

YAESU

WIRES-X

Wide-Coverage Internet Repeater Enhancement System



What is Wires-X

- Yaesu's Definition:

WIRES (Wide-coverage Internet Repeater Enhancement System) is an Internet communication system which expands the range of amateur radio communication. For WIRES-X, an amateur node station connecting to the Internet is used as the access point and connects the wireless communication to the Internet. Users' stations can communicate with other amateur stations all over the world using a node within the radio wave range.

WIRES-X
Digital User
Station

WIRES-X
Digital Node
Station

WIRES-X
Digital Node
Station

WIRES-X
Digital User
Station

Internet



C4FM
Digital



Digital
Data



Digital
Data



C4FM
Digital



FTM-400D



FTM-400D



HRI-200



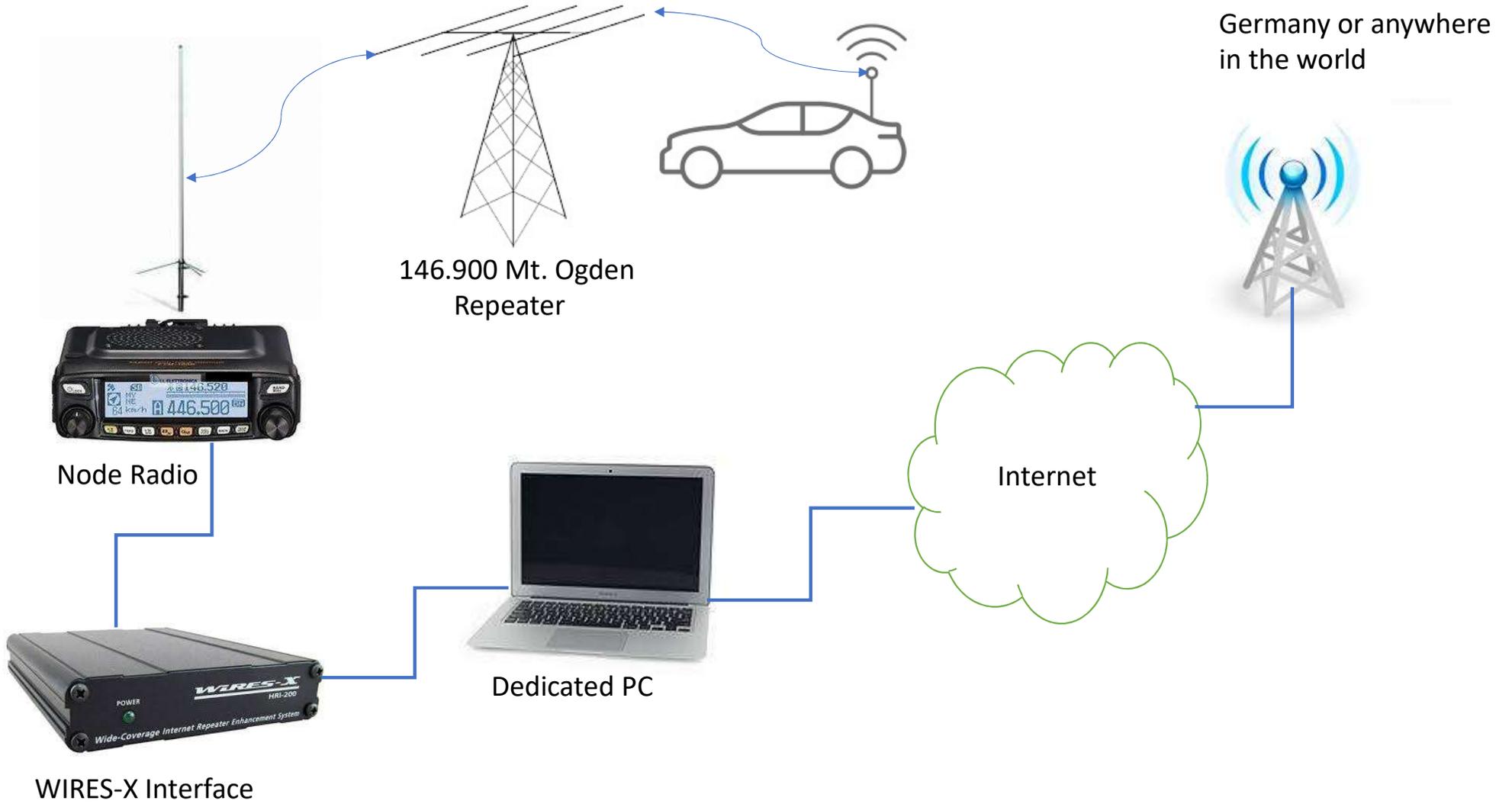
HRI-200

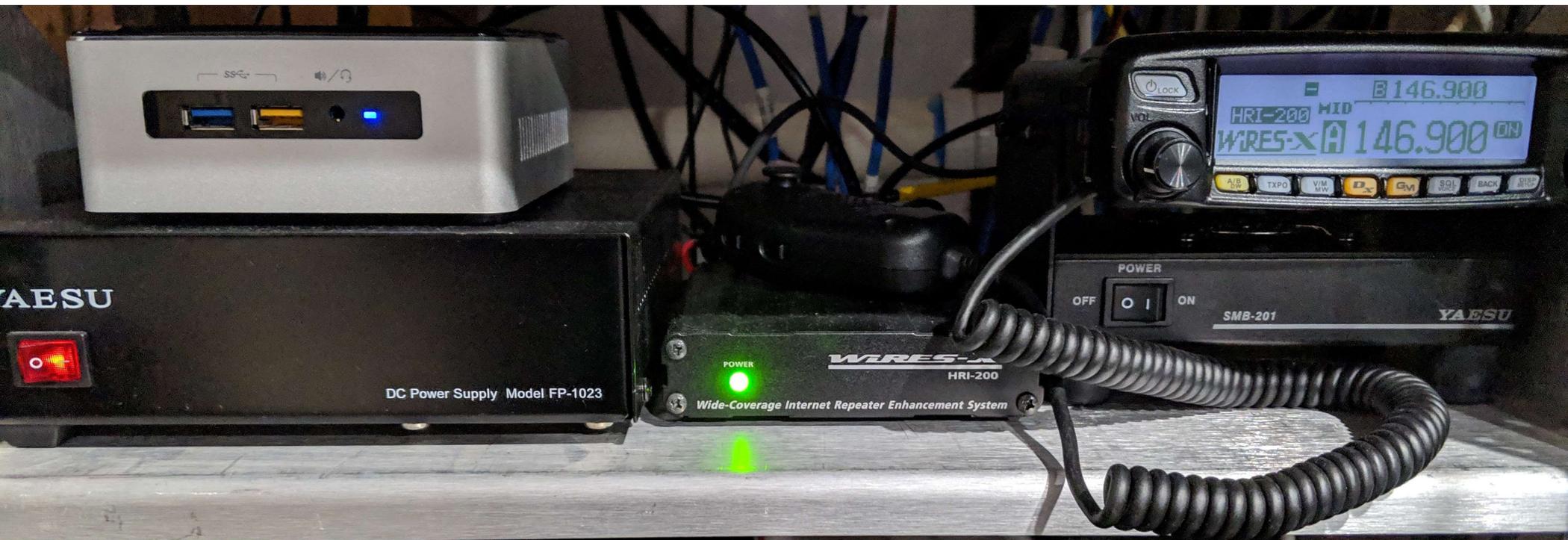


FTM-400D



FT1D







How Do I connect

1. Val has added a shortcut to the instructions on the club's website <http://www.ogdenarc.org> (Bottom Left Side, temporarily. It will reside permanently as a link to sfarc.org at the bottom of the repeater page, as well as under "Downloads" then "Member Downloads" from the main page.)
2. You do not need the offsets etc.. Just VFO, If you have the repeater programmed as a channel that's OK as well.
3. Hit the Wires-X button, some you just tap, some you hold (Instructions up coming on a different slide)
4. When you hear the 4 tones, you're connected to Wires-X but not a room, as seen on the first screen below.

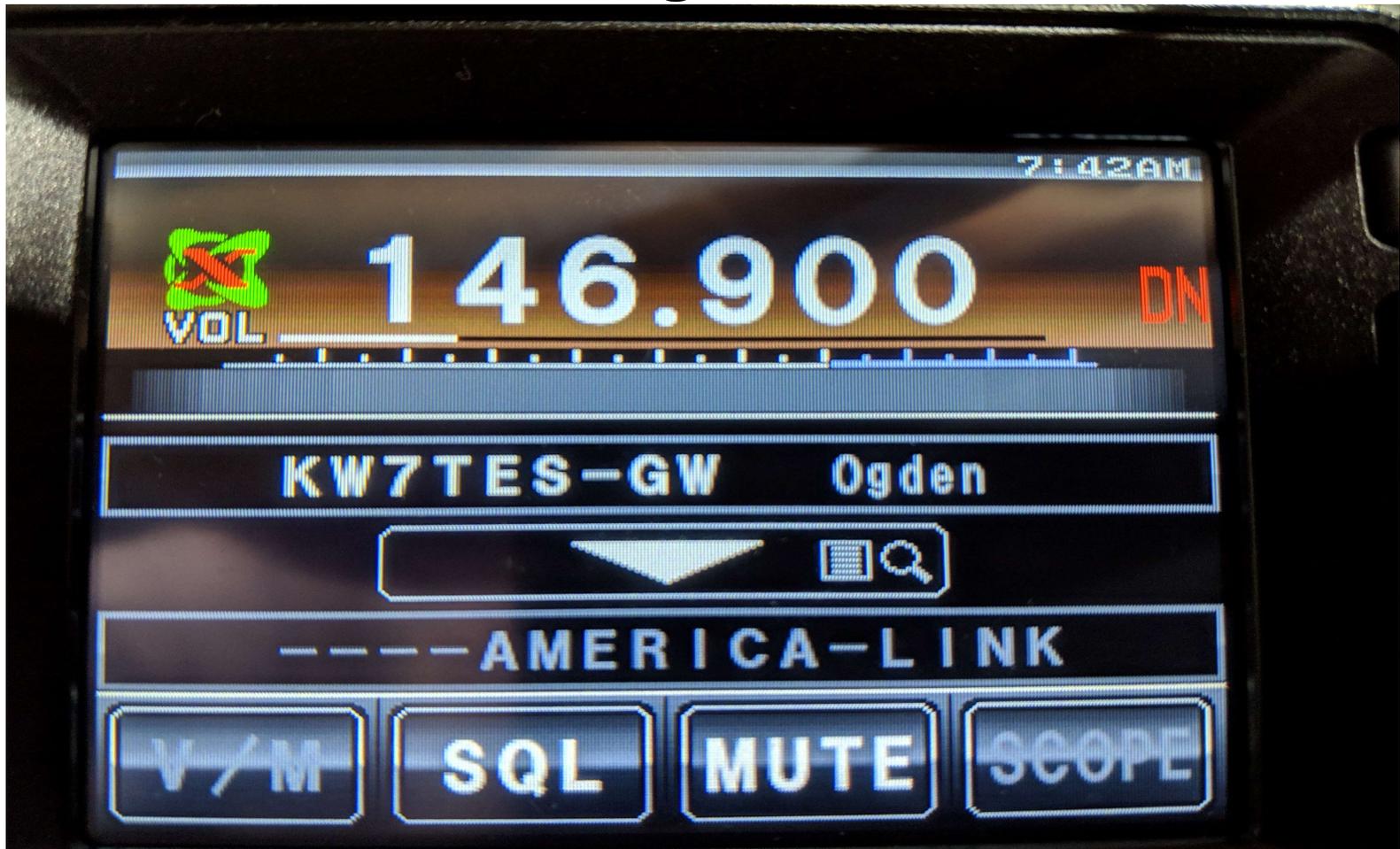


How Do I Connect

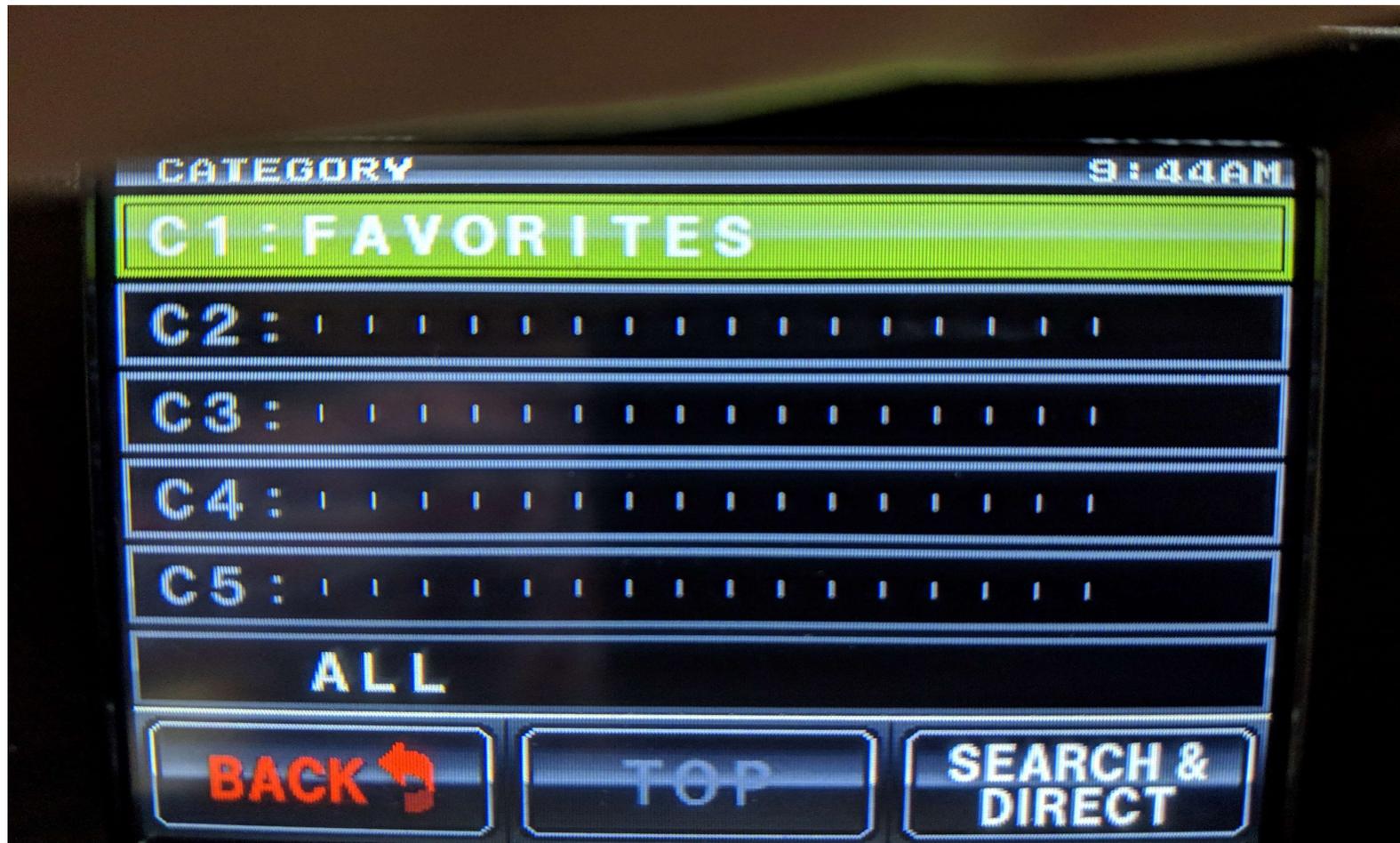


Our Room Number 46683

Connecting to WIRES-X



Connecting to a Room



Connecting to a Room



Connecting to a Room



Extras



How Do I Disconnect

FTM-400 & FTM-100 hit the * button on the MIC.



How Do I Disconnect

FT2D press the DISP button.



Information & Rules to follow

- Please feel free to connect our repeater to a Wires-X room out side of our default room, but remember **it is your responsibility to disconnect it** when you are done.
- You cannot disconnect while someone is talking.
- Listen for a couple of minutes to make sure no one else is using the repeater.
- If you hear static someone is on the digital side, please don't use the repeater.
- If you have your radio set so you don't hear the static please look at your meter to make sure that it's not moving.
- You may want to announce your intentions to use WIRES-X before you connect so those listening to the repeater will know what is happening.

Information & Rules to follow

- Pause for three seconds after hitting the PTT, prior to speaking.
- You only have three minutes to hold down the PTT before you will be disconnected. Keep each response to those you are speaking with less than three minutes.
- If you are connected to WIRES-X, but not a room and hit the PTT button you will be automatically connected to the last room you were to.
- You can connect to the NODE and not a ROOM to talk locally from a distant location.

Questions

1. What kind of radios can I use?

- Yaesu FT2D
- Yaesu FT-7250DR
- Yaesu FTM-400 DR/XDR
- Yaesu FTM-3207Dr
- Yaesu FTM-100DR
- Yaesu FT-70DR
- Yaesu FT 991 / 991A
- Yaesu FTM-3200DR
- Yaesu FT1DR

2. Can I connect with an analog radio?

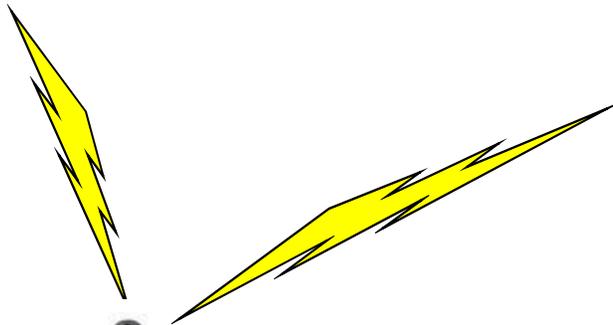
3. What does RT, GW, ND mean after the callsign?

4. Can more than one person use it at the same time?

Quick Look at Hot Spots

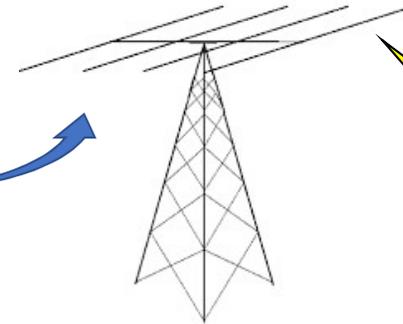
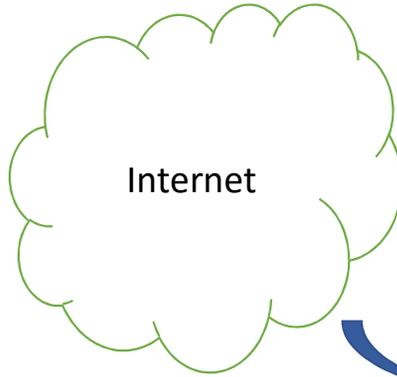


HOW IT WORKS



Wires-x, DSTAR, & DMR
Crossband Also

HOME/HOTEL



146.900 Mt. Ogden

WIRES-X / YSF



Popular Rooms

- America Link Room # 21080
- Texas Nexus Room # 21636
- MNWIS-FUSION # 21493
- Ogden-Utah Room # 46683 (Default Room NOT Popular YET 😊)
 - (Connect directly to the node 36683)

If you are traveling you can find info for the area your are going to below:

Room List: https://www.yaesu.com/jp/en/wires-x/id/id_eu.php

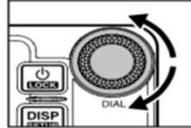
Node List: https://www.yaesu.com/jp/en/wires-x/id/active_room.php

Have a Great Day!

Connecting to a local node

- Turn to match the frequency of the local node that you wish to connect with on Band A.

Tip Press and touch in the function menu displayed to designate the frequency by the number.

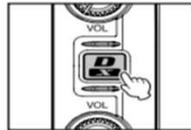


FTM-400

8

Connecting to a Faraway Station Using WIRES-X

- Press and hold for 1 second or more. The WIRES icon will appear on the left side of the frequency indication and "X" will flash.



When a local node is found, "X" will be lit solid, and the node name and city name will appear on the bottom part of the screen.

Tip While the [X] is flashing, press the to re-establish connection to the local node.

Tip When a local node cannot be found, the "X" will disappear in 20 seconds.

Tip When the detected local node is a repeater station, "[R]" will appear on the top part of the WIRE icon.

Caution

WIRES-X can be used only for the band A.

When using the band B (shown on the bottom part of the screen) as the operation band, press and hold for 1 second or more. The band A (shown on the top part of the screen) will be the operation band.

Connecting to a Faraway Station Using WIRES-X

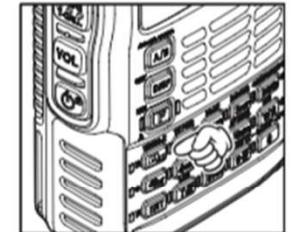
Connecting in digital mode

Caution

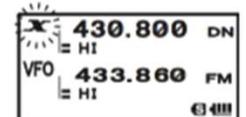
Before using WIRES-X, press to set the communication mode of band A (shown on the top part of the screen) to any mode other than [FM]. For details, refer to "Selecting Communication Mode" in the basic operating manual.

Connecting to a local node

- Rotate to set band A to the frequency of the desired local node.
 - Tip** You can directly enter the frequency using the numerical keypad. After entering, press .
- Press and hold for 1 second or more. [X] will flash on the left side of the frequency indication.



FT1(X)DR



When a local node is found, [X] will be lit solid, and the node name and city name will appear on the bottom part of the screen.

Tip Depending on the connection status, the screen will show one of four display patterns.

- Connected to the local node, but unable to connect to Internet nodes or rooms (never before established connection to Internet nodes or rooms)
- Connected to the local node, but unable to connect to Internet nodes or rooms (previously succeeded in establishing connection to Internet nodes or rooms)

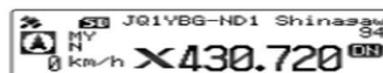
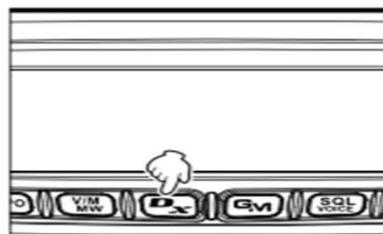


Connecting to a Faraway Station Using WIRES-X

Connecting to the other node ID or the other room ID

- 1 Rotate the DIAL to set the operating band to the frequency of the desired local node.
- 2 Set the WIRES-X DG-ID to the same ID number as the node station. Refer to "The DG-ID feature to access the WIRES-X node station" (page 33).
- 3 Press and hold  for over one second.
[X] flashes on the left side of the frequency display. When a local node is found, [X] is lit solid, and the node name and city name appear on the upper part of the screen.

Tip Depending on the connection status, the screen will show one of four display patterns.



FTM-100

- (1) Connected to the local node, but unable to connect to Internet nodes or rooms (never before established connection to Internet nodes or rooms)
- (2) Connected to the local node, but unable to connect to Internet nodes or rooms (previously succeeded in establishing connection to Internet nodes or rooms)
- (3) Connected to the local node, successfully connected to an Internet node or room (the Internet node or room is the same as the one used before)
- (4) Connected to the local node, successfully connected to an Internet node or room (the Internet node or room is different from the one used before)

When ► is displayed, rotate the DIAL. Call signs of nodes and rooms on the Internet you previously connected to flash.

Tip While [X] is flashing, briefly press the  key to re-establish connection to the local node.

Tip When any local node cannot be found, [X] will disappear in five minutes.

Tip When the detected local node is a repeater station, [[R]] appears below [X].

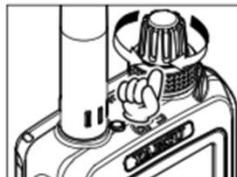
Caution

WIRES-X can only be used on the operating band.

Connecting to a Faraway Station Using WIRES-X

Connecting to local nodes

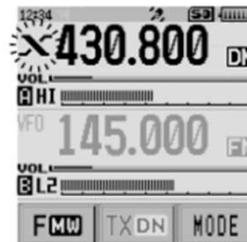
- 1 Rotate the DIAL to set the A-band to the frequency of the desired local node.



Tip You can directly enter the frequency using the numerical keypad by touching the A-band display.

FT2DR

- 2 Press the **[X]** key.
[X] flashes on the left side of the frequency display.



When a local node is found, **[X]** is lit solid, and the node name and city name appear on the bottom part of the screen.

Tip Depending on the connection status, the screen will show one of four display patterns.

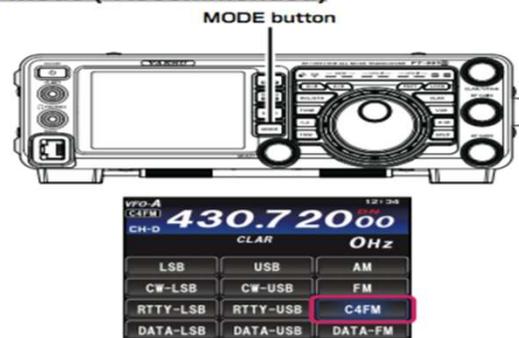
CONNECTING TO A NODE OR ROOM ON THE INTERNET IN DIGITAL MODE

NOTE:

- * Ascertain the DSQ code or the DG-ID setting of the WIRES-X node station. Connecting to the WIRES-X node requires the transceiver DG-ID be set according to the DSQ code or the DG-ID code set on the WIRES-X node station.
- * Before using WIRES-X, set the communication mode (modulation mode) to C4FM.

Connecting to a WIRES-X node in the C4FM mode (*Recommended)

1. Set the communication mode to C4FM.
After pressing the **MODE** button, touch "C4FM".
2. Set the transmit/receive DG-ID to the same ID number as the node station. For details, refer to the FT-991A Operating Manual.
3. Tune to the frequency of the local node you want to connect to.
4. Transmit corresponding to the transmit/receive frequency.
 - If receiving the signal from the node, transmit it as is.
 - If not receiving the signal from the node, it is possible that the node station is not connected to the Internet → proceed to step "Connecting to the other node ID or the other room ID".



Connecting to the other node ID or the other room ID

1. Press the **MENU(SETUP)** button.
2. Rotate the **MULTI** knob to select "153 WIRES DG-ID".
3. Touch **[SELECT]** on the screen.
4. Rotate the **MULTI** knob to set the WIRES-X DG-ID to the same ID number as the node station.
 - 01 - 99: Only nodes matching the set DG-ID number may be connected.
 - AUTO: Only open nodes, set to the DG-ID number "00" may be connected.

Default setting: AUTO

5. Touch **[ENTER]** on the screen.
6. Touch **[BACK]**.
Returns to the original screen.
7. Press the **F(M-LIST)** button.
8. Touch **[X]**.

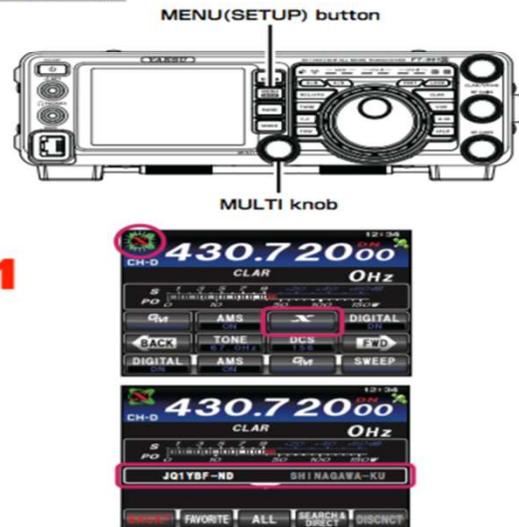
The transceiver automatically switches to transmit mode and "X" of the "X" icon flashes.

When a local node is found, "X" is lit solid, and the node name (call sign) and city name appear.

TIPS:

- While "X" is flashing, briefly press **[X]** to re-establish connection to the local node.
- While "X" is flashing, press and hold **[X]** for over one second to cancel the connection operation.
- When a local node cannot be found, "X" will disappear in 20 seconds.
- When the local node found is a repeater station, "X" appears on the right side of "[R]".

FT-991



Room Disconnect for the various Yaesu C4FM Radios

The FT-991 has an easy method to disconnect from a room or node with in the WIRES X digital mode; touch the [DISCNCT] button. The FT1D, FT1XD, FT2D and FTM-400DR have a different mode for disconnecting from a room or node, while in WIRES X mode. The following is a brief description on disconnecting by radio model.

FT1D and FT1XD Disconnect



Figure 90 FT1D and FT1XD Disconnect method

FT2D Disconnect



Figure 91 FT2D Disconnect methods

FTM-100D FTM-400DR Disconnect

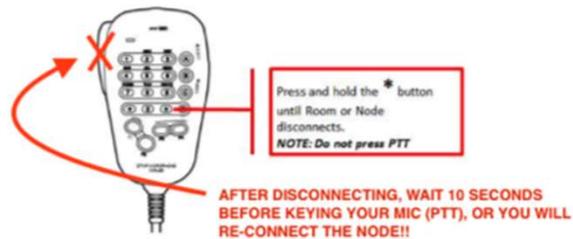


Figure 92 FTM-400DR Disconnect method