

# 144/430MHz DIGITAL/ANALOG TRANSCEIVER

# **C4FM FDMA**

# FT1DR FT1DE

Instruction Manual (WIRES-X Edition)

Thank you for purchasing our product.

This instruction manual explains information related to the "WIRES-X Function". For information on basic operation of the transceiver, refer to the operating manual enclosed in the product package.

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# Using the WIRES-X

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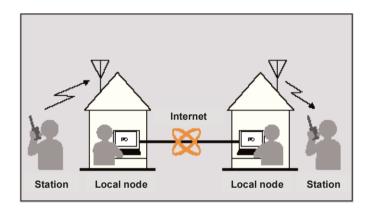
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# What is WIRES-X?

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.

The device allows you to have analog/digital communications with stations far beyond the VHF/UHF radio communication range by using WIRES-X local nodes. In digital communication mode, you can search stations by call signs or keywords, and exchange data such as messages and location information.

Since you can also use WIRES-X together with the GM (Group Monitoring) function on a compatible transceiver to create a group including local nodes, you can also establish a network covering a wider range.

#### Caution -

You cannot connect to a currently in service WIRES-II node from a WIRES-X node, or vice versa.

#### What is WIRES-X?

# Terminology

#### Node

Radio repeater connected to the Internet via a PC, which repeats communications of conventional amateur radio stations as an access point

#### Local node

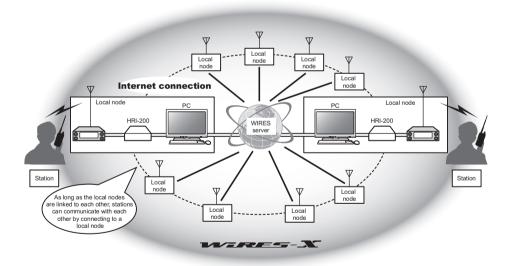
Node within the radio communication range of a conventional amateur radio station

#### Analog node

Node which is a transceiver or repeater using the conventional FM format and can only repeat DTMF (Dual Tone Multi Frequencies) codes and analog audio transmissions/ receptions

#### Digital node

Node which is a transceiver or repeater compatible with digital communications in C4FM (Continuous 4 level FM) format. With this type of node, you can not only relay voice communications, but also text and image data transmissions. You can also repeat DMTF codes and analog audio transmissions/receptions.



# WIRES-X user ID

YAESU provides identification names with the WIRES-X nodes. For each node, a DTMF ID (5-digit number) and user ID (alphanumeric characters consisting of up to 10 digits) are provided.

If you know the ID of the node you want to connect with, you can transmit the DTMF code from the FT1DR/DE, and directly specify the node to connect to by searching by characters (only for digital nodes).

#### ID list

Nodes and rooms which are currently operating WIRES are listed and published on our WIRES website. We provide information such as IDs, call signs and operating frequencies (some may not be published due to the wishes of owners).

# Room (Round QSO Room)

WIRES system community space to which multiple nodes can connect simultaneously. As well as voice communications, you can also chat with text messages on the PC used for the local node.

#### Open room

Room which allows all nodes to connect to

#### Closed room

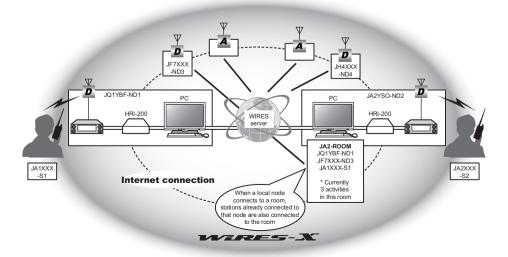
Room only registered nodes can connect to

#### Owner

Node which opens and organizes a room

#### Activity

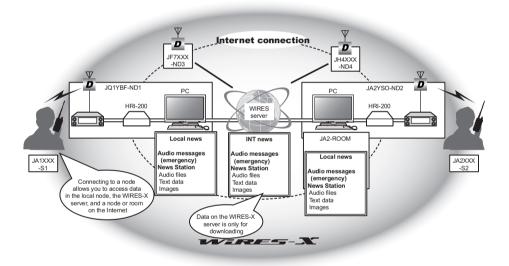
Nodes which are currently connected to a specific room



#### News function

This feature allows you to save digital data such as text, image and audio data on the PC used for the local node, and access the data from the connected digital station. From the digital station, you can access the local node (local news), the data storage area (news station) in the connected destination node or room to read data (upload data) and write data (download data).

The owners of a node or room can read/write data 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 digital station, the channel can be scanned automatically when you start up WIRES-X. Utilize this function as follows:

- Quickly connect to the local node you usually access by presetting its frequency in advance.
- By presetting to a shared channel frequency with your friends nodes, you can quickly connect the FT1DR/DE to a local node even while you are traveling in other areas

You can use 2 transceivers as nodes, one for the preset search channel (receive only channel) and the other for the voice channel (operation channel).

# Finding a local node

To communicate using 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 our website: https://www.yaesu.com/jp/en/wires-x/index.php

First use this list to search for a nearby local node, and 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.)

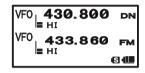
# Connecting in digital mode

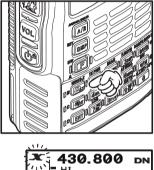
#### Caution -

Before using WIRES-X, press (5.1) 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

- 1 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 ENT.
- Press and hold ( ) for 1 second or more
   [X] will flash on the left side of the frequency indication.







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.
- (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)



սուսության

- (3) Connected to the local node, successfully connected to Internet nodes or rooms (nodes or rooms are the same as ones previously used)
- (4) Connected to the local node, successfully connected to Internet nodes or rooms (nodes or rooms are different from ones previously used)

When the ► is displayed, rotate the Intermediate Disk. Call signs of nodes or rooms where you previously established connection will flash.

- Tip While the [X] is flashing, press the  $\textcircled{Bis}^{\text{WRESX}}$  to re-establish connection to the local node.
- Tip When any local node cannot be found, [X] will disappear in 5 minutes.
- Tip When the detected local node is a repeater station, [[**R**]] will appear below [**X**].





#### Caution -

WIRES-X can be used only on band A.

When using band B (shown on the bottom part of the screen) as the operation band, after pressing and holding  $\underbrace{\text{Wess}^{\times}}_{\text{exc}}$  for 1 second or more, band A (shown on the top part of the screen) will automatically become the operation band.

#### Connecting to a node or room on the Internet

You can connect to a desired 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 desired node or room

#### Searching from the node & room lists

1 When the connection destination is displayed, press and hold ENT for 1 second or more.

The menu list of the local node will appear.



- 2 Rotate DIAL to select [ALL]
- 3 Press ENT

Accessible node and room lists will appear.

- Tips [Waiting] will keep flashing until the list is displayed.
  - 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 connecting to each room) appears on the right side.
- **4** Rotate The connection destination
- 5 Press ENT

The FT1DR/DE will initiate connection and [Waiting] will flash.

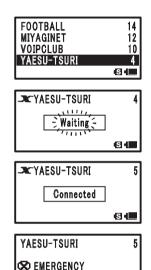
When connection is successfully established,

[Connected] will appear, followed by the menu list of the connection destination.

Tip If connection is unsuccessful, an error message will appear and the screen will return to the list of nodes and rooms. For explanation of error messages, please refer to the "Error

Message Guide" (page 45).





NEWS STATION

SL



You can list items in order according to the number of activities or access history from [7 WIRES-X]  $\rightarrow$  [3 SEARCH SETUP] in setting mode.

#### Searching by node or room name

- When the connection destination is displayed, press and hold ENT for 1 second or more The menu list of the local node will appear.
- 2 Rotate DIAL to select [SEARCH & DIRECT]
- 3 Press ENT

The character input screen will appear.



C4:	
C5:	
ALL	
SEARCH & DIRECT	
	S 📃

**4** Use the numerical keypad to enter all or part of the room name or user ID of the connection destination.

The characters you have just entered will appear on the screen.

**Tips** • Refer to the following table and enter the name or ID using up to 16 alphanumeric characters.

Characters

1 ABC2

DEF3 GHI4

JKL5

MNO6

PQRS7

TUV8

WXYZ9

0		0		J									
To modify charact	ers, press	E.	Pressing	F	will r	nove	the	cursor	to th	ne lef	t and	erase	а

- Pressing ENT will move the cursor to the right.
- To select symbols such as "-" and "/", rotate
- 5 Press and hold ENT for 1 second or more [SEARCH] will become selected.

Number kevs

1

2 3

4

6

7

8

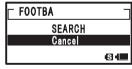
9

6 Press ENT

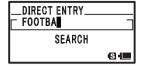
Connection destination search will start and [Waiting] will flash.

If connection destinations with a name partially matching the name you entered are found, they will be listed.

- Tips If there is no connection destination matching the entered name, [No Matches] will appear, and then the screen will return to the SEARCH screen.
  - To edit the name, rotate the DIAL, select [Cancel], press ENT], then make changes on the input screen.
  - If the name you entered is found, the FT1DR/DE will initiate the connection immediately.
  - The screen will display the room list search results, followed by the node list search results.
  - On the room columns in the search results, the number of activities (the number of nodes connecting to each room) appears on the right side.







- 7 Rotate 🛄 to select the connection destination
- 8 Press ENT

The FT1DR/DE will initiate connection and [Waiting] will flash.

Tip Instead of ENT, you can press 🛞 to establish connection while continuing to transmit from your transceiver

When connection is successfully established,

[Connected] will appear, followed by the menu list of the connection destination.

Tip If connection is unsuccessful, an error message will appear and the screen will return to the list of nodes and rooms. For an explanation of error messages, please refer to the "Error Message Guide" (page 45).

#### Tip -

You can list items in order according to the number of activities or access history from [7 WIRES-X]  $\rightarrow$  [3 SEARCH SETUP] in setting mode.

#### • Connecting to the node or room you have most recently connected

If you have previously connected to a node or room, it will be displayed and flashing at the bottom of the screen.

When this happens, press ENT to start connection, and once connection is established, A list of available nodes will appear.

If there is a  $\blacktriangleright$  to the left of the node name, rotate the  $\prod_{\text{DAL}}$  to display the node you have most recently connected to.

If connection is unsuccessful, an error message will appear and the node name will return to flashing mode.

For an explanation of error messages, please refer to the "Error Message Guide" (page 45).

#### • Specifying the DTMF ID of the desired node or room

- 1 Press
- 2 Press V/M

The DTMF input screen will appear.

- 3 Enter the 5-digit DTMF ID
- 4 Press and hold ENT for 1 second or more

Tip Press (V/M) to cancel input.





DIRECT ENTRY	
<u>┌</u> #■	]
	S 💷

Tip

# Communicating with others

1 When the connection destination is displayed, press

The FT1DR/DE will switch to transmit mode.



2 Speak into [MIC]

 Tip
 Place the microphone about 5 cm away from your mouth when you speak.

 Caution
 Do not continuously transmit over an extended period of time to reduce the risk of overheating, malfunction, and injury.

3 Release 🎬

The FT1DR/DE will switch to receiving mode.

Tip -

You can communicate with the connection destination by pressing even when viewing data in a node or room on the Internet using the NEWS function in digital mode (Page 21).

# Useful functions in digital mode

#### Using a preset channel

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 Desp for 1 second or more The FT1DR/DE will enter setting mode.
- 2 Rotate The to select [7 WIRES-X]
- 3 Press ENT The menu list will appear.
- 4 Rotate to select [2 RPT/WIRES FREQ]
- 5 Press ENT

The selection items will appear.



- 6 Rotate in to select [PRESET]
  - Tips Rotating 🛄 switches between [MANUAL] and [PRESET]. • The default setting is [MANUAL].
- 7 Press ENT

The frequency will appear.

- **8** Rotate  $\bigoplus_{n=1}^{\infty}$  to select the frequency
  - Tips Rotating the changes the frequency by the increments specified in setting mode. Pressing in and rotating changes the frequency by 1 MHz increments.
    - Pressing (BAND) will change the preset frequency band.
    - The default settings are 145.780 for band A and 438.980 for band B.
- 9 Press PISP. 4 times

of the screen.

minutes.

The frequency will be set, and then the screen will return to the frequency display screen.

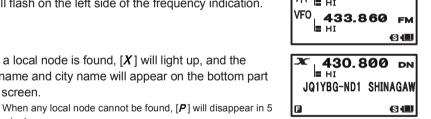
#### Connecting to a preset channel

- 1 Follow the procedure in "Presetting a channel" to make the preset channel available in advance.
- **2** Press and hold  $\begin{bmatrix} w_{\text{ires}}, x \\ e_x \end{bmatrix}$  for 1 second or more,

[P] will flash on the left side of the frequency indication.

When a local node is found, [X] will light up, and the

node name and city name will appear on the bottom part

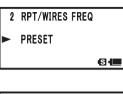


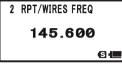
30.800

#### Tip -

Tip

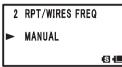
If the local node has a different frequency than your preset channel frequency, your settings will automatically change to the node frequency.





# Ending searching by a preset channel

- 1 Follow steps 1 to 5 in "Presetting a channel" to display the selection items of [2 RPT/ WIRES FREQ]
- 2 Rotate Into display [MANUAL] Tip Rotating Into switches between [MANUAL] and [PRESET].



3 Press DISP, 3 times

The screen will return to the frequency display screen.

# Connecting to a registered node or room

You can register names of 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 name

- Press and hold for 1 second or more The FT1DR/DE will enter setting mode.
- 2 Rotate to select [7 WIRES-X]
- 3 Press ENT

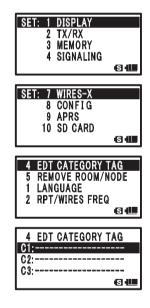
The menu list will appear.

- 4 Rotate in to select [4 EDT CATEGORY TAG]
- 5 Press ENT

The category name setting screen will appear.

- 6 Rotate DIAL to select one of [C1] to [C5].
- 7 Press ENT

The character input screen will appear.



**8** Use the keypad to enter the category name.

The characters you have just entered will appear at the center of the screen.

Tips • Refer to the following table to enter the category name using up to 16 alphanumeric characters.

	<u> </u>	, v	/0/ 1111/							
•	To modify charact	ters, press	🖭 . Pi	ressing	👜 wi	ll move	the cursor	to the left	and erase	а
,	character									

• Pressing ENT will move the cursor to the right.

- To select symbols such as "-" and "/", rotate
- You can switch between alphanumeric characters and Japanese katakana by selecting [7] WIRES-X]  $\rightarrow$  [1 LANGUAGE].
- 9 Press and hold (ENT) for 1 second or more.

8

9

Δ

The screen will return to the category name setting screen. The category name you entered will appear.

Tip Repeat steps 6 to 9 to set more category names.

# **10** Press PISP, 3 times

The category name will be set, and then the screen will return to the frequency display screen.

#### Registering a node or room

- Connect to the desired node or room.
- 2 When the connection destination is displayed, press ENT The menu list of the connection destinations will appear.
- **3** Rotate in to select **[ADD]**
- 4 Press ENT

The category list will appear.

- **5** Rotate  $\bigoplus_{n=1}^{m}$  to select a category
- 6 Press ENT

The connection destinations list will appear, and then the name of the node or room currently connected will be added to the list.

4 EDT CATEGORY TAG C1: YAESU C2:-C3: 6

1 1 2 abc2ABC 3 def3DEF 4 ghi4GHI 5 ikl5JKL 6 mno6MNO 7 pgrs7PQRS

tuv8TUV

wxvz9WXYZ

 $0 - \frac{\%}{2!} + \frac{\%}{4}$ 

Number kevs Characters

> 430.800 DN JQ1YBG-ND1 SHINAGAW JA2YSO-ND2 NAGOYA 6 JA2YSO-ND2 NAGOYA CO EMERGENCY NEWS STATION I ADD S III C1: YAESU C2: NAGOYA **C3: SHINAGAWA** C4: NAGANO

> > S



4 EDT CATEGORY TAG YAFSU

S 💷

7 Rotate to select [BACK] C1: YAESU JA2YSO-ND2 8 Press ENT BACK The screen will return to the menu options. S 💷 Connecting to the registered node or room 1 Press and hold [ENT] for 1 second or more 430.800 DN E HT The menu list of the local node will appear. JQ1YBG-ND1 SHINAGAW IS -2 Rotate in to select one of [C1] to [C5] C1: YAESU C2: NAGOYA 3 Press ENT **C3: SHINAGAWA** [Waiting] will appear, followed by a list of nodes and C4: NAGANO S 🖿 rooms. Tip On room columns, the number of activities (the number of nodes connecting to each room) appears on the right side. **4** Rotate **(**) to select the connection destination C1: YAESU YAESU-TSURI 5 Press ENT JA2YSO-ND2 Connection will begin and [Waiting] will flash. S 🖿 Instead of pressing (ENT), press 👹 to establish connection Tip while continuing to transmit from your transceiver. XJA2YSO-ND2 MILL, Waiting S 🕒 If connection is successful, [Connected] will be displayed, JA2YSO-ND2 and menu options for the node will appear. Connected Tip If connection is unsuccessful, an error message will appear, and the screen will return to the list of nodes and rooms. S 🖿 For an explanation of error messages, please refer to the "Error Message Guide" (page 45). JA2YSO-ND2 CO EMERGENCY

#### Tip -

You can list items in order according to the number of activities or access history from [7 WIRES-X]  $\rightarrow$  [3 SEARCH SETUP] in setting mode.

NEWS STATION

IS -

#### Disconnecting from a node or room

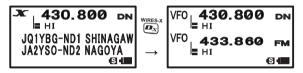
1 Press and hold for 1 second or more If disconnection is successful, [Not Connected] will be displayed.

Tip Once [Not Connected] has appeared, the display will return to the local node connection screen.

# **Releasing the WIRES-X connection**

Press and hold  $\underbrace{\mathbb{P}_{X}}^{\text{WRESX}}$  for 1 second or more. The display will return to the frequency screen, and the [X] to the left of the frequency will disappear.

Tip The local node and connection destination nodes or rooms will remain connected.



# Connecting to an analog node

When the desired node is an analog station, use the DTMF function on the transceiver. For details on how to use the DTMF function, refer to "Using the DTMF Function" in the basic operating manual.

#### Connecting to a node or room on the Internet

- 1 Set the main band frequency to the local node frequency
- 2 Press  $\underbrace{\mathbf{P}}_{\mathbf{W}}^{\text{WRES-X}}$  to switch to analog FM mode

Tip For details, refer to "Switching the communication mode" in the basic operating manual.

3 While pressing 🖏, press the DTMF ID key of the node or room where you want to connect

The DTMF code will be delivered.

4 Release , and keep the FT1DR/DE in receiving mode for about 10 seconds Once connection is established, you will be able to hear audio.

Caution The connection destination screen will not appear.

#### Tip -

You can store DTMF codes consisting of up to 16 digits for 10 channels on the FT1DR/DE. If you register the codes of frequently-used connection destinations in advance, you can easily transmit a code by pressing its abbreviated number while pressing 🛞. For details, refer to "Using the DTMF Function" in the basic operating manual.

# Communicating with others

1 Press 👹

The FT1DR/DE will switch to transmit mode.

XYAESU-TSURI	5
Not Connected	
	S 🖿

2 Speak into [MIC]

Tip Place the microphone about 5 cm away from your mouth when you speak.

Caution Do not continuously transmit over an extended period of time to reduce the risk of overheating, malfunction, or injury.

## 3 Release 🛞

The FT1DR/DE will return to receive mode.

# Disconnecting from a node or room

While pressing (), press the #99999 (DTMF disconnection command) key.

# Various display functions

# Confirming the digital node location

When the signal from the local node you are connected to contains GPS location information, you can display the location data on the screen.

While viewing the connection destination screen, press to displayed on the destination screen, press to display the compass screen. The direction and distance from the present station to the local node will be displayed.

Press er again to return to the connection destination screen.



#### Tip -

When [NUMERIC] is selected from [1 DISPLAY]  $\rightarrow$  [2 TARGET LOCATION] in the setting mode, the latitude & longitude screen appears instead of the compass screen.

# Confirming the frequency

On the WIRES-X screen, press  $\overrightarrow{VM}$  to change to the frequency display screen that was displayed before using WIRES-X. Press  $\overrightarrow{VM}$  again to return to the WIRES-X screen.

[Dual band screen] 430.800 430.800 X DN DN E ĤI E ĤĨ JQ1YBG-ND1 SHINAGAW VFO 433.860 DW V/M FM HI S 💷 G 💷 [Single band screen] 430.800 DN 430.800 ⊨ нт JQ1YBG-ND1 SHINAGAW DW V/M DN s I S III [When viewing text data of the local node] Dual band 430.800 to:YAESU-CAMP DN HI HI MESSAGE **VFO** 433.860 DW V/M FM from:JQ1YBF-ABC HI S 💷 S 🖿 Mono band X 430.800 dw V/M DN S 📖

# Returning to the initial screen

While on the WIRES-X screen, press and hold Area for 1 second or more to return to WIRES-X startup screen (initial screen).

# Using the News Function of WIRES-X

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

# Viewing messages

You can read messages (text data) that are transmitted/received by either a local node, or a node or room on the Internet, from the FT1DR/DE transceiver.

#### Caution -

To read messages, insert a microSD card into the FT1DR/DE in advance. For details, refer to "Using a microSD memory card" in the basic operating manual.

# Viewing text data in a local node

- Press and hold ENT for 1 second or more The menu list of the local node will appear.
- 2 Rotate DIAL to select [LOCAL NEWS]
- 3 Press ENT

[Waiting] will be displayed.

If data reception is successful, a list of available sources at the local node will appear.

4 Select one, then press (NT) [Waiting] will be displayed.

If data reception is successful, menu options for the local node will appear.

5 Press ENT

The upload/download select screen will appear.

- 6 Rotate to select [DOWNLOAD]
- 7 Press ENT

The data type select screen will appear.

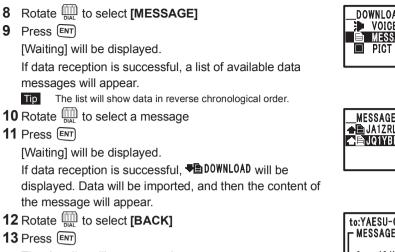
ALL SEARCH & DIRECT

430.800

DN







The data list will appear again.



MESSAGE	
▲ JA1ZRL-789	16:15
<b>→</b> JQ1YBF-ABC	12:06
	S 💶



#### Tips :

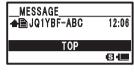
- On the data content display screen, press 🔤 to display the sender's location information when the data was imported.
- On each screen, rotate into the end to display [BACK]. Select [BACK] and press [NT] to return to the previous screen.

#### Operations on the data list

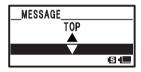
When there is a large number of data items available, the list will be divided into smaller lists with 20 data items each. At the end of each list, the following icons will appear to allow you to move to the other lists. Rotate  $\bigcap_{DAL}$  to select a list, and press ENT to enter the list.

**[TOP]** Displays the beginning of the first list.

- [▲] Displays the previous list. Not available on the first list.
- [▼] Displays the next list. Not available on the last list.







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

You can read text information provided by Yaesu on the WIRES-X server from the FT1DR/DE transceiver.

- Press and hold FNT for 1 second or more The menu list of the local node will appear.
- 2 Rotate make to select [INT NEWS]
- 3 Press ENT The menu of the WIRES-X server will appear.
- 4 Press ENT The data type select screen will appear.
- 5 Rotate (MESSAGE)
- 6 Press ENT

The data list will appear.

Tip The list will show data in reverse chronological order.



- 7 Rotate DIAL to select a message
- 8 Press ENT

[Waiting] will be displayed.

If data reception is successful, **DOWNLOAD** will be displayed. Data will be imported; the content of the message will appear.

9 Rotate DIAL to select [BACK]

#### 10 Press ENT

The data list will appear again.

MESSAGE	
🖹 What's New	16:15
Information	12:06
	S 🖿







# Viewing text data in a node or room on the Internet

- When the connection destination is displayed, press ENT The menu list of the node or room on the Internet will appear.
- 2 Press ENT

The upload/download select screen will appear.

- 3 Rotate Tild to select [DOWNLOAD]
- 4 Press ENT

The data type select screen will appear.

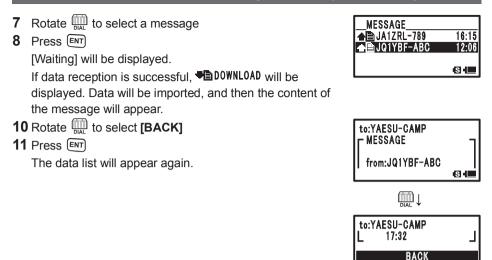
- **5** Rotate **[MESSAGE]**
- 6 Press ENT

The data list will appear.

Tip The list will show data in reverse chronological order.



IS -



#### Tip

On the content display screen, press by to display the sender's location information when the data was imported.

#### Caution -

When the category list or data list is displayed, if you press (), the FT1DR/DE transceiver will be ready to transmit audio to the currently connected node or room on the Internet.

# Importing images

You can import images transmitted/received by either a local node, or a node or room on the Internet onto the FT1DR/DE transceiver.

#### Cautions -

- To import images, insert a microSD card into the FT1DR/DE in advance. For details, refer to "Using a microSD memory card" in the basic operating manual.
- Imported images cannot be viewed on the FT1DR/DE. To view images after importing, remove the microSD card from the FT1DR/DE, and then view the data on the card using a PC, etc.

# Importing images from a local node

- 1 Follow steps 1 to 7 in "Viewing text data in a local node" to display the data type select screen
- 2 Rotate That to select [PICT]
- 3 Press ENT

The data list will appear.

Tip The list will show data in reverse chronological order.

- 4 Rotate DIAL to select an image
- 5 Press ENT

The image data information will appear.

- 6 Rotate To select [DOWNLOAD]
- 7 Press ENT

Data import will start and [DOWNLOAD] will flash.



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After data import completes, [Completed] will appear, and then the data list will appear again.

- Tips Data in unsupported formats cannot be imported. In such a case, [Not Completed] will appear, and then the screen will return to the data type select screen.
  - When the microSD card does not have enough free space, data cannot be imported. In such a case, [Memory is full] will appear, and then the screen will return to the data type select screen.

# Importing images from the WIRES-X server

You can import images provided by Yaesu on the WIRES-X server onto the FT1DR/DE transceiver.

- 1 Follow steps 1 to 4 in "Viewing text data on the WIRES-X server" to display the data type select screen
- 2 Rotate Tild to select [PICT]
- 3 Press ENT

The data list will appear.

Tip The list will show data in reverse chronological order.

- 4 Rotate Int to select an image
- 5 Press ENT

The image data information will appear.

- 6 Rotate To select [DOWNLOAD]
- 7 Press ENT

Data import will start and [DOWNLOAD] will flash.



PICT	
What's New	16:15
Information	12:06
	S 🖿







After data import completes, [Completed] will appear, and then the data list will appear again.

- Tips Data in unsupported formats cannot be imported. In such a case, [Not Completed] will appear, and then the screen will return to the data type select screen.
  - When the microSD card does not have enough free space, data cannot be imported. In such a case, [Memory is full] will appear, and then the screen will return to the data type select screen.

# Importing data from a node or room on the Internet

- 1 Follow steps 1 to 4 in "Viewing text data in a node or room on the Internet" to display the data type select screen
- 2 Rotate Tild to select [PICT]
- 3 Press ENT

The data list will appear.

Tip The list will show data in reverse chronological order.



4 Follow steps 4 to 7 "Importing data of a local node" to import data



#### Caution -

When the category list or data list is displayed, if you press , the FT1DR/DE will be ready to transmit audio to the currently connected node or room on the Internet.

#### Viewing imported data later

You can also view the imported data later.

- Press and hold FNT for 1 second or more The menu list of the local node will appear.
- 2 Rotate to select [LOG]
- Press ENT The data type select screen will appear.
- 4 Rotate Int to select [MESSAGE] or [PICT]
- 5 Press ENT

The data list will appear.

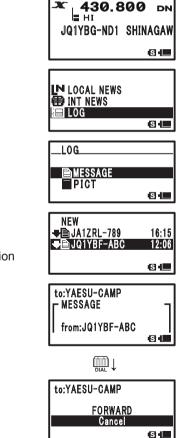
Tip The list will show data in reverse chronological order.

- 6 Rotate 🛄 to select data
- 7 Press ENT

The content of the message or image data information will appear.

- 8 Rotate to select [Cancel]
- 9 Press ENT

The data list will appear again.



# Deleting imported data

#### Deleting a file

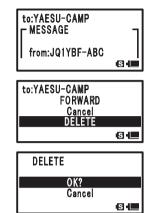
- 1 Follow steps 1 to 7 "Viewing imported data later" to display the content of the message or image data information
- 2 Rotate To select [DELETE]
- 3 Press ENT
- 4 Rotate Tild to select [OK?]
- 5 Press ENT

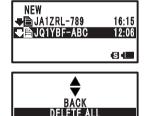
The file will be deleted, and then the data list will appear again.

#### • Deleting all files

- 1 Follow steps 1 to 5 "Viewing imported data later" to display the data list
- 2 Rotate Int to select [DELETE ALL]
- 3 Press ENT
- 4 Rotate That to select [OK?]
- 5 Press ENT

The files will be deleted, and then the data list will appear again.







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# 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 2 types:

EMERGENCY: Emergency information. Depending on the node or room settings, mandatory updates will be supplied to connected nodes and rooms in 5-minute intervals for 2 hours starting from the initial dissemination of the news.

NEWS STATION: Normal message. You can listen to the message anytime you (LOCAL NEWS) want as long as the message is not deleted from the node or

room.

#### Caution -

You can play and listen to audio files on the FT1DR/DE transceiver but you cannot save audio files to the FT1DR/DE.

# Listening to the information in the local node

#### Listening to emergency information

- 1 Follow steps 1 to 4 in "Viewing text data in a local node" to display the menu list of the local node
- 2 Rotate To select [EMERGENCY]
- 3 Press ENT

The data list will appear.

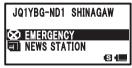
 Tips
 • The list will show data in reverse chronological order.

 • Data registered within the past 2 hours will flash.

- 4 Rotate 🛄 to select an audio file
- 5 Press ENT

Audio playback will start and the title of the audio file will flash.

When playback stops, the data list will appear again.





#### Тір

During audio playback, press 🔤 to display the sender's location information when the audio file was recorded.

#### • Listening to a routine message

- 1 Follow steps 1 to 7 in "Viewing text data in a local node" to display the data type select screen
- 2 Rotate to select [VOICE]
- 3 Press ENT

The data list will appear.

- Tip The list will show data in reverse chronological order.
- 4 Rotate 🛄 to select an audio file
- 5 Press ENT

Audio playback will start and the title of the audio file will flash.

When playback stops, the data list will appear again.

Tip -

During audio playback, press (Dep) to display the sender's location information when the audio file was recorded.

# Listening to the WIRES-X server (INT NEWS) information

You can play and listen to the audio data provided by Yaesu on the WIRES-X server.

#### Listening to emergency information

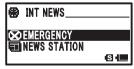
- 1 Follow steps 1 to 3 in "Viewing text data on the WIRES-X server" to display the category list of the WIRES-X server
- 2 Rotate The to select [EMERGENCY]
- 3 Press ENT

The data list will appear.

- Tips The list will show data in reverse chronological order.
  - $\ensuremath{\cdot}$  Data registered within the past 2 hours will flash.
- 4 Rotate Tild to select an audio file
- 5 Press ENT

Audio playback will start and the title of the audio file will flash.

When playback stops, the data list will appear again.









#### • Listening to a routine message

- 1 Follow steps 1 to 4 in "Viewing text data on the WIRES-X server" to display the data type select screen
- 2 Rotate to select [VOICE]
- 3 Press ENT

The data list will appear.

- Tip The list will show data in reverse chronological order.
- 4 Rotate 🛄 to select an audio file
- 5 Press ENT

Audio playback will start and the title of the audio file will flash.

When playback stops, the data list will appear again.





# Listening to information on a node or room on the Internet

#### Listening to emergency information

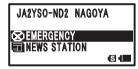
- 1 Follow step 1 in "Viewing text data in a node or room on the Internet" to display the menu list of the connection destination
- 2 Rotate To select [EMERGENCY]
- 3 Press ENT

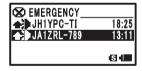
The data list will appear.

- Tips The list will show data in reverse chronological order.
  - Data registered within the past 2 hours will flash.
- 4 Rotate Tild to select an audio file
- 5 Press ENT

Audio playback will start and the title of the audio file will flash.

When playback stops, the menu list of the connection destination will appear again.





Tip -

During audio playback, press to display the sender's location information when the audio file was recorded.

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#### • Listening to a routine message

- 1 Follow steps 1 to 4 in "Viewing text data in a node or room on the Internet" to display the data type select screen
- 2 Rotate Tild to select [VOICE]
- 3 Press ENT

The data list will appear.

Tip The list will show data in reverse chronological order.

- 4 Rotate to select an audio file
- 5 Press ENT

Audio playback will start and the title of the audio file will flash.

When playback stops, the data list will appear again.

Tip =

During audio playback, press (Dep) to display the sender's location information when the audio file was recorded.

# Transmitting messages and images

You can transmit data such as messages (text data) and images saved on the microSD card inserted into the FT1DR/DE, to a local node, or a node or room on the Internet. You can also create a new message and transmit it.

#### Tips -

- For details on microSD cards, refer to "Mounting and dismounting microSD memory card" in the basic operating manual.
- You can also transmit photos taken with the camera that is built into the optional speaker microphone "MH-85A11U". For details on how to take photos, refer to "Taking picture with the optional camera mounted on speaker microphone" in the basic operating manual.

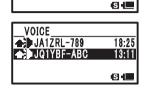
# Transmitting data to a local node

#### • Creating and transmitting a message

- 1 Follow steps 1 to 5 in "Viewing text data in a local node" to display the upload or download select screen
- 2 Rotate To select [UPLOAD]
- 3 Press ENT

The data type select screen will appear.





DOWNLOAD

VOICE MESSAGE Pict

- 4 Rotate in to select [MESSAGE]
- 5 Press ENT The data list will appear.
- 6 Rotate in to select **[NEW]**
- 7 Press ENT

The character input screen will appear.

**8** Use the keypad to enter a message

The characters you have just entered will appear on the top part of the screen.

Tips • Refer to the following table and enter the message using up to 80 characters and numerals.

Number keys	Characters
1	1
2	abc2ABC
3	def3DEF
4	ghi4GHI
5	jkl5JKL
6	mno6MNO
7	pqrs7PQRS
8	tuv8TUV
9	wxyz9WXYZ
0	0 -%/?!.:#

- To modify characters, press in . Pressing is will move the cursor to the left and erase a character.
- Pressing (ENT) will move the cursor to the right.
- You can switch between alphanumeric characters and Japanese katakana by selecting [7] WIRES-X]  $\rightarrow$  [1 LANGUAGE].
- 9 Press and hold [ENT] for 1 second or more The entered content will be confirmed.
- **10** Rotate **(UPLOAD)**

11 Press ENT

Message transmission will start and [UPLOAD] will flash.

When the message has been transmitted, [Completed] will appear, and then the data list will appear again.

UPLOAD	
VOICE	
MESSAGE	
PICT	
	S 💷



Let's go to the camp tomorrow!∎	
ß	-



Т	Tip							
	On the character input screen, rotate to select the fixed phrase icon (E), and then press ENT to select one of the 19 fixed phrases.							
	1	QRM	8	Good job	15	wait for you		
	2	QRP	9	Good day	16	Pick me up		
	3	QRT	10	Good evening	17	Thank you		
	4	QRX	11	Good night	18	OK		
	5	QRZ	12	Send messages	19	urgent		
	6	QSY	13	Send pictures				
	7	Good morning	14	on my way				

#### Transmitting a saved message or image

- 1 Follow steps 1 to 3 in "Creating and transmitting a message" to display the data type select screen
- 2 Rotate to select [MESSAGE] or [PICT]
- 3 Press ENT

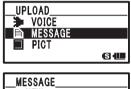
The data list will appear.

- 4 Rotate DIAL to select a message or image
- 5 Press ENT

The data content will appear.

- 6 Rotate DIAL to select [UPLOAD]
- 7 Press ENT

Message transmission will start and [UPLOAD] will flash. When the message has been transmitted, [Completed] will appear, and then the screen will return to the data type select screen.









# Transmitting data to a node or room on the Internet

#### Creating and transmitting a message

- 1 Display the menu list of the node or room on the Internet
- 2 Rotate To select [NEWS STATION]
- 3 Press ENT

The upload/download select screen will appear.



- 4 Rotate to select [UPLOAD]
- 5 Press ENT The data type select screen will appear.



**6** Follow steps 4 to 11 in "Creating and transmitting a message" under "Transmitting data to a local node" to create and transmit a message

#### Transmitting a saved message or image

- 1 Follow steps 1 to 5 in "Creating and transmitting a message" to display the data type select screen
- **2** Follow steps 2 to 7 in "Transmitting a saved message or image" under "Transmitting data to a local node" to select and transmit data

#### Transmitting an audio message

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 will be supplied to connected nodes and rooms in 5-minute intervals for 2 hours starting from the initial dissemination of the news.

NEWS STATION: Routine message. You can listen to the message anytime you (LOCAL NEWS) want as long as the message is not deleted from the node or room.

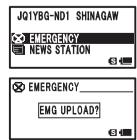
#### Transmitting data to a local node

#### Transmitting emergency information

- 1 Follow steps 1 to 5 in "Viewing text data in a local node" to display the upload or download select screen
- 2 Rotate To select [EMERGENCY]
- **3** Press and hold

[EMG UPLOAD?] is displayed and a 3-second beep can be heard.

Tip Releasing will cancel upload of emergency information.



#### Using WIRES-X and the GM Function Simultaneously

Continue to hold 👹 until **DUPLOAD** is displayed and countdown begins.

Continue to hold and speak into the [MIC]
 The maximum recording time is 1 minute.
 Transmission of the message will begin. The screen will

display **DPLOAD** and the countdown will be flashing.

When the message has been transmitted, [Completed] will appear, and then the menu list of the local node will appear again.

#### Transmitting a routine message

- 1 Follow steps 1 to 5 in "Viewing text data in a local node" to display the upload or download select screen
- 2 Rotate To select [UPLOAD]
- 3 Press ENT

The data type select screen will appear.

- 4 Rotate Tild to select [VOICE]
- 5 Speak into [MIC] while pressing 🛞

Tip The maximum recording time is 1 minute.

Transmission of the message will begin. The screen will display **DPLOAD** and the countdown will be flashing.

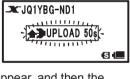
When the message has been transmitted, [Completed] will appear, and then the screen will return to the data type select screen.

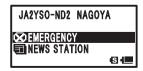
#### Transmitting data to a node or room on the Internet

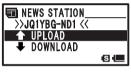
#### • Transmitting emergency information

- 1 Display the menu list of the node or room on the Internet
- **2** Follow steps 2 to 3 in "Transmitting emergency information" under "Transmitting data to a local node" to transmit a message









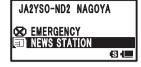




#### Using the News Function of WIRES-X

#### • Transmitting a routine message

- 1 Display the menu list of the node or room on the Internet
- 2 Press ENT The upload/download select screen will appear.



**3** Follow steps 3 to 6 in "Transmitting a routine message" under "Transmitting data to a local node" to transmit a message

# Using WIRES-X and the GM Function Simultaneously

You can use WIRES-X even when using the GM (Group Monitor) function on the FT1DR/DE transceiver. By forming a group including local nodes and organizing the GM, group members can also utilize WIRES-X to communicate with a node or room on the Internet, including exchanging data.

This section explains how to use a local node which is registered as a group member. For details on how to use the GM functions, refer to the separate GM instruction manual available on our website.

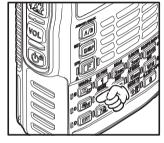
#### Cautions -

- The local node must be a digital station and have the GM function enabled as well.
- Before using the GM functions, press week to set 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.

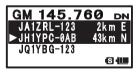
# Registering a local node with a group

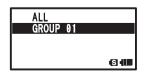
- 1 Check the call sign of the local node
- 2 Set band A to the frequency used for the GM operation
- 3 Press Gu

The group list will appear.









- 4 Rotate DIAL to select [ALL]
- 5 Press ENT

Call signs, distance and direction to other nearby stations will appear.

Tip Stations within communication range are highlighted.

- 6 Rotate to select a local node
- 7 Press ENT

The call sign of the local node will flash.

- 8 Press and hold ENT for 1 second or more The group list will appear.
- 9 Rotate Internet to select a group where you want to register the local node
- 10 Press ENT

The local node will be added to the selected group

#### Using WIRES-X and the GM Function Simultaneously

#### 11 Press Gu

The screen will return to the frequency display screen.

#### Tip =

Use the SYNC function after registering the local node as a group member, so that other members can check the local node from their stations. For details, refer to the separate GM instruction manual.

# Using the News Function of WIRES-X in GM Operation

- 1 Rotate , select a node on the group list that lies within communication range
- Press and hold ENT for 1 second or more Menu options for the node will be displayed.



6

3 Follow steps outlined in "Using the News Function of WIRES-X".

# **Confirming the frequency**

While on the group list screen or the WIRES-X screen, press  $\overline{\mathbb{V}}_{\mathcal{W}}^{\mathbb{W}}$  to switch to the frequency screen that was displayed before starting GM operation.

Pressing w again will return to the group list or WIRES-X screen.

#### Returning to the group list screen

While on the WIRES-X screen, press and hold Area for 1 second or more to return to the group list screen.

# WIRES-X Setting Mode Menus

Menu/Item	Functions	Setting items (Bold items are default settings.)		
1 LANGUAGE	Changing the language used for setting mode and menu, etc.	JAPANESE/ <b>ENGLISH</b>		
2 RPT/WIRES FREQ	Setting the transmission frequencies for repeaters/ WIRES-X	MANUAL/PRESET		
	Setting preset frequencies	144.000 to 146.000 <b>145.780</b> 430.000 to 440.000 <b>438.980</b>		
3 SEARCH SETUP	Setting the item order on the node & room lists	HISTORY/ACTIVITY		
4 EDIT CATEGORY TAG	Editing category names	C1 to C5		
5 REMOVE ROOM/NODE	Deleting registered nodes/rooms	C1 to C5 1 to 20 in total in each category		

# Using the WIRES-X Setting Mode

# Setting the language displayed on the screen

You can select the language displayed on the screen from [JAPANESE] and [ENGLISH].

- Press and hold for 1 second or more The FT1DR/DE will enter setting mode.
- 2 Rotate to select [7 WIRES-X]
- 3 Press ENT

The menu list will appear.

- 4 Rotate Into select [1 LANGUAGE]
- 5 Press ENT

The selection items will appear.

6 Rotate III to select [JAPANESE] or [ENGLISH]



7 Press 👹

The screen will return to the frequency display screen.

# Setting the transmission frequencies for repeaters/WIRES-X

You can select how to set the transmission frequency used when connecting to a local node.

- 1 Press and hold <sup>SET</sup> The FT1DR/DE will enter setting mode.
- 2 Rotate Int to select [7 WIRES-X]
- 3 Press ENT

The menu list will appear.

- 4 Rotate Int to select [2 RPT/WIRES FREQ]
- 5 Press ENT

The selection items will appear.

6 Rotate (MANUAL) or [PRESET] Rotating (MANUAL) and [PRESET].

MANUAL: Set the frequency every time you look for a local node.

PRESET: Use the preset frequency every time you look for a local node by setting the frequency in advance as follows:

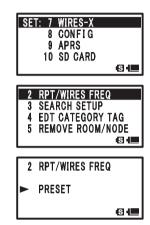
Selecting [PRESET] and pressing ENT will display the frequency select screen.

- 7 Rotate 🛄 to select the frequency
  - Tip If you rotate , the frequency will change by the increments specified in setting mode. If you press and rotate , the frequency will change by 1 MHz increments.
- 8 Press 👹

Tip

The screen will return to the frequency display screen.

Press BAND to switch between preset frequency bands.



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# Setting the item order on the node & room lists

You can select the criteria to sort the list of connection destinations on the Internet.

- Press and hold Press for 1 second or more The FT1DR/DE will enter setting mode.
- 2 Rotate to select [7 WIRES-X]
- 3 Press ENT The menu list will appear.
- 4 Rotate I to select I SEARCH SETUPI
- 5 Press ENT

The selection items will appear.

6 Rotate (INSTORY) or [ACTIVITY] Rotating (INSTORY) and [ACTIVITY].

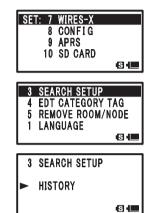
HISTORY: Displays the list sorted in order of the connection destination that your station most

- recently connected to.
- ACTIVITY: Displays the list sorted in descending order from the room with the most nodes connected. Nodes come after rooms.
- 7 Press 👹

The screen will return to the frequency display screen.

# Editing a category name

You can name 5 categories where nodes and rooms are registered. Up to 16 alphanumeric characters can be used for each category name. For details, refer to "Registering a node or room" (page 16).



# Deleting the registered nodes and rooms

You can delete nodes and rooms registered in the 5 categories.

- Press and hold for 1 second or more The FT1DR/DE will enter setting mode.
- 2 Rotate to select [7 WIRES-X]
- 3 Press ENT The menu list will appear.
- 4 Rotate Into select [5 REMOVE ROOM/NODE]
- 5 Press ENT The category list will appear.
- 6 Rotate To select a category
- 7 Press ENT

The connection destination list will appear

- 8 Rotate Tild to select a connection destination
- 9 Press ENT

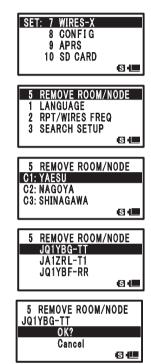
The delete confirmation screen will appear.

- 10 Rotate In to select [OK?]
- 11 Press ENT

The connection destination will be deleted, and then the connection destination list will appear on the screen again. Destinations shown below the deleted connection destination will move up by one.

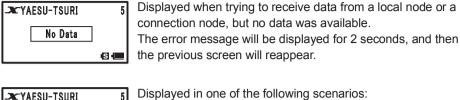
# **12** Press 👹

The screen will return to the frequency display screen.



# **Error Message Guide**

Error messages and explanations.



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Displayed in one of the following scenarios: The error message will be displayed for 2 seconds.

- Connection was lost between the local node and the connection destination node.
- While another transceiver was attempting to establish connection to a node via the local node, the node was already connected to another node.



Not Connected

Displayed for 2 seconds when trying to establish connection to a node via the local node, but the node itself was connected to another node (except when another transceiver is involved).

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Displayed for 2 seconds when trying to establish connection to a node via the local node, but the node could not be found (power off, Internet disconnected, etc.).



# The radio

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