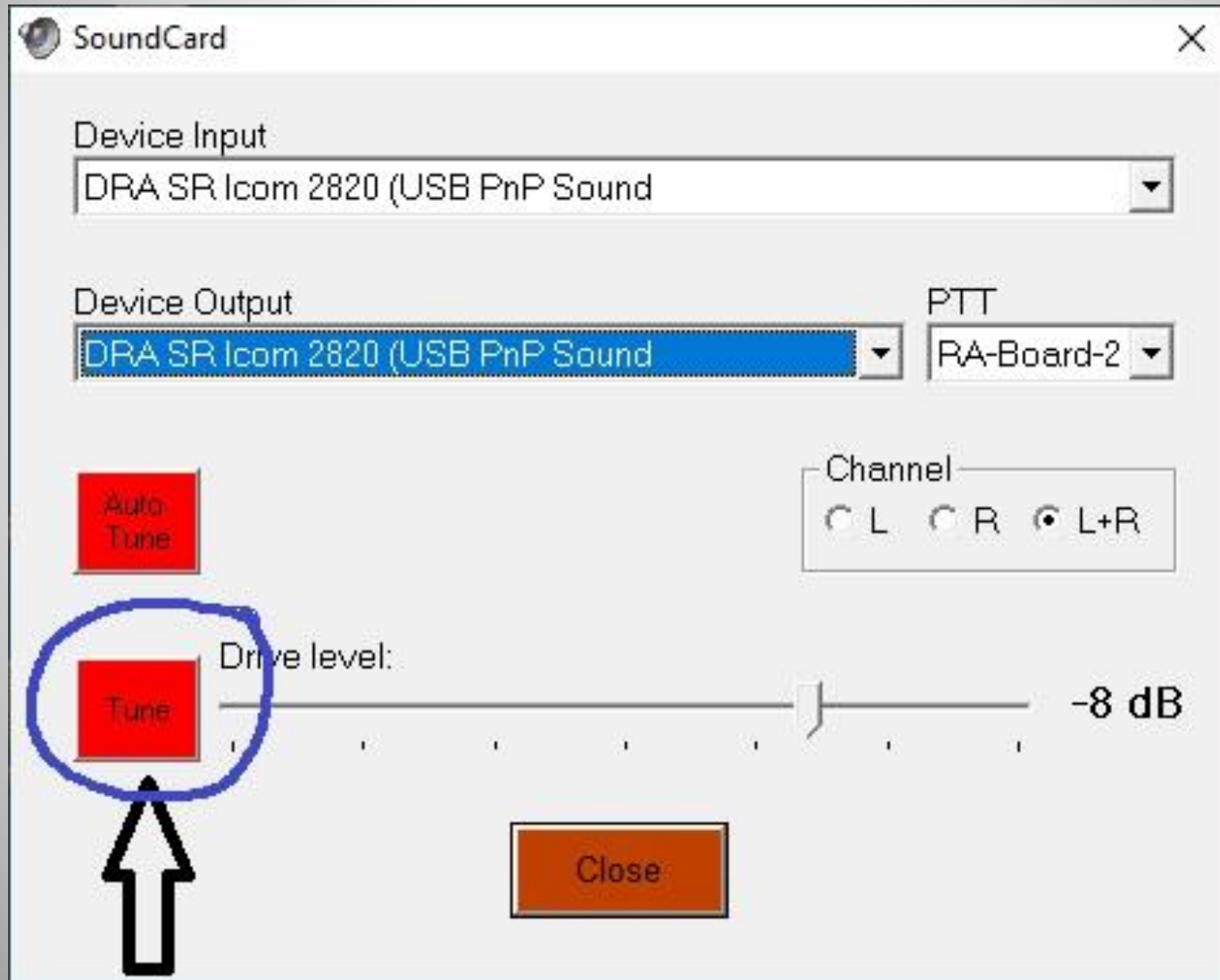
Identify your sound card and PTT method
Set DRIVE level (TX audio)
Select audio channel: L / R / L+R



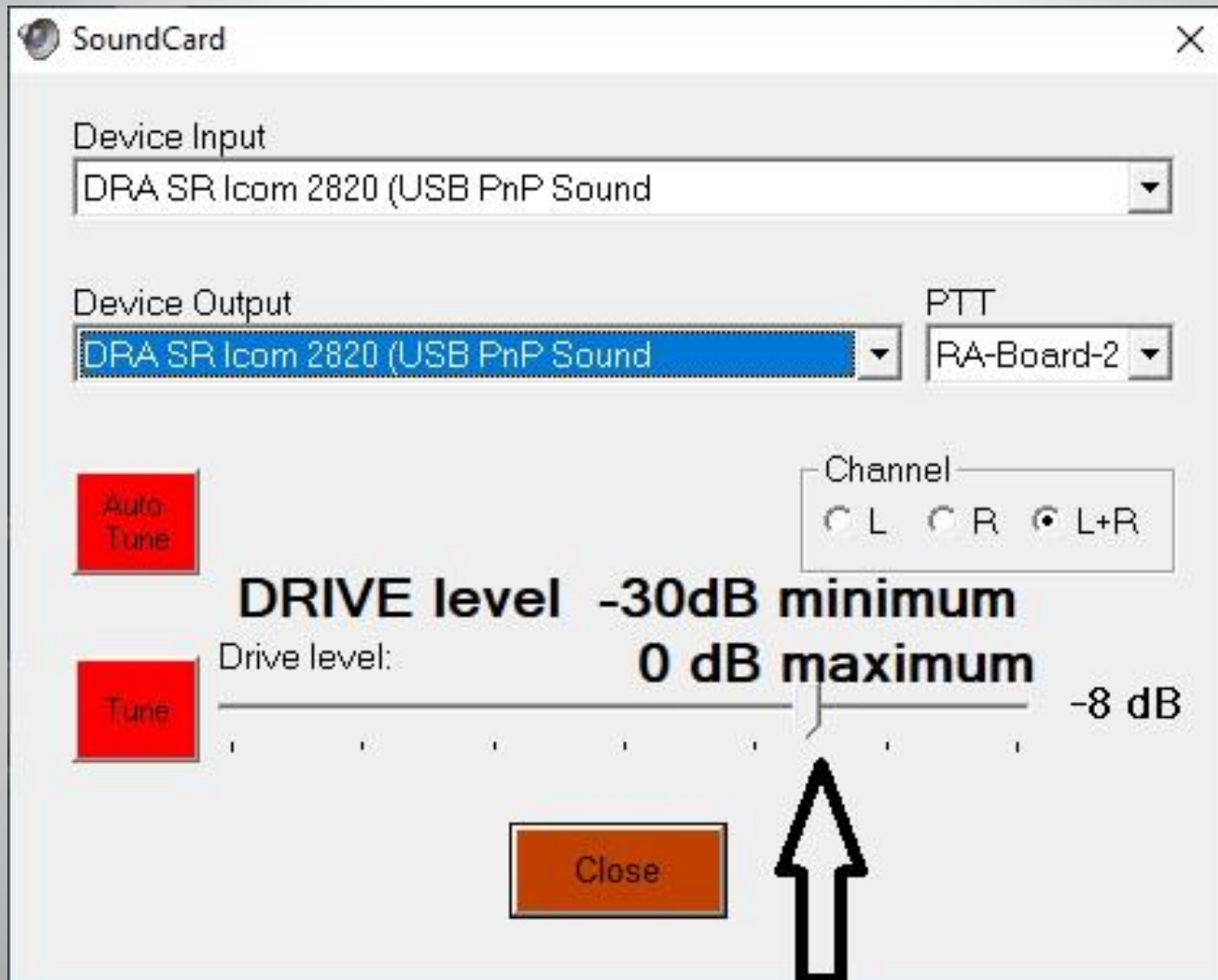
Pick method for SEND (PTT)
four options - you choose based on your radio



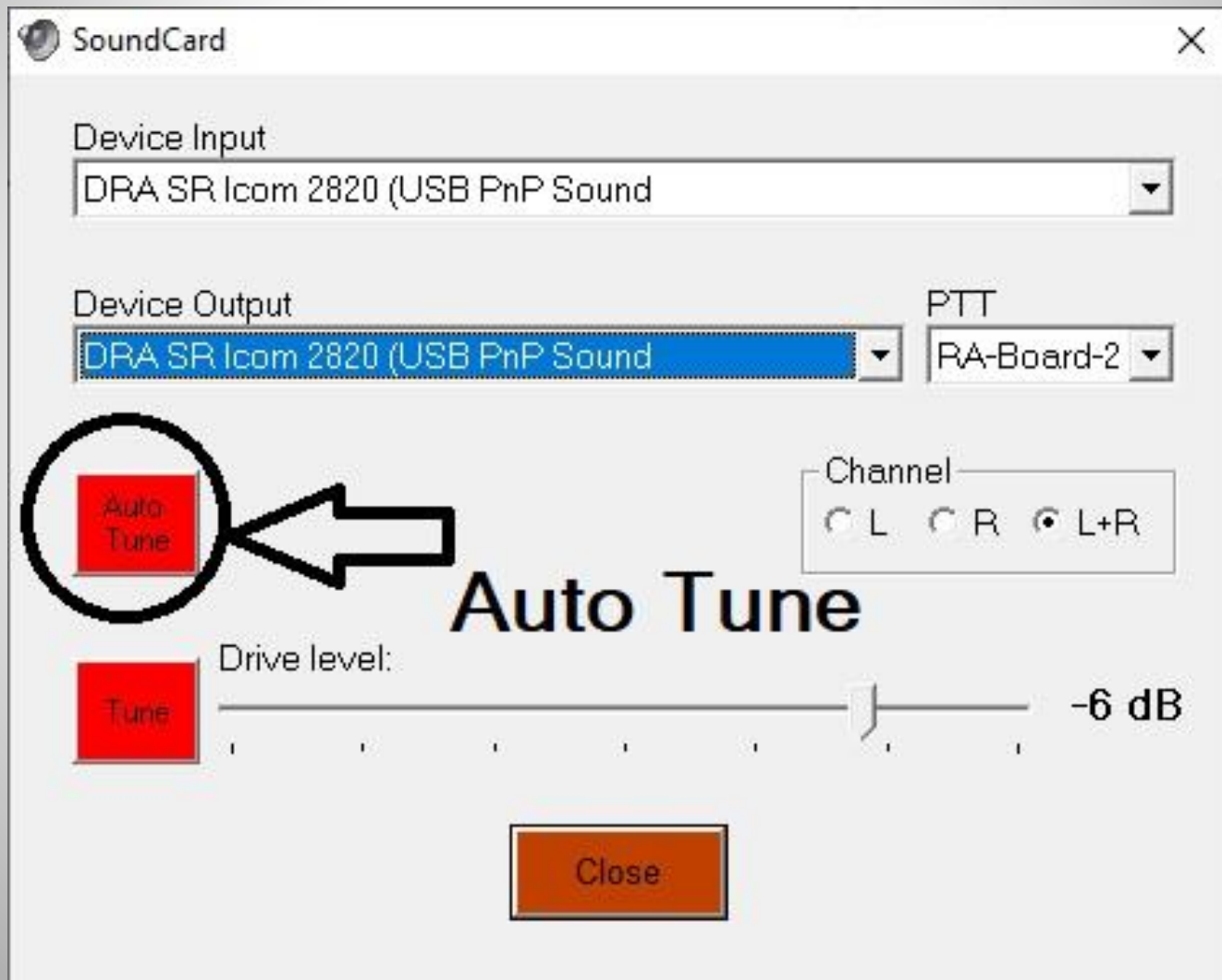
TUNE button
engages PTT and send a 1500 Hz audio tone



DRIVE LEVEL: set TX audio amplitude
wide range 0 to -30 dB



Auto Tune - feature on FM only



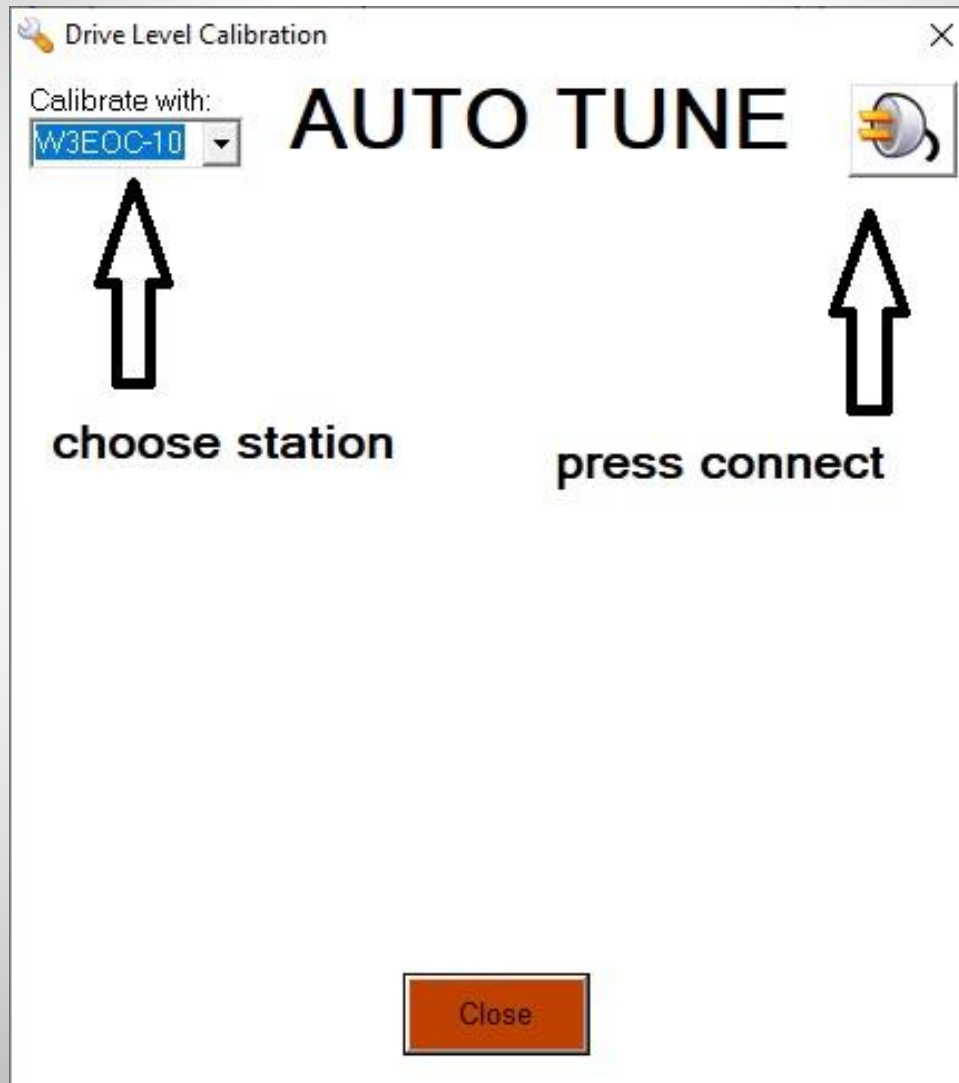
How does autotune work on FM

Sound card sends out 10 levels of TX audio

Receiving station measures S/N of each level

Receiving stations sends info back to sending station and suggests changes as needed to RX and TX audio of sending station

On FM only AUTO TUNE to EACH station



Result: TX Drive Level is automatically set
VU meter shows Receive Audio level

Drive Level Calibration

Calibrate with:
N3MEL

Drive Level: +0 dB

S/N: +19.3 dB

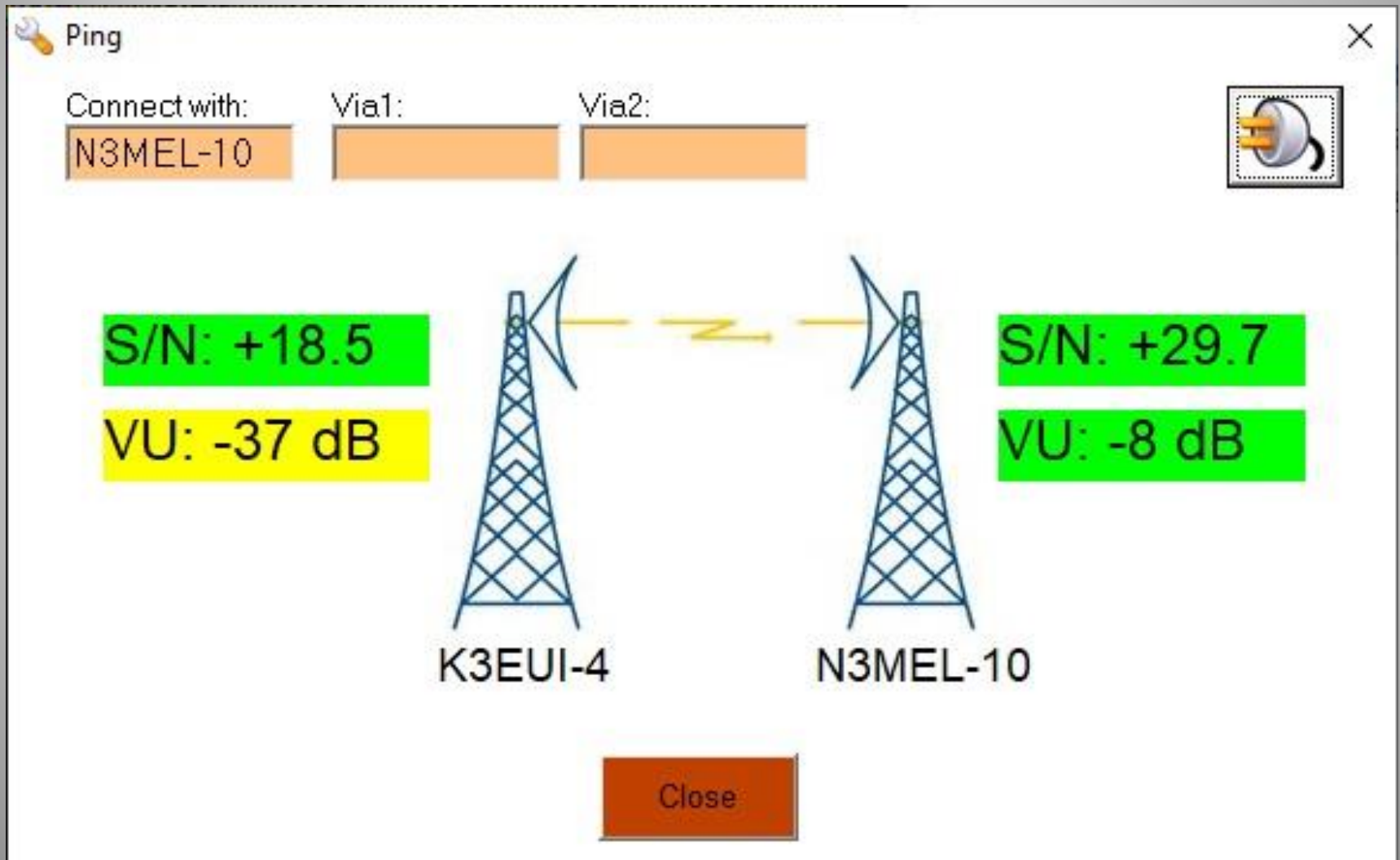
VU: -25 dB



Turn the R14 trimpot to the right

Close

PING on FM shows S/N and Rx audio VU
on both sides of the link



Digipeaters on FM

Can be used to produce links over larger distances with up to 2 digipeaters

You can set up your own station as a digi

We use -4 after your call in Chester Cty

i.e. K3eui-4

Enter your call -4 to set up your station as a "digipeater"

VARA Setup 192.168.1.155

TCP Ports:

Command: 8300

Data: 8301

KISS: 8100

FM System: **NARROW**

Digipeater: **K3EUI-4**

☒ Allow VARA check for updates

☒ KISS interface ☐ SysLog

VARA Licenses

Callsign:	Registration Key:
K3EUI	XXXXXXXXXXXXXXXXXXXX

Compatible with Signalink USB

SQL

DATA OUT 9600bps

GND

DATA

DATA OUT 1200bps

PTT

DATA IN

to PC input

from PC output

* 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

VARA FM

options are "narrow" or "wide"

VARA Setup 192.168.1.155

TCP Ports:

Command: 8300

Data: 8301

KISS: 8100

FM System: **NARROW**

Digipeater: K3EUI-4

Retries: 3

☒ Allow VARA check for updates

☒ KISS interface ☐ SysLog

VARA Licenses

Callsign:	Registration Key:
K3EUI	XXXXXXXXXXXXXXXXXXXX

Compatible with Signalink USB

SQL

DATA OUT 9600bps

GND

DATA

DATA OUT 1200bps

PTT

DATA IN

to PC input

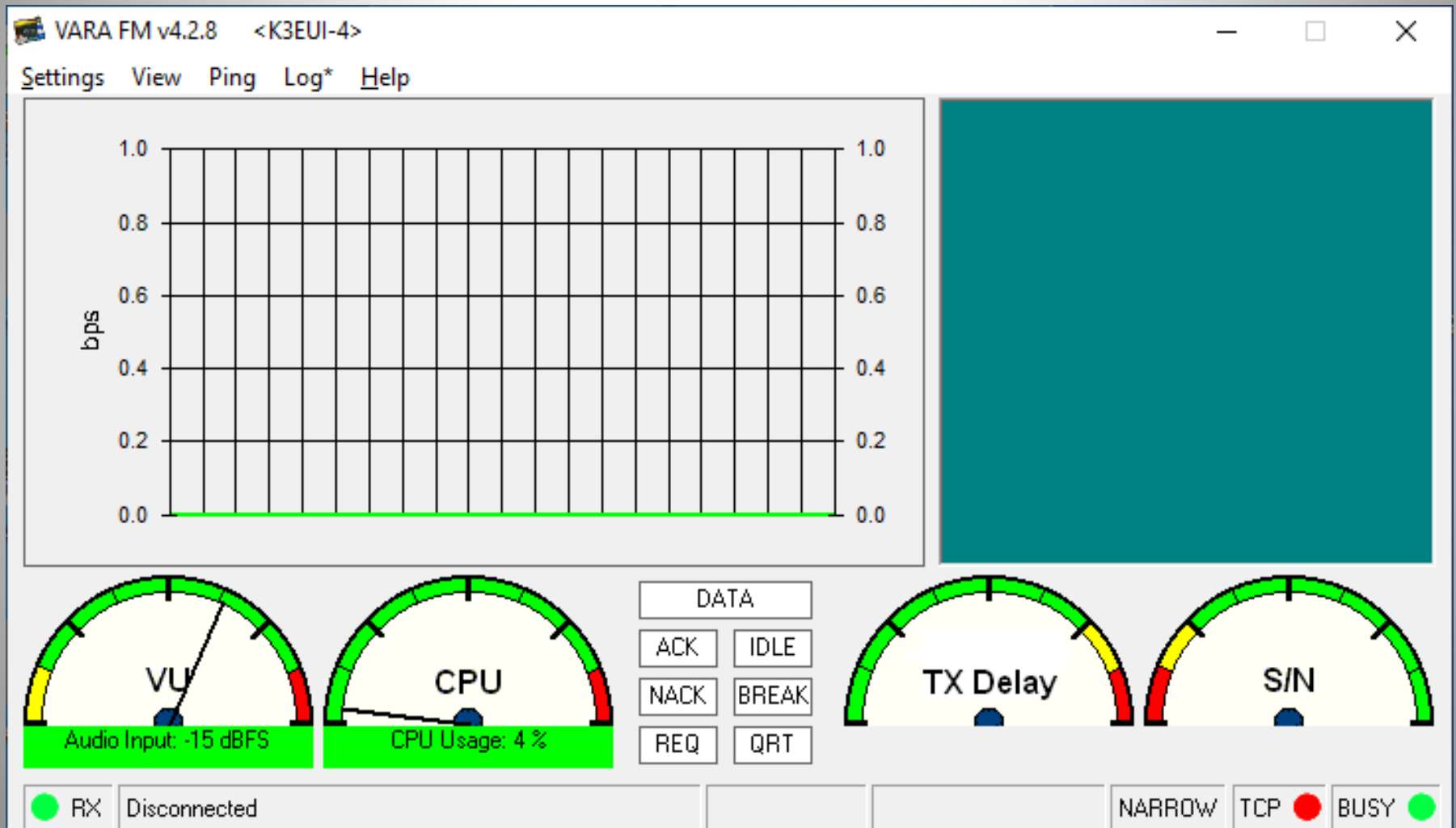
from PC output

* 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

VARA FM (VHF/UHF) can operate
Narrow (<3 kHz) or Wide (<6 kHz)



VARA FM 4.0 VHF/UHF

WIDE BW (6 KHz) needs 9600 baud TX/RX pins

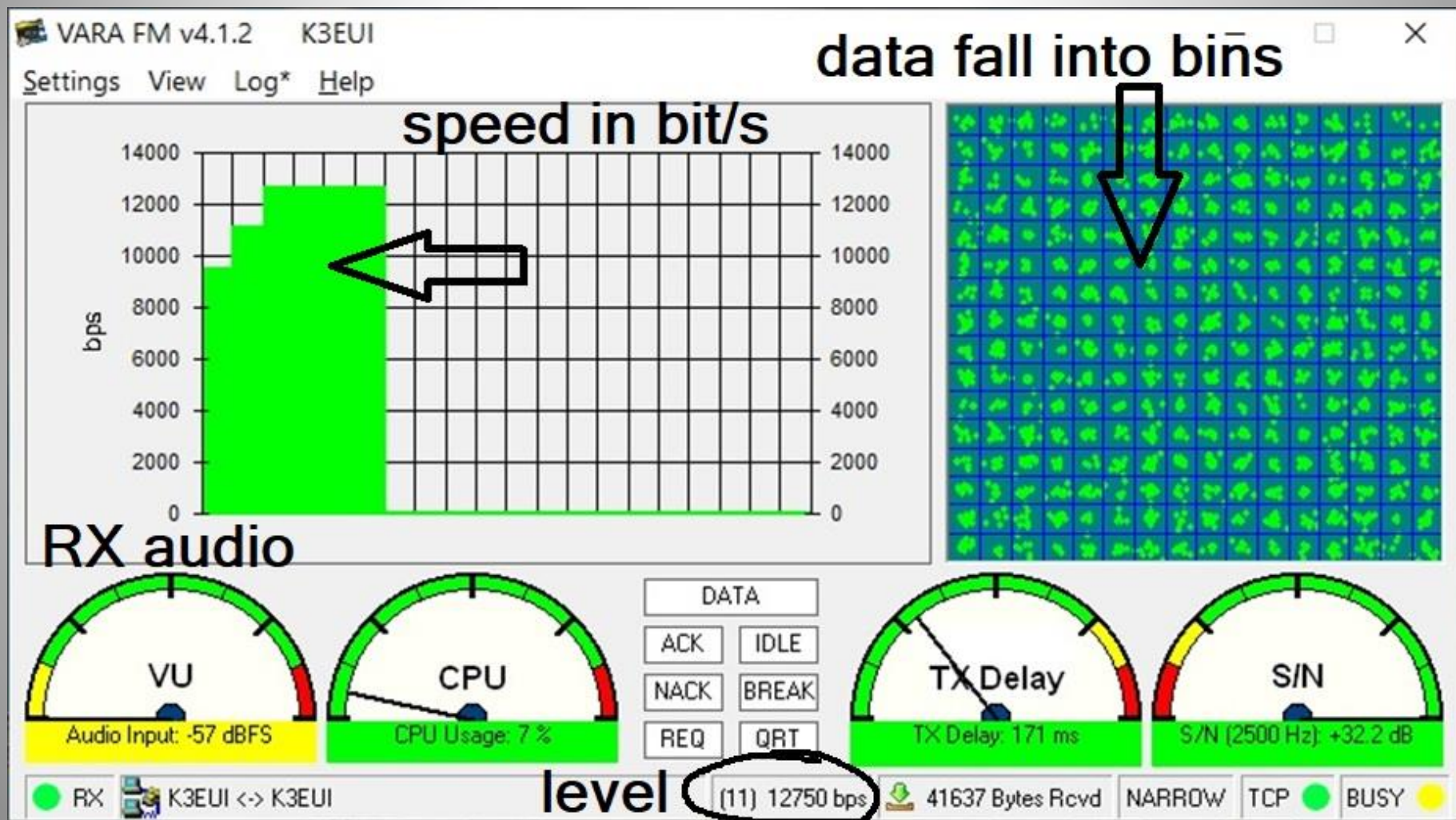
NARROW BW (<3 kHz) uses 1200 baud pins
similar to speaker and microphone audio paths

VARA FM v4.0.0
Speed Levels

Level	VARA FM WIDE				VARA FM NARROW			
	Symbol Rate	Carriers	Mod.	Net Rate (bps)	Symbol Rate	Carriers	Mod.	Net Rate (bps)
1	42	14	4PSK	566	42	14	4PSK	549
2	42	29	4PSK	1188	42	29	4PSK	1181
3	42	58	4PSK	2390	42	58	4PSK	2390
4	42	98	4PSK	4040	42	58	4PSK	3188
5	42	98	4PSK	5387	42	58	8QAM	4252
6	42	98	8QAM	7185	42	58	16QAM	5668
7	42	98	16QAM	9580	42	58	32QAM	7087
8	42	116	16QAM	11340	42	58	64QAM	8505
9	42	116	32QAM	14144	42	58	64QAM	9567
10	42	116	64QAM	16932	42	58	128QAM	11162
11	42	116	64QAM	19003	42	58	256QAM	12750
12	42	116	128QAM	22102				
13	42	116	256QAM	25210				

Busy Rx Window VARA FM

note speed level 11 = 12,750 bit/second



VARA on HF SSB

You must choose the client app

VARA chat or VARA Terminal

VAR AC

Winlink Express

VARA on HF SSB

HF comms depends on propagation

Local 10-200 miles 80 meter

Regional 100-600 miles: 40 meters

Greater distances: 20 meters

VARA HF Gateways (using USB)

list call, frequency, mode, distance

HF Channel Selector									
Select Channel Update Via Internet Update Via Radio Map Forecast SFI Exit All RMS									
Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (km)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
KB3PCY	3593.500	V2300	FM29EV	00-23	PUBLIC	5	180	99	99
W2KBF	3597.500	V2300	FM29IR	00-23	PUBLIC	37	129	99	99
N3MEL-11	7104.700	V500	FM29DX	13-22	PUBLIC	8	303	96	96
K3FZT	7039.500	V500	FN20JA	11-23	PUBLIC	37	075	96	96
KB3PCY	7107.250	V500	FM29EV	00-23	PUBLIC	5	180	96	96
W2KBF	7101.500	V2300	FM29IR	00-23	PUBLIC	37	129	96	96
W2MMD	7101.500	V2300	FM29JR	00-23	PUBLIC	42	123	96	96
W3PLG	7107.000	V500	FN20FM	00-23	PUBLIC	65	006	96	96
K3FZT	10146.500	V2750	FN20JA	11-23	PUBLIC	37	075	94	94
N3MEL-11	14108.000	V500	FM29DX	13-22	PUBLIC	8	303	92	92
K3FZT	14113.500	V500	FN20JA	10-19	PUBLIC	37	075	92	92
KB3PCY	14109.000	V2300	FM29EV	00-23	PUBLIC	5	180	92	92
AC8NP	7101.500	V2300	EN81JC	00-23	PUBLIC	653	284	77	53
K4BLA	7090.800	V500	FM04PG	00-23	PUBLIC	686	204	76	49
KQ4CAA	7102.500	V500	FM05LD	00-23	PUBLIC	611	211	76	53
VA3LDN	7085.000	V2300	EN93KA	00-23	PUBLIC	572	309	75	53

VARA HF Winlink "Gateways" allow internet access all over world



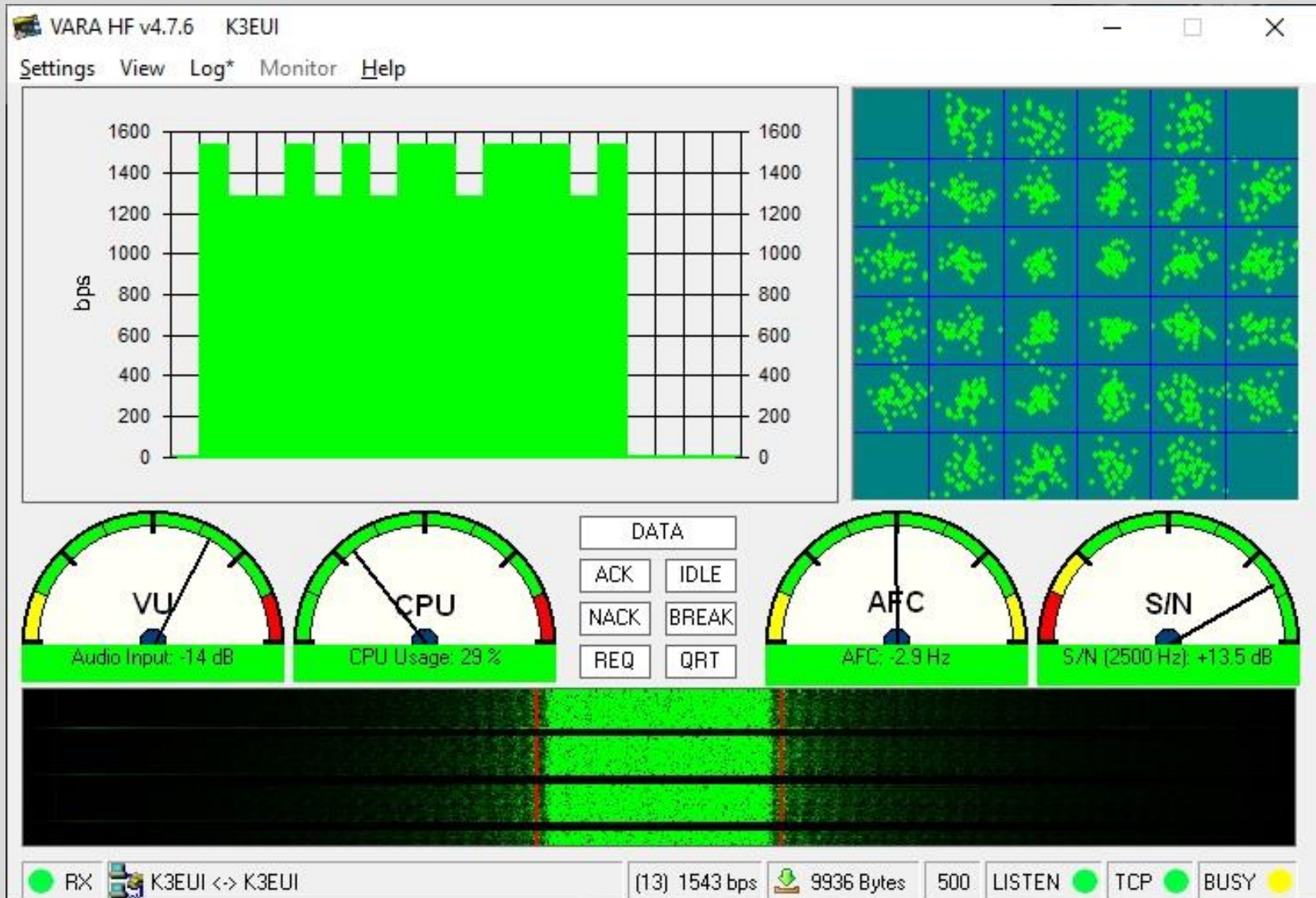
VARA HF bandwidth options and speeds

500 Hz and 2300 Hz

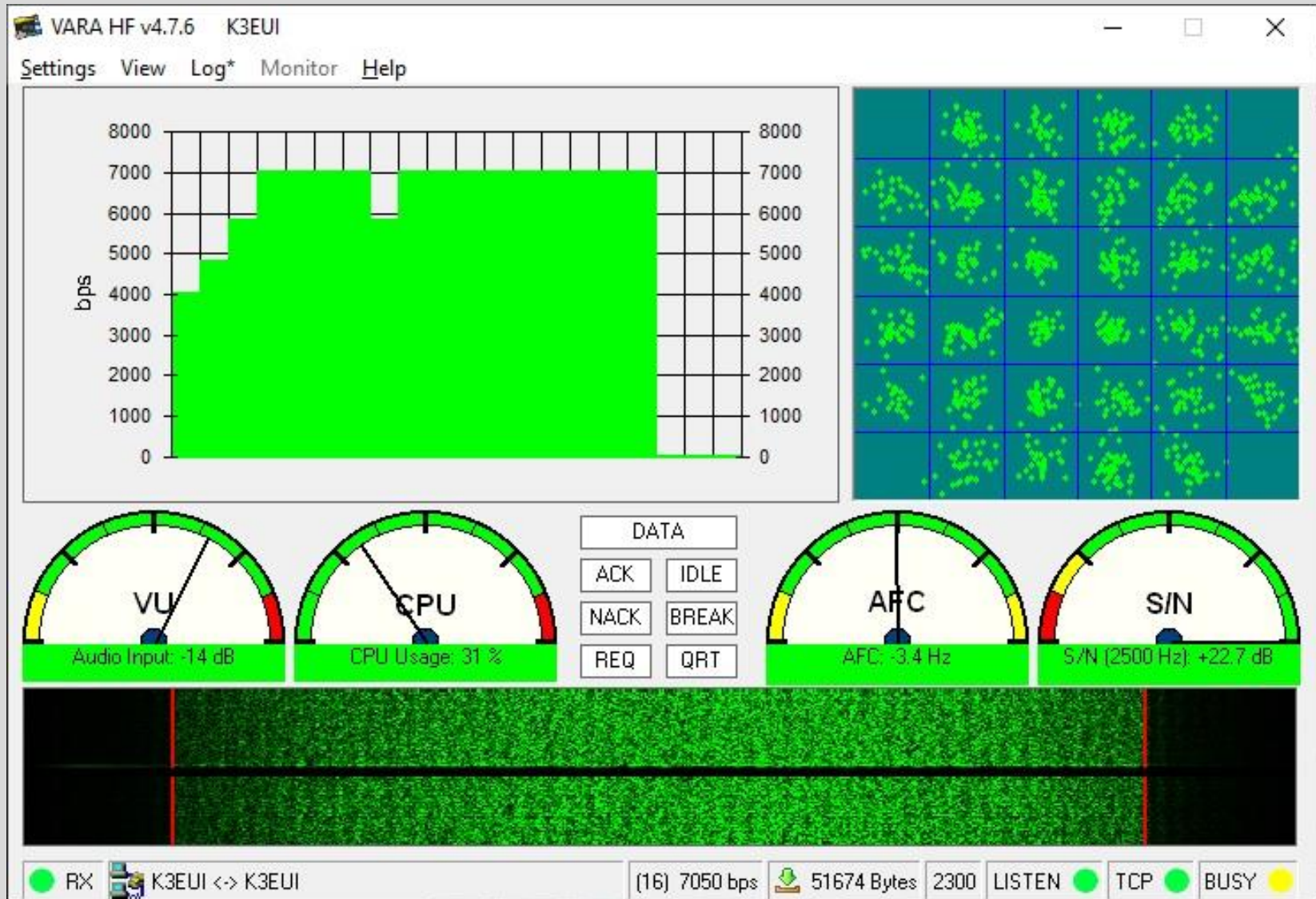
VARA HF v4.0.0 Speed Levels

Level	VARA HF 2300				VARA HF 500			
	Symbol Rate	Carriers	Mod.	Net Rate (bps)	Symbol Rate	Carriers	Mod.	Net Rate (bps)
1	23	32	FSK	18	23	11	FSK	18
2	47	16	FSK	41	47	11	FSK	41
3	47	16	FSK	82	47	11	FSK	61
4	94	16	FSK	175	94	2	BPSK	88
5	94	3	4PSK	270	94	2	4PSK	177
6	94	4	4PSK	363	94	3	4PSK	270
7	94	6	4PSK	549	42	11	4PSK	441
8	94	8	4PSK	735	42	11	4PSK	588
9	94	10	4PSK	922	42	11	4PSK	705
10	42	49	4PSK	2011	42	11	8PSK	884
11	42	49	4PSK	2682	42	11	8PSK	1060
12	42	49	4PSK	3219	42	11	16QAM	1286
13	42	49	8PSK	4025	42	11	32QAM	1543
14	42	49	8PSK	4830				
15	42	49	16QAM	5872				
16	42	49	32QAM	7050				

VARA on HF bandwidth set to 500 Hz (level 13 = 1543 bit/second)

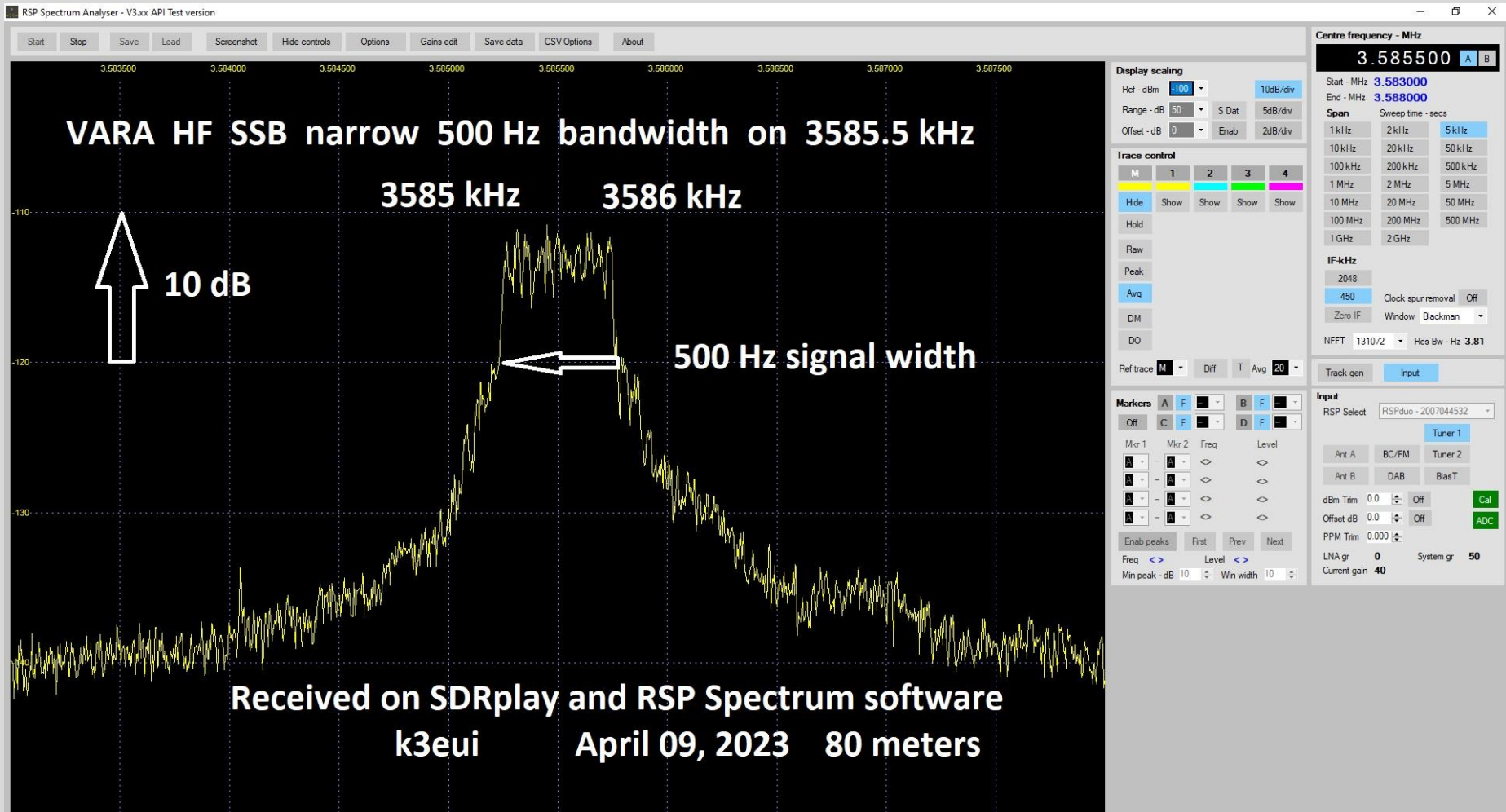


VARA HF set to higher bandwidth 2300 Hz
higher data rates: level 16 => 7050 bit/s

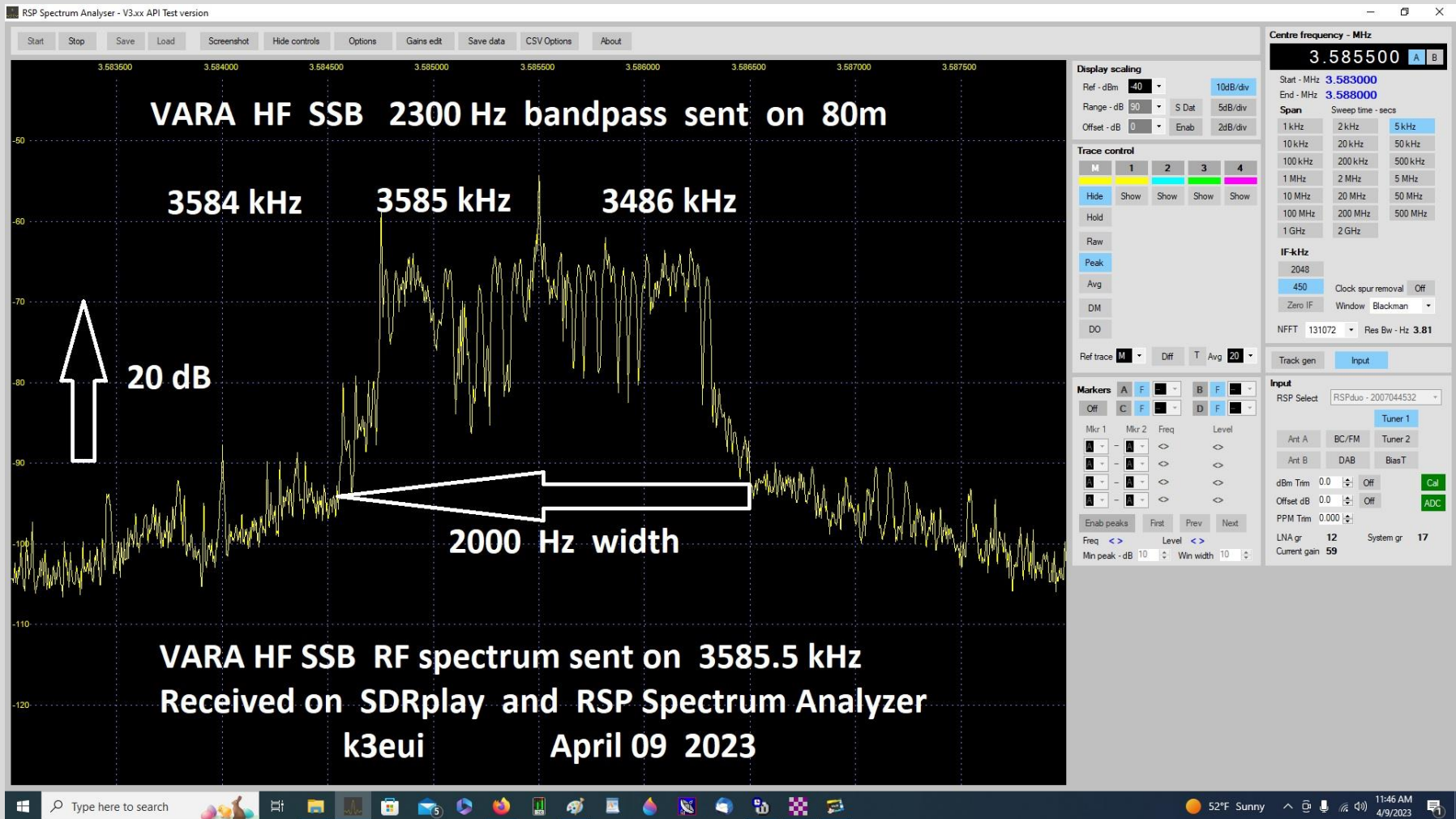


What does VARA modulation
look like on SSB and FM?

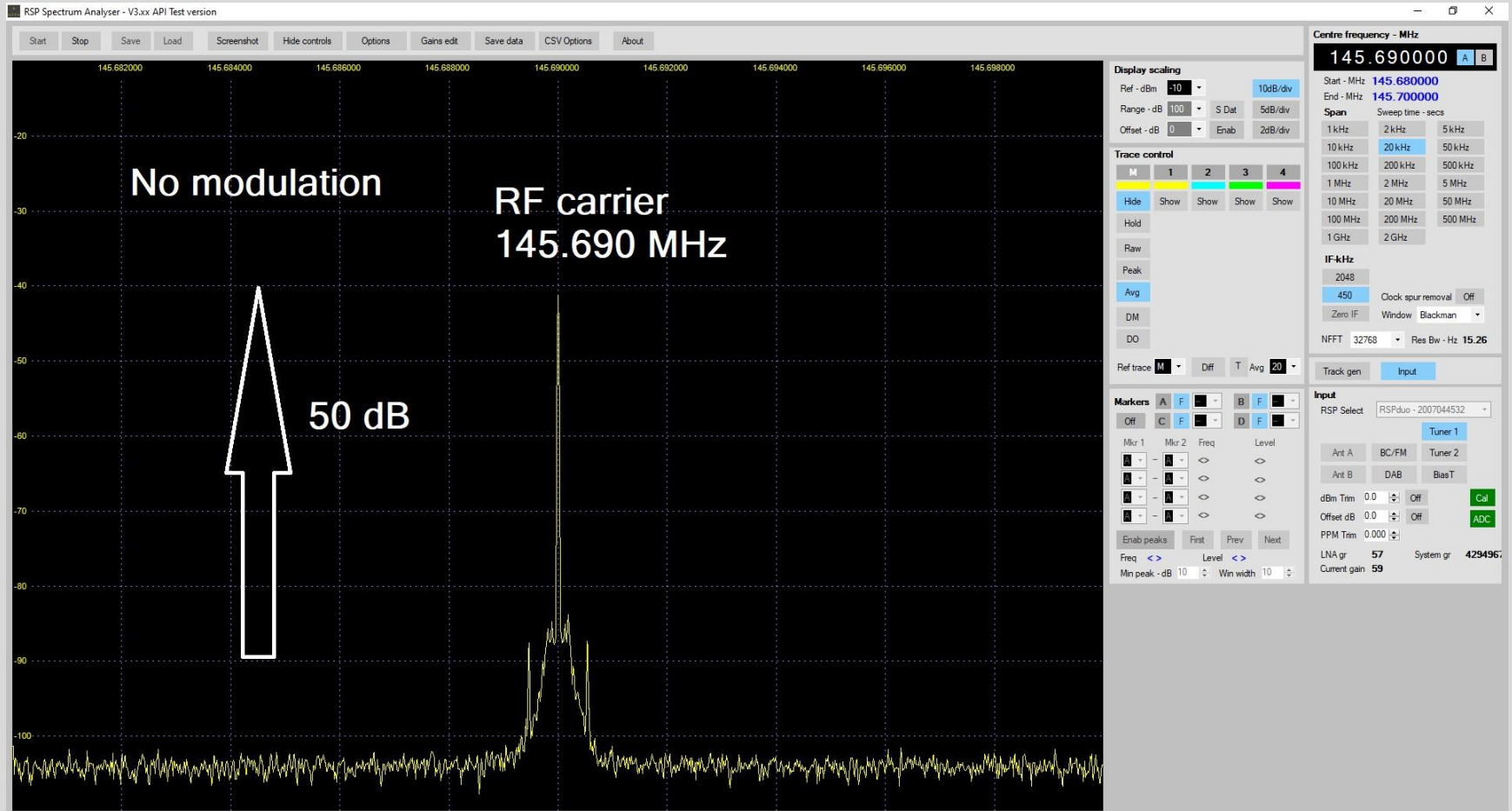
VARA HF (SSB) with 500Hz BW



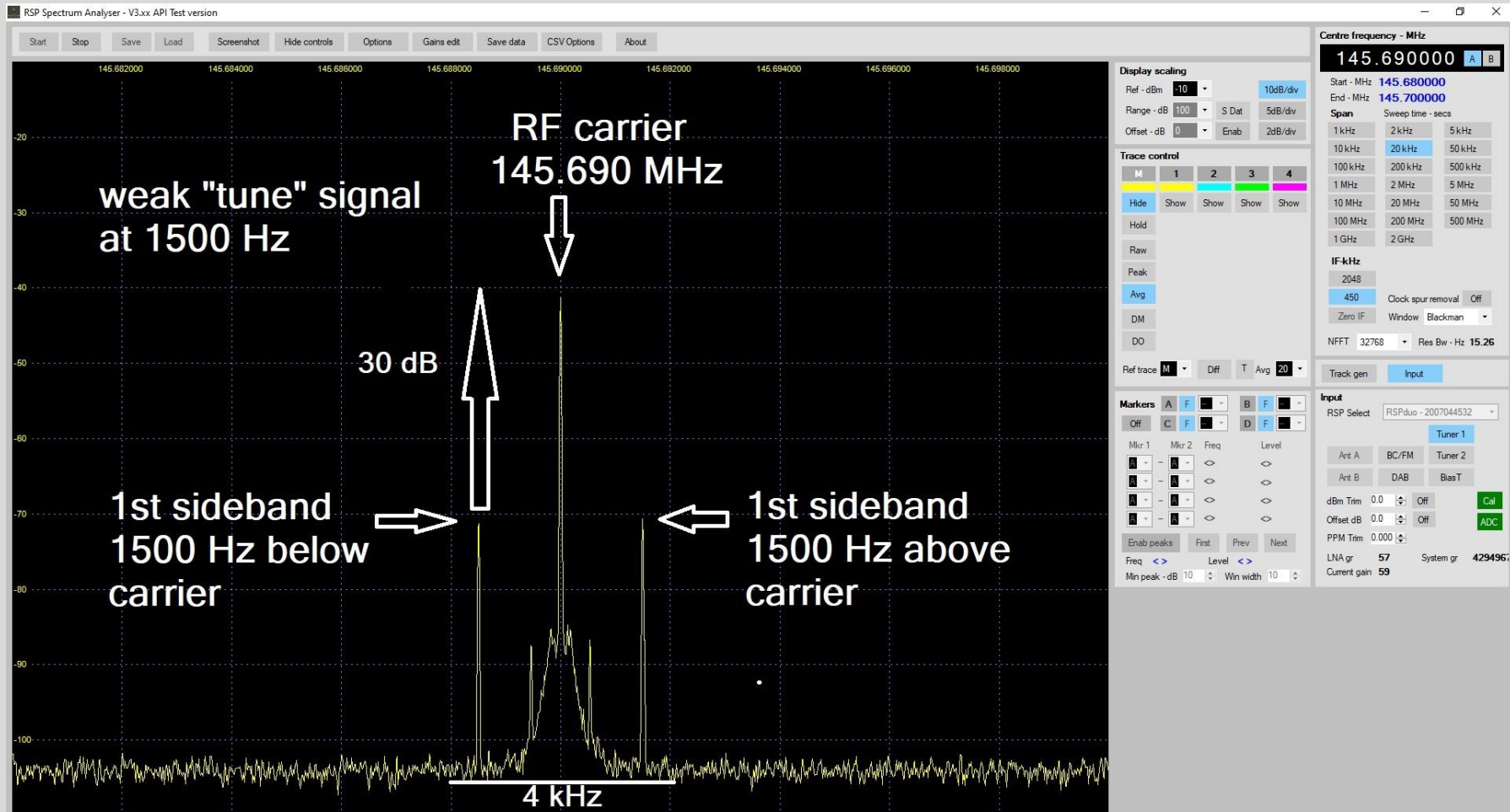
VARA HF at 2300 Hz BW



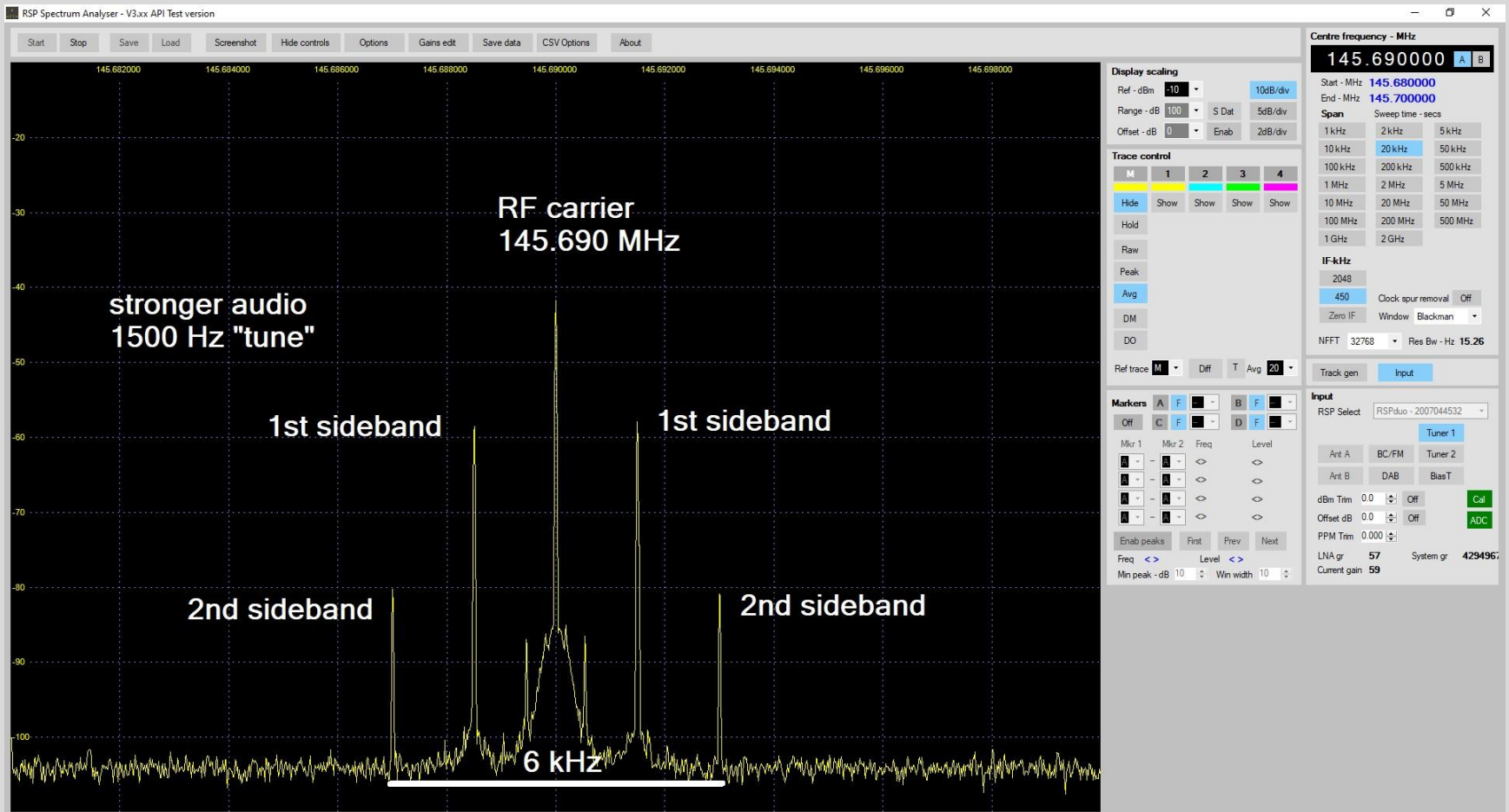
FM carrier with no modulation



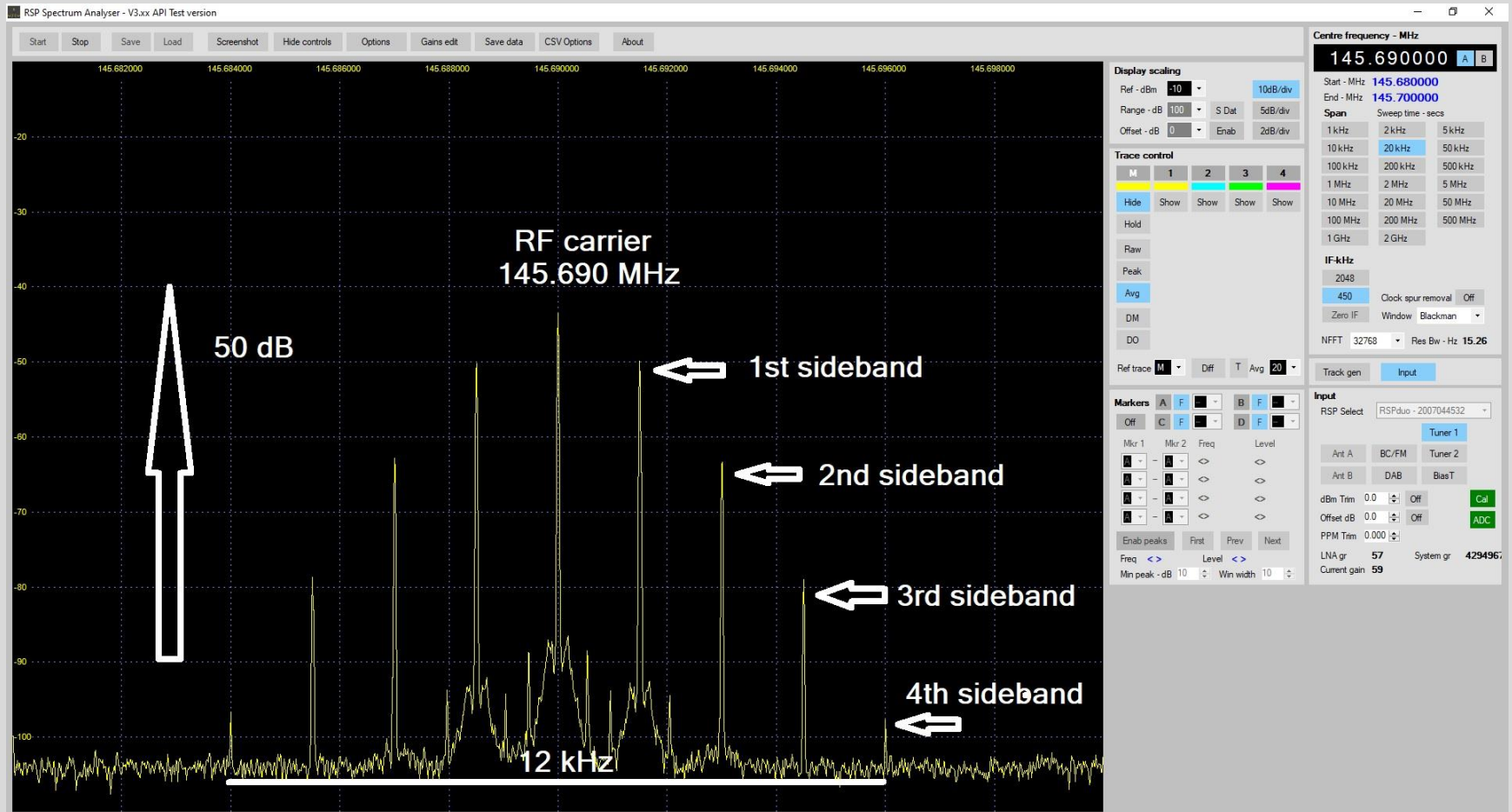
FM Very weak modulation (barely audible)
1500 Hz "tune" audio 30 dB below carrier
RF bandwidth about 4 kHz



FM tune audible but not loud modulation
note presence of 1st and 2nd sidebands
increasing bandwidth to 6 kHz



As FM modulation level increases
number and amplitude of sidebands increases
bandwidth also increases now to 12 kHz



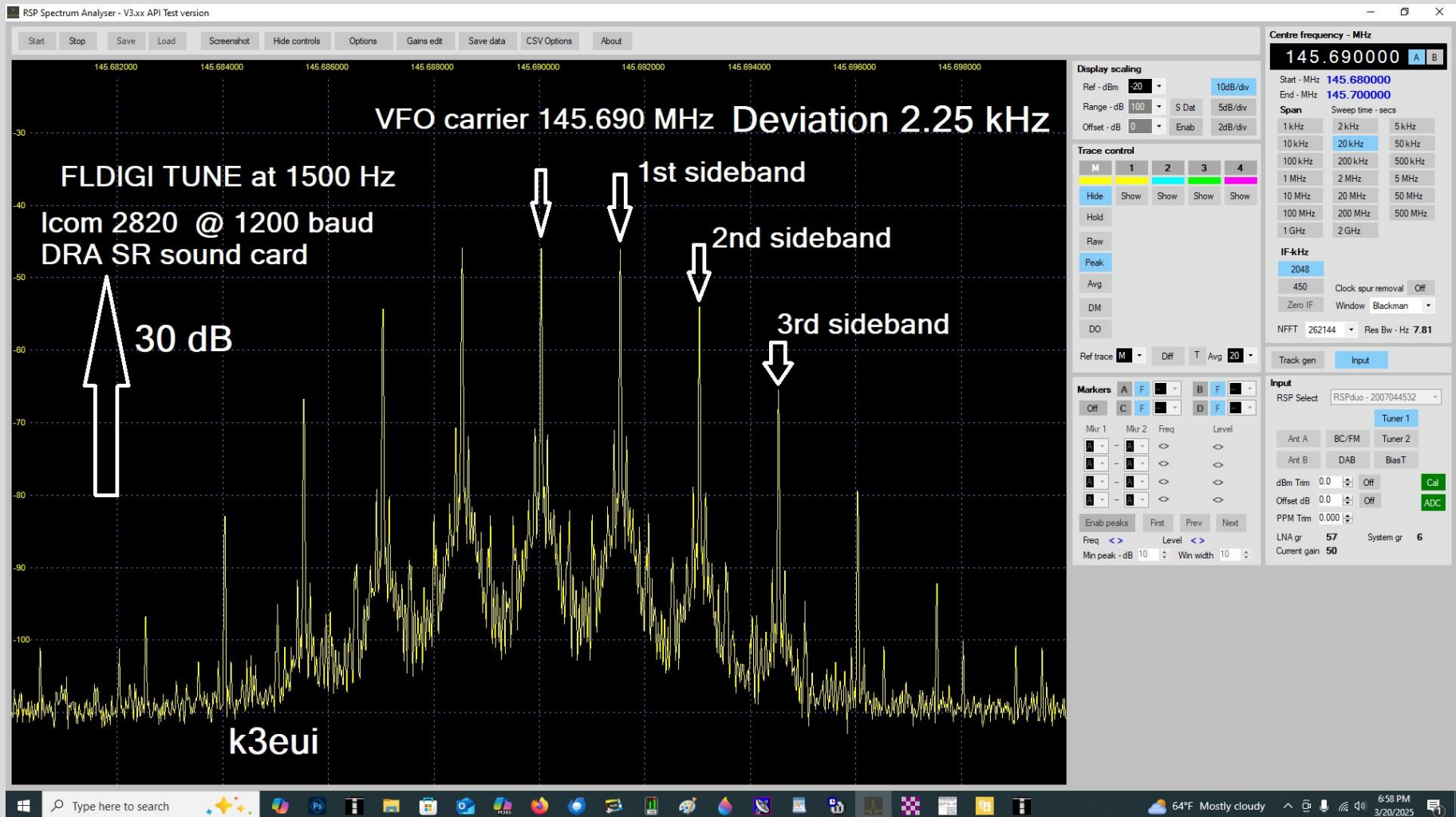
What is ideal level of TX audio on an FM radio?

When the deviation of the TX signal is set to about 2 to 3 kHz

When the 1st pair of sidebands has an amplitude equal to the carrier amplitude with a 1500 Hz TUNE signal the modulation "index" is 1.5

$$\text{Deviation} = 1.5 \times 1.5 \text{ kHz} = 2.25 \text{ kHz}$$

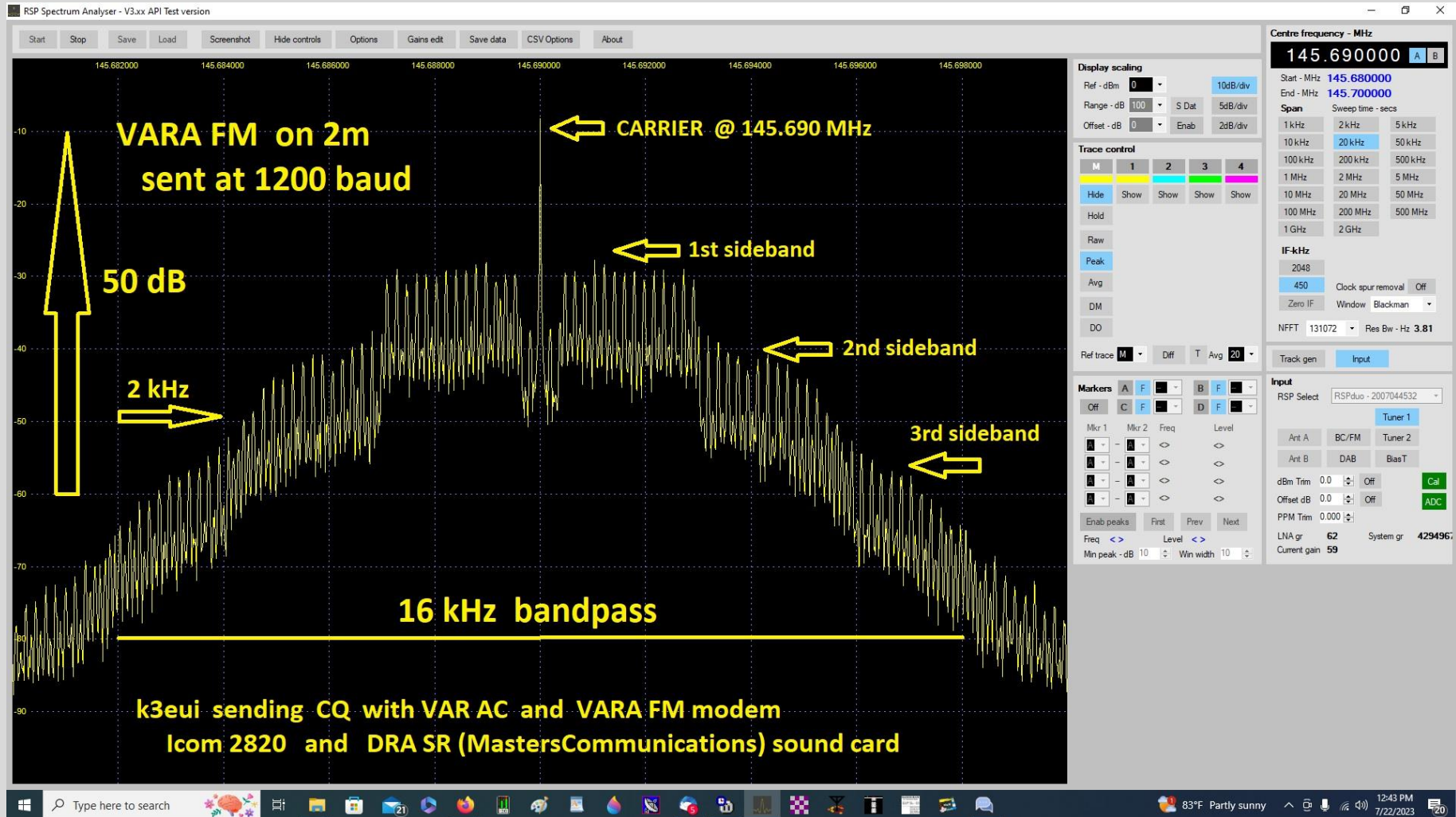
FM modulated by a single pitch TUNE
sine wave at 1500 Hz
multiple sidebands and larger bandwidth (**16 kHz**)



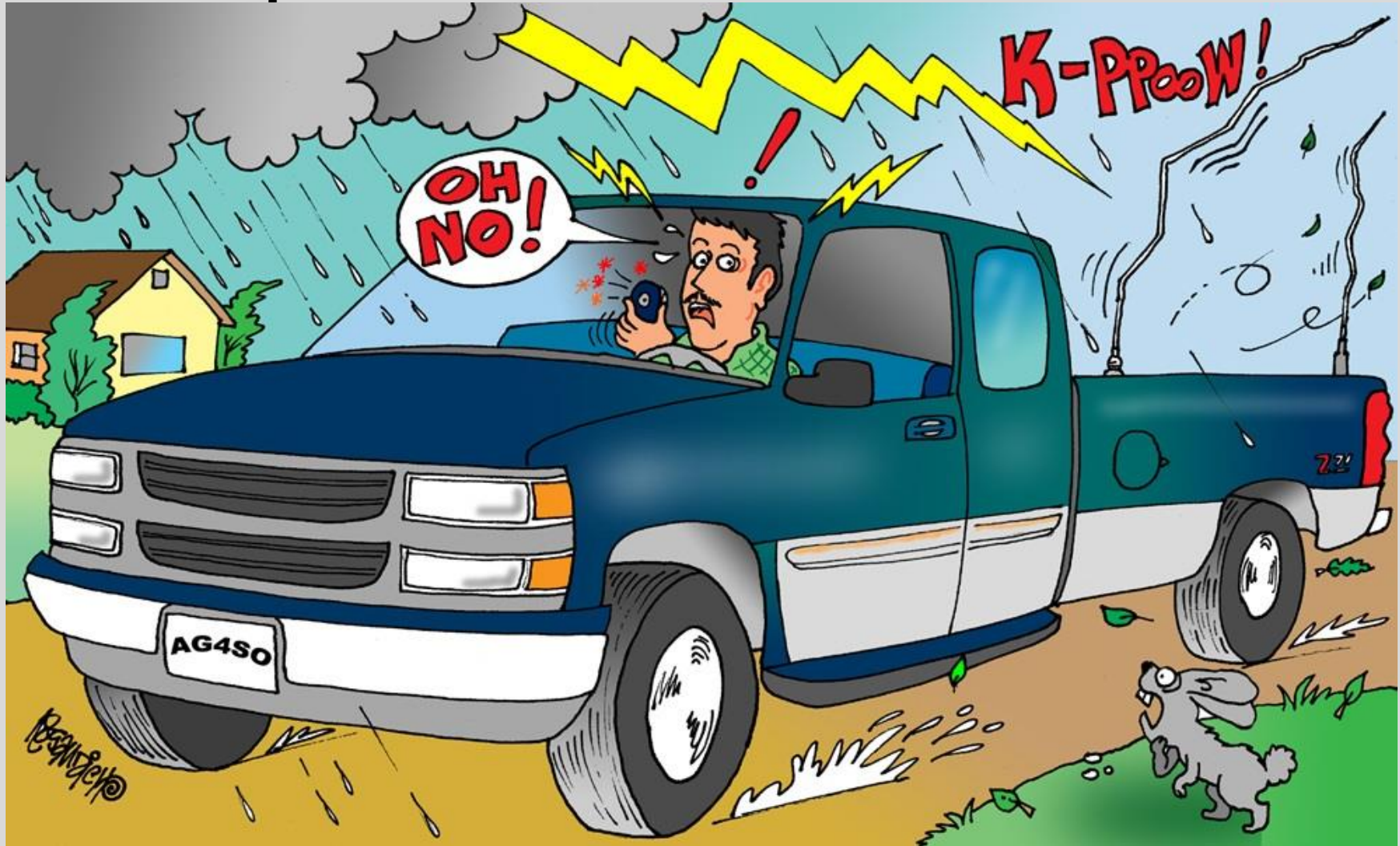
Once the TX audio
is set to ideal with a TUNE

What would a VARA FM
data signal look like?

VARA FM signal with ideal level of TX audio



Sometimes we need to set up
portable for EMCOMM



Complete HF / VHF / UHF station
Icom 706MIIG (HF/VHF/UHF) SSB-FM
USB-serial converter COM port PTT and CAT (rig control)
Signalink usb audio VARA modes HF antenna tuner
Pactor TNC and VHF PACKET



VARA FM and Winlink

Messages can be sent
"peer-to-peer"
or
to a "Gateway" with internet
connection

VHF VARA FM GATEWAYS on 2m band

note call, frequency, mode, grid

Vara FM Channel Selector						
Exit Select Channel Update Table Via Internet Update Table Via Radio						
Stations found within 300 kilometers of your grid square.						
Callsign	Frequency (MHz)	Channel Width	Grid Square	Group	Distance (km)	Bearing (Degrees)
KB3PCY-10	145.670	Wide	FM29EV	PUBLIC	004	180
N3MEL-10	145.670	Wide	FM29DX	PUBLIC	008	303
W3CTK-10	145.670	Narrow	FN20HA	PUBLIC	023	067
AA3E-10	145.050	Narrow	FN20GD	PUBLIC	027	032
KE3HG-10	145.670	Narrow	FN20EF	PUBLIC	032	000
K3FZT-10	145.670	Wide	FN20JA	PUBLIC	037	076
W2KBF-10	145.030	Narrow	FM29IR	PUBLIC	037	129
W2MMD-3	145.030	Wide	FM29JR	PUBLIC	043	123
WA3WLH-10	145.010	Narrow	FN20FJ	PUBLIC	052	008
KB2HEX-10	145.050	Narrow	FM19WP	PUBLIC	053	233
WA3ERQ-10	145.610	Narrow	FN20MC	PUBLIC	060	072
W3PLG	144.950	Narrow	FN20FM	PUBLIC	065	007
KC2QVT-10	145.010	Wide	FM29PX	PUBLIC	078	086
W2ZQ-10	145.030	Narrow	FN20OG	PUBLIC	080	063
K3ARS-10	145.010	Narrow	FM19WF	PUBLIC	090	209
KC3DSO-10	145.225	Wide	FM28GV	PUBLIC	116	173
KC3DSO-9	145.225	Wide	FM28GV	PUBLIC	116	173

Register your call with Winlink.org

Winlink Express Properties

×

Call Signs

My Callsign: My Password: (Case sensitive) ☐ Show password

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

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

Auxiliary Callsigns and Tactical Addresses

My Grid Square:

Winlink Express registration key:

Service Codes

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

Contact Information (Optional)

Name:

Street address 1:

Street address 2:

City:

State/Province:

Country:

Postal code:

Web Site URL (optional):

Phone number:

Non-Winlink e-mail:

Additional information (optional):

Recalculate HF path quality if SFI changes more than:

Keep logs for weeks. Keep deleted messages for days.

☒ Display list of pending incoming messages prior to download

☒ Warn about connections to stations holding messages

☒ Allow diagnostic information to be sent to the Winlink Development Team

☐ Automatically install field-test (beta) versions of Winlink Express

New Message format Winlink (Gateway) or P2P

Enter a new message

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

From: K3EUI Send as: Winlink Message ☐ Request message receipt Set Defaults

To: NY3J;

Cc: K3EUI;

Subject: TEST American Red Cross - Daily Shelter Report

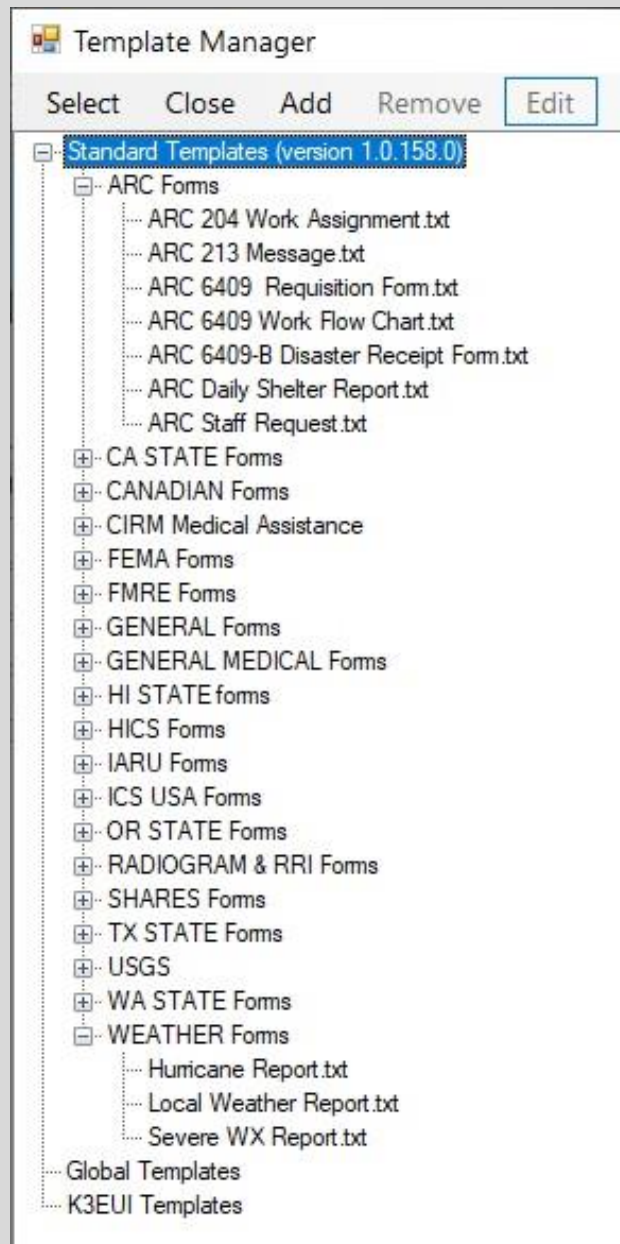
Attach:

THIS IS A DRILL message

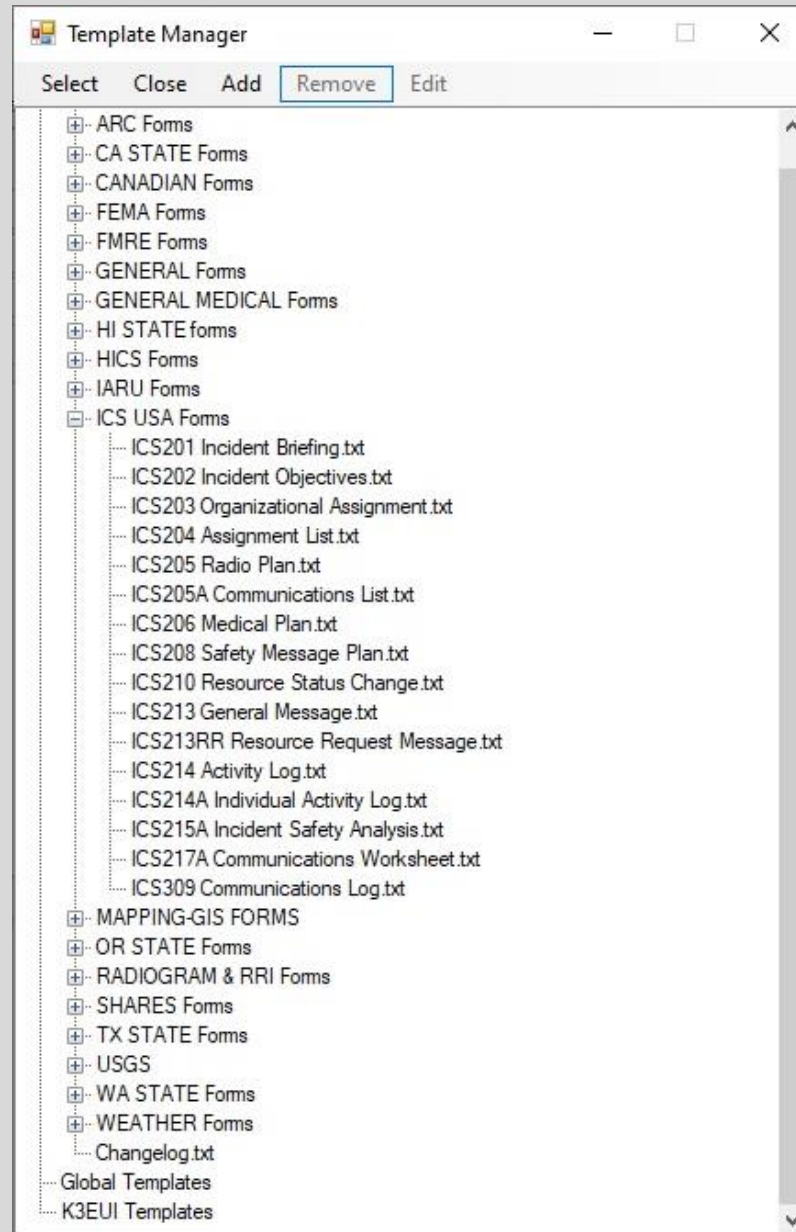
TEST from k3eui to ny3j
July 23, 2021

Connect on 80m SSB on 3584.0 kHz

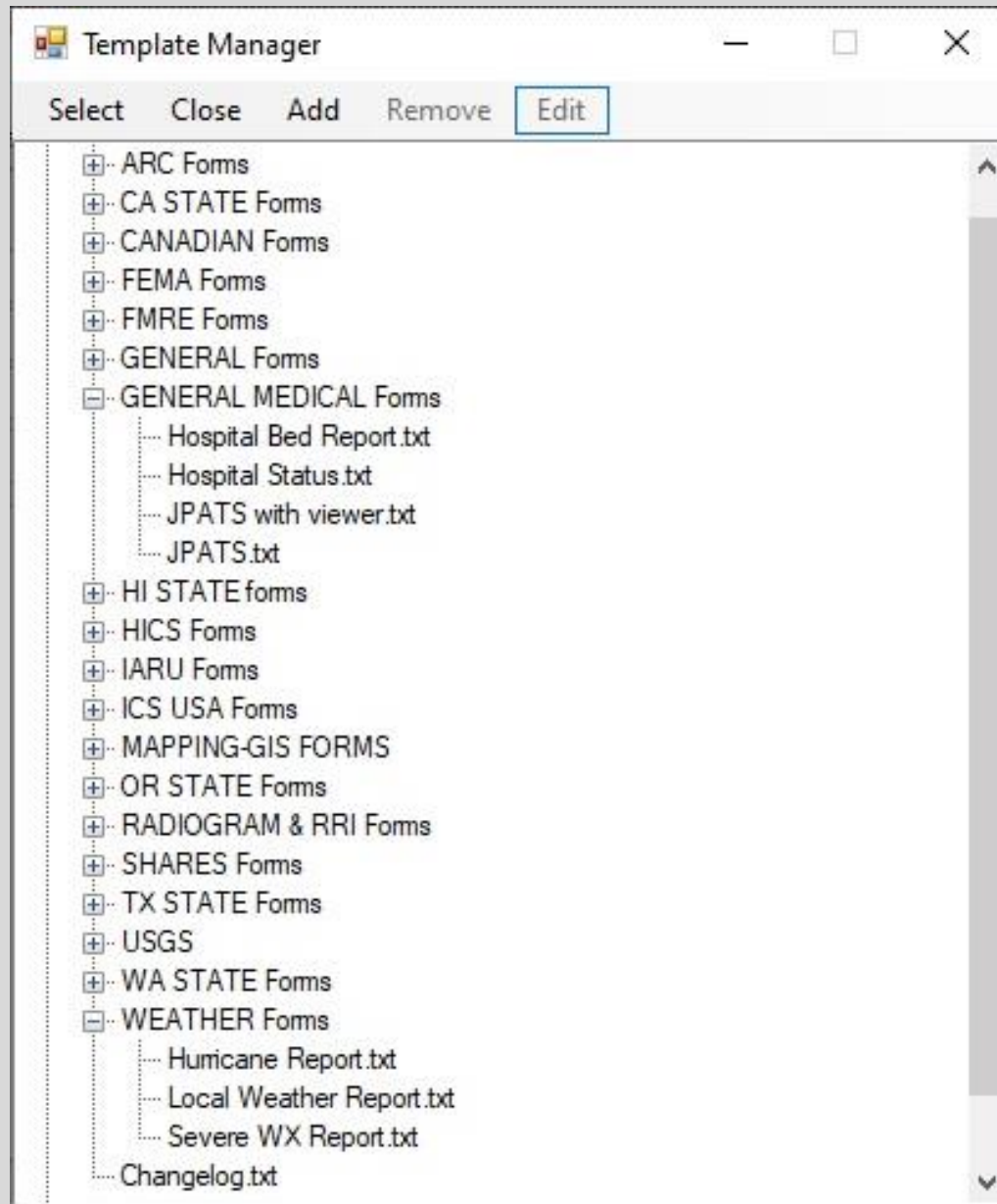
American Red Cross Templates



ICS Templates



Medical and Weather Templates



American

Red Cross

Daily Shelter Report

Load ARC Daily Shelter Report Data

Form Info

Date

07-04-2021

Incident/ DR #

0001

Shelter Name/County

West Chester University Shelter

SHELTER INFORMATION

Shelter Address

West Chester University

Shelter Phone Number (s)

610 999 9999

SHELTERING STAFF

POSITION	NAME	PHONE
Shelter Manager	Mr Joe	
Day Shift Supervisor	Ms. Jane	
2nd Shift Supervisor		
Night Shift Supervisor		

Total Number of Sheltering Workers

Day Shift

5

2nd Shift

5

Night Shift

2

OTHER FUNCTIONS OR ACTIVITIES STAFF

# Disaster Health Services		# Casework and Recover Planning	
# Disaster Mental Health		# Feeding	
# Disaster Spiritual Care		Other	#

SHELTER POPULATION

Age Groups (years)	0-3	4-7	8-12	13-18	19-65	65 +
Nighttime Population Submitted Last Night	5	5	5	5	5	5
Daytime Population Today	7	7	7	7	7	7

Total NEW Shelter Dormitory Registrations Since Last Night:

12

OPERATIONAL REPORTING

	Breakfast	Lunch	Dinner	Snacks/Drinks	Cots	Blankets	Comfort Kits	Clean-up Kits	Other Bulk Items	Signage Kits		
# Used Today	12	12	12	12	15	15	5	5	5	5		
# Available Tomorrow												
# Needed Tomorrow												

NOTES

Severe Weather Report

Daily Shelter Report

Severe WX Report Entry

File | C:/RMS%20Express/K3EUI/Tem...

SEVERE WEATHER REPORT

Load Severe WX Data

Sender:

Report Date/Time (local): Report Version (Select one): ☒ Initial ☐ Update ☐ Final Message

Fill in what you can. This form sends data as plain text to your recipient(s).

Reporting Party Name

Reporting Party Phone Number

Reporting Party Email Address

EVENT AREA

State/Province/Region County

City Other

Optional Decimal GPS Coordinates: Auto filled via a connected GPS device or enter manually
(If entering GPS coordinates manually, use decimal format. Example: 32.5042,-116.9834 Note the comma)

OBSERVED EVENT CONDITIONS

Check All That Apply:

Flood:

Hail:

High Wind Speed: [View Wind Speed guidelines](#)

Tornado / Funnel Cloud:

Wind Damage:

Winter Precipitation:

Snow:

Freezing Rain:

55kB file sent in 23 sec ==> 140 kB/minute
on 2m FM simplex

Vara FM Peer-to-Peer Session - K3EUI

Exit Settings Switch to Winlink Session Channel Selection **Start** Stop Abort

Connection Direct ▾ K3EUI via Freq.: Range: Bearing:

Favorites: ▾ Select Add to favorites Remove from favorites

In: 48733/55206 Out: 0/0 BPM: 123270 Disconnected/Listening

```
*** Connected to Peer: K3EUI @ 2021/04/11 15:00:33 Freq: 145.690
;FW: K3EUI
[RMS Express-1.5.36.0-B2FHM$]
K3EUI DE K3EUI >
;FW: K3EUI
[RMS Express-1.5.36.1-B2FHM$]
; K3EUI DE K3EUI (FM29EW)
;PM: K3EUI AQ4TY9311H3R 55206 K3EUI test VARA WIDE k3eui to k3eui
FC EM AQ4TY9311H3R 56372 55206 0
F> F1
FS Y
*** Receiving AQ4TY9311H3R
*** AQ4TY9311H3R - 56372/55206 bytes received
*** Bytes: 55687, Time: 00:23, bytes/minute: 140036
FF
FQ
*** -- End of session at 2021/04/11 15:01:25 --
*** Messages sent: 0. Total bytes sent: 0, Time: 00:52, bytes/minute: 0
*** Messages Received: 1. Total bytes received: 55687, Total session time: 00:52, bytes/minute: 63682
*** Disconnected from Peer: K3EUI @ 2021/04/11 15:01:26
*** Session: 0.9 min; Avg Throughput: 54883 Bytes/min; 1 Min Peak Throughput: 54883 Bytes/min
```

Time for a Coffee Break and Questions

