

# FT2DR/DE C4FM/FM

## Quick Guide



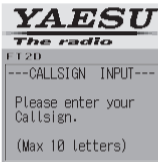
- |                        |                       |
|------------------------|-----------------------|
| 1 Antenna (SMA)        | 12 Battery pack       |
| 2 TX/BUSY LED          | 13 GPS antenna        |
| 3 Touch panel display  | 14 DIAL               |
| 4 [PTT] switch         | 15 VOL                |
| 5 [MONI/T-CALL] switch | 16 microSD card slot  |
| 6 [SQL] switch         | 17 DATA terminal      |
| 7 Power switch         | 18 MIC/SP terminal    |
| 8 [DISP] key           | 19 [BAND] key         |
| 9 [BACK] key           | 20 EXT DC IN terminal |
| 10 [X] key             | 21 [V/M] key          |
| 11 [GM] key            | 22 [A/B] key          |

EH060M551

### Input / Edit the Call Sign

#### Input the Call Sign

When the power is turned on for the first time after purchase, or when ALL RESET is executed, a screen to input the call sign is displayed.



Press the [DISP] key to display the alphabet input screen. Use the keypad entry screen to input the Call Sign ID.



Touch [123] to switch to the numeric input screen. Touch [ABC] in the numeric input screen to return to the alphabet input screen. Press [OK] to complete the Call Sign entry.

#### Changing the Call Sign

The Call Sign ID can be changed using the set mode. Press the [DISP] key for one second or longer to display the "SETUP MENU" and then touch [CALLSIGN].



Alphabet input screen is displayed. Input the call sign using the alphabet input screen and the numeric input screen and then press [OK].

### Return to the Current Operating Screen

To exit set mode and return to the current operation mode, either press [POWER] on the left side of the transceiver, or briefly press the [BACK] key repeatedly.

#### Reset the Settings

##### Reset All

Press the [POWER] key for one second or longer while pressing the [BACK] key, [DISP] key and [BAND] key to turn the power ON. Touch [OK] when "ALL RESET?" appears on the display.

##### Reset the Settings of the Set Mode

Press the [POWER] key for one second or longer while pressing the [BACK] key and [DISP] key to turn the power ON. Touch [OK] when "SET MODE RESET?" appears on the display.

#### Select the Operating Band

The operating band is switched each time the [A/B] key is pressed. Also, in dual band operations, touching the frequency display area of the non-operating band (displayed in grey), will change it to the operating band. The frequency band displayed in black is the operating band.

Each time the [A/B] key is pressed for one second or longer, the screen will switch between dual band display and mono band display.

#### Adjusting the Volume

Turn the VOL knob to the left or right to adjust the volume up or down.

### Selecting the Frequency Band

Select the frequency band by pressing the [BAND] key. Touch [FMW] before pressing the [BAND] key to switch the frequency band in the reverse order. Press the [BAND] key to switch the receive frequency operating bands in the order shown in the below table. Touch [FMW] before pressing the [BAND] key, to switch the bands in the reverse order. The receive frequency bands for Band A and B are as shown in the following table.

Frequency Band (Band)	Band A	Band B
522 kHz to 1710 kHz (AM radio band)	●	—
76 (88) MHz to 108 MHz (FM radio band)	●	—
1.8 MHz to 30 MHz (shortwave band)	●	—
30 MHz to 76 (88) MHz (50 MHz band)	●	—
108 MHz to 137 MHz (aeronautical radio band)	●	●
137 MHz to 174 MHz (144 MHz band)	●	●
174 MHz to 222 MHz	●	●
222 MHz to 420 MHz (information radio band (1))	●	●
420 MHz to 470 MHz (430 MHz band)	●	●
470 MHz to 774 (800) MHz *Band B is up to 580 MHz	●	●
803 (800) MHz to 999 MHz (information radio band (2))	●	—

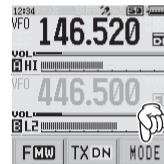
( ):EXP/European Version

#### Setting the Frequency

Press the [V/M] key to switch to the VFO mode and then turn the DIAL. Or touch the frequency display area to show the keypad entry screen and enter the frequency manually.

### Selecting the Communication Mode

Use the radio in the AMS mode ([DN][VW][FM]) for normal operations. The communications mode is automatically selected to match the mode of the received signals. Touch [MODE] to switch the communication mode.



"AMS" → "DN (V/D mode)" → "VW (FR mode)" → "FM (Analog)"

**DN:** Digital voice and data will be sent simultaneously with automatic error correction, for reliable communications.

**VW:** Digital voice data is transmitted using the entire 12.5 kHz bandwidth. High quality voice communication is possible.

**FM:** Analog communication using the FM mode.

#### Changing the Transmit Power

Touch [FMW] and [TXPWR] and then turn the DIAL to select the transmit output level.

"HIGH" → "LOW1" → "LOW2" → "LOW3"

(When a lithium-ion battery pack, or an external power supply is connected)

Press [POWER] after selecting the transmit output power.

#### Locking the Keys and Switches

Press [POWER] (power switch) to lock the key buttons. Press [POWER] (power switch) again to release the lock.

## Communicating

Yaesu C4FM digital amateur transceivers can communicate digitally with each other, and also use FM to communicate with analog amateur transceivers.

By selecting the **AMS** mode (DN/VW/FM), the transceiver can automatically match the communication mode of the received signals, and recognize both C4FM digital and FM analog signals for communication purposes.

When operating in the digital fixed mode (DN/VW), Always be aware of the FM analog users on the frequency. Do not transmit digital signals or interfere with FM communications in progress.

\*Select the mode according to the operating situation.

### Send

Speak into the microphone from a distance of about 5 cm while pressing **[PUSH TO TALK]**.

The BUSY/TX LED lights up red and the PO meter on the LCD visually displays the transmit power level.

### Receive

Release **[PUSH TO TALK]** to return to receive mode. Upon receiving a C4FM digital signal, the call sign or name of the sending station is displayed.

\*The period of time that the call sign of the sending station is displayed may be changed. Press the **[DISP]** key for one second or longer to display the "SETUP MENU", and change the setting in **[TX/RX]→[2 Digital]→[2 Pop-up Setting]**.

## Using Position Information and BACKTRACK

Press the **[DISP]** key to display the BACKTRACK screen.

### Displaying the Received Station's Position

Touch **[YR]** to display the direction and distance to the sending station when receiving the digital information.



### Displaying My Station Direction of Travel

Touch **[MY]** to display the direction of travel of your own station.

### Registering Position Information

Touch **[MEM]** to enter the memory mode and save the position information being displayed, **[★]**, **[L1]** and **[L2]** will flash. Touch either **[YR]** or **[MY]** to save the respective position information into the corresponding **[YR]** or **[MY]** memory register.

### Using BACKTRACK

After registering the position to a memory, the direction and distance from your present location to the registered point will be displayed when **[★]**, **[L1]** or **[L2]** is touched (BACKTRACK function).

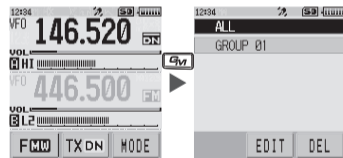
## Operating GM

In GM mode, group members are shown divided into those within the sphere of communication and those outside. The direction and distance from your own station to members within the sphere of communication will be shown in real time. In addition, messages and images may be sent to and received from other group members.

\*A microSD memory card is required for data management purposes. See the instructions in the section on "Using a microSD memory card" of the instruction manual to install a microSD memory card in the transceiver.

### Displaying Within Range/Out-of-range Stations in the "ALL" Operation Function (no group setting is required)

Set Band A to the desired frequency and press the **[GM]** key in the AMS mode (DN/VW/FM) or digital mode (DN/VW) to display the operating group select/create new group screen.



Press **[ALL]** to display up to 24 stations that are operating in the GM mode on the same frequency within the sphere of communication.



When a station displayed on the screen is touched, it will be selected and start flashing (multiple selections are allowed). The selected stations may be added to a group by touching **[GROUP]**, and then touching any of the groups displayed to add the selected stations to that group.

\*During GM operations, if the **[GM]** key is pressed, GM operations will terminate and the display will return to the VFO or memory mode operating screen.

### Creating a Group

Select "GROUP 01" and then touch **[EDIT]** in the Select Operating Group Select / Create New Group screen. Up to 16 groups (with a maximum of 24 members each) may be created. When a group is selected, the members will be shown separately from those in the operation under "ALL".

1 Select "GROUP 01" and touch **[EDIT]**.



2 Input the group name and then press the **[BACK]** key.

## Viewing Transmitted and Received Messages and Images

Touch **[FMW]** followed by **[LOG]** to select **[MESSAGE]** or **[PICT]** and view the message list or the image list. In addition, new messages may be created/sent, replied to, and forwarded.

NEW	Creating and sending a new message
	Received messages (unread)
	Received messages (read)
	Transmitted messages
	Transmission failure messages
	Received images (unread)
	Received images (read)
	Transmitted images
	Transmission failure images
	Photos taken with the optional camera microphone

\*Refer to the GM Edition of the instruction manual for details on: message creation; editing and deletion of groups/members; SYNC function, synchronizing the operating group members with other stations by radio; transferring of group information via a microSD memory card and so on (download the information from the Yaesu website).