YAESU
The radio

FTM-100DR/DE
Firmware Update Information

This update adds the DG-ID function and the DP-ID function in the digital C4FM mode of the FTM-100DR/DE is compatible with the System Fusion II digital repeater DR-2X.

!	By updating this firmware, t the conventional operation of the DSQ function (digital squelch function) will no longer be available.

❏ New Additional Features Implemented by This Firmware Update

Digital Group ID (DG-ID) feature

● The two-digit DG-ID number (00 to 99) can be set separately for Transmit and Receive. By setting both transmit and receive to "00", you can communicate with all the other stations in the digital C4FM mode, regardless of their DG-ID number setting.
● By matching the transmit DG-ID number to the uplink DG-ID number set in the DR-2X System Fusion II digital repeater, you can access the digital repeater DR-2X used in the club.
● For communication only among a group of friend's transceivers, you can all match the same DG-ID number; then only your friend's voices will be heard. Also, by using the GM function you can check whether stations with the same DG-ID are in the communication range.

Digital Personal ID (DP-ID) feature

● In C4FM digital communication, transmitted radio signals contain individual ID information (Radio ID) of each transceiver. The DP-ID function uses this individual ID information.
● By registering the DP-ID of the handset to the digital repeater DR-2X of System Fusion II, you can manage the digital repeater by remote operation.
● When communicating with one handset, if you register the DP-ID of the other station in each other 's transceiver, you can communicate even if the DG-ID number is different.

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

When accessing to the WIRES-X node station, the connecting node station may be selected in accordance with the DG-ID setting of the node stations.

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

Communicating only with the specific members by setting the DG-ID number except for "00"

Example: Enter the transmit DG-ID number "50" and the receive DG-ID number "00"

1. Press and hold the [**GM**] key.

   The DG-ID number setting screen is displayed.

   > **ℹ** While setting the DG-ID number, pressing and holding the [**DISP**] (SETUP) key will set the transmit and the receive DG-ID numbers to "00".

2. Press the [**GM**] key.

   The transmit DG-ID (DG-ID TX) number blinks.

3. Rotate the **DIAL** knob to set the transmit DG-ID (DG-ID TX) to "50".

4. Press the [**GM**] key, then rotate **DIAL** knob to select "DG-ID RX".

5. Press the [**GM**] key.

   The receive DG-ID (DG-ID RX) number blinks.

6. Rotate the **DIAL** knob to set the receive DG-ID (DG-ID RX) to "00".

7. Press and hold the [**GM**] key to save the setting and return to normal operation.

   • The group members with same DG-ID number may communicate with each other at the same frequency.

   • The transmit DG-ID number appears on the upper side of the LCD.

   > **ℹ**
   > ● The transmit and receive DG-ID default number is set to "00".
   > ● Normally, for general operation set the DG-ID number to "00" for both transmit and receive.

8. Press the [**GM**] key to turn the GM (Group Monitor) function ON, then you can check whether or not other Group Member stations are operating within communications range.

   • The other stations also need to turn the GM function ON.

   • While operating in the GM function, the call sign, the distance and the direction of a maximum 24 stations with the GM function turned ON, and that are within the communication range, may be checked.

   • Rotate the **DIAL** knob to select the other stations.

9. Press the [**GM**] key to turn the GM (Group Monitor) function OFF.

   > **ℹ**
   > ● Note that when the receive DG-ID number of your transceiver is set to a DG-ID number other than "00", received signals that do not have the same DG-ID number may not be heard.
   > ● The distance and direction information is displayed only when the position information is included in the signal of the other station.
   > ● The transceivers that may transmit position information with the GM function are as follows: (As of September 2017).
   > FTM-400XDR/XDE, FTM-400DR/DE, FTM-100DR/DE, FT2DR/DE, FT1XDR/FT1XDE, FT1DR/FT1DE, FT-991A / FT-991[*] (*: Latitude and longitude setting must be entered manually, or an external GPS device must be connected.).

Digital Personal ID (DP-ID) feature

Registering the DP-ID to a DR-2X digital repeater

> ℹ️ 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 [**DISP**](**SETUP**) key to enter the Set-up Menu.
2. Rotate **DIAL** knob to select "6 GM".
3. Press the [**DISP**](**SETUP**) key.
4. Rotate **DIAL** knob to select "1 DP-ID LIST".
5. Press the [**DISP**](**SETUP**) key.
   The DP-ID List is displayed.

6. 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.
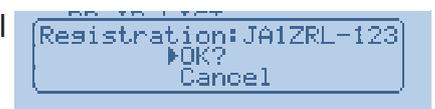
   > ℹ️ ● When a signal from the already registered transceiver is received, the display of DP-ID LIST does not change.
   > ● When registering a transceiver already registered with a different call sign, the call sign registered in the DP-ID list is changed to registrar the new call sign.

7. Press the [**DISP**](**SETUP**) key.
   - When registering in the DP-ID list is finished, then the display returns to the DP-ID list screen.
   - To continue operating without registering the DP-ID, Rotate the DIAL knob to select "Cancel" and then press the [**DISP**] (**SETUP**) key.
   - If registering several DP-IDs, repeat steps 6 to 7.
   - A maximum of 24 stations may be registered.
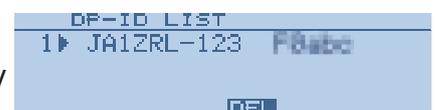
8. Press and hold the [**DISP**](**SETUP**) key to return to normal operation.
   Register the DP-ID of all the transceivers in the group to another transceiver using the same operation.

   > ℹ️ ● Once the DP-ID is registered, the DP-ID is stored until the DG-ID is deleted.
   > ● Register with another transceiver while each other's transceivers are nearby.

Deleting the registered DP-ID

1. Press the [**DISP**](**SETUP**) key to enter the Set-up Menu.
2. Rotate **DIAL** knob to select "6 GM".
3. Press the [**DISP**](**SETUP**) key.
4. Rotate **DIAL** knob to select "1 DP-ID LIST".
5. Press the [**DISP**](**SETUP**) key.

   The DP-ID List is displayed.
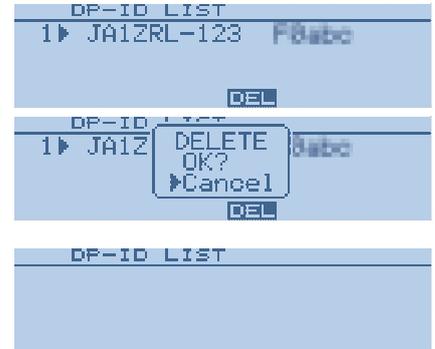
6. Rotate the **DIAL** knob to select the call sign, then press the [**DEL**] software key.

   The confirmation screen is displayed.
7. Rotate the **DIAL** knob to select "OK?"
8. Press the [**DISP**](**SETUP**) key to delete.
   - When deleting in the DP-ID list is finished, then the display returns to the DP-ID list screen.
   - To return to normal operation without deleting the DP-ID, rotate the **DIAL** knob to select "Cancel" and then press the [**DISP**](**SETUP**) key.
   - If deleting several DP-IDs, repeat steps 6 to 8.
9. Press and hold the [**DISP**](**SETUP**) key to save the setting and return to normal operation.

How to set the DG-ID feature to access the WIRES-X node station

1. Press and hold the [**DISP**] (**SETUP**) key to enter the Set-up Menu.
2. Rotate **DIAL** knob to select "7 WIRES-X".
3. Press the [**DISP**] (**SETUP**) key.
4. Rotate **DIAL** knob to select "2 DG-ID".
5. Press the [**DISP**] (**SETUP**) key.
6. Rotate the **DIAL** knob to select the DG-ID setting.

   AUTO: All node stations are searched regardless of the DG-ID setting of the WIRES-X local node, adjusted automatically the squelch setting of the found node station.

   01 to 99: The only local node station correspond to set DG-ID setting are searched.

> - The default setting is "AUTO".
> - It is recommended that the [2 DG-ID] is set to "AUTO" for normal operation.

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

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