YAESU

Radio for Professionals

HF/50/144/430MHz ALL MODE TRANSCEIVER

FTX-1series

Instruction Manual (WIRES-X Edition)

When operating the FTX-1 in HRI mode, perform the following steps.

1. Press and hold the [FUNC] knob.
2. Display the “PAGE 3/3 FM/C4FM” function screen.
3. Touch [HRI MODE], or rotate the [FUNC] knob to select [HRI MODE] then press the [FUNC] knob.
   HRI MODE will be set to “ON”.

For details on operation in HRI mode, please refer to the “WIRES-X Connection Kit HRI-200 Instruction Manual”.
Note that there is no need to connect the HRI-200 to the FTX-1.

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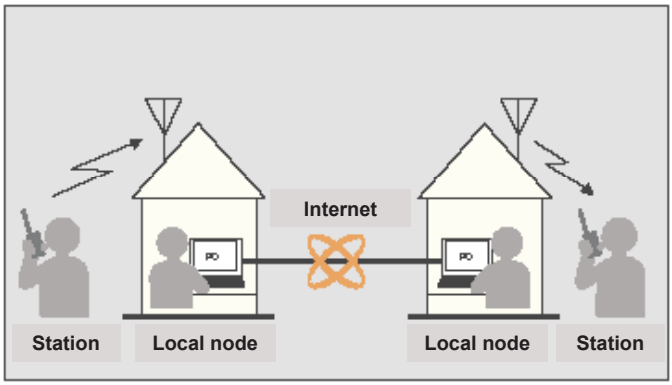
What is WIRES-X?

WIRES (Wide-coverage Internet Repeater Enhancement System) is an Internet communication system which expands the range of amateur radio communication. By relaying radio signals via the Internet, stations can be connected where radio waves cannot reach each other.

WIRES uses local nodes (stations connected to the Internet via PCs) as access points which repeat communications of conventional amateur radio stations. When the local nodes are connected to each other via the Internet, amateur stations all over the world can communicate with each other just by connecting conventional stations to the local nodes.



In addition to the WIRES features, WIRES-X also supports digital communications. Using WIRES-X, you can transmit and receive digitalized data such as text, image data and audio.

Using WIRES-X in conjunction with the transceiver allows analog/digital communications with stations beyond the direct radio contact range. In digital communication mode, you can search for stations by call signs or keywords, and exchange data such as messages and location information.

Terminology

■ Node

Radio repeater connected to the Internet via a PC, creating an internet WIRES access point which repeats signals of conventional amateur radio stations.

- **Local node**

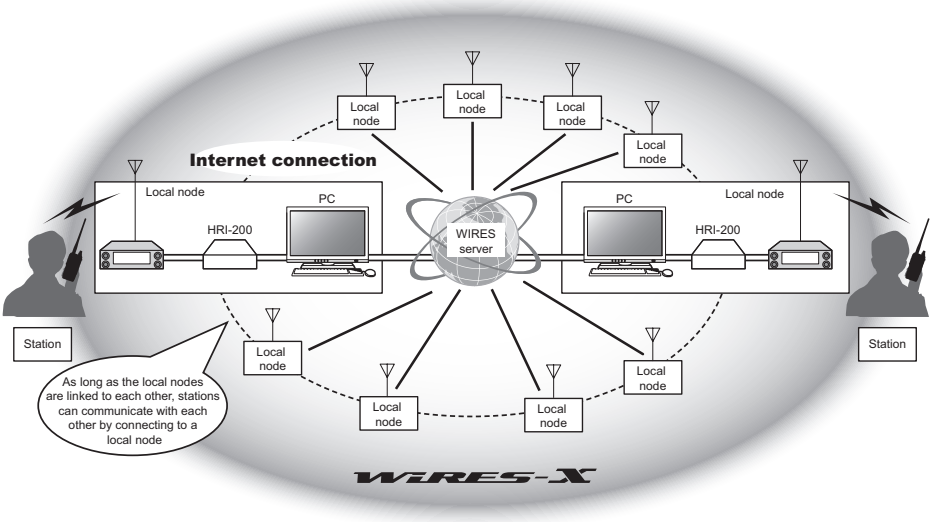
Node within the radio contact range of a conventional amateur radio station.

- **Analog node**

An analog node is a transceiver or repeater using the conventional FM format, that can only repeat DTMF (Dual Tone Multi Frequency) codes, and analog audio transmissions.

- **Digital node**

A Digital node is a transceiver or repeater compatible with digital communications in C4FM (Continuous 4 level FM) format. This type of node can transmit/receive digital audio, as well as text and image data. You can also repeat DTMF codes and analog audio transmissions.



■ WIRES-X user ID

YAESU provides identification names with the WIRES-X nodes. For each node, a DTMF ID (5-digit number) and an alphanumeric user ID (up to 10 digits) are assigned.
If the ID of the node to be connected is known, you can transmit the DTMF code from the transceiver, or directly specify the node to connect by searching the digital characters (only for digital nodes).

● **ID list**

Nodes and rooms which are currently operating WIRES are listed and published on the Yaesu website. Information such as the IDs, the call signs and the operating frequencies is provided (some nodes may not be published due to the wishes of the owners).

■ Room (Round QSO Room)

WIRES system creates community space QSO Rooms to which multiple nodes can connect simultaneously. Besides voice communications, you can also chat with text messages on the local node control PC.

● **Open room**

Room which allows all nodes to connect

● **Closed room**

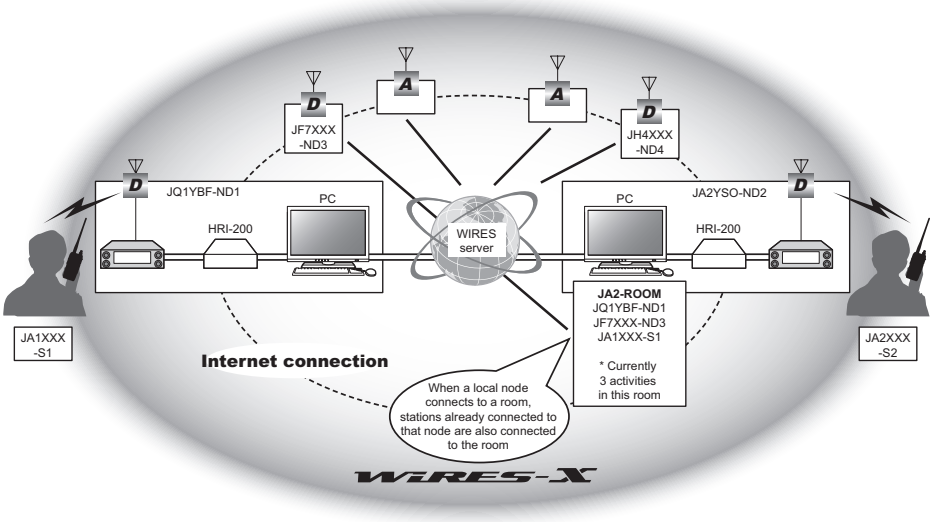
Room only registered nodes can connect

● **Digital room**

Room only digital nodes can connect

● **Activity**

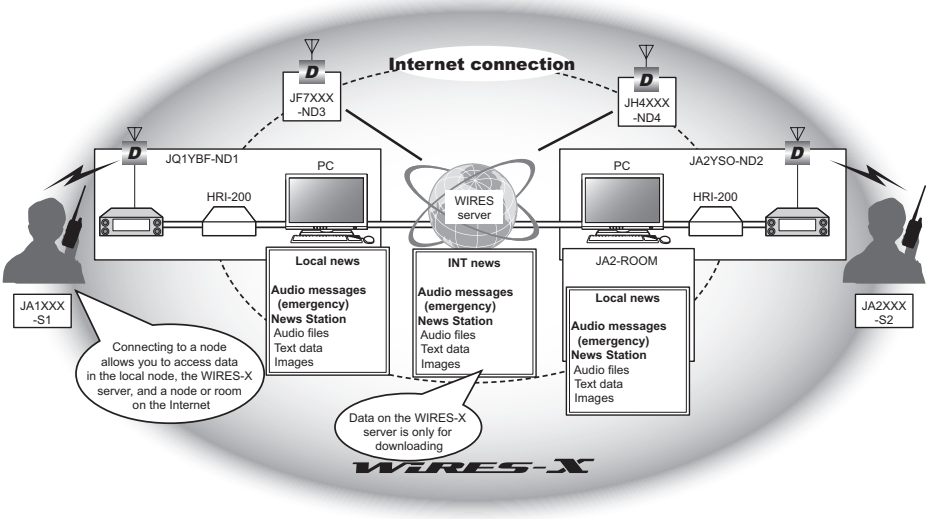
Nodes currently connected to a specific room



Tip: In the illustration, D refers to digital nodes and A refers to analog nodes.

■ News function

This feature allows digital data such as text, image, and audio, to be saved on the local node control PC. The data can be accessed from the connected digital stations.
From a digital transceiver connected to a local node or room, you can access the local node (LOCAL NEWS) and the data storage area (news station), and import (upload) and export (download) data.
Owners of a node or room can import/export data from/to their own station via a PC. The owner can also delete data and change information such as its name and attribution. The WIRES-X server also has its own news station (INT NEWS) where you can read information and data supplied by YAESU.



■ Preset search function

If the preferred channel for connecting to a local node is programmed (preset) in the transceiver, the channel can be scanned automatically when WIRES-X is started.
Utilize this function as follows:

- Quickly connect to the usually accessed local node by presetting its frequency in advance.
- By presetting a channel frequency shared with your friends nodes, you can quickly connect the transceiver to a local node even while traveling in other areas.

Two transceivers can be used on the node, one for the preset search channel (receive only channel) and the other for the voice channel (operation channel).

Connecting to a Distant Station Using WIRES-X

Finding a local node

To communicate with WIRES-X, a WIRES-X node station (local node) must be established within radio contact range of the user transceiver.

WIRES-X nodes are stations users voluntarily registered with Yaesu. Their information such as locations and operation styles are listed on the Yaesu website:
https://www.yaesu.com/jp/en/wires-x/index.php

First use this list to search for a nearby local WIRES-X node, and then find nodes on the Internet used by people you want to communicate with; write down the node names and frequencies.Since the connection procedure differs between digital stations and analog stations, confirm whether the node is an analog station or a digital station.

- When the local node is a digital station:
  Connect from your transceiver in digital mode.
  (Nodes on the Internet can connect to both digital and analog stations.)
- When the local node in an analog station:
  Connect from your transceiver in analog mode.
  (Nodes on the Internet can connect to both analog and digital stations.)

Connecting in digital mode

- Ascertain 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 DG-ID code set on the WIRES-X node station.
- Confirm that the operating mode of WIRES-X node has been set to the C4FM digital mode.
- Before using WIRES-X, set the communication modulation mode to C4FM.

Connecting to a WIRES-X digital node

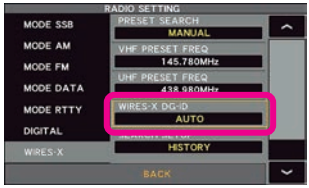
1. Set the transmit/receive DG-ID to the same ID number as the node station.
   For details, refer to the FTX-1 Operating Manual.

> The DG-ID number set by this connection method is the normal DG-ID number set by function menu. Please note that this is not the WIRES-X DG-ID number set in [**WIRES-X DG-ID**] in the setup menu.

2. Transmit with the corresponding node transmit/receive frequency.
   - If the signal is received from the node, continue to operate as is.
   - If not receiving the signal from the node, it is possible that the node station is not connected to the Internet, if so, proceed to the next 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 and hold the **FUNC** knob → select [**RADIO SETTING**] → [**WIRES-X**] → [**WIRES DG-ID**] → Press the **FUNC** knob.
   The WIRES-X DG-ID setting screen will be displayed.



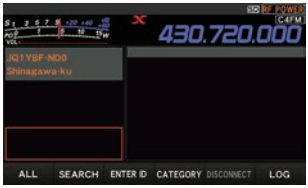
2. Rotate the **FUNC** knob, or touch “<” or “>” on either side of the value to set the WIRES-X DG-ID to the same ID number as the node station.
   AUTO: Only open nodes, set to the DG-ID number “00” may be connected.
   1 to 99: Only nodes matching the set DG-ID number may be connected.
   The default setting is “AUTO”
3. Press the **FUNC** knob, or wait for about 3 seconds to save the setting.
4. Set the frequency of the desired local node.
5. Press and hold the [**D X**] key.
   “**X**” flashes on the display.

> - While “**X**” is flashing, briefly press the [**D X**] key to re-establish connection to the local node.
> - When a local node cannot be found, “**X**” will disappear in 20 seconds.

6. 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.
   Depending on the connection status, the screen will show one of four display patterns.

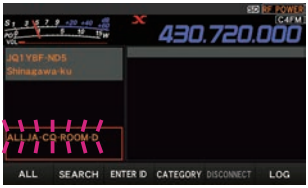
Example #1:

Connected to the local node, but unable to connect to Internet nodes or rooms (never before established a connection to Internet nodes or rooms).



Example #2:

Connected to the local node, but unable to connect to Internet nodes or rooms (previously succeeded in establishing a connection to an Internet node or room).
Press the **PTT** switch to connect to the blinking node or room for internet communication.



Example #3:

Connected to the local node, and successfully connected to an Internet node or room (the Internet node or room is the same one most recently used).
Press the **PTT** switch for internet communication.

Example #4:

Connected to the local node, and successfully connected to an Internet node or room (the Internet node or room is different from the one most recently used).
To use the current connection destination, press the **PTT** switch and continue Internet communication.

Now press the **FUNC** knob or press the **PTT** switch to connect to the selected Internet node or room and initiate Internet communication.

Connecting to a node or room on the Internet

Connect to the chosen node or room in one of the following ways:

- 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

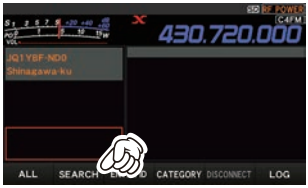
● Searching from the node & room lists

1. While displaying the local node, touch [**ALL**].
   - Displays the list of accessible nodes and rooms.
   - Connection destinations are displayed from the room list and then node list.
   - On the connection destination room columns, the number of activities (the number of nodes connected to each room) appears on the right side.

2. Rotate the **FUNC** knob to select the node or room to connect, then press the **FUNC** knob.

● **Searching by node or room name**

1. While displaying the local node, touch [**SEARCH**]. The character input screen is displayed.



2. Enter all or part of the room or node name, then touch [**ENT**].

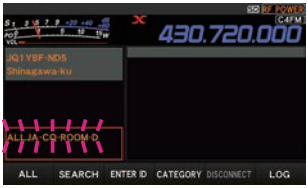
If connection destinations with the first part of the name matching the partial entry are found, they will be listed.

- If the entered name is found, the transceiver establishes connection immediately.
- The screen displays the room list search results followed by the node list search results.
- On the room search results, the number of nodes connected to each room appears on the right side.

3. Rotate the **FUNC** knob to select the node or room to connect, then press the **FUNC** knob.
   - If connection is unsuccessful, an error message appears and the screen returns to the list of nodes and rooms.

● **Connecting to the most recently connected node or room**

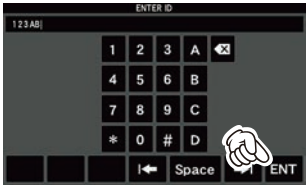
The previously Internet connected node or room, appears and flashes at the screen.
Touch the flashing node or room or the **PTT** switch to start the connection.



● **Specify the DTMF ID of the node or room to connect**

1. While the WIRES-X connection screen is displayed, touch [**ENTER ID**].
   The ENTER ID screen is displayed.

2. Use the numeric keypad of the display and touch the 5 digits of the room or node to connect, then touch [**ENT**].



Communicating with others

1. While displaying the station you are currently connected to, press **PTT** switch.
   The transceiver switches to transmit.
2. Release the **PTT** switch.
   The transceiver returns to receive.

● **Disconnecting from the node or room**

1. Touch [DISCONNECT] on the screen.

Release the WIRES-X connection

Press and hold the [**D X**] key to disconnect and switch to the frequency display screen, the "**X**" on the frequency display disappears.
If the disconnect operation is not performed, the local node and the node or room remain connected.

Useful functions in digital mode

Using preset channels

Programming (presetting) a channel frequency allows you to easily connect to a local node.

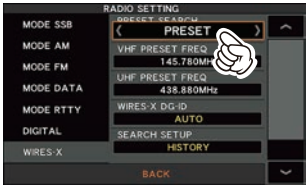
By sharing a channel frequency with other nodes, you can connect the transceiver to a local node even while you are out. This is useful for a group to operate a station.

● **Presetting a channel**

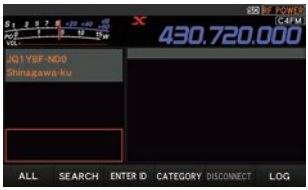
1. Press and hold the **FUNC** knob → [**RADIO SETTING**] → [**WIRES-X**] → [**VHF PRESET FREQ**] or [**UHF PRESET FREQ**] → Press the **FUNC** knob.
2. Rotate the **FUNC** knob to select frequency.
3. Press the **FUNC** knob, or wait for about 3 seconds to save the setting.

● **Connecting to a preset channel**

1. Follow the above procedure “Presetting a channel” to make the preset channel available in advance.
2. Press and hold the **FUNC** knob → [**RADIO SETTING**] → [**WIRES-X**] → [**PRESET SEARCH**] → Press the **FUNC** knob.
3. Rotate the **FUNC** knob to select “PRESET”.
4. Press the **FUNC** knob, or wait for about 3 seconds to save the setting.
5. Press and hold the [**D X**] key.
   The preset frequency is recalled, and the “**X**” icons flash alternately in the upper of the frequency display.



6. When a local node is found, “**X**” lights up, and the node name and city name appear on the screen.



● **Stop using preset channels**

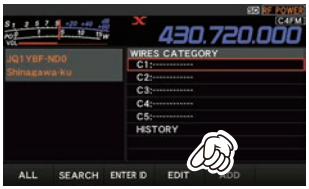
Set step 3 of the previous section to “MANUAL”.

Connecting to registered nodes or rooms

Register names of Internet nodes and rooms on the Internet and sort them into 5 categories. Up to a total of 20 nodes and rooms can be registered in each category.

● Registering category names

1. Touch [**CATEGORY**].
2. Rotate the **FUNC** knob to select one of [**C1**] to [**C5**], then press the **FUNC** knob.
3. Touch [**EDIT**].
   The character input screen is displayed.



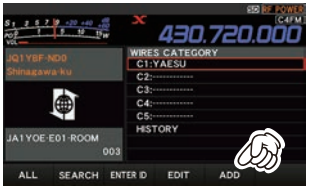
4. Enter the category name.
5. Touch [**ENT**] to set the category name and return to the previous screen.
   Repeat steps 2 to 5 to set more category names.

6. Press the [**BACK**] key return to normal operation.

● Registering a node or room

1. Touch [**CATEGORY**].
   The category list displayed.

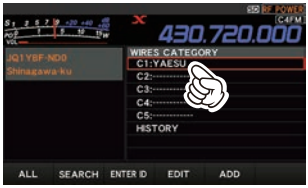
2. Rotate the **FUNC** knob to select one of [**C1**] to [**C5**].
3. Touch [**ADD**].
   The name of the currently connected node or room is added to the registered node and room lists.
4. Press the [**BACK**] key.
   The screen returns to the list.



● **Connecting to registered nodes or rooms**

1. Touch [**CATEGORY**].
   The category list displayed.

2. Rotate the **FUNC** knob to select one of [**C1**] to [**C5**], then press the **FUNC** knob.
   - Displays the node and room lists.
   - On room listings, the number of nodes connected to each room appears at the right side.

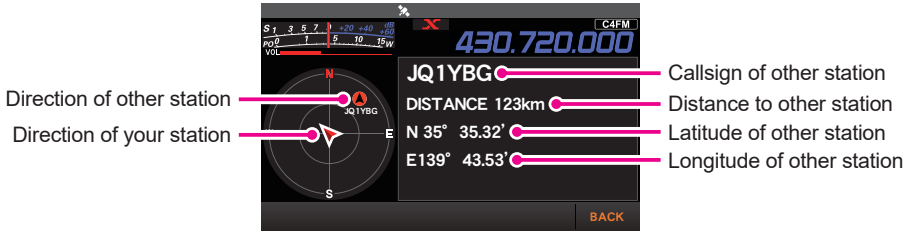


3. Rotate the **FUNC** knob to a node or room, then press the **FUNC** knob.
   Rotate the **FUNC** knob to select the node or room to connect, then press **PTT** to switch to establish a connection.

Confirming the location of the local node and the partner station

When the signal from the connected local node contains GPS location data, the information can be displayed on the screen.

1. Press the [**DISP**] key on WIRES-X screen.
   If the signal of the partner station operating in C4FM digital DN (V/D) mode includes GPS position information, the distance, direction, latitude and longitude of the received station from your own station are displayed.



2. Press the [**DISP**] key again to return to normal operation.

Connecting to analog nodes

When the node to connect is an analog station, use the DTMF function on the transceiver. For details on using the DTMF function, refer to “DTMF Operation” in the Advance Manual.

Connecting to nodes or rooms on the Internet

1. Set the main band frequency to the local node frequency.
2. Press and hold the [**N/W (MODE)**] key, then touch [**FM**] to switch to analog FM mode.
3. Press and hold the [**FUNC**] knob, then touch [**DTMF**].
   The DTMF CODE screen is displayed.
4. While pressing and holding the **PTT** switch, use the numeric keypad of the display and touch the DTMF ID key “#” followed by the 5 digits of the room or node to connect.
5. Release the **PTT** switch on the microphone, and keep the transceiver in receiving mode for about 10 seconds.
   - Once connection is established, you will be able to hear audio.
   - The connection destination screen does not appear.

DTMF codes consisting of up to 16 digits can be stored into 9 channels on the transceiver. If you register the codes of frequently-used connection destinations in advance, you can easily transmit the code by selecting it on the function menu screen. For details, refer to “DTMF Operation” in the Advance Manual.

Communicating with others

1. Press the **PTT** switch, and speak into microphone.
2. Release the **PTT** switch.
   The transceiver switches to receive mode.

Disconnecting from the node or room

1. While pressing the **PTT** switch on the microphone, use the numeric keypad of the display and touch the “#” followed by “99999” (DTMF disconnect command).
2. Disconnects the node or room.

Using WIRES-X Digital Node News Function

In WIRES-X digital mode, you can transmit/receive messages (text data) and images; you can also record/play audio messages.

Before using the News function, insert a microSD memory card into the transceiver. For details, refer to “Using the microSD Card” in the basic operating manual.

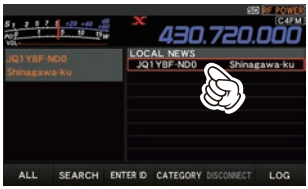
Viewing messages

Text messages and data that are transmitted/received by either a local node, or a node or room on the Internet, can be read on the transceiver.

Viewing text data in local nodes

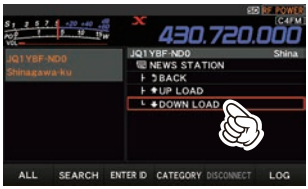
1. On the connected destination screen, touch the local node.

2. Rotate the **FUNC** knob to select the local node name displayed in [**LOCAL NEWS**], then press the **FUNC** knob.
   If data reception is successful, the menu list of the local node appears.

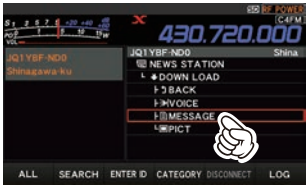


3. Rotate the **FUNC** knob to select [**NEWS STATION**], then press the **FUNC** knob.
   The upload/download select screen will appear.

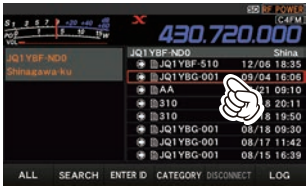
4. Rotate the **FUNC** knob to select [**DOWNLOAD**], then press the **FUNC** knob.
   The data type select screen will appear.



5. Rotate the **FUNC** knob to select [**MESSAGE**], then press the **FUNC** knob.
   - If data reception is successful, the list of data appears.
   - The list shows the registered data in reverse chronological order.



6. Rotate the **FUNC** knob to select the message to view, then press the **FUNC** knob.
   Downloads the data and displays the content of the message.



7. Press the [**BACK**] key.
   Returns the screen to the data list.

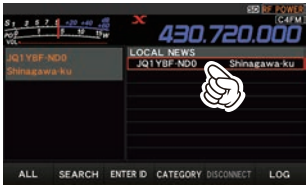
> On each screen, press the [**BACK**] key to return to the previous screen.

Viewing text data on the WIRES-X server (INT NEWS)

Text information provided by Yaesu on the WIRES-X server can be read from the transceiver.

1. On the connected destination screen, touch the local node.

2. Rotate the **FUNC** knob to select the local node name displayed in [**LOCAL NEWS**], then press the **FUNC** knob.
   If data reception is successful, the menu list of the local node appears.



3. Rotate the **FUNC** knob to select [**INT NEWS**], then press the **FUNC** knob.
   Displays the menu of the WIRES-X server.

4. Rotate the **FUNC** knob to select [**NEWS STATION**], then press the **FUNC** knob.
   Displays the data type select screen.

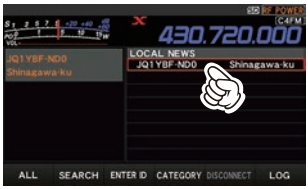
5. Rotate the **FUNC** knob to select [**MESSAGE**], then press the **FUNC** knob.
   - If data reception is successful, the list of data appears.
   - The list shows the registered data in reverse chronological order.

6. Rotate the **FUNC** knob to select the message to view, then press the **FUNC** knob.
   - Downloads the data and displays the content of the message.

7. Press the [**BACK**] key.
   Returns the screen to the data list.

Viewing text data in nodes or rooms on the Internet

1. Rotate the **FUNC** knob to select the Internet node or room to connect, then press the **FUNC** knob.
   Displays the menu list of the Internet node or room.



2. Follow steps 3 to 6 of “Viewing text data in local nodes” (page 18) to import the data.

Importing images

Images can be imported (transmitted/received) to the transceiver from a local node, or an Internet node or room.

Importing images from local nodes

1. Follow steps 1 to 4 in “Viewing text data in local nodes” on page 18 to display the data type select screen.
2. Rotate the **FUNC** knob to select [**PICT**], then press the **FUNC** knob.
   - Displays the data list.
   - The list shows the registered data in reverse chronological order.
3. Rotate the **FUNC** knob to select the image to download, then press the **FUNC** knob.
   - Starts downloading and “WAITING” appears.
   - After data import completes, the image appears.
   - When the microSD memory card does not have enough free space, data cannot be imported.
4. Press the [**BACK**] key.
   Returns the screen to the data list.

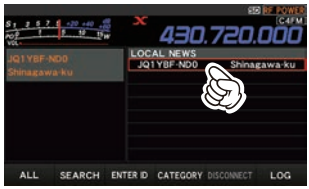
Importing images from the WIRES-X server (INT NEWS)

Images provided by Yaesu on the WIRES-X server can be imported onto the transceiver.

1. Follow steps 1 to 4 in “Viewing text data on the WIRES-X server (INT NEWS)” (page 19) to display the data type select screen.
2. Follow steps 2 to 3 in “Importing images from local nodes” above to display or save the image data.

Importing data from nodes or rooms on the Internet

1. Rotate the **FUNC** knob to select the node or room to connect, then press the **FUNC** knob.
   Displays the menu list of the Internet node or room.



2. Follow steps 3 to 6 in “Viewing text data in local nodes” (page 18) to import data.

- On each screen, press the [**BACK**] key to return to the previous screen.
- Even when the category list or data list is displayed, you can press the **PTT** switch to send audio to the connected node or room on the Internet for communication.

Viewing imported data later

You can also view the imported data later.

1. Touch [**LOG**].
   Displays the LOG screen.

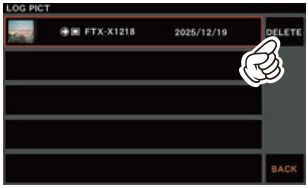
2. Rotate the **FUNC** knob to select [**MESSAGE**] or [**PICT**], then press the **FUNC** knob.
   - Displays the data list.
   - The list shows the registered data in reverse chronological order.

3. Press the [**BACK**] key.
   Returns the screen to the data list.

Deleting imported data

Deleting a file

1. Follow steps 1 to 2 “Viewing imported data later” on page 22 to display the content of the message or image data.
2. Touch [**DELETE**].
   The confirmation message appears.
3. Touch [**OK**].
   “COMPLETED” will appear on the display.



Listening to audio messages

You can play and listen to audio files transmitted/received by a local node, or node or room on the Internet. Audio files are categorized into the following two types:

EMERGENCY: Emergency information. Depending on the node or room settings, mandatory updates are supplied to connected nodes and rooms in five-minute intervals for two hours starting from the initial dissemination of the news.

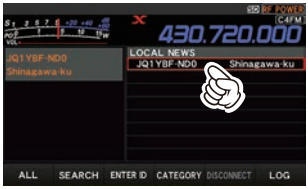
NEWS STATION: Normal message. Listen to the message anytime, as long as the message is not deleted from the node or room.

VOICE data of the news function cannot be imported to the transceiver.

Listening to emergency information in the local node

1. On the connected destination screen, touch the local-node.

2. Rotate the **FUNC** knob to select the local node name displayed in [**LOCAL NEWS**], then press the **FUNC** knob.
   If data reception is successful, the menu list of the local node appears.



3. Rotate the **FUNC** knob to select [**EMERGENCY**], then press the **FUNC** knob.
   - Displays the data list.
   - The list shows the registered data in reverse chronological order.

4. Rotate the **FUNC** knob to select the audio file to play, then press the **FUNC** knob.
   - Audio playback begins.

Listening to routine messages in local nodes

1. Follow steps 1 to 4 in “Viewing text data in local nodes” on page 18 to display the data type select screen.
2. Rotate the **FUNC** knob to select [**VOICE**], then press the **FUNC** knob.
   - Displays the data list.
   - The list shows the registered data in reverse chronological order.
3. Rotate the **FUNC** knob to select the audio file to play, then press the **FUNC** knob.
   - Audio playback begins.

Listening to routine messages on the WIRES-X server (INT NEWS)

1. Follow steps 1 to 4 in “Viewing text data on the WIRES-X server (INT NEWS)” on page 19 to display the data type select scre-en.
2. Rotate the **FUNC** knob to select [**VOICE**], then press the **FUNC** knob.
   - Displays the data list.
   - The list shows the registered data in reverse chronological order.
3. Rotate the **FUNC** knob to select the audio file to play, then press the **FUNC** knob.
   - Audio playback begins.

Listening to emergency information in nodes or rooms on the Internet

1. Rotate the **FUNC** knob to select the node or room on the Internet to connect, then press the **FUNC** knob.
   Displays the menu list of the node or room on the Internet.
2. Rotate the **FUNC** knob to select [**EMERGENCY**], then press the **FUNC** knob.
   Displays the data list.
   - The list shows the registered data in reverse chronological order.
   - Data registered within the past 2 hours flashes.
3. Rotate the **FUNC** knob to select the audio file to play, then press the **FUNC** knob.
   - Audio playback begins.

Listening to routine messages in nodes or rooms on the Internet

1. Rotate the **FUNC** knob to select the Internet node or room to connect, then press the **FUNC** knob.
   Displays the menu list of the node or room on the Internet.
2. To play the audio, follow steps 2 to 3 in “Listening to routine messages in local nodes” on above.

Transmitting messages and images

You can transmit messages (text data) and images saved on the microSD memory card inserted into the transceiver, to a local node, or a node or room on the Internet. You can also create a new message and transmit it.

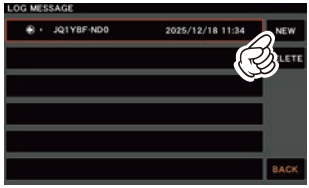
For details on microSD memory cards, refer to “Using the microSD Card” in the basic operating manual.

Creating and transmitting messages to local nodes

1. Follow steps 1 to 3 in “Viewing text data in local nodes” on page 18 to display the upload (transmission)/download (reception) select screen.
2. Rotate the **FUNC** knob to select [**UPLOAD**], then press the **FUNC** knob.
   Displays the data type select screen.

3. Rotate the **FUNC** knob to select [**MESSAGE**], then press the **FUNC** knob.
   Displays the data list.

4. Touch [**NEW**].



5. Touch [**EDIT**].

6. Use the numeric keypad of the display to enter a message of up to 80 characters, then touch [**ENT**].
   Displays the entered message confirmation screen.
7. Touch [**UPLOAD**].
   • Starts message transmission.

Transmitting saved messages or images to local nodes

1. Follow steps 1 to 2 in “Creating and transmitting messages to local nodes” on page 25 to display the data type select screen.
2. Rotate the **FUNC** knob to select [**MESSAGE**] or [**PICT**], then press the **FUNC** knob.
   Displays the data list.
3. Rotate the **FUNC** knob to select the message or image to transmit, then press the **FUNC** knob.
4. Touch [**FWD**] for message or touch [**UPLOAD**] for image.

Creating and transmitting messages to nodes or rooms on the Internet

1. Rotate the **FUNC** knob to select the node or room on the Internet to connect to, then press the **FUNC** knob.
   Displays the menu list of the node or room on the Internet.
2. Rotate the **FUNC** knob to select [**NEWS STATION**], then press the **FUNC** knob.
   Displays the upload (transmission)/download (reception) select screen.
3. Rotate the **FUNC** knob to select [**UPLOAD**], then press the **FUNC** knob.
   Displays the data type select screen.
4. Follow steps 3 to 7 in “Creating and transmitting messages to local nodes” on page 25 to create and transmit a message.

Transmitting saved messages or images to nodes or rooms on the Internet

1. Follow the above steps 1 to 3 in “Creating and transmitting messages to nodes or rooms on the Internet”, to display the data type select screen.
2. Follow the above steps 2 to 4 in “Transmitting saved messages or images to local nodes”, to select and transmit data.

Transmitting audio messages

You can transmit audio messages spoken into the microphone as data to a local node, or node or room on the Internet.

Audio files are categorized into the following 2 types:

EMERGENCY: Emergency information. Depending on the node or room settings, mandatory updates are supplied to connected nodes and rooms in five-minute intervals for two hours starting from the initial dissemination of the news.

NEWS STATION: Normal message. Listen to the message anytime as long as the message is not deleted from the node or room.

Transmitting emergency information to local nodes

1. Follow steps 1 to 2 in “Viewing text data in local nodes” on page 18 to display the menu list of the local node.
2. Rotate the **FUNC** knob to select [**EMERGENCY**].
3. Press the **PTT** switch, a beep sounds and a confirmation screen “**VOICE UPLOAD**” Appears. When sending emergency information, press and hold the **PTT** switch, after three beeps. While pressing the **PTT** switch, speak into MIC.
   The maximum recording time is one minute.
4. Release the **PTT** switch after completing audio transmission.
   After message transmission completes, “**COMPLETED**” appears and then the screen returns to the menu list of the local node.

Transmitting routine voice messages to local nodes

1. Follow steps 1 to 3 in “Viewing text data in local nodes” on page 18 to display the upload (transmission)/download (reception) select screen.
2. Rotate the **FUNC** knob to select [**UPLOAD**], then press the **FUNC** knob.
   Displays the data type select screen.
3. Rotate the **FUNC** knob to select [**VOICE**].
4. While pressing the **PTT**, speak into MIC.
   The maximum recording time is one minute.
5. Release the **PTT** after completing audio transmission.
   After message transmission completes, “**COMPLETED**” appears.

Transmitting emergency information to nodes or rooms on the Internet

1. Rotate the **FUNC** knob to select the node or room on the Internet to connect, then press the **FUNC** knob.
   Displays the menu list of the node or room on the Internet.
2. Follow steps 2 to 4 in “Transmitting emergency information to local nodes” above to transmit a message.

Transmitting routine messages to nodes or rooms on the Internet

1. Follow steps 1 to 2 in “Creating and transmitting messages to nodes or rooms on the Internet” on page 26 to display the upload (transmission)/download (reception) select screen.
2. Follow steps 2 to 5 in “Transmitting routine voice messages to local nodes” above to transmit a message.

WIRES-X Setup Menus

WIRES-X setting mode list

Setup Menu no. / item	Description	Selectable options (Options in bold are the default settings)
PRESET SEARCH	Setting the operating frequencies for repeaters/WIRES-X	**MANUAL** / PRESET
VHF PRESET FREQ	Setting preset frequencies	Depends on the transceiver version.
UHF PRESET FREQ	Setting preset frequencies	Depends on the transceiver version.
WIRES-X DG-ID	Setting the DG-ID	1 to 99 / **AUTO**
SEARCH SETUP	Setting the item order on the node & room lists	**HISTORY** / ACTIVITY
Node Mode	WIRES-X operation mode setting	**AP RADIO** / AP P / DIRECT

Using the WIRES-X setup menu

Setting the operating frequencies for WIRES-X (PRESET SEARCH)

The [**D X**] key can be set to always use the preset frequency when searching for the local node.

For details, refer to “Using preset channels” on page 13.

Setting the preset frequencies (VHF PRESET FREQ / UHF PRESET FREQ)

It is possible to save a preset frequency being used when searching for a local node by pressing the [D X] key.

For details, refer to “Using preset channels” on page 13.

The DG-ID feature to access the WIRES-X node station (WIRES-X DG-ID)

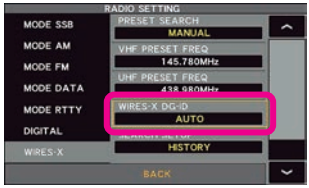
Set the WIRES-X, DG-ID number used when connecting to the local node station by pressing the [**D X**] key.

1. Press and hold the **FUNC** knob → [**RADIO SETTING**] → [**WIRES-X**] → [**WIRES-X DG-ID**] → Press the **FUNC** knob.
2. Rotate the **FUNC** knob, or touch “<” or “>” on either side of the value to set the WIRES-X DG-ID to the same ID number as the node station.

   AUTO: Only open nodes, set to the DG-ID number “00” may be connected.

   1 to **99**: Only nodes matching the set DG-ID number may be connected.

   The default setting is “**AUTO**”.

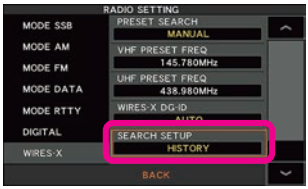


3. Press the **FUNC** knob, or wait for about 3 seconds to save the setting.

Setting the item order on the node & room lists (SEARCH SETUP)

To change the sort criteria of the list of connection destinations on the Internet:

1. Press and hold the **FUNC** knob → [**RADIO SETTING**] → [**WIRES-X**] → [**SEARCH SETUP**] → Press the **FUNC** knob.
2. Rotate the **FUNC** knob to select "**HISTORY**" or "**ACTIVITY**".



HISTORY: Displays the list sorted in order of the connection destination that your station most recently connected to.

ACTIVITY: Displays the list sorted in descending order from the room with the most nodes connected. Nodes come after rooms.

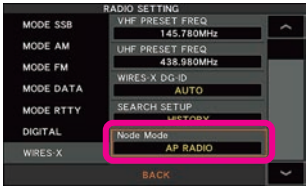
The default setting is "**HISTORY**".

3. Press the **FUNC** knob, or wait for about 3 seconds to save the setting.

Setting the WIRES-X Mode (NODE MODE)

To change the WIRES-X communication method:

1. Press and hold the **FUNC** knob → [**RADIO SETTING**] → [**WIRES-X**] → [**Node Mode**] → Press the **FUNC** knob.
2. Rotate the **FUNC** knob to select Node Mode.



AP RADIO: The FTX-1 can function as a standalone access point.

AP PC: Connect a computer to the FTX-1 and communicate using C4FM over the air.

DIRECT: Does not send or receive over the air, but communicates using the FTX-1 through a connected computer.

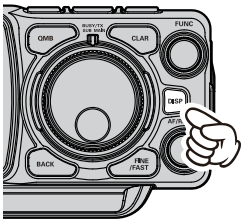
The default setting is "**AP RADIO**".

3. Press the **FUNC** knob, or wait for about 3 seconds to save the setting.

Other Function

Turning the display ON and OFF

Press and hold the [**DISP**] key to hide all displays on the screen.
Press the any key or rotate the knob to show the hidden displays.



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