

## FTM-3200DR/DE

### Firmware Update Information

This update adds the DG-ID function, the DP-ID function and WIRES-X in the digital C4FM mode of the FTM-3200DR/DE and is compatible with the System Fusion II digital repeater DR-2X.



- By updating this firmware, the conventional operation of the DSQ function (digital squelch function) will no longer be available.
- The Microphone [P1] / [P2] keys become operations only for a DG-ID (digital group ID) function.
- Some items of the Set Mode are changed. Please note that a number of the menu items are changed. (For details, refer the Set Mode list.)

#### Additional Functions

##### Digital Group ID (DG-ID) feature

The DG-ID function can setup two-digit DG-ID numbers (00 to 99), separately for Transmit and Receive. The DG-ID numbers can regulate communications within designated groups, and easily control access to DR-2X repeaters.

- By setting both transmit and receive to “00” (default), you can communicate with all the other stations in the digital C4FM mode.
- By matching the transmit DG-ID number to the uplink DG-ID number set in the club DR-2X System Fusion II digital repeater, you can access the digital repeater DR-2X used by the club.
- The FTM-3200DR/DE may register transmit and receive DG-ID numbers in the DG-ID memories (up to 10 pairs), and then use the [P1] / [P2] keys on the microphone to easily recall a Group ID.

##### Digital Personal ID (DP-ID) feature

Every C4FM digital transmit communication contains the individual ID information (Radio ID) of each transceiver. The DP-ID function uses this Digital Personal Identification information to remotely control the digital repeater DR-2X, even if different DG-ID numbers are used for communication between transceivers.

- By registering the DP-ID of the transceiver to the DR-2X System Fusion II digital repeater, you can manage the digital repeater by remote operation.
- When communicating with another transceiver, if the DP-ID of the stations are registered in each other's transceivers, they can communicate even if the DG-ID numbers are different.

### **WIRES-X feature**

WIRES (Wide-coverage Internet Repeater Enhancement System) is an Internet communication system which expands the range of amateur radio communication. You may employ Internet communications by connecting from your transceiver to a WIRES-X local node station.

\* FTM-3200DR/DE does not accommodate the transmission/reception of messages, images, audio messages, or location information.

## DG-ID/DP-ID Function

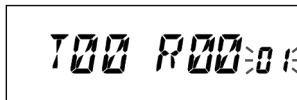
### How to use the Digital Group ID (DG-ID) feature

#### ● Register the DG-ID number in the DG-ID memory

**Example:** Enter the transmit DG-ID number “50” and the receive DG-ID number “00” into the DG-ID memory “01”.

1. Press and hold the **[P2]** key on the microphone.

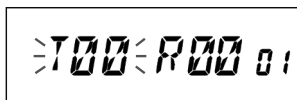
The DG-ID memory number at the bottom right of the screen blinks.



2. Rotate the **DIAL** knob to select the DG-ID memory number to be stored to the “01” register.

3. Press the **[P2]** key on the microphone.

The transmit DG-ID number “T00” blinks.



4. Rotate the **DIAL** knob to set the transmit DG-ID number to “T50”.



5. Press the **[P2]** key on the microphone.

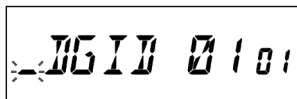
The receive DG-ID number blinks.



6. Rotate the **DIAL** knob to set the receive DG-ID number to “R00”.

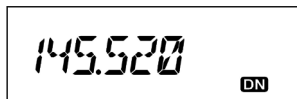
7. Press the **[P2]** key on the microphone.

- The input screen of the DG-ID tag is displayed.



- Use the numeric keys on the microphone or the **DIAL** knob to input the characters of the DG-ID tag. Up to 8 characters can be entered.
- Press the **[P3]** key on the microphone or **[SQL (TXPO)]** key to move the cursor to the left.
- Press the **[P4]** key on the microphone or **[V/M (MW)]** key to move the cursor to the right.

8. Press and hold the **[P2]** key on the microphone to save the setting and return to normal operation.



- If the receive DG-ID number is set to other than “00”, note that you cannot receive signals other than the same DG-ID number.
- Normally, for general operation set the DG-ID number to “00” for both transmit and receive.

● **Recall and use the DG-ID number registered in the DG-ID memory**

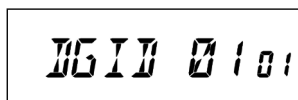
1. Press the **[P1]** key on the microphone, the information of the current DG-ID is displayed.
2. Rotate the **DIAL** knob to select the number of DG-ID List to recall.
3. Press the **PTT** button to selected the DG-ID number and return to the frequency display screen. Or if five seconds passes, the selected screen will return to frequency screen automatically.
  - When using the DG-ID memory, the tag of the DG-ID memory being used is displayed every 5 seconds.
  - If the DG-ID memory is "00", DG-ID memory tag is not displayed every five seconds.
4. Press the **[P1]** key on the microphone to switch to the DG-ID number display as shown below. When the DG-ID memory is "00", no DG-ID tag is displayed, only the DG-ID number "00" is displayed.

**DG-ID Tag display →**

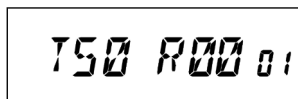
**DG-ID Number display →**

**Normal Screen**

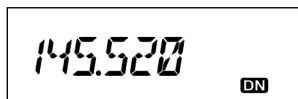
- If there is no operation for more than five seconds, the display returns to the normal frequency display screen.



DG-ID Tag display



DG-ID Number display



Normal Screen (Frequency)



Normal Screen  
(DG-ID Tag)

**Restore the DG-ID number to "00" for both transmit and receive without using the DG-ID memory**

1. Press and hold the **[P1]** key on the microphone while on the frequency display screen.  
The DG-ID memory returns to DG-ID memory "00" with one touch.

## How to use the Digital Personal ID (DP-ID) feature

**Note:** To register the transceiver DP-ID in the System Fusion II, DR-2X C4FM digital repeater, refer to the instruction manual of the DR-2X.

By registering the transceiver's DP-ID in the DR-2X, you can remotely control the settings and functions of DR-2X. Remote control cannot be performed from a transceiver that does not register the DP-ID, so it is possible to securely manage repeaters.

### **DR-2X Remote Control Feature**

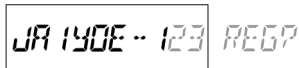
- Activate the repeater operation
- Deactivate the repeater operation
- Set the repeater to C4FM mode
- Set the transmit power
- Voice Message Control (Rec / Play / Stop)
- Set the Emergency Call

### **● Register the transceivers**

1. Press and hold the **[MHz(SETUP)]** key to enter the Set-up Menu.
2. Rotate **DIAL** knob to select "**13 DPID LST**".
3. Press the **[MHz(SETUP)]** key.  
The DP-ID List is displayed.

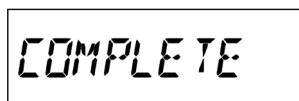


4. While the DP-ID list is displayed, a transmission in the digital C4FM mode from the other transceiver will register the DP-ID.



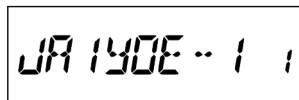
When a signal from the other station is received, the call sign is displayed on the LCD.

5. Press and hold the **[D/A(GM)]** key to save the setting.



- When registering in the DP-ID list is finished, "**COMPLETE**" is displayed, then the display returns to the DP-ID list screen.

- To continue operating without registering the DP-ID, press the **[D/A(GM)]** key.
- If registering several DP-IDs, repeat steps 4 to 5.
- A maximum of 24 stations may be registered.



6. Press and hold the **[MHz(SETUP)]** key to return to normal operation.  
Register the DP-ID of all the transceivers in the group to another transceiver using the same operation.

### ● Deleting the registered DP-ID

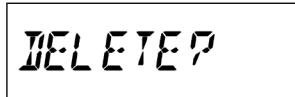
1. Press and hold the **[MHz(SETUP)]** key to enter the Set-up Menu.
2. Rotate **DIAL** knob to select “**13 DPID LST**”.
3. Press the **[MHz](SETUP)** key.

The DP-ID List is displayed.

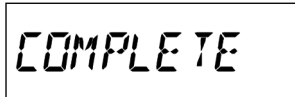


4. Rotate the **DIAL** knob to select the call sign.
5. Press and hold the **[D/A](GM)** key

The confirmation screen is displayed.



6. Press and hold the **[D/A](GM)** key again to delete.



- When deleting in the DP-ID list is finished, “**COMPLETE**” is displayed for three seconds, then the display returns to the DP-ID list screen.
- To return to normal operation without deleting the DP-ID, press the **[D/A](GM)** key.
- If deleting several DP-IDs, repeat steps 4 to 6.



7. Press and hold the **[MHz](SETUP)** key to return to normal operation.

### ☐ WIRES-X Function

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

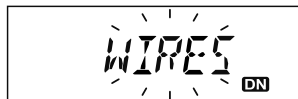
- Ascertain the DSQ code or the DG-ID setting of the WIRES-X node station. Connecting to the WIRES-X node requires the transceiver DG-ID be set according to the DSQ code or the DG-ID code set on the WIRES-X node station.
  - Confirm that the operating mode of WIRES-X node has been set to the C4FM mode.
1. Press and hold the **[MHz(SETUP)]** key to enter the Setup Menu.
  2. Rotate the **DIAL** knob to select “**W-DGID 50**”, then press the **[MHz(SETUP)]** key.
  3. Rotate the **DIAL** knob to set the WIRES-X DG-ID to the same ID number as the node station.

Display	Description
<b>DGID01-99</b>	Only nodes matching the set DG-ID number may be connected.
<b>AUTO</b> <b>(default setting)</b>	Only open nodes, set to the DG-ID number "00" may be connected.

4. Press and hold the **[MHz(SETUP)]** key to save the new setting and return to normal operation.

5. Transmit corresponding to the transmit/receive frequency.
  - If receiving the signal from the node, transmit it as is.
  - If not receiving the signal from the node, it is possible that the node station is not connected to the Internet ➡ proceed to step 6
6. Press the [P3] key.
 

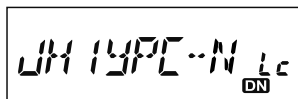
“WIRES” blinks.



After successfully connecting to the node, one of the following screens is displayed indicating the node status.

☐ **1. Node ID screen of the node (Lc)**

- This screen is displayed if the node is disconnected from the other node or the room on the Internet.
- The node station's node ID is displayed.
- Continue to select a connecting node ➡ proceed to step 7



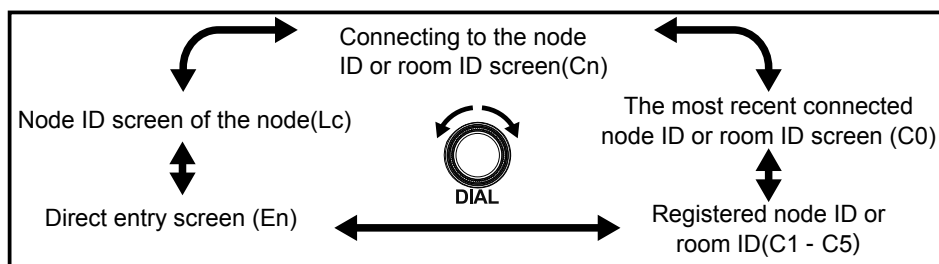
☐ **2. Connecting to a node ID or room ID screen (Cn)**

- This screen is displayed when the node has been connected to a node or room on the Internet.
- The connecting node station's node ID is displayed.
- If not changing the connecting node/room ➡ proceed to step 8
- When changing the connecting node/room ➡ proceed to step 7



**Note:** If the node connection is not successful, the beep sound is emitted and the transceiver returns to the normal operation.

7. Rotate the **DIAL** knob to select one of the connection screens (see below information), and connect to the desired node/room.



☐ **The most recent connected node ID or room ID screen (C0)**

Most recent connected node ID or room ID is displayed. A single press of the [#] key on this screen will connect to the most recent node/room.



☐ **Registered node ID or room ID screen (C1-C5)**

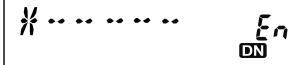
Rotate the **DIAL** knob to select a previously registered node/room (maximum 5 nodes/rooms) on the C1-C5 screen.



- **Registering the node/room:** Press and hold the [1]-[5] key to register the node/room (C1-C5) on the connected node ID or room ID (Cn).
- **Cancelling the connected node/room:** Select the node/room (C1-C5) then press and hold the [C] key to delete the registered node/room.

☐ **Direct entry screen (En)**

Direct connection to a node or room may be made by inputting the other node ID or room ID (5 digits) manually.



- Pressing the numeric keys (5 digits), and then press the [#] key, will request connection with another node ID or room ID.
- **Clearing the input node ID or room ID:** Press and hold the [C] key
- **Cancelling the input node ID or room ID:** Pressing the [\*] key to return to the node ID screen (Lc) or the connecting node ID or room ID screen.

**Note:** When a node has been connected, the node or room connection may be changed by inputting a different node ID or room ID.

When connecting to a node or room, "**CONNECT**" is displayed on the screen, and the display is automatically switched to the connecting node ID or room ID screen (Cn).



**Note:** In the case when the selected node or room is not connected, the screen will display one of the below icons.

"**OFFLINE**" (Node or room is not in operation.)

"**BUSY**" (Another node is connecting.)

8. Transmit to communicate with the WIRES-X Internet Link.

**Note:** Operations of the microphone [#], PTT, [\*], and [D] keys, are described in the below chart:

Operation method (operation screen)	Description
Press the [#] key or the PTT switch (C0 / C1 to C5 / En screen*)	Connect to the displayed node/room or change the destination connection. (*The PTT switch is disabled on the En screen)



Operation method (operation screen)	Description
Press and hold the [*] key (Lc / Cn / C0 / C1 to C5 / En screen)	Disconnect from the connected node or room.
Press and hold the [1] to [5] key (Cn screen)	The connected node or room ID is registered to the memory of the number when it is pressed and held (In case the memory is already written, the registration is overwritten).
Press the [D] key (On activating WIRES-X)	Temporarily displays the operating frequency (when calling C4FM digital signal, the callsign of the other station is displayed). Press the [D] key again to return to the previous screen.

9. When communication is completed, press and hold the microphone [P3] key to Exit WIRES-X mode.

**Note:** About WIRES-X open node stations

A listing of the WIRES-X open node stations, with their location, operation mode, etc. is posted on the Yaesu WIRES-X website.  
<https://www.yaesu.com/jp/en/wires-x/index.php>

### **Connect and communicate with WIRES-X in analog mode**

Confirm that the node station setting is in analog mode.

In analog mode, specify the connection destination using DTMF signals.

1. In the normal operating screen, press the [D/A(GM)] key to set the analog FM mode, and then tune to the frequency of the node station.

**Note:** When "DT AUTO 14" in set mode is changed to "AUTO", change the initial value to "MANUAL".

2. While holding down the **PTT** switch on the microphone, press the [#] key and then enter the 5 digit ID number of the node or room to be connected, the DTMF code will be sent to the node station.
3. Keep the transceiver in receive mode for about 10 seconds. Once connection is established, you will be able to hear audio.

**Note:** The connected destination screen will not appear.

4. Face the microphone and speak.

### **Disconnecting from the node or room**

---

1. While pressing the **PTT** switch, then enter the “#99999” (DTMF disconnect command) keys.

**Note:** In analog mode, the excellent C4FM features such as clear voice, digital information etc cannot be used, so we recommend using digital C4FM when communicating with the WIRES-X Internet Linking System

## Setup (Menu) Mode List

Menu Item	Function	Available Values	Default
1: APO	Enables/Disables the Automatic Power Off feature.	0.5H to 12H (0.5H step) / OFF	OFF
2: BCLO	Enables/Disables the Busy Channel Lock-Out feature.	ON/OFF	OFF
3: BEP KEY	Enables/Disables the key beeper.	KEY+SCAN / KEY / OFF	KEY+SCAN
4: BEP EDGE	Enables/Disables the Band-edge beeper while scanning.	ON/OFF	OFF
5: BEP STBY	Enables/Disables the Standby beep.	ON/OFF	ON
6: BELL	Selects the CTCSS/DCS/EPCS Bell Ringer repetitions.	1 to 20 / CONTINUE / OFF	OFF
7: CLK TYPE	Shifting of the CPU clock frequency.	A / B	A
8: DC VOLT	Indicates the DC Supply Voltage.	---	---
9: DCS CODE	Setting of the DCS code.	104 standard DCS codes	023
10: DCS INV	Select a combination of DCS inversion codes in terms of communication direction.	NORMAL / INVERT / BOTH	NORMAL
11: DIG AMS	Sets the transmission mode.	TX MANUAL / TX FMFIX / TX DNFIX / AUTO	TX MANUAL
12: DI POPUP	Sets the information pop-up time.	2 / 4 / 6 / 8 / 10 / 20 / 30 / 60 / CONTINUE / OFF	10 SEC
13: DPID LST	DP-ID list (Display/Register/Clear)	(Registered DP-ID)	---
14: DT AUTO	Enables/Disables the DTMF Autodialer feature.	MANUAL / AUTO	MANUAL
15: DT DELAY	Setting of the DTMF Autodialer TX Delay Time.	50 / 250 / 450 / 750 / 1000	450 MS
16: DT SET	Loading of the DTMF Autodialer Memories.	---	---
17: DT SPEED	Setting of the DTMF Autodialer Sending Speed.	50 / 100	50 MS
18: DW RVRT	Enables/Disables the "Priority Channel Revert" feature.	ON / OFF	OFF
19: GM RINGR	Enables/Disables the alert sound when detecting stations within communication range.	IN RANGE / ALWAYS / OFF	IN RANGE
20: GM INTVL	Selects the automatic sending interval.	NORMAL / LONG	NORMAL
21: LCD DMMR	Setting of the front panel display illumination level.	LEVEL 1 / 2 / 3 / 4	LEVEL 4
22: LOCK	Selects the Control Locking Lockout combination.	KEY+DIAL / PTT / KEY+PTT / DIAL+PTT / ALL / KEY / DIAL	KEY+DIAL
23: MIC GAIN	Adjust the microphone gain level.	LEVEL 1 to 9	LEVEL 5
24: MEM NAME	Programming an Alpha/Numeric label for a Memory Channel.	---	---

Menu Item	Function	Available Values	Default
25: MW MODE	Selects the method of selecting of channels for Memory Storage.	NEXT CH / LOWER CH	NEXT CH
26: OPEN MSG	Selects the Opening Message that appears when the radio is powered ON.	OFF / DC / MESSAGE	MESSAGE
27: PAG CD-R	Setting the Receiver Pager Code for the Enhanced CTCSS Paging & Code Squelch function.	---	05 47
28: PAG CD-T	Setting the Transmitting Pager Code for the Enhanced CTCSS Paging & Code Squelch function.	---	05 47
29: PRG P3	Programming the function assigned to Microphone [P3] key.	SQL OFF HOME WX CH CD SRCH SCAN T CALL TX POWER DIG/ANA GM WIRES Setup Menu Item #1 to 51	WIRES
30: PRG P4	Programming the function assigned to Microphone [P4] key.		*
31: RADIO ID	Displays the transceiver ID	XXXXX (uneditable)	---
32: RF SQL	Adjusts the RF Squelch threshold level.	OFF / S1 to S8	OFF
33: RPT ARS	Activates/Deactivates the Automatic Repeater Shift feature.	ON / OFF	ON
34: RPT FREQ	Sets the magnitude of the Repeater Shift.	0.00 - 150.00 (MHz)	0.60 MHz
35: RPT SFT	Sets the Repeater Shift direction.	-RPT / +RPT / SIMPLEX	SIMPLEX
36: SCAN RSM	Selects the Scan Resume mode.	BUSY / HOLD / 2-10 (SEC)	5.0 SEC
37: SCAN SKP	Selects the Memory Scan mode.	OFF / SKIP / SELECT	OFF
38: SQL EXP	Sets the squelch type separately for transmission and reception.	ON / OFF	OFF
39: SQL TYPE	Selects the Tone Encoder and/or Decoder mode.	TONE / TSQ / DCS / RV TONE / PAGER / OFF	OFF
40: STEP	Sets the frequency synthesizer steps.	AUTO / 5 / 6.25 / 10 / 12.5 / 15 / 20 / 25 / 50 / 100 (kHz)	AUTO
41: TEMP	Indicates the current temperature inside the transceiver.	---	---
42: TONE FRQ	Setting of the CTCSS Tone Frequency.	67.0 to 254.1 (Hz)	100.0 HZ
43: TOT	Sets the Time-Out Timer.	0.5 to 10.0 (MIN) / OFF	3.0 MIN
44: TS MUTE	Enables/Disables the receiver audio output while the Tone Search or DCS Search Scanner is activated.	ON / OFF	ON

Menu Item	Function	Available Values	Default
45: TS SPEED	Selects the Tone Search or DCS Search Scanner speed.	FAST / SLOW	FAST
46: VER DISP	Displays the transceiver software version	CPU x.xx DSP x.xx	---
47: WX ALERT	Enables/Disables the Weather Alert feature.	ON / OFF	OFF
48: WX VOL	Selects the audio output level of the Weather Alert.	NOR VOL / MAX VOL	NOR VOL
49: W/N DEV	Reduction of the Microphone Gain/Deviation and receiver bandwidth.	WIDE / NARROW	WIDE
50: W-DGID	Setting of the WIRES-X DGID	AUTO/DGID01-99	AUTO
51: MY CALL	Sets your station call sign	-----	---

\*: Depends on the transceiver version.