YAESU
The radio

144/430 MHz
DIGITAL/ANALOG TRANSCEIVER
C4FM/FM

FT2DR/DE
Instruction Manual
(GM Edition)

Thank you for purchasing this Yaesu product.
This instruction manual explains information related to the "GM Function".
For information on basic operation of the transceiver, please refer to the supplied FT2DR/DE Operating Manual.
Company names and products in this manual are trademarks or registered trademarks of the respective company.

Table of Contents

What is the GM Function?

The GM (Group Monitor) function automatically monitors for any other stations with the GM function in operation on the same frequency, or stations operating in DN mode, within communication range. The GM function then displays the acquired information, including the direction and distance, on the screen for each detected call sign.

In addition to notifying you of the GM members within your communication range, the GM function also displays the relative positions of all the members on the transceiver screen.

Cautions
- The GM function does not operate on the B-band.
- To use the GM function, all of the members must operate on the same frequency.

Displaying all the stations using the GM function

Register a partner station within communication range as a member.

1 Press .

The GM function activates and displays up to 24 stations using the GM mode on the same frequency, or stations operating in DN mode, within the communication range.
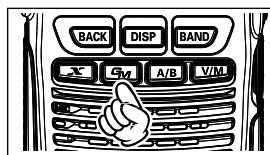
Inputting Text

The keyboard for inputting member stations identification is displayed on the FT2DR/DE LCD touch screen.

For details on how to enter letters, refer to "Entering Letters" on page 19 in the FT2DR/DE Operating Manual.

Checking Received Messages and Images

Use the GM function to check the messages and images on the LOG list.

1 Press [GM].

The GM function activates and displays up to 24 stations using the GM mode on the same frequency, or stations operating in DN mode, within the communication range.

2 Touch **[LOG]**.

3 Touch **[MESSAGE]** or **[PICT]**.

Displays the LOG list.

Tip • The icons on the left side of the LOG list indicate the following.

NEW	Creating and sending a new message
🅼⊕🖼	Message received (unread)
🅼⊕🗎	Message received (read)
🅼⊕🗎	Message sent
🅼✳🗎	Message failed to send
🅼⊕🖼	Image received (unread)
🅼⊕◻	Image received (read)
🅼⊕◻	Image sent
🅼✳◻	Image failed to send
🅼📷◻	Image taken with the camera built in the optional microphone

4

4 Rotate the DIAL to select the data you want to check.

Displays the selected data.

Tips • Press the DISP key to display the location where the message was sent for MESSAGE data and the location where the image was taken for PICT data.

• Touch **[FORWARD (or FWD)]** to forward the data to other members. Refer to "Forwarding the Checked Message or Image Data" on page 11.

• Touch "REPLY" to reply to the sender. Refer to "Replying to the Sender of the Checked MESSAGE or Image Data" on page 10.

• Touching **[DEL]** displays "DELETE ?". Select **[OK]**, then touch **[OK]** to delete the information.

5 Press the **[BACK]** key three times.

Return the screen to the previously viewed screen.

Sending MESSAGE and PICT (Image) Data

Send messages or images using the GM function.
There are the following 4 ways for sending messages or images.

(1) Creating and sending a new message

(2) Replying to the sender of the checked message or image data

(3) Forwarding the checked message or image data

(4) Sending the image data you took

Creating and Sending a New Message

Create a new message and send it to the members.

1 Press 🔲.

The GM function activates and displays up to 24 stations
using the GM mode on the same frequency, or stations
operating in DN mode, within the communication range.

2 Touch **[LOG]**.

3 Touch **[MESSAGE]**.
Displays the LOG list.

4 Touch **[NEW]**.
Displays the message entry screen.

6

5 Touch **[EDIT]**.

6 Refer to "Entering Letters" on page 19 in the FT2DR/DE Operating Manual to enter a message.

7 Press the BACK key.

Displays the entire message.

8 Touch **[SEND]**.

Displays the member list display.

Tips • To cancel transmission, touch **[BACK]**.
  • To save the entered message as a standard message, touch **[SAVE]** (page 18).
  • To continue message entry, touch **[EDIT]**.

9 Touch **[ALL]**.

"SEND to ALL ?" appears.

To send the message to a specific member, touch the member that is within communication range.

Caution • Messages cannot be sent to members outside of communication range.

Tip • The address designation "to:" is merely for displaying "ALL" or the call sign of a specific station. In other words, even if you specify a call sign for "to:" to send a message, other stations operating GM on the same frequency can still read the message as long as they are within the communication range.

10 Select **[OK]**, then touch **[OK]**.

Sends the message.

7

Using Standard Messages

The following 19 standard messages have been saved in the radio's memory AS default to help save time and effort in text input.

1	QRM	**11**	Good night
2	QRP	**12**	Send messages
3	QRT	**13**	Send pictures
4	QRX	**14**	on my way
5	QRZ	**15**	wait for you
6	QSY	**16**	Pick me up
7	Good morning	**17**	Thank you
8	Good job	**18**	OK
9	Good day	**19**	urgent
10	Good evening		

1 Follow steps 1 to 5 in "Creating and Sending a New Message" on page 6 to display the message entry screen.

2 Touch MTXT.

Displays the standard message list.

Tip • For "M01" to "M10", you can register a message comprising up to 80 letters (page 18).

3 Rotate the DIAL to select the standard message you want to use.

4 Touch **[PASTE]**.

Displays the selected standard message in the message entry field.

5 Press the BACK key.

8

Displays the entire message.

```
12:34                    🏃  📶
     📄NEW

        QRM



   SEND    EDIT    SAVE
```

6 To add letters to the message, input letters following steps 5 to 6 in "Creating and Sending a New Message" on page 6.

Registering a standard message

Up to 10 texts containing a maximum of 16 characters each can be registered as standard messages.
Registered texts can be selected and used like the 19 standard messages that have been prepared in advance.

1 Follow steps 1 to 6 in "Creating and Sending a New Message" on page 6 to input a text message.

   Tip • Alphanumeric characters including symbols can be used.

2 Touch **[SAVE]**.

   Displays the standard message list.

   Tip • Touch the ᴹᵀˣᵀ icon to select the desired message from the registered 19 standard messages.

```
12:34                    🏃  📶
     📄NEW

    Let's go to the
    camp tomorrow!




   SEND    EDIT    SAVE
```

3 Rotate the DIAL to select the number where you want to register the standard message.

   Tip • You can select a number from "M01" to "M10".

4 Touch **[SAVE]**.

   Registers the text as a standard message and displays the message entry screen.

   Tips • If you register a new message to a number where a message already have registered, the old message is overwritten.

   • To cancel registration, press the `BACK` key.
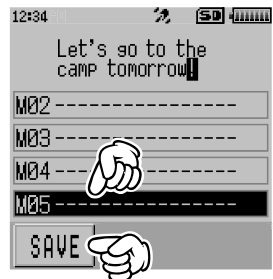
```
12:34                    🏃  📶
    Let's go to the
    camp tomorrow▌
   M02 ---------------
   M03 ---------------
   M04 ---------------
   M05 ---------------
    SAVE
```

9

Replying to the Sender of the Checked Message or Image Data

After checking the message or image data, reply to the sender.

1 Press $\boxed{G_M}$.

The GM function activates and displays up to 24 stations using the GM mode on the same frequency, or stations operating in DN mode, within the communication range.

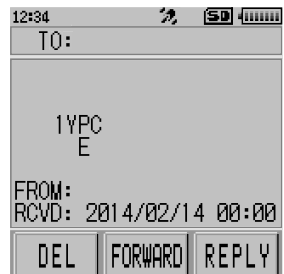**2** Touch **[LOG]**.

3 Touch **[MESSAGE]** or **[PICT]**.
Select the data type (MESSSAGE or PICT) you want to send.
Displays the LOG list.

4 Touch the data to which you want to reply.
Displays the selected data.

10

5 Touch **[REPLY]**.

Displays the message entry screen.

Tip • When replying, the call sign of the MESSAGE/PICT data sender is automatically specified for "to:".

6 Touch **[EDIT]**.

7 Enter the reply message.

Refer to "Creating and Sending a New Message" on page 6 to enter the reply message.

8 Press the `BACK` key.

Displays the entire message.

9 Touch **[SEND]**.

Sends the message to the sender of the MESSAGE/PICT data.

Forwarding the Checked Message or Image Data

After checking the message or image data, forward the data to other members.

1 Press `GM`.

The GM function activates and displays up to 24 stations using the GM mode on the same frequency, or stations operating in DN mode, within the communication range.
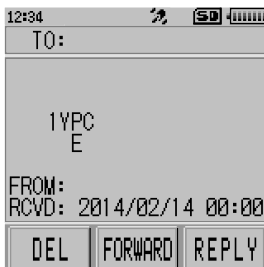
2 Touch **[LOG]**.

3 Touch **[MESSAGE]** or **[PICT]**.

Select the data type (MESSSAGE or PICT) you want to send.

Displays the LOG list.

11

4 Touch the data you want to forward to other members.

Displays the selected data.

12:34		SD
LOG MSG		1/1

NEW

⊕🖻	00/00
⊕🖻	00/00
⊕🖻	00/00
⊕🖻	00/00

DEL TOP ▲ ▼

12:34		SD
TO:		

1YPC
E

FROM:
RCVD: 2014/02/14 00:00

DEL FORWARD REPLY

5 Touch **[FORWARD]**.

Displays the member list.

6 Touch **[ALL]**.

"SEND to ALL ?" appears.

Caution • Messages cannot be sent to members outside of communication range.

7 Select **[OK]**, then touch **[OK]**.

Sends the message or image to other members.

12

Sending Image Data You Took

Take still images using the optional speaker microphone with built-in snapshot camera (MH-85A11U) and send them to the members.

Tip

• For details on how to send images you took using the optional speaker microphone with built-in snapshot camera (MH-85A11U), refer to "Taking Picture Using the Optional Camera-Mounted Speaker Microphone Snapshot Function" in FT2DR/DE Operating Manual.

---

1 Press 〔GM〕.

The GM function activates and displays up to 24 stations using the GM mode on the same frequency, or stations operating in DN mode, within the communication range.
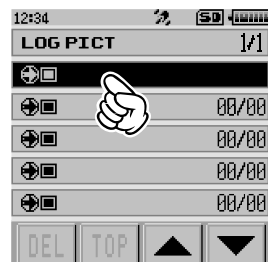
2 Touch **[LOG]**.

3 Rotate the DIAL, then touch **[PICT]**.

Displays the list of image data saved on the microSD memory card.

4 Rotate the DIAL, then touch the image you want to send.

Displays the selected image.

13

5 Touch **[SEND]**.

Displays the member list.

6 Touch **[ALL]**.

"SEND to ALL ?" appears.

Caution ● Images cannot be sent to members outside of communication range.

7 Touch **[OK]**.

Sends the image.

## Displaying Your Partner Station Locations Automatically

The compass on each member slot displays the direction from your station. The location information of your partner station can also be saved.

Checking the Location of Your Partner Station

1 Press ⌗ .

The GM function activates and displays up to 24 stations using the GM mode on the same frequency, or stations operating in DN mode, within the communication range.

2 Rotate the DIAL to select the partner station of which you want to display the location information.
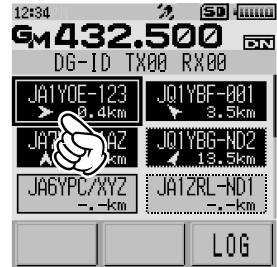
3 Press the DISP key.

The compass displays the direction and distance from the selected station to your station.

In heading-up mode, the compass circle indicates the direction (E, W, S and N) that you are heading. The compass arrow indicates the direction of your partner station.

Tips

- The location display can be changed from [DISPLAY]→[1 TARGET LOCATION].
- Press the DISP key again to return the screen to the member list screen.
- In Set mode, from [DISPLAY]→[2 COMPASS], the compass mode can be switched between [HEADING UP] and [NORTH UP] to indicate compass orientation of your station. However, when "YR", "★", "L1" or "L2" is selected, the compass mode is set to [HEADING UP], which cannot be switched to [NORTH UP], for indicating the direction of your partner station location.
  [HEADING UP]: The compass circle indicates the direction (E, W, S and N) you are heading in. The arrow indicates the direction of your partner station.
  [NORTH UP]: Always displays the north on the top. The arrow indicates the direction you are heading in.
- You cannot update the location information of your partner stations outside of communication range.
- If your station or your partner stations do not set the location information manually or capture the GPS satellite signals, the compass display is not available.

Cautions

- When the GPS satellite signals cannot be acquired, the location of your partner station does not appear.
- A positioning error of several hundred meters may occur due to the environmental conditions.
- This function is a simplified function that makes use of GPS satellite data. Use this function as a reference for checking the location of your partner station.

Registering the Location Information of Your Partner Station

1 Press 🔲.

The GM function activates and displays up to 24 stations using the GM mode on the same frequency, or stations operating in DN mode, within the communication range.

2 Rotate the DIAL to select the partner station of which you want to display the location information.

3 Press the [DISP] key.

The compass displays the direction and distance of the selected station from your station.

In heading-up mode, the compass circle indicates the direction (E, W, S and N) you are heading in. The compass arrow indicates the direction of your partner station.

4 Touch **[YR]**.

The [YR] display is highlighted.

5 Touch **[MEM]**.

[★], [L1] and [L2] blink.

6 Touch [★], [L1] or [L2].

Registers the location information of your partner station.

> **Tip** • Touch **[MEM]** to stop the display from blinking.

16

GM Set Mode List

Set mode item No./ item	Descriptions	Options (bold letters: default)
1 DP-ID LIST	Displays the DP-ID list screen	—
2 RADIO ID CHECK	Transceiver specific number(ID) appears. (This cannot be edited)	—

GM Set Mode Function List

• **1 DP-ID LIST**

Display of the DP-ID list screen

Explanation: Every C4FM digital transmit communication contains the individual ID information (Radio ID) of each transceiver. The DP-ID function uses this individual ID information.

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.

For details, refer to the FT2DR/DE operating Manual.

• **2 RADIO ID CHECK**

Display of RADIO ID

Explanation: In the GM function, each transceiver transmits its own ID besides the call sign.

RADIO ID is a 5-digit code consisting of alphanumeric characters that are written into the transceiver during factory production.

The RADIO ID cannot be edited.

YAESU
The radio

1709-C