



WIRES-X

Wide-Coverage Internet Repeater Enhancement System

along with a short discussion about

System Fusion

and the new..

145.270 Wires-X Repeater



Updated February 2025

The Bartow repeater is now LIVE on WiRES-X

- The Bartow Fusion repeater went live on Wires-X on Monday, January 27th, 2025

Wires-X Node
94102

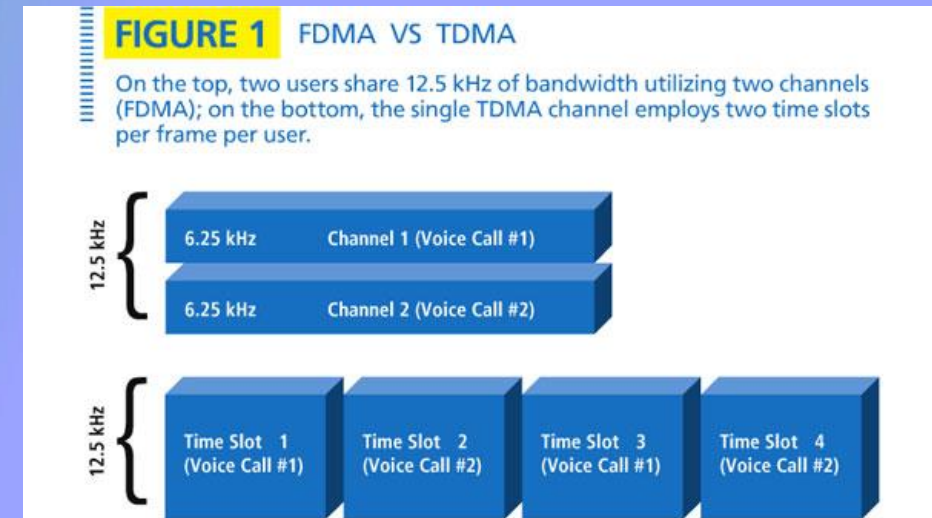


Thank you to Richard Sharp
for getting WIRES-X online.



A short description of *System Fusion*

- “**System Fusion**” is Yaesu’s implementation of Digital Amateur Radio, introduced in 2013.
- To transmit digital voice and data, System Fusion utilizes **C4FM/FDMA** 4-level FSK technology.
- Instead of using time slots and slicing up communications like DMR, which uses Time Division Multiple Access (TDMA), Frequency Division Multiple Access (**FDMA**) separates users by frequency



A short description of *System Fusion*

(continued)

- You'll hear Yaesu's System Fusion referred to by some as C4FM as well.
- C4FM, which stands for **Continuous Four Level Frequency Modulation**, is the same mode used in P25 Phase1, which is used by Emergency Responders, but is not compatible with P25 Phase1.
- System Fusion quickly became a dominating digital format because of quality, reliability, and performance in a wide range of environments.



A short description of *System Fusion*

(continued)

- *What makes it **Fusion**?*
 - ❖ Every **Fusion** radio and repeater is aware of the current QSO transmission and it's mode.
 - ❖ If a part of a QSO input starts as FM, the repeater “repeats” FM.
 - ❖ If a part of the QSO starts as C4FM, it “repeats” C4FM.
 - ❖ Each endpoint (HT, mobile, etc.), if it has AMS enabled (**Automatic Mode Switching**), will automatically switch between FM or C4FM.



A short description of ***System Fusion***

(continued)

- **Fusion** mode is what both the Lakeland Amateur Radio Club repeater, as well as the Lake Wales Radio Amateurs clubs support.
- Both of the club repeaters can be used either Analog or Digital (Yaesu System Fusion/C4FM).
- Although the two club repeaters operate in “**Fusion**” mode, it is important to know that the new Bartow 145.27 repeater, is in **digital mode only**, and will not be accessible using FM.



A short description of *System Fusion*

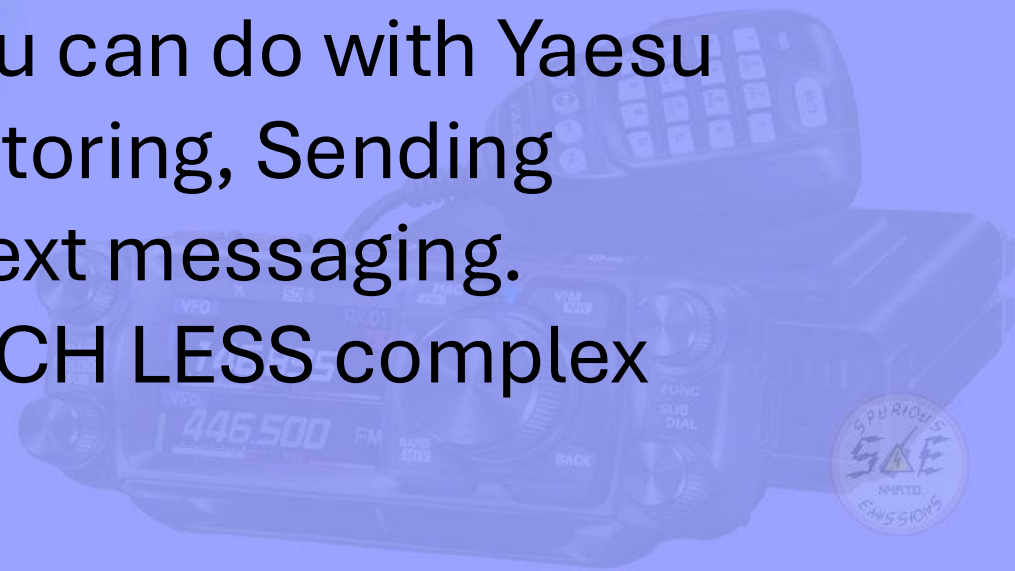
(continued)

- One last note about Yaesu System Fusion: Although it is a “digital” mode, don’t think of it as a non-radio, Internet only mode.
- Although Wires-X repeaters and nodes can be linked via the Internet, Yaesu System Fusion/C4FM, can be used via simplex.
- With that in mind, if you and some friends are at a swap and have Fusion radios, you could all use them digital simplex at the swap and avoid some of the traditional “analog” interference you might sometimes get.



Some last comments about *System Fusion*

- Fusion has excellent integrity due to its good bit error rate characteristics and error correction and technology
- It integrates both analog and digital seamlessly
- Unlike other digital modes, no complex registration is required
- It is user friendly with no learning curve
- There are more “advanced” things you can do with Yaesu System Fusion, such as Group Monitoring, Sending photos, GPS location sharing, and text messaging.
- It's even easier than D-Star, and MUCH LESS complex than DMR!



Modes available on your Yaesu System Fusion rig

- **FM** – (analog FM) – Maintains backwards compatibility with existing FM equipment. Your usage of FM repeaters, simplex, etc. will all still be available to you. (FM is 25 kHz and FM Narrow 12.5 kHz)
- **DN** – (Digital Narrow, 6.25 kHz) - One of the most common modes used with Yaesu System Fusion for simultaneous voice, and digital communications (GPS location, pictures, text)
- **VW** – (Voice Wide, 12.5 kHz) – Provides higher quality digital voice, but no simultaneous digital communications occurring, such as sharing your GPS coordinates with others). (*May need to be enabled in sub-menus*)

Modes available on your Yaesu System Fusion rig

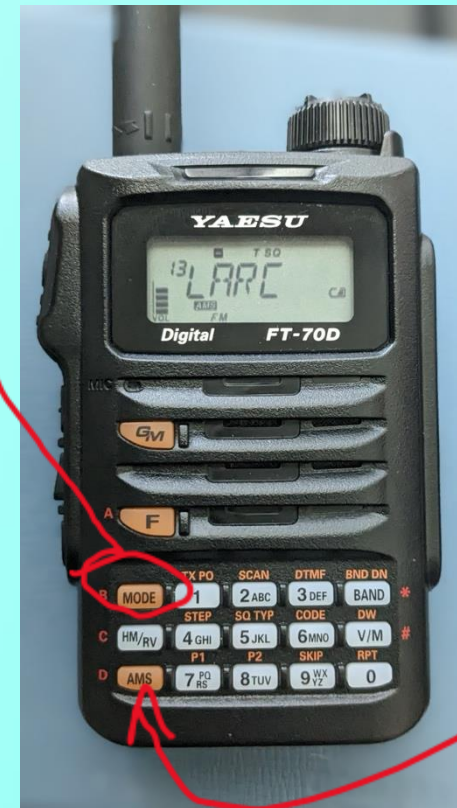
Yaesu System Fusion can be used in either **Voice Wide (VW) 12.5 kHz or **Digital Narrow (DN)** 6.25 kHz modes.**

Modes available on your Yaesu System Fusion rig

While VW mode can be used for communication, it is important to note that **many WIRES-X nodes and rooms prefer or require Digital Narrow (DN) mode, as it uses only 6.25 kHz bandwidth and is more commonly used among users.** Therefore, you “could” use VW mode on WIRES-X, but you might encounter **situations where DN mode is preferred or is required.**

Understanding Mode and AMS Selection on your rig

- It is important to understand how the **D/X** key on Yaesu mobile rigs work, as is the **MODE** and **AMS** button functionalities work on handheld radios



Understanding D/X button on your mobile rig.....

- A short press of the D/X button allows you to change modes



Understanding D/X button on your mobile rig.....

- On some mobile rigs, you will see a small square box over the mode
- On HT's, you may see the letters AMS
- This means the rig is in Automatic Mode Selection.
- (There are times you may not want AMS!)



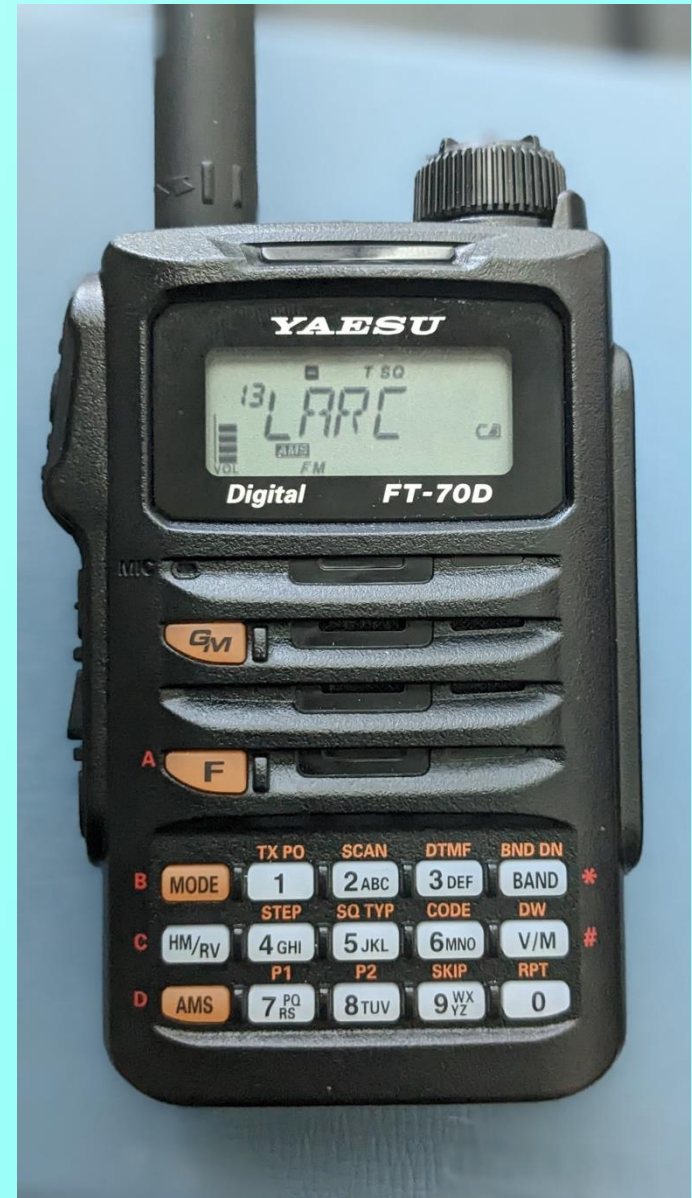
Understanding D/X button on your mobile rig.....

- A long press of the D/X button works with Wires-X, and we will talk about that later in the presentation.



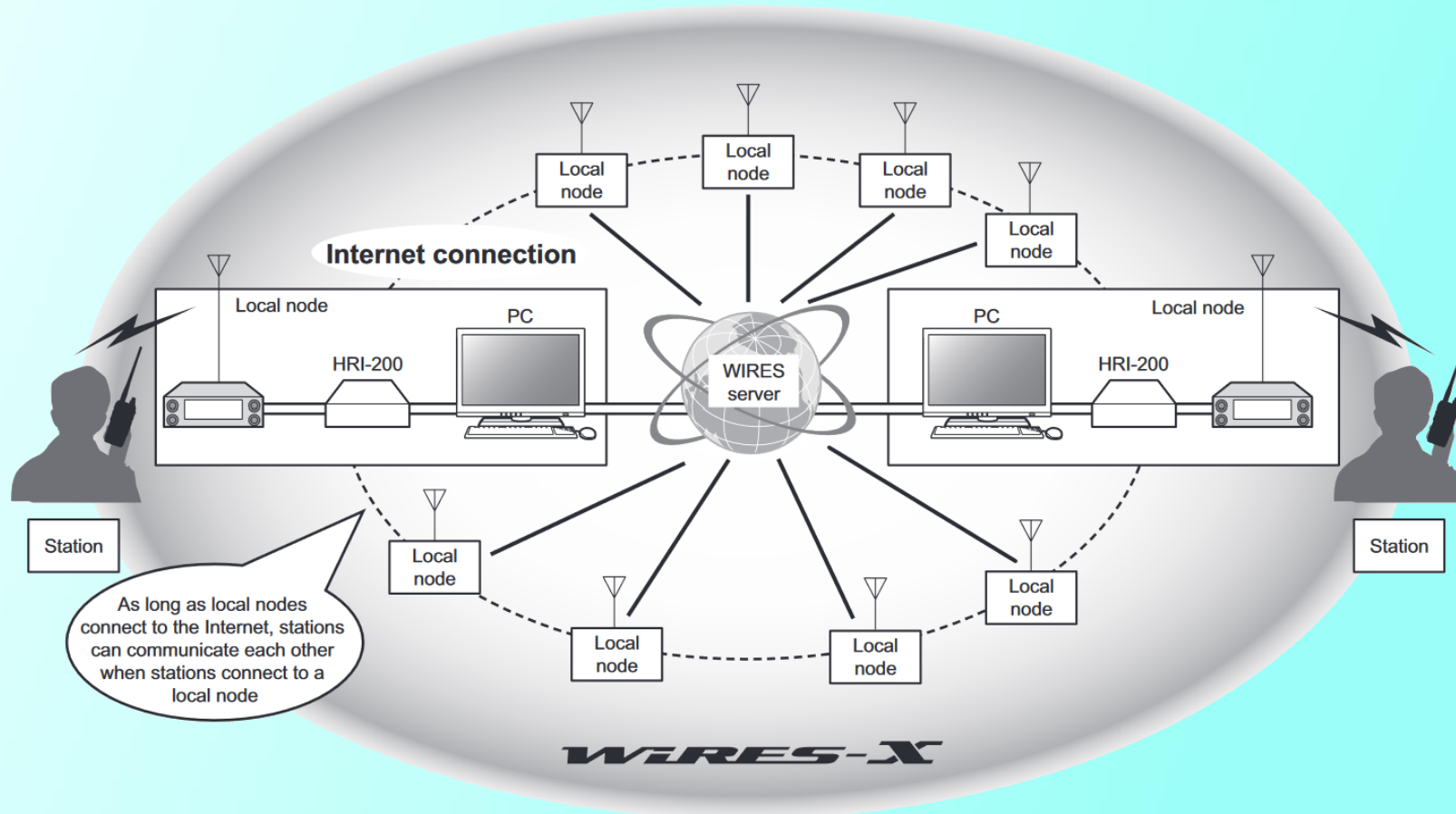
Understanding **MODE** and **AMS** buttons on your FT70D

- A **SHORT** press on the **MODE** button allows you to switch between FM, DN (digital narrow), and (if enabled in menu 16), VW (voice wide)
- A **LONG** press on the **AMS** button will turn on **Automatic Mode Select**. (when **AMS** is shown on the screen, it is enabled. When you don't see **AMS**, it is disabled and will stay in the mode selected)



Let's move on from the all-radio (RF) signal world to...

WIRES-X



- WiRES-X is an acronym for “**Wide-coverage Internet Repeater Enhancement System.**”
- The system was developed by Yaesu for the further interest of Amateur Radio.
- It uses a form of VOIP (Voice Over Internet Protocol) to connect distant Amateur Radio stations utilizing the Internet as the backbone.

How it Works

WIRES-X

(continued)

- A radio amateur operator connects to a local node/repeater, which in turn, is connected to an Internet thru a PC.
- The local node/repeater relays the amateur's transmission to the Internet via the PC
- The PC relays the transmission to another node's PC that is also connected to the Internet, and then on to that node's radio.
- The local node/repeater radio then relays the transmission to the receiving Amateur Radio Station.

Wires-X allows you to ...

WIRES-X

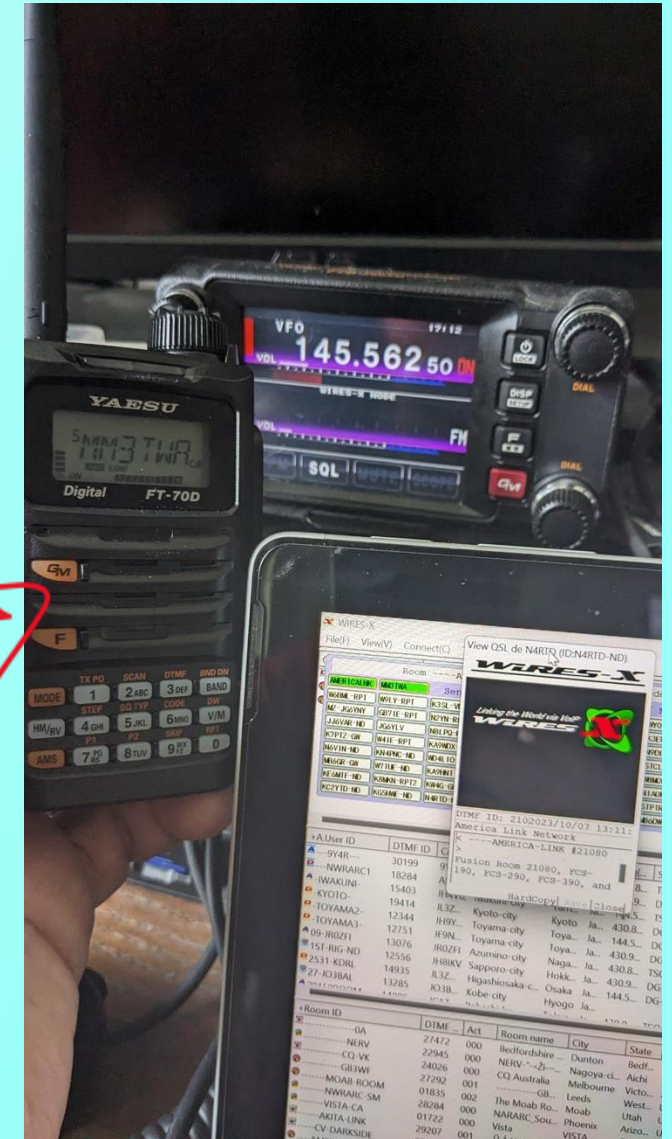
(continued)

- Like Fusion, **Wires-X** also supports **digital data and text**, along with audio on the global network. (Beyond the scope of this presentation).
- This is NOT a new idea, other networks such as D-Star, IRLP and others have similar functionality.
- Although accessing Wires-X through a repeater is nice, many radios can act as Nodes, allowing you to access the Wires-X system directly
- Using Wires-X can be an easy way to link repeaters.
- Call signs, QSL info, distances, etc. can be included along with the digital signal.

What is a node?

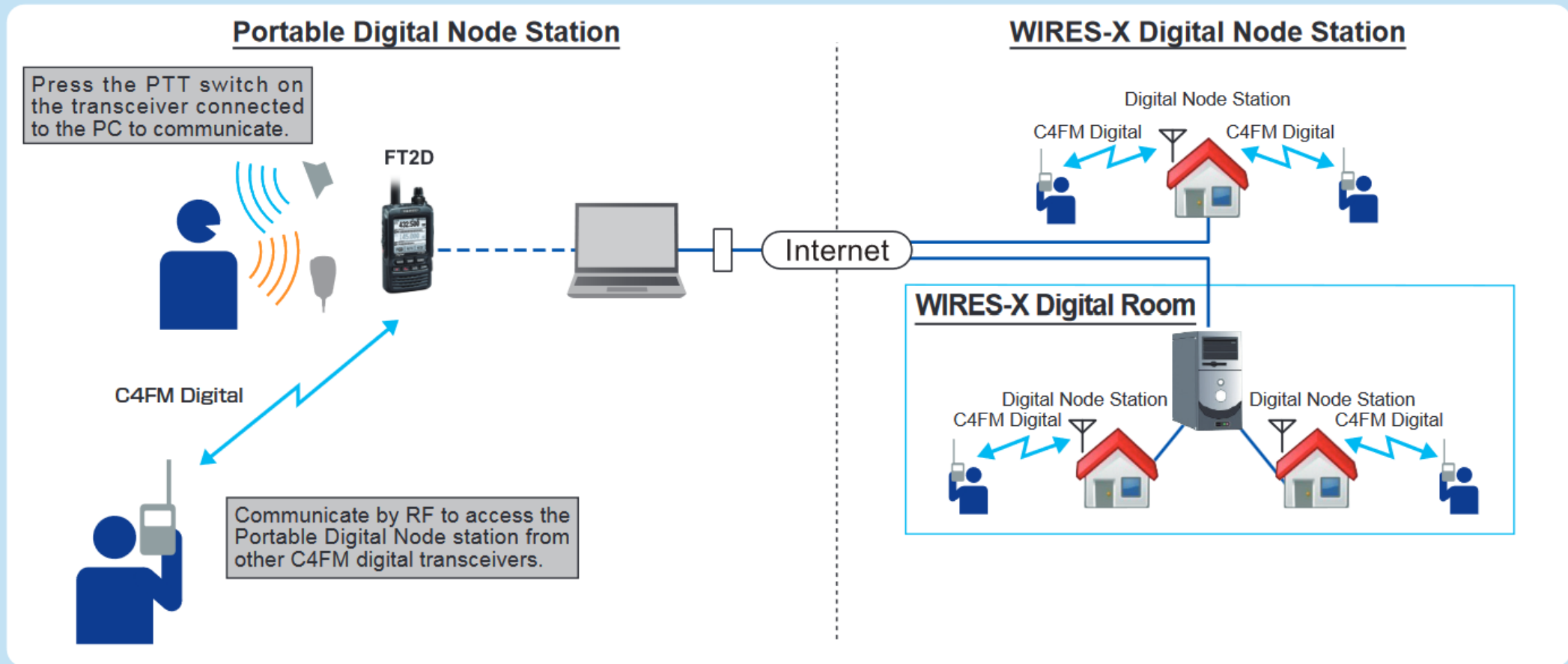
- A **Node** is a radio (**repeater or local radio**) connected to the Internet via a PC, which repeats communications of an Amateur Radio station as an access point
- A **Local Node** (or Portable Digital Node **PDN**) is a **personal radio station** operating on a VHF or UHF frequency connected to the Internet through a linked PC.

WIRES-X



A Yaesu FTM-400 configured as a PDN NODE, using a PC with Wires-X software, being accessed via RF on the FT-70D.

Access Point Illustration



WiRES-X

(continued)



Yaesu System Fusion repeater with a n HRI-200 WiRES-X interface, a PC, and an Internet connection

But how can I access WiRES-X using the new Bartow 145.270 repeater?



- First, know that unlike the LARC of LWRA repeaters, this repeater is 100% digital at all times.
- You'll need to program your Yaesu System Fusion radio to receive on **145.270** and transmit on 144.670.
- Although the repeater supports VW (voice wide) audio with better quality, set your memory by default to **DN (Digital Narrow)** as that WiRES-X rooms use.
- Setting a “tone” like a PL tone is not necessary when using the repeater as you will be accessing it digital only.

How can I access the WiRES-X Rooms on the Bartow 145.270 Repeater



- First of all, you don't need to know anything about nodes and rooms to use WiRES-X
- The repeater may (or may not) be connected to a WiRES-X room. The only way you can find out is by pressing the **WiRES-X button** on your radio.
- No one will have an issue with you pressing the **WiRES-X button**. (Do when no signal present)
- All data communication is muted so there are no annoying data bursts to hear and you won't break anything.

How to access WiRES-X through a repeater

WiRES-X
(continued)

When you long press the WiRES-X button,



several things happen:

- Your radio sends a handshake request to the repeater.
- If the repeater is NOT a connected node, your WiRES-X request will timeout and your radio will be returned to normal operation. You will then know that the repeater is NOT connected to a node, therefore it is not connected to a room.
- If the repeater IS connected as a node, the node will respond and send a data stream back to your radio via the repeater.
- The information you see will depend on the type of radio you have.

How can I access the WiRES-X Rooms on the Bartow 145.270 Repeater

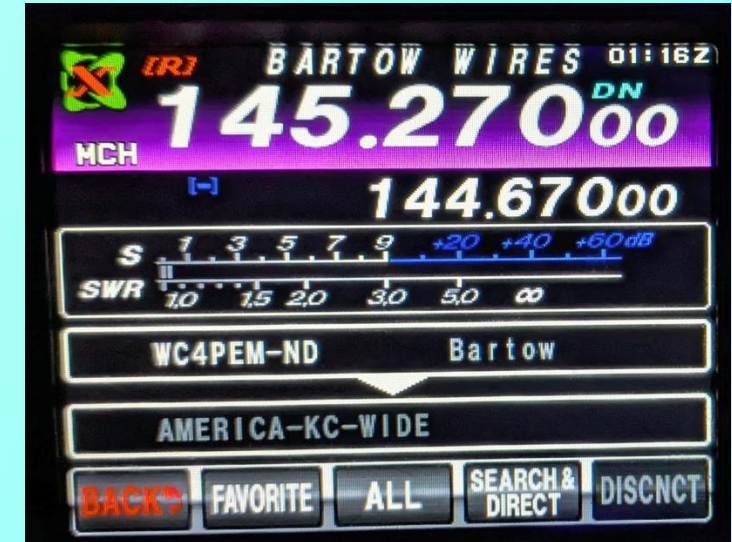
When you long press the WiRES-X button,



several things happen:

- Radios such as the FT-991A, and FTM-400 have larger screens, while radios such as the FTM-100, FTM-200, FTM-300, FTM-400, and smaller handhelds display a little less information.
- But what you will see on all of them is the name of the room the repeater is connected to and how many nodes are connected to the room .

WiRES-X
(continued)



How can I access the Wires-X Rooms on the Bartow 145.270 Repeater



When you long press the WiRES-X button,



several things happen:

- At this point there are several things you can do. Having satisfied your curiosity, you can simply take your radio out of Wires-X mode and return to normal use
- You could at this point choose to connect to a Wires-X room.
- If you don't know what room to connect to, you can request a list of rooms from the repeater (node)
- The list will display on your radio and you can select the one to connect to (depending on the radio).

WiRES-X Tip

WiRES-X
(continued)

- **Just like some of our local linked-repeater systems, you should key your microphone, wait at least a second and a half, and then begin talking.**
- **Also, hold the mic PTT for a good second or two at the end of your transmission.**
- **One reason is that some WiRES-X rooms are not only on Wires-X, but tied in via bridges to DMR, D-Star, P-25, NXDN, Echolink, and more.**

***Radio Specific
WiRES-X
Commands***

Radio Specific WiRES-X Commands

- **To enter WiRES-X mode**, Press the <F> key, release, and then press the <AMS> key. Your radio will communicate with the repeater and you'll be ready to send WiRES-X commands. (Note: If you try and enter WiRES-X mode and it keeps flashing WIRES, you may not have a good signal connection with the repeater. Should you end up on the Cn (connecting/connected room ID screen), your connection on WiRES-X has been established and you can move forward).

WiRES-X

(continued)



Yaesu FT-70DR

** note: When a local node can not be found, the word *WIRES* will continue to flash and timeout after 20 seconds

Radio Specific WiRES-X Commands

Now that you're connected to WiRES-X, you can **turn the dial** and select from the following modes:

- **Lc – Node ID screen** – this tells you what node (repeater) are connected to. For the Bartow WiRES-X repeater, it will say WC4PEM.
- **Cn – Connecting/connected Room ID screen** – if the repeater (node) is connected to a WiRES-X room, you will see that displayed on this screen.
- **C0 – The most recently connected to node/room screen.**
- **C1-C5** – Your room/node stored (favorites) locations
- **En** – Direct entry screen, where you will enter a room to connect. This will let you key in the five digit room/node ID to connect to.

WiRES-X
(continued)



Yaesu FT-70DR

** note: When a local node can not be found, the word *WiRES* will continue to flash and timeout after 20 seconds

Radio Specific WiRES-X Commands

- **CONNECT to a stored room (favorite)** – Turn the Dial to C1-C5 where the room is stored, then press the <AMS> key, and you will be connected to the room.
- **CONNECT to a non-stored room**, simply turn the dial to the En position, type in the room number, then press the <AMS> key.
- To **STORE a number** in your registered/stored list (**favorite**) , **while you are connected to the room**, simple **press and HOLD** down the number of the location you would like the room stored to.
- To **DISCONNECT** from a room, **press and HOLD** down the <BAND> Key.
- **DONE with WiRES-X?** Simply **press and HOLD** down the <MODE> key and you will be restored to normal radio operation.

WiRES-X

(continued)



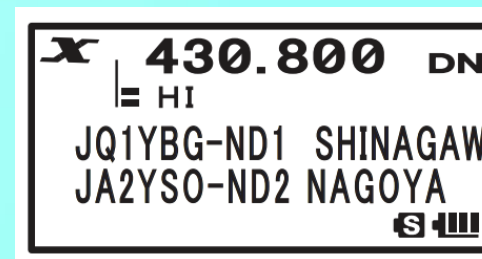
Yaesu FT-70DR

** note: When a local node can not be found, the word *WiRES* will continue to flash and timeout after 20 seconds

Radio Specific WiRES-X Commands

- Rotate the dial and set the **A band** to the frequency of the node you wish to connect to. It can only be on the A band.
- **Access WiRES-X** – Press and **HOLD** the Wires-X [**DX**] button
 - 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.
- **Join a Room** – You can select a node or room in one of the following ways
 - Selecting an accessible node or room from the list
 - Specifying the node name or room name
 - Selecting the most recently connected node or room
 - Specifying the DTMF ID of the node or room you want to connect to
- **Disconnect from a Room** – Press and **HOLD** the scope bnd dn [**BAND**] button for one second or more
- **Disconnect from WiRES-X** – Press and **HOLD** the Wires-X [**DX**] button for more than one second

WiRES-X
(continued)



Yaesu FT1D

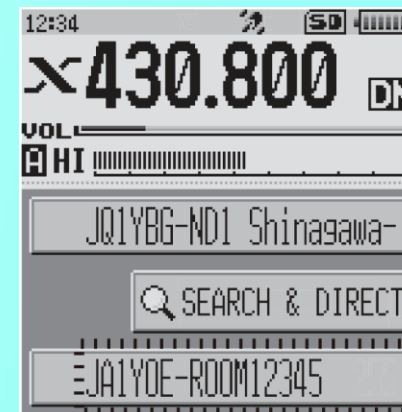
** note: When a local node can not be found, the **X** will disappear after 5 minutes.

Radio Specific WiRES-X Commands

- Rotate the dial and set the **A band** to the frequency of the node you wish to connect to. It can only be on the A band.
- **Access WiRES-X** – Press the **[X]** button
 - 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.
- **Join a Room** – You can select a node or room in one of the following ways
 - Selecting an accessible node or room from the list
 - Specifying the node name or room name
 - Selecting the most recently connected node or room
 - Specifying the DTMF ID of the node or room you want to connect to
- **Disconnect from a Room** – Press and **HOLD** the **[BAND]** button on the keypad
- **Disconnect from WiRES-X** – Press and **HOLD** the **[X]** button for more than one second

WiRES-X

(continued)



Yaesu FT2DR

** note: When a local node can not be found, the **X** will disappear after 30 seconds.

Radio Specific WiRES-X Commands

- WiRES-X can only be used on the **A band** on the FT3DR
- **Access WiRES-X** – Press and **HOLD** the **[X]** button for more than one second.
 - 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.
- **Join a Room** – You can select a node or room in one of the following ways
 - Selecting an accessible node or room from the list
 - Specifying the node name or room name
 - Selecting the most recently connected node or room
 - Specifying the DTMF ID of the node or room you want to connect to
- **Disconnect from a Room** – Press and **HOLD** the **[BAND]** button on the keypad
- **Disconnect from WiRES-X** – Press and **HOLD** the **[X]** button for more than one second

WiRES-X

(continued)



Yaesu FT3DR

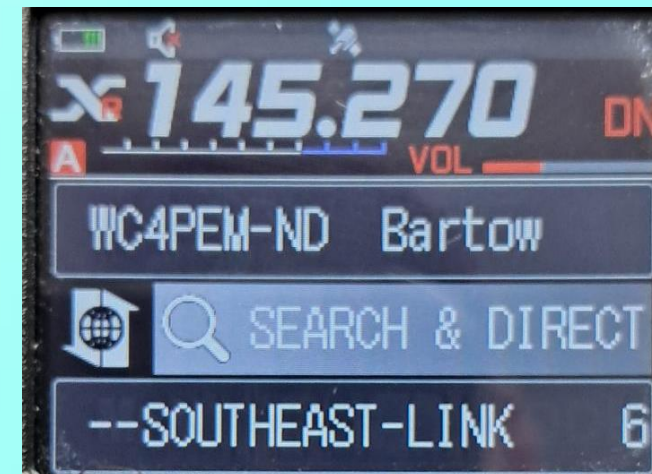
** note: When a local node can not be found, the **X** will disappear after 30 seconds.

Radio Specific WiRES-X Commands

- WiRES-X can only be used on the **A band** on the FT5DR
- **Access WiRES-X** – Press and **HOLD** the **[GM/X]** button for more than one second.
 - 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.
- **Join a Room** – You can select a node or room in one of the following ways
 - Selecting an accessible node or room from the list
 - Specifying the node name or room name
 - Selecting the most recently connected node or room
 - Specifying the DTMF ID of the node or room you want to connect to
- **Disconnect from a Room** – Press and **HOLD** the **[BAND]** button on the keypad
- **Disconnect from WiRES-X** – Press and **HOLD** the **[GM/X]** button for more than one second

WiRES-X

(continued)



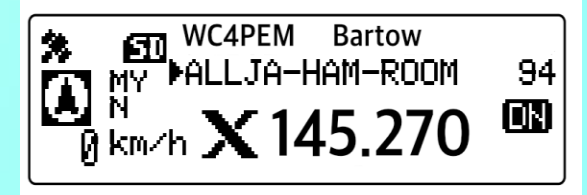
Yaesu FT5DR

** note: When a local node can not be found, the **X** will disappear after 30 seconds.

Radio Specific WiRES-X Commands

- WiRES-X can only be used on the operating band
- **Access WiRES-X** – Press and **HOLD** the [D X] button on the top of the radio for more than one second.
 - 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.
- **Join a Room** – You can select a node or room:
 - To search the node & room lists, press and HOLD the [BAND] button for more than a second.
 - Rotate the DIAL to select [ALL], then press [DISP/SETUP]
 - Rotate the DIAL to select the node or room you want to connect to, then press the [DISP/SETUP] button
- **Disconnect from a Room** – Press and hold the * key on the microphone
- **Disconnect from Wires-X** – Press and **HOLD** the [D X] button for more than one second

WiRES-X
(continued)

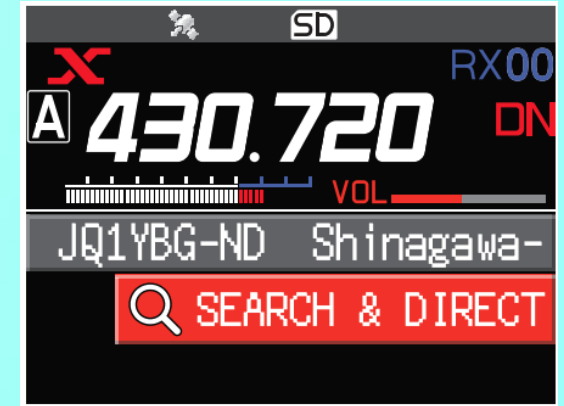


Yaesu FTM-100DR

Radio Specific WiRES-X Commands

- WiRES-X can only be used on the A band
- **Access WiRES-X** – Press and **HOLD** the [D X] button on the top of the radio for more than one second.
 - 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.
- **Join a Room** – You can select a node or room:
 - Select an accessible node or room from the list
 - Specify the node name or room name
 - Select the most recently connected node or room
 - Specify the DTMF ID of the node or room to connect
- **Disconnect from a Room** – Press and hold the * key on the microphone
- **Disconnect from WiRES-X** – Press and **HOLD** the [D X] button

WiRES-X
(continued)



Yaesu FTM-200DR

** note: When a local node can not be found, the **X** will disappear after 20 seconds.

Radio Specific WiRES-X Commands

- WiRES-X can only be used on the A band
- **Access WiRES-X** – Press and **HOLD** the [D X] button on the top of the radio for more than one second.
 - 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.
- **Join a Room** – You can select a node or room:
 - Select an accessible node or room from the list
 - Specify the node name or room name
 - Select the most recently connected node or room
 - Specify the DTMF ID of the node or room to connect
- **Disconnect from a Room** – Press and hold the * key on the microphone
- **Disconnect from WiRES-X** – Press and **HOLD** the [D X] button

WiRES-X

(continued)



Yaesu FTM-300DR

** note: When a local node can not be found, the **X** will disappear after 30 seconds.

Radio Specific WiRES-X Commands

- WiRES-X can only be used on the A band
- **Access WiRES-X** – Press and **HOLD** the [D X] button on the top of the radio for more than one second.
 - 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.
- **Join a Room** – You can select a node or room:
 - Select an accessible node or room from the list
 - Specify the node name or room name
 - Select the most recently connected node or room
- **Disconnect from a Room** – Press and hold the * key on the microphone
- **Disconnect from WiRES-X** – Press and **HOLD** the [D X] button

WiRES-X
(continued)



Yaesu FTM-400DR

** note: When a local node can not be found, the **X** will disappear after 20 seconds.

Radio Specific Wires-X Commands

- WiRES-X can only be used on the A band
- **Access WiRES-X** – Press and **HOLD** the [D X] button on the top of the radio for more than one second.
 - 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.
- **Join a Room** – You can select a node or room:
 - Select an accessible node or room from the list
 - Specify the node name or room name
 - Select the most recently connected node or room
 - Specify a DTMF ID of the node or room to connect
- **Disconnect from a Room** – Press and hold the * key on the microphone
- **Disconnect from WiRES-X** – Press and **HOLD** the [D X] button

WiRES-X
(continued)



Yaesu FTM-500DR

** note: When a local node can not be found, the **X** will disappear after 20 seconds.

Radio Specific WiRES-X Commands

- WiRES-X can only be used on the A band
- **Access WiRES-X** – Press the F/M-List button. Then touch the **X** button. When the local node is found, the **X** will be lit solid in the upper left hand corner.
- **Join a Room** – You can select a node or room:
 - Press the ALL button and select from a list sent by the node.
 - Use the SEARCH & DIRECT button to find a room by partial name or specify a DTMF ID of the room to connect to.
 - Select the most recently connected node or room, which is displayed at the bottom of the screen slightly grayed out.
- **Disconnect from a Room** – Press and hold the * key on the microphone or press the DISCNCT button.
- **Disconnect from WiRES-X** – Press the BACK button.

WiRES-X
(continued)



Yaesu FT-991A

** note: When a local node can not be found, the **X** will disappear after 20 seconds.

Once you understand your radio's specific WiRES-X access, what "rooms" are available?



- There are popular WiRES-X rooms such as **America Link** (21080), which hosts the Saturday night International Wires-X Fusion Net, but where can you see and/or search for other active WiRES-X rooms?
 - Yaesu has an active room list at **https://yaesu.com/jp/en/wires-x/id/active_room.php**
 - There I was able to search and found N4DLW (21036), the callsign used for the node that connects to the Brandon (Lithia) WiRES-X repeater. You can sort the list such as by state, where I found a number of rooms specific to Florida.

Active WiRES-X Room List



(continued)

LATEST WIRES-X ACTIVE ROOM ID LIST

Update every 20 min 08 Oct 2023 14:13:55 GMT

ROOM ID	DTMF ID	Act	Room Name	City	State ▲	Country	Comment
W2TR-ROOM	68179	001		THE VILLAGES	Florida	USA	
TGIF-ROOM	28418	000	TGIF	Spring Hill	Florida	USA	
NM2V-ROOM2	64898	000	CQ-FRATERNITY	Maitland	Florida	USA	
ND1C-ROOM3	80751	006	Daytona North	Bunnell	Florida	USA	The 145.390 Machine Flagler County FI USA Also On YSF Daytona-North 80751
N7MUE-ND1	43110	001	N7MUE HOME	Jacksonville	Florida	USA	
N4DLW-ROOM	21036	000		Brandon	Florida	USA	
MIAMI/COLOMBIA	80825	000	Miami/Colombia	Hollywood	Florida	USA	The Best.
LAGRANDE-RCB	62622	005	LA GRANDE RADIO CLUB	CLEWISTON	Florida	USA	LA GRANDE RADIO CLUB
KX4LEO-ROOM	43138	001	KX4LEO-ROOM	Webster	Florida	USA	KX4LEO Room, Webster Florida
KW4G-ROOM	83115	000	Highlands Co FI Room	Sebring	Florida	USA	
KN4HYG-ROOM	00122	002	Miami Hams 2	HOMESTEAD	Florida	USA	Miami YSF 07580

Guidelines for WiRES-X Use



(continued)

- Press the WiRES-X button on your radio to connect to the node.
- Use the search features of your radio to find a room or node to connect to.
- Due to latency on the internet, it is good practice to wait a second or two after pressing the PTT button before speaking, and to hold the PTT for a second or two after finished speaking.
- Also not a bad idea to say “over” or similar when done speaking.
- When done with QSO – disconnect from the node or room. Varies by radio, but press the * button on an FTM-400DR to disconnect the node, or on an FT-70DR, press and hold the [BAND] button.

WiRES-X Etiquette on a Repeater



- If the repeater is connected to another room or node, **DO NOT CHANGE TO ANOTHER ROOM**. It is where it is for a reason. Somebody is using it.
- If connecting to another room, make contacts as desired, and **DISCONNECT** from the room when done.
- Do not tie up the repeater so you can just listen to other rooms/repeaters in other areas. If you just want to listen, use/get a radio that supports PDN mode. Or, most popular rooms and repeaters have broadcastify support, you can listen all you want there.
- The WiRES-X node is usually on a timeout timer, so don't be surprised if it disconnects after some preset time (in our case, one hour).
- If you are connected to a WiRES-X room, but not involved in a QSO, and local users start using the repeater, disconnect from any rooms so local users can conduct their QSOs.

Local/Popular Nets on WiRES-X

WiRES-X
(continued)

■ EPARS C4FM Fusion Net

Thursday, February 13 · 8:00 – 9:00pm

📍 Dade City, FL, U

☰ We, East Pasco
started a Fusion
Please come join
#81609. Hope t

The International Wires X Fusion NET in Room —America-Link- (21080) reminder

When: Saturday, 25 March 2017 09:00 PM to 10:00 PM

(GMT-05:00) Eastern Time (US & Canada)

Where: America-Link- (21080)

Notes: Saturday Night 9 PM Eastern / Sunday

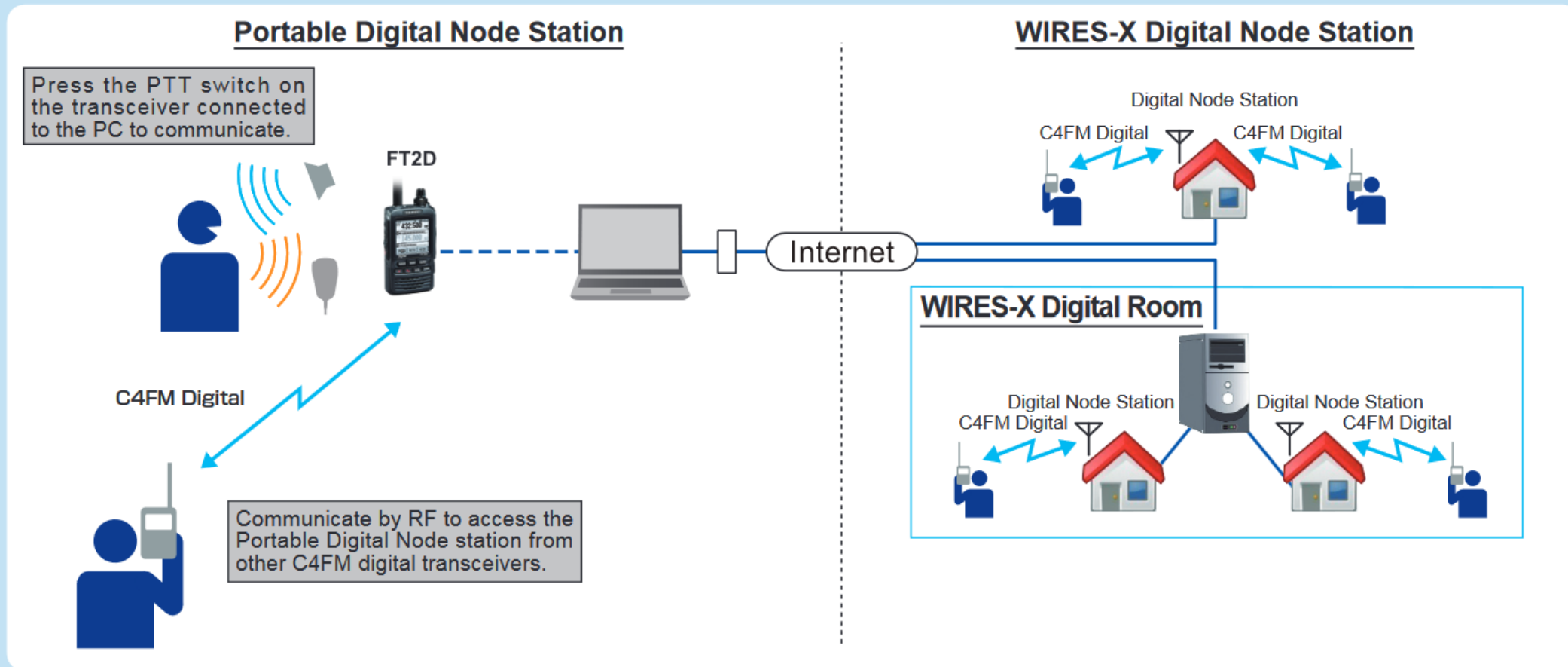
DV4Mini FCS 2-90 (America Link Network)

Join us and check in! Listen, learn, interact,
community living the Wires X Fusion exper





Access Point Illustration



What I like about Fusion and WiRES-X



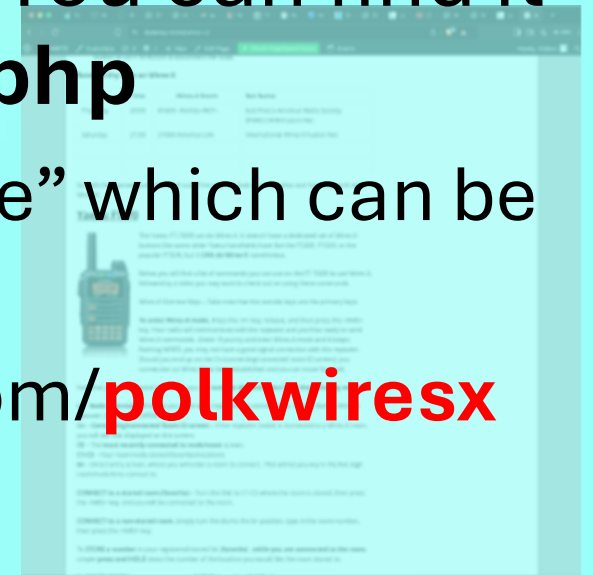
(continued)

- To switch from FM analog to Digital Voice, it's as simple as pressing one button.
- When it comes to WiRES-X it's simple... **not spending hours on a codeplug** as when using DMR.
 - You simply enter one frequency, that of the node/repeater, then use the "WiRES-X" button and either choose through the menus, or perhaps one of your stored favorites.
 - Basically, **the repeater (node) does all the work.**

Resources Online



- Separate from the standard operating manual that came with the rig, Yaesu also has created Wires-X editions of their users manuals that focus specifically on using the rig for WiRES-X.
- Yaesu has a Web site dedicated to WiRES-X. You can find it at <https://yaesu.com/jp/en/wires-x/index.php>
- There is a nice document titled “WiRES X – The Bible” which can be found at <https://tinyurl.com/wirexbible>
- Local Web page with resources at <https://tinyurl.com/polkwiresx>



Common Questions



If I am not in WiRES-X mode and the node is already connected to a WiRES-X room, will I still be heard in that room or node?

- Answer: **Yes, if you are in DN Fusion mode, but not in WiRES-X, you can still participate with the room/node.**

Do I need to disconnect with a room/node when I am done using it?

- Answer: **Yes, if you are no longer going to be transmitting on the node you are connected to, you should disconnect.**

What happens if I forget to disconnect from a room/node.

- Answer: **The repeater will automatically disconnect from the room/node 1 hour after you connected to it.**

Common Questions

WiRES-X

(continued)

What happens when I switch to WiRES-X mode?

Answer: **A WiRES-X Handshake takes place – This was designed for two purposes with the first one being to control the node. This would be for changing rooms, disconnecting rooms, uploading/downloading data, etc.**

The second purpose was to be able to have your radio switch to the correct operating frequency. (This is WHY your radio goes to VFO mode when a successful handshake is completed.)

Common Questions



(continued)

Do I need to register on the WiRES-X system to use WiRES-X?

- Answer: **No, you do not.**

When would I have to register to use the Wires-X system?

Answer: **Only in the case that you are going to have a device, such as radio acting as a PDN, or an HRI-200, on the Wires-X system as a node.**

You need to know it can take 5 to 7 business days, Japan time, for a DTMF Node/Room ID to be issued. Even longer if the information cannot be verified or we have a backlog. Recently we were doing some updates and optimization dealing with WiRES-X. This is why the websites (registration and active nodes/rooms) were offline recently.

Common Questions



(continued)

Why the delay to register a PDN ID?

I spoke with John Kruk, N9UPC, at Yaesu about this. His response was *“ALL applications are manually reviewed to ensure the information is legit. Then after confirmation it is entered into the system. At that point, the system is updated and notifications sent out.*

I cannot begin to tell you how many applications incomplete, wrong information, or a slew of other things. This helps keep WiRES-X an amateur network for free usage.”

In person he mentioned simple things such as if your name on QRZ is your legal name, but you go by something else, use your legal name.

Common Questions

WiRES-X

(continued)

If I am traveling and using a WiRES-X repeater elsewhere, how can I connect up to our Bartow WiRES-X repeater and have a QSO with folks using our Bartow repeater?

Answer: This is very easy to do. Using your radio on WiRES-X, simply connect the local repeater node you are using to the DTMF ID of the Bartow repeater which is 94102. Same thing if you are using your radio as a PDN to access the WiRES-X network. Simply connect to DTMF ID 94102 and you will then be heard on the air from the Bartow repeater.

Questions?