Digital Personal ID (DP-ID) feature ................................................. 6
About the Digital Personal ID (DP-ID) feature ............................................. 6
Registering the DP-ID of the other station .................................................... 6
Deleting the registered DP-ID ...................................................................... 7
Communicating with specified other station in the Analog FM mode... 9
Selecting the Squelch Type in the Analog FM Mode................................. 9
Tone squelch feature................................................................................... 10
Setting CTCSS Tone frequency ................................................................. 10
Searching for the CTCSS Tone transmitted by the other Station .............. 10
Digital Code Squelch (DCS) feature .......................................................... 11
Setting the DCS CODE .............................................................................. 11
Searching for the DCS Code Used by the Other Station ........................... 12
Two-Tone CTCSS Pager Function .............................................................. 12
Using the Pager Function........................................................................... 12
Setting the Code for Your Station .............................................................. 12
Calling a Specific Station .......................................................................... 13
Receiving “pager code” calls from a Remote Station (Standby Operation) 14
Using the Pager Answer Back .................................................................... 14
Notification of a Call from a Other Station by the Bell Function .......... 14
User Programmed Reverse CTCSS Decoder........................................... 15
Memory Function ........................................................................20
Memory Channel List........................................................................................ 16
The Memory Channel Only Mode.............................................................. 16
Using Memory Banks.................................................................................. 17
Registering to Memory Banks .................................................................... 17
Open the Memory Bank display ................................................................. 18
Open Memory Bank Channels .................................................................... 18
Canceling a Memory Channel Registered in Memory a Bank ................. 18
Assigning a Name to a Memory Bank ........................................................ 19
Split Memory ................................................................................................ 20
Setting Skip Memory Channel and Specified Memory Channel .......... 20
Skipping Unwanted Scan Frequencies (Skip Search Memory) .............. 20
Programmable Memory Channel Scan (PMS) ......................................... 22
Registering to the Programmable Memory Channels............................. 22
Performing Programmable Memory Channel Scan .................................. 22
Memory Bank Scanning................................................................................ 23
Memory Bank Link Scanning....................................................................... 23
Setting Bank Link ...................................................................................... 23
Performing Bank Link Scan....................................................................... 23
Dual Receive (D.RCV) Function ................................................................. 24
Registering the priority channel ................................................................. 24
Activating the Dual Receive (D.RCV) feature.................................................. 25
Setting the Dual Receive (D.RCV) Resume Conditions ............................ 25
Contents

Using the GPS Function ................................................................. 26
  The GPS Function ................................................................. 26
  Activating the GPS Function ................................................. 26
Displaying Position Information of Remote Stations in Digital Mode .... 26
Saving GPS Information (GPS Log Function) ............................... 28
  Checking Tracks on Your PC ................................................. 28
GPS Screen Information and Operation ....................................... 29
Smart Navigation Function ........................................................ 30
  Real-Time Navigation Function ............................................. 30
  Backtrack Function .............................................................. 30
Functions to Use as Necessary ...................................................... 32
  AF-DUAL Receive Function .................................................. 32
DTMF Operation ........................................................................... 33
  Setting the DTMF Memory ..................................................... 33
  Transmitting the Registered DTMF Code ................................. 33
  Transmitting DTMF code automatically using DTMF memory .... 33
  Manually Transmitting the DTMF Code ................................... 33
Using the Transceiver for Packet Communication .......................... 34
Clone Operation .......................................................................... 35
Connecting to a PC ....................................................................... 36
  Updating the FT5DR/DE firmware ......................................... 36
All Reset ..................................................................................... 37
Setup Menu Reset ........................................................................ 37
Using Setup Menu ......................................................................... 38
Setup Menu Operation .................................................................. 38
Tables of Setup Menu Operations ............................................... 39
Setup Menu Operations ............................................................... 45
  DISPLAY Menu ................................................................. 45
    1 TARGET LOCATION ...................................................... 45
    2 COMPASS ................................................................. 45
    3 BAND SCOPE ............................................................. 45
    4 LAMP ......................................................................... 45
    5 LANGUAGE ............................................................... 46
    6 LCD BRIGHTNESS ...................................................... 46
    7 DISPLAY COLOR ...................................................... 46
    8 OPENING MESSAGE .................................................. 47
    9 SENSOR INFO .......................................................... 47
   10 SOFTWARE VERSION .................................................. 47
<table>
<thead>
<tr>
<th>Menu</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX/RX Menu</td>
<td>48</td>
</tr>
<tr>
<td>1 MODE</td>
<td>48</td>
</tr>
<tr>
<td>1 ANTENNA ATT</td>
<td>48</td>
</tr>
<tr>
<td>2 FM DEVIATION</td>
<td>48</td>
</tr>
<tr>
<td>3 RX MODE</td>
<td>48</td>
</tr>
<tr>
<td>2 DIGITAL</td>
<td>48</td>
</tr>
<tr>
<td>1 DIGITAL POPUP</td>
<td>48</td>
</tr>
<tr>
<td>2 LOCATION SERVICE</td>
<td>49</td>
</tr>
<tr>
<td>3 STANDBY BEEP</td>
<td>49</td>
</tr>
<tr>
<td>4 DIGITAL VW</td>
<td>49</td>
</tr>
<tr>
<td>5 AUDIO PITCH</td>
<td>49</td>
</tr>
<tr>
<td>3 AUDIO</td>
<td>50</td>
</tr>
<tr>
<td>1 MIC GAIN</td>
<td>50</td>
</tr>
<tr>
<td>2 MUTE</td>
<td>50</td>
</tr>
<tr>
<td>3 RX AF DUAL</td>
<td>50</td>
</tr>
<tr>
<td>4 SP SELECT</td>
<td>50</td>
</tr>
<tr>
<td>5 VOX</td>
<td>51</td>
</tr>
<tr>
<td>6 RECORDING</td>
<td>51</td>
</tr>
<tr>
<td>MEMORY Menu</td>
<td>51</td>
</tr>
<tr>
<td>1 BANK LINK</td>
<td>51</td>
</tr>
<tr>
<td>2 BANK NAME</td>
<td>51</td>
</tr>
<tr>
<td>3 MEMORY NAME</td>
<td>51</td>
</tr>
<tr>
<td>4 MEMORY PROTECT</td>
<td>51</td>
</tr>
<tr>
<td>5 MEMORY SKIP</td>
<td>52</td>
</tr>
<tr>
<td>6 MEMORY WRITE</td>
<td>52</td>
</tr>
<tr>
<td>SIGNALING Menu</td>
<td>52</td>
</tr>
<tr>
<td>1 BELL</td>
<td>52</td>
</tr>
<tr>
<td>2 DCS CODE</td>
<td>52</td>
</tr>
<tr>
<td>3 DCS INVERSION</td>
<td>52</td>
</tr>
<tr>
<td>4 DTMF MODE</td>
<td>52</td>
</tr>
<tr>
<td>5 DTMF MEMORY</td>
<td>53</td>
</tr>
<tr>
<td>6 PAGER</td>
<td>53</td>
</tr>
<tr>
<td>7 PR FREQUENCY</td>
<td>53</td>
</tr>
<tr>
<td>8 SQL LEVEL</td>
<td>53</td>
</tr>
<tr>
<td>9 SQL S-METER</td>
<td>53</td>
</tr>
<tr>
<td>10 SQL EXPANTION</td>
<td>54</td>
</tr>
<tr>
<td>11 SQL TYPE</td>
<td>54</td>
</tr>
<tr>
<td>12 TONE SQL FREQ</td>
<td>54</td>
</tr>
<tr>
<td>13 TONE SEARCH</td>
<td>54</td>
</tr>
<tr>
<td>14 WX ALEAT</td>
<td>55</td>
</tr>
<tr>
<td>SCAN Menu</td>
<td>55</td>
</tr>
<tr>
<td>1 DW TIME</td>
<td>55</td>
</tr>
<tr>
<td>2 SCAN LAMP</td>
<td>55</td>
</tr>
<tr>
<td>3 SCAN RE-START</td>
<td>55</td>
</tr>
<tr>
<td>4 SCAN RESUME</td>
<td>55</td>
</tr>
<tr>
<td>5 SCAN WIDTH</td>
<td>56</td>
</tr>
<tr>
<td>6 PRIORITY REVERT</td>
<td>57</td>
</tr>
</tbody>
</table>
Digital Personal ID (DP-ID) feature

About the Digital Personal ID (DP-ID) feature

When operating in digital C4FM communications, each transceiver is programmed with, and sends its own individual ID information (Radio ID) in each transmission. The DP-ID function and the individual identification information, makes possible group communications of stations that are within communications range.

Digital Personal ID (DP-ID) feature opens the speaker audio only when a signal set to the same DP-ID in the Digital Mode is received, even if each transceiver is set a different Digital Group ID (DG-ID) number.

The digital C4FM repeater equipped with the DP-ID function allows preferentially contact in an emergency, regardless of the repeater setting or if the repeater is being used without the DG-ID setting.

- Digital C4FM mode transceivers compatible with the DG-ID function are required in order to utilize this function.
- If the firmware is not compatible with the DG-ID function, update to the latest firmware to use the DG-ID function. The latest firmware is available on the YAESU website.

Registering the DP-ID of the other station

- Once registered, DP-ID is stored until deleted.
- Register with each other's transceivers nearby.
- When setting the DG-ID code to “00”, the transceiver will receive signals from all digital C4FM stations. To utilize the DP-ID function, it is necessary to set the receive DG-ID code to a number other than “00”.

1. Press and hold the [F MENU] key → touch [GM] → touch [1 DP-ID LIST].
   - The DP-ID list is displayed.
   - If a number of DP-IDs are registered, rotate the DIAL knob to display the desired DP-ID.

2. 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 callsign and “REGISTRATION?” are displayed on the LCD.

- When a signal from another registered transceiver is received, nothing is display on the LCD.
- When registering a transceiver already registered with a different call sign, the call sign registered in the DP-ID list is changed to the new registered call sign.
3. Touch [OK] to save the setting.
   • When registering in the DP-ID list is finished, “COMPLETED” is displayed for three seconds, then the display returns to the DP-ID list screen.
   • If not registering the DP-ID, press the [CANCEL].
   • If registering several DP-IDs, repeat step 2 and 3.
   • A maximum of 24 stations may be registered.

4. Press the PTT switch to save the setting and return to normal operation.
   • Similarly, register all of the communicating transceivers’ DP-IDs to the DP-ID lists of the other stations.
   • The DP-ID setting is complete.

For communicating using the DP-ID function, register the DP-ID of each other’s transceiver on both transceivers. By registering the DP-ID, users may communicate even if the Digital group ID (DG-ID) is a different setting.

![Diagram showing DP-ID communication and deletion]

### Deleting the registered DP-ID

1. Press and hold the [F MENU] key → touch [GM] → touch [1 DP-ID LIST].

   The DP-ID list is displayed.
2. Rotate the DIAL knob to select the call sign of the other transceiver, then touch [DEL].
   Confirmation screen “DELETE?” is displayed.

3. Touch [OK] to delete.
   - When finished registering in the DP-ID list, “COMPLETED” is displayed for three seconds.
   - If not registering another DP-ID, touch [CANCEL].
   - If deleting several DP-IDs, repeat step 2 and 3.

4. Press the PTT switch to save the setting and return to normal operation.
Selecting the Squelch Type in the Analog FM Mode

1. Press the [F MENU] key → [SQTYP].
   If [SQTYP] is not displayed, touch [FWD →] to display [SQTYP] and then touch it.

2. Turn the DIAL knob and select the type of squelch, refer to the table below.

   *Tone squelch (CTCSS), DCS and the New PAGER (EPCS) functions do not operate in the C4FM digital mode. Touch [MODE] to change to the Analog FM mode, or turn the AMS function ON.*

<table>
<thead>
<tr>
<th>Squelch type</th>
<th>Icon indication</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td></td>
<td>Deactivates the tone squelch function and DCS function OFF, then returns to the normal squelch operation in the Analog FM mode.</td>
</tr>
<tr>
<td>TONE</td>
<td>TN</td>
<td>Analog FM Transmissions contain the CTCSS tone. Receives as a normal squelch operation.</td>
</tr>
<tr>
<td>TONE SQL</td>
<td>TSG</td>
<td>Activates the CTCSS tone squelch function on Analog FM receive.</td>
</tr>
<tr>
<td>DCS</td>
<td>DCS</td>
<td>Activates the Digital Code Squelch (DCS) function. The DCS code may be selected from 104 codes (from 023 to 754).</td>
</tr>
<tr>
<td>REV TONE</td>
<td>RTN</td>
<td>Activates the reverse tone function. Used to monitor communications based on the squelch control system. When a signal contains the designated tone, the squelch is not opened, and when the tone signal disappears, the squelch opens, and communication starts.</td>
</tr>
<tr>
<td>PR FREQ</td>
<td>PR</td>
<td>Activates the no-communication squelch function for radios. The no-communication signal tone frequencies may be specified within the range from 300 Hz to 3000 Hz in steps of 100 Hz.</td>
</tr>
<tr>
<td>PAGER</td>
<td>PAG</td>
<td>Activates a new two-tone CTCSS pager function. When communicating with FT5DR/DE transceivers among friends, specify personal codes (each code is composed of two tones) so that only specific stations are called.</td>
</tr>
<tr>
<td>D CD*</td>
<td>DC</td>
<td>Transmits the signal containing the DCS CODE. Receives as a normal squelch operation.</td>
</tr>
<tr>
<td>TONE-DCS*</td>
<td>T-D</td>
<td>Sends a tone signal when transmitting, and receives the only signal matches the DCS code when receiving.</td>
</tr>
<tr>
<td>D CD-TONE SQL*</td>
<td>D-T</td>
<td>Sends the DCS CODE when transmitting and receives only signals that contain a matching tone signal when receiving.</td>
</tr>
</tbody>
</table>
*: Press and hold the [F MENU] key → [SIGNALING] → [10 SQL EXPANTION] set to “ON”, “D CD”, “TONE-DCS” and “D CD-TONE SQL” setting values are activated.

3. Press the PTT switch to save the settings and return to normal operation.

- The squelch type may be set for each frequency band (BAND).
- The CTCSS and DCS squelch settings are also active during scanning. If scanning is performed with the CTCSS and DCS squelch function activated, scanning stops only when a signal containing the specified CTCSS tone or DCS code is received.
- Pressing the MONI/T-CALL switch allows signals that do not contain a tone or DCS code, and signals with different tones, DCS codes, digital mode signals to all be heard.
- Press and hold the [F MENU] key → [SIGNALING] → [3 DCS INVERSION] allows to receive the DCS code of the inverted phase.

### Tone squelch feature

The tone squelch opens the speaker audio only when a signal containing the specified CTCSS tone is received. The receiver will be quiet while waiting for a call from a specific station.

- The tone squelch function does not function in digital mode. Touch [MODE] to change the communication mode to Analog FM mode or turn the AMS function ON.

### Setting CTCSS Tone frequency

The tone frequency may be selected from 50 frequencies (from 67.0 Hz to 254.1 Hz).

1. Press the [F MENU] key → [SQTYP].
   - If [SQTYP] is not displayed, touch [FWD →] to display [SQTYP] and then touch it.
2. Rotate the DIAL knob to select “TONE SQL”.
3. Press the PTT switch to save the settings and return to normal operation.
4. Press the [F MENU] key → [CODE].
5. Rotate the DIAL knob to select the tone frequency.
6. Press the [BACK] key to save the setting and return to normal operation.

- The tone frequency setting is common with the squelch types as follows:
  - TONE, TONE SQL, REV TONE, TONE-DCS, D CD-TONE SQL
- The default setting is “100.0 Hz”

### Searching for the CTCSS Tone transmitted by the other Station

The tone search function does not function in digital mode. Touch [MODE] to change the communication mode to Analog FM mode or turn the AMS function ON.

Search and display the tone squelch CTCSS tone transmitted by the other station.

1. Press the [F MENU] key → [SQTYP].
   - If [SQTYP] is not displayed, touch [FWD →] to display [SQTYP] and then touch it.
2. Rotate the DIAL knob to select the “TONE SQL”.
3. Press the PTT switch to save the setting and return to normal operation.
4. Press the [MENU] key → [CODE].
   The setting screen of the tone frequency is displayed.
5. Touch [SEARCH].
   • The transceiver begins searching for a matching tone frequency.
   • When a corresponding tone frequency is detected, a beep sound is emitted, and the detected tone frequency blinks. The searching stops for 5 seconds and the audio is heard.
6. Touch [STOP] to stop searching.
7. Press the [BACK] key to save the detected tone frequency and return to normal operation.

   To set the transceiver operation when scanning stops, press and hold the [MENU] key → [SCAN] → [4 SCAN RESUME]. This setting is common with the scan setting, tone search function and DCS search function.

**Digital Code Squelch (DCS) feature**

The Digital Code Squelch opens the speaker audio only when a signal containing the specified DCS code is received. The DCS code may be selected from 104 types (from 023 to 754).

   The tone search function does not function in digital mode. Touch [MODE] to change the communication mode to Analog FM mode or turn the AMS function ON.

**Setting the DCS CODE**

1. Press the [MENU] key → [SQTYP].
   If [SQTYP] is not displayed, touch [FWD →] to display [SQTYP] and then touch it.
2. Rotate the DIAL knob to select “DCS”.
3. Press the PTT switch to save the setting and return to normal operation.
4. Press the [MENU] key → [CODE].
5. Rotate the DIAL knob to select the DCS code.
6. Press the [BACK] key to save the detected tone frequency and return to normal operation.

   • The DCS code set by the above operation is the common setting for all transmissions with a DCS Code (DCS, D CODE, T DCS, D TONE).
   • The default DCS code is “023”.

---

12 TONE SQL FREQ
TONE : 123.0 Hz

SEARCH STOP

12 TONE SQL FREQ
TONE : 123.0 Hz

SEARCH STOP

2 DCS CODE
DCS : 023

SEARCH STOP

TRANSMIT/TONE

TRANSMIT/TONE
Searching for the DCS Code Used by the Other Station

Search for the DCS code used by the other station.

1. Press the [F MENU] key → [SQTYP].
   If [SQTYP] is not displayed, touch [FWD →] to display [SQTYP] and then touch it.
2. Rotate the DIAL knob to select “DCS”.
3. Press the PTT switch to save the setting and return to normal operation.
4. Press the [F MENU] key → [CODE].
   The DCS code setting screen is displayed.
5. Touch [SEARCH].
   • The transceiver starts to search for the DCS code.
   • When a corresponding DCS code is detected, a beep sound is emitted. The detected DCS code blinks. The searching stops for 5 seconds and the audio is heard.
6. Touch [STOP] to stop searching.
7. Press the [BACK] key to save the detected DCS code and return to normal operation.

Two-Tone CTCSS Pager Function

When using FT5DR/DE transceivers with a group of friends, setting the Two-Tone CTCSS personal codes allows calling just the specific stations. Even when the person who is called is not near the transceiver, the information on the LCD indicates that a call was received.

The new two-tone CTCSS pager feature does not operate in digital mode. Touch [MODE] to change the communication mode to Analog FM mode or turn the AMS function ON.

Using the Pager Function

1. Press the [F MENU] key → [SQTYP].
   If [SQTYP] is not displayed, touch [FWD →] to display [SQTYP] and then touch it.
2. Rotate the DIAL knob to select the “PAGER”.
3. Press the PTT switch to save the setting and return to normal operation.

Setting the Code for Your Station

Set the “pager code” to be called by other stations.

1. Activate the pager function by referring to “Using the pager function” above.
2. Press the [F MENU] key → [CODE].
   If [CODE] is not displayed, touch [FWD →] to display [CODE] and then touch it.
3. Rotate the DIAL knob to select “CODE-RX”.

4. Press the [F MENU] key to move the “▶” icon to the first element of the code.
   Rotate the DIAL knob to select the first element of the code from 01 to 50.

5. Press the [F MENU] key to move the “▶” icon to the second element of the code.
   Rotate the DIAL knob to select the second element of the code from 01 to 50.
   The same code cannot be used for both elements.

6. Press the PTT switch to save the setting and return to normal operation.

   • The reverse combination works as the same code, that is “05 47” is the same as “47 05”.
   • If the same code is specified for all individuals, all the individuals can be called at the same time.
   • The default code is “05 47”.
   • When receiving the signals, the intermittent sound of the tone signal may be heard slightly.

**Calling a Specific Station**

The “pager code” may be set to call specific stations.

1. Activate the pager function by referring to “Using the Pager Function” (page 12).
2. Press the [F MENU] key → [CODE].
   If [CODE] is not displayed, touch [FWD →] to display [CODE] and then touch it.
3. Rotate the DIAL knob to select “CODE-TX”.
4. Press the [F MENU] key to move the “▶” icon to the first element of the code.
   Rotate the DIAL knob to select the first element of the code from 1 to 50.
5. Press the [F MENU] key to move the “▶” icon to the second element of the code.
   Rotate the DIAL knob to select the second element of the code from 1 to 50.
   The same code cannot be used for both elements.
6. Press the PTT switch to save the setting and return to normal operation.
7. Press the PTT switch to transmit a call to the specific station.
Receiving “pager code” calls from a Remote Station (Standby Operation)

When the Pager function is activated, and a call is received with a corresponding Code, the audio is heard. When the PTT switch is pressed, the “PAG” icon blinks and the other station's audio is heard regardless of whether the code matches or not. About 10 seconds after the signal disappears, the “PAG” icon will light, and the sound of the unmatched signal will not be heard.

Furthermore, when the Bell function (see below) is activated, the bell rings and the “声响” icon blinks when receiving calls from the other station.

Using the Pager Answer Back

When called by another station with a corresponding pager code, the transceiver is automatically placed in the transmit mode (for about 2.5 seconds) to notify the other station that you are ready to communicate.

1. Activate the pager function by referring to “Using the Pager Function” (page 12).
2. Press the [F MENU] key → [CODE].
   If [CODE] is not displayed, touch [FWD →] to display [CODE] and then touch it.
3. Press the [F MENU] key, and then rotate the DIAL knob to select “ON”.
4. Press the PTT switch to transmit a call to the specific station.

Notification of a Call from a Other Station by the Bell Function

The Bell may be set to sound an Alert when a call from another station containing a corresponding tone, DCS or pager code is received. “声响” icon on the display blinks to provide a later notice of the call from the other station.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [1 BELL].
2. Press the [F MENU] key.
3. Rotate the DIAL knob to select “BELL”.
4. Press the [BACK] key, and then rotate the DIAL knob to select “RINGER”, and then press the [F MENU] key.
5. Rotate the DIAL knob to select the desired number of times (1-20 times or continuous) the Bell rings.
   • • • 1time ↔ 2times ↔ • • • ↔ 20times ↔ CONTI • • •
6. Press the PTT switch to save the setting and return to normal operation, and the “声响” icon appears on the display.

If the setting is “CONTI” (continuous), the bell keeps sounding until an operation is made.
User Programmed Reverse CTCSS Decoder

The tone signal frequency can be set at 100 Hz intervals between 300 Hz and 3000 Hz to mute the audio when receiving a signal containing a CTCSS tone matching the programmed tone.

1. Press the [F MENU] key → [SQTYP].
2. Rotate the DIAL knob to select “PR FREQ”.
3. Press the PTT switch to save the setting and return to normal operation.
4. Press the [F MENU] key → [CODE].
   The setting screen containing the CTCSS tone frequencies is displayed.
5. Rotate the DIAL knob to select the desired CTCSS tone frequency.
   300Hz to 3000Hz (100Hz steps)
6. Press the PTT switch to save the setting and return to normal operation.
Memory Function

Memory Channel List

Since memory channels are displayed in a list, you can easily recall the memory by checking the frequency and memory tag display.

1. Press the [F MENU] key → [MEMORY].
   • If [MEMORY] is not displayed, touch [FWD →] to display [MEMORY] and then touch it.
   • You can switch between memory tag display and frequency display by press and hold the [V/M •] key.
   • The “X” icon is displayed at the left of memory channels set as skip memory, and the “P” icon is displayed at the left of memory channels set as specified memory.
   • Deleted memory channels are displayed in gray text.
   • Touching [ ], will cause the 10 digits of the memory channel to blink. Then turning the DIAL knob will fast forward memories in 10 channel steps. To cancel fast forward, touch [ ] again.

2. Rotate the DIAL knob to select the desired memory channel.
3. Touch [ENT] to recall the selected memory channel and enter memory mode.

The Memory Channel Only Mode

The FT5DR/DE may be set to operated only in the registered memory channels.

1. While pressing the [V/M •] key, press and hold the POWER switch to turn the transceiver ON.
   • The memory channel only mode is ON, the previously selected memory channel is recalled.
   • Rotate the DIAL knob to select the memory channels.
   • Touch and hold the frequency display to display the numeric keypad, enter a 3-digit memory channel number, and then touch [ENT] to recall the memory channel.

   • In the memory only mode, only the following functions will operate:
     • Changing the communication mode (touch [MODE])
     • The transmission mode setting of the AMS function (touch [TX AUTO], [TX FM] or [TX DN])
     • Switching MAG groups (press the [BAND] key)
     • Audio level adjustment
     • Key lock function (press the POWER switch)
     • Function menu MEMORY, DISP, LED LIGHT, SCAN, and D.RCV functions
     • SQL level adjustment (press the [SQL] key)
     • Group monitor (GM) function (press the [GM] key)
     • WIRES-X function (press the [X] key)
     • Pressing the [V/M •] key, will sound the beep, “M-ONLY” will be displayed, and the function will not operate.

• Canceling Memory Only Mode
1. Turn the transceiver OFF; and then while pressing the [V/M •] key, press and hold the POWER switch to turn the transceiver ON.
Using Memory Banks

The transceiver allows using up to 24 memory banks to be recalled with the sorted memory channels. One memory channel may also be registered in two or more memory banks according to the intended use.

Example of registering memory channels to the memory banks:

<table>
<thead>
<tr>
<th>Memory channels</th>
<th>Memory banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 145.000 MHz</td>
<td>BANK1 (1 - 100) 144 MHz Amateur Band Channels</td>
</tr>
<tr>
<td>2 145.500 MHz</td>
<td>BANK2 (1 - 100) 430 MHz Amateur Band Channels</td>
</tr>
<tr>
<td>3 120.400 MHz</td>
<td>BANK3 (1 - 100)</td>
</tr>
<tr>
<td>4 -</td>
<td>BANK4 (1 - 100) All Amateur Band Channels</td>
</tr>
<tr>
<td>5 439.700 MHz</td>
<td>BANK5 (1 - 100)</td>
</tr>
<tr>
<td>6 432.800 MHz</td>
<td>BANK6 (1 - 100) Air Band Channels</td>
</tr>
<tr>
<td>7 108.700 MHz</td>
<td>BANK7 (1 - 100)</td>
</tr>
<tr>
<td>8 -</td>
<td>BANK8 (1 - 100)</td>
</tr>
<tr>
<td>9 -</td>
<td>BANK9 (1 - 100)</td>
</tr>
<tr>
<td>10 -</td>
<td>BANK10 (1 - 100)</td>
</tr>
<tr>
<td>900 -</td>
<td>BANK24 (1 - 100)</td>
</tr>
</tbody>
</table>

Registering to Memory Banks

1. Press the [V/M •] key to enter the memory mode.
2. Rotate the DIAL knob to recall the memory channel to register in the memory bank.

3. Press and hold the [V/M •] key. Memory channel will blink.
4. Rotate the DIAL knob to select the memory bank (BANK1 to BANK24) to register the memory channel.

The memory bank channels are displayed between the memory channel 1 (1CH), and PMS memory channel U50.
5. Press the [V/M •] key. The memory channel is registered in the selected memory bank and the transceiver operation returns to the memory mode.
Open the Memory Bank display

1. Press the [V/M •] key to enter the memory mode.
2. Press the [F MENU] key→[BANK].
   If [BANK] is not displayed, touch [BACK ←] to display [BANK] and then touch it.

   B1 to B24: The memory bank display
   : The memory channel display

   If no memory channel is registered, setting the following operation sounds the beep and “NO BANK” will be displayed.

- Disable the memory bank display

1. Press the [F MENU] key→[MR].
   If [MR] is not displayed, touch [BACK ←] to display [MR] and then touch it.

Open Memory Bank Channels

1. While the memory bank is displayed, press the [BAND] key.
2. Rotate the DIAL knob to select the memory bank (BANK1 to BANK24) to be recalled.

   If no memory channel is registered, the memory bank may not be selected.

3. Press the [BAND] key or PTT switch.
   The selected memory bank is activated.

Canceling a Memory Channel Registered in Memory a Bank

1. Recall the memory bank to cancel registering.
2. Press and hold the [V/M •] key.
3. Rotate the DIAL knob to select the memory channel to cancel registering to the memory channel.
4. Touch [ ], and then touch [M.DEL].
Assigning a Name to a Memory Bank

A name can be assigned to a memory bank using up to 16 characters. The following types of characters can be entered:

- Alphabetic characters (1 byte and 2 byte letters, uppercase and lowercase characters)
- Numbers (1 byte and 2 byte numbers)
- Symbols

1. Press and hold the [F MENU] key → touch [MEMORY] → [2 BANK NAME].
2. Touch the bank where you want to edit the tag.
   - The character input screen is displayed.
   - Use the numeric keys or DIAL knob, to input the name characters.
   - Touch [→] to move the cursor to the right
   - For additional details on inputting a memory tag, refer to “Text input screen” in the Operating Manual.

   The default memory bank names are set from “BANK 1” to “BANK24. Each name may be changed.

3. When input is complete, press the PTT switch to save the characters and return to normal operation.
Split Memory

Two different frequencies, one for receive and another for transmit, may be registered to a memory channel.

1. Register the receive frequency to a memory channel first.
   - For additional details on registering to a memory channel, refer to the “Registering to Memory Channels” in the Operating Manual.
2. Set the transceiver to the desired transmit frequency.
3. Press and hold the [V/M •] key.
4. Rotate the DIAL knob to select the channel number that the receive frequency was registered to on step 1.
5. While pressing and holding the PTT switch, press the [V/M •] key.
   - The beep sounds and the split memory is saved.
   - While recalling the split memory, “□” is displayed on the LCD.

While operating the split memory, Press the [F MENU] key → [REV], to reverse the transmit and receive frequencies temporarily. When reversing the frequencies, “□” will blink.
Setting Skip Memory Channel and Specified Memory Channel

For efficient memory channel scanning, two types of memory channels may be designated, “skip memory channels” and “specified memory channels”. Set “Skip Memory Channels” will be skipped during the memory scanning; and only “Specified Memory Channels” will be scanned during specified memory channel scanning.

1. Recall the memory channel to skip or specify.
2. Press and hold the [F MENU] key → touch [MEMORY] → [5 MEMORY SKIP].
3. Rotate the DIAL knob to change as follows:
   • • • → OFF → SKIP X → SELECT P → • • •
   • SKIP: Skip Memory Channel
     The “X” at the right of the memory channel number lights up, and then the channel is skipped during scanning of memory channels.
   • SELECT: Specified Memory Channel
     The “P” at the right of the memory channel number lights up, and then only designated memory channels are scanned during memory scanning.
   • OFF: Normal Memory Channel
     The “X” or “P” at the right of the memory channel number turns OFF.

● Scanning Only the Specified Memory Channels
1. Recall the memory channel registered as a specified memory channel.
2. Press the [F MENU] key → [SCAN].
   • If [SCAN] is not displayed, touch [BACK ←] to display [SCAN] and then touch it.
   • Only the memory channels registered as the specified memory channels are scanned.

Unless two or more specified memory channels are registered, the specified memory channel scanning does not function.
Skipping Unwanted Scan Frequencies (Skip Search Memory)

During the VFO scan, an unwanted frequency may be skipped by registering it to the “skip search memory channels” in advance.

- **Set the temporary scan stop to the skip search memory**
  1. Press and hold the `[V/M •]` key to temporarily stop the VFO scan.
  2. Rotate the DIAL knob to select a skip search memory channel from 901-999.
     - Only skip search memory channels 901-999 may be selected.
  3. Press the `[V/M •]` key.
     - The beep sounds, and the search skip channel is saved to memory, then the scan resumes.

- **Specifying Unwanted VFO Scan Frequencies**
  1. In the VFO mode, set the frequency that you do not want to receive.
  2. Register the skip search memory (901-999) with the same steps as “Registering to Memory Channels” (see the Operating Manual).

    The skip search memory may be deleted with the same steps as “Clearing Memories” (see the Operating Manual). The deleted frequency is scanned again.

Programmable Memory Channel Scan (PMS)

Registering to the Programmable Memory Channels

50 sets of PMS memory channels (L1/U1 to L50/U50) are available.

- Register the lower and upper frequencies of the frequency range in a pair of Programmable Memory Channels.
  - L：Lower limit memory channel
  - U：Upper limit memory channel

- For more details on registering frequencies to the memory channel, refer to the “Registering to Memory Channels” in the Operating Manual.

    Make sure to use the corresponding numbers for the lower and upper limit memory channels.

    Set the PMS memory channel for performing the Programmable Memory scanning (PMS) as follows:

    - The scan width of the upper and lower limit frequencies must be 100 kHz or more.
    - The lower and upper limit memory channels must be within the same frequency band.
    - The lower and upper limit memory channels must not be registered in reverse.
    - The PMS memory channel must not be registered as a skip memory channel.

Performing Programmable Memory Channel Scan

The programmable memory channel scan allows scanning a specified frequency range within the same frequency band.

1. Recall the PMS memory channel to which the lower limit (L) or upper limit (U) of the frequency band is registered.
   - If [SCAN] is not displayed, touch [BACK ←] to display [SCAN] and then touch it.
   - Programmable memory channel scanning starts.
   - During scanning, “PMSP” appears on the upper left side of the display.
   - If the DIAL knob is rotated while scanning is in progress, the scanning will continue up or down in frequency according to the direction of the DIAL Knob rotation.
• If the scanner halts on an incoming signal, the back light will turn ON and the
decimal point between the “MHz” and “kHz” digits of the frequency display will blink.
• Scanning will resume in about five seconds.

3. Touch [STOP] or press the [PTT] switch to cancel the scanning.
   In this state (displayed as “PMSP□□” at the upper left of the display), the frequency
can be changed by turning the DIAL knob only in the upper/lower limit frequency
range stored by PMS memory.

● Disable the PMS function
1. Press the [V/M •] key.
   Return to the normal memory mode.

Memory Bank Scanning
Scan only the memory channels stored in the recalled memory bank.
1. Recall the memory bank you want to scan by referring to “Open the Memory Bank
display” (page 18) and “Open Memory Bank Channels” (page 18).
2. Press [F MENU] → [SCAN].
   If [SCAN] is not displayed, touch [BACK ←] to display [SCAN] and then touch it.
   Memory bank scan starts.

Memory Bank Link Scanning
During regular memory bank scanning, only the memory channels assigned to the
recalled memory bank are scanned. During memory bank link scanning, you can scan
memory channels registered in two or more banks you specified in advance.

Setting Bank Link
1. Press and hold the [F MENU] key → touch [MEMORY] → [1 BANK LINK].
2. Rotate the DIAL knob to select the memory bank for which you want to perform bank
   link scanning.
3. Press the [F MENU] key, a check mark will appear and it will be set to Bank Link.
4. Repeat steps 3 and 4 to select other memory banks.
5. Press the [PTT] switch to save the setting and return to normal operation.

Performing Bank Link Scan
1. Recall the memory bank set as bank link by referring to “Open the Memory Bank
display” (page 18) and “Open Memory Bank Channels” (page 18).
   The memory bank number is changed from [B] to [b] and the bank link scanning is
   activated.
2. Press the [F MENU] key → [SCAN].
   If [SCAN] is not displayed, touch [BACK ←] to display [SCAN] and then touch it.
   Bank Link Scanning is performed toward the higher memory channel numbers.

Press and hold the [DISP] key → touch [SCAN] → [5 SCAN WIDTH] → [BANK LINK] is set
to “OFF”, to temporarily disable banklink and perform normal memory-bank scanning while
banklink is set.
**Dual Receive (D.RCV) Function**

The transceiver is equipped with the following 3 types of Dual Receive Functions:

- VFO Dual Receive
- Memory Channel Dual Receive
- Home Channel Dual Receive

The transceiver checks for signals on the frequency registered to the selected memory channel (Priority Memory Channel) once approximately every 5 seconds. When receiving a signal on the frequency registered to a priority memory channel, the Dual Receive function automatically pauses, and allows reception of the signals.

**Example:** Checking the priority memory channel “6” (432.500 MHz), while receiving “145.240 MHz”.

---

**Registering the priority channel**

1. Register the preferred receive frequency and communication mode to the priority memory channel (see the operating manual).
2. Press the [V/M •] key to recall the memory channel.
3. Touch and hold the [F MENU] key, and then rotate the DIAL knob to select the memory channel registered in step 1.
4. Touch [PRI.CH].
   - The priority memory channel setting is saved and operation returns to the prior recalled memory channel.
   - When recalling the priority memory channel, the “P” icon appears on the upper right side of the memory channel number.
Activating the Dual Receive (D.RCV) feature

1. Set the frequency and communication mode to monitor continually.
   The monitor frequency may be set on the VFO mode, the memory channel mode or the HOME channel mode.
   
   **VFO Dual Receive**
   **VFO** ⇔ Priority Memory Channel
   
   **Memory Channel Dual Receive**
   **Memory Channel** ⇔ Priority Memory Channel
   
   **HOME Channel Dual Receive**
   **HOME channel** ⇔ Priority Memory Channel

2. Press the [F MENU] key → [D.RCV].
   - If [D.RCV] is not displayed, touch [BACK ←] to display [D.RCV] and then touch it.
   - The dual receive function is activated and the following icon is displayed on the top left of the display.

   **VFO Dual Receive**: VDR
   **Memory Channel Dual Receive**: MDR (/DXX/dXX)*
   **HOME Channel Dual Receive**: HDR

   * In the memory bank, DXX is displayed, and in the memory bank where the bank link is set, dXX (XX is a bank number) is displayed.

When a signal is received on the priority channel, the beep sounds, and the Dual Receive function stops temporarily.

The combination of the frequency bands and modes for the Priority Memory Channel and the receiver monitor frequency can be easily changed. Dual Receive may be operated with the AMS function ON.

Setting the Dual Receive (D.RCV) Resume Conditions

1. Press and hold the [F MENU] key → touch [SCAN] → [4 SCAN RESUME].
2. Rotate the DIAL knob to select “DW”.
3. Press the [F MENU] key, and then rotate the DIAL knob to select the resume condition after halting in the Dual Receive function (default setting is “HOLD”).

   **2.0 sec ~ 10.0 sec**  The signal is received for the specified period of time, and then the Dual Receive resumes.
   The Dual Receive resume time may be set from 2 to 10 seconds at 0.5 second intervals.

   **BUSY**  The signal is received until the signal fades out. Two seconds after the signal fades out, the Dual Receive resumes.

   **HOLD**  The Dual Receive stops and tuning remains on the current receive frequency. (The Dual Receive does not resume.)

4. Press the PTT switch to save the new setting and return to normal operation.

   Press and hold the [F MENU] key → touch [SCAN] → [6 PRIORITY REVERT] is set to “ON”, press the PTT switch to transmit, without waiting for activity to appear on the priority channel. After transmitting, the transceiver receives the priority channel and Dual Receive resumes after 5 seconds.
Using the GPS Function

The GPS Function

GPS (Global Positioning System) is a space-based satellite navigation system that provides location and time information anywhere on the earth. It was developed by the U.S. Department of Defense as a military system. When the GPS receiver acquires 3 or more signals (of about 30) GPS satellites orbiting at an altitude of about 20,000 km, it can calculate and display its current position (latitude, longitude, and altitude) within a tolerance of several meters. In addition, GPS can receive the exact time from the satellite onboard atomic clock.

Activating the GPS Function

Activating the GPS function enables the transceiver to automatically obtain the internal clock setting, and your location information setting from the GPS data.

- The default setting is ON.

1. Press and hold the [F MENU] key → touch [APRS] → [20 GPS POWER].
2. Rotate the DIAL knob to select “GPS ON”.
3. Press the PTT switch to save the setting and return to normal operation.

When the GPS function is active, the power consumption increases by about 15 mA. As a result, the battery life is reduced, as compared to when the GPS function is deactivated.

Displaying Position Information of Remote Stations in Digital Mode

With V/D mode of the C4FM digital, the GPS position information is transmitted simultaneously with voice signals; therefore, the direction and position of the remote station can be displayed in real-time even while communicating.

For details, see “Real-Time Navigation Function” (page 30)

- Even if the GPS function of your station is set to OFF, the position information of the remote station can be displayed in V/D mode.
- When the GPS function is not active, the remote station cannot display the position information for your station.
About Positioning by GPS

“Positioning” refers to calculation of your current position from the satellite orbit information and radio propagation time. At least 3 satellites need to be acquired for successful positioning. If positioning fails, move away from buildings as far as possible and stand in an area with open sky.

- **About errors**

  The measurement environment may result in positioning errors of several hundred meters. Under favorable conditions, positioning can be performed successfully using only three satellites. However, under the following poor conditions, the positioning accuracy can decrease or positioning can fail.

  - Between tall buildings
  - Narrow paths between buildings
  - Indoors or near large buildings
  - Under elevated roads or high voltage power lines
  - Between trees such as in forests or woods
  - Inside a tunnel or underground
  - Through heat reflective glass
  - Areas with strong magnetic fields

- **When not in use for a long time**

  When using the GPS functions for the first time after purchase, or when it has been unused in a while, a few minutes may be required to acquire the satellites. Also, if the GPS function has been turned OFF for several hours, a few minutes may be required to search for satellites.
Saving GPS Information (GPS Log Function)

The GPS position information can automatically be saved periodically onto a microSD memory card. Using the saved data, tracks can be displayed on commercially available map software*.

* Technical support for the map software is not provided by YAESU.

1. See “Activating the GPS Function” on page 26, and activate the GPS function.
2. Press and hold the [F MENU] key → touch [CONFIG] → [7 GPS LOG].
3. Rotate the DIAL knob to select the GPS data logging interval.
   OFF / 1 sec / 2 sec / 5 sec / 10 sec / 30 sec / 60 sec
4. Press the PTT switch to save the setting and return to normal operation.
   The GPS log function is activated, and GPS log “LOG” icon will be displayed.

   • The position information is saved periodically unless “OFF” is selected in step 3 (shown above) or the power of the transceiver is turned off.
   • Reselecting the GPS data logging interval in step 3 or turning on the transceiver again, begins saving the GPS data under a different file name.

Checking Tracks on Your PC

1. Turn off the transceiver.
2. Remove the microSD memory card from the transceiver.
3. Connect the microSD memory card to your PC using a commercially available memory card reader.
4. Open the “FT5D” folder in the microSD memory card.
5. Open the “GPSLOG” folder.
   • The data is saved as “GPSyymmddhhmmss.log”.
   • The [yymmddhhmmss] part of the name consists of year (yy), month (mm), day (dd), hour (hh), minute (mm), and second (ss).

   • Tracks can be displayed on the map by importing the data to commercially available map software.
   • For information on importing, please refer to the operation manual for the map software you use.
GPS Screen Information and Operation

Activating the GPS function displays the following information on the LCD.

1. In the normal operation screen, press the [F MENU] key → touch [DISP].
   • If[D.RCV] is not displayed, touch [BACK ←] to display [D.RCV] and then touch it.
   • If the navigation screen is displayed, touch the compass display to switch to the GPS information screen.

① Displays the satellite azimuth and elevation angles. Displays in North-up mode.
② Displays the date and time.
③ Displays the current speed.
④ Displays the satellite number and reception level.
⑤ Displays the latitude on the upper side of the screen whereas displays the longitude on the lower side of the screen.
   The current position appears using north (N) or south (S) latitude.
   Display format: X DD° MM. MMM
   X: X=N: North latitude, X=S: South latitude, DD: Degree, MM:MMM Minute
   Example: N 35° 37.250 (35 degrees, 37 minutes, 15 seconds north latitude)
   The current position appears using east (E) or west (S) longitude.
   Display format: X DDD° MM. DMMM
   X: X=E: East longitude, X=W: West longitude, DDD: Degree, MM:MMM Minute
   Example: E 139° 44.500 (139 degrees, 44 minutes, 30 seconds east latitude)
⑥ Displays the altitude of the current position “ALTI xxxxm”.
   Example: ALTI 36m

- The GPS data units for position, speed and altitude may be changed by pressing and holding the [F MENU] key → touch [APRS] → [22 GPS UNIT].
- When the GPS function is used, the accurate time and date are obtained from GPS and shown on the LCD in 24-hour format. This time data is displayed on the GPS and APRS screens.
- The geodetic system datum (WGS-84 / Tokyo) of the built-in GPS unit may be selected by pressing and holding the [F MENU] key → touch [APRS] → [19 GPS SETUP] in Setup Menu. However, since APRS uses the geodetic system of WGS-84, it is recommended not to change it.
- The time zone may be set at 30-minute increments by press and hold the [F MENU] key → touch [APRS] → [28 TIME ZONE] (the default setting: UTC 0:00).
- The position information obtained from an external GPS device may be used by pressing and holding the [F MENU] key → touch [APRS] → [17 COM PORT SETTING] and then setting “INPUT” to “GPS”. In this case, the data from the internal GPS will be ignored.
- When using an external GPS device, move it away from the transceiver to reduce interference.
Smart Navigation Function

There are 2 methods of navigation with the Smart Navigation function.
- Real-time navigation function
- Backtrack function

Before using the smart navigation function, press and hold the [F MENU] key → touch [APRS] → [1 TARGET LOCATION], select “COMPASS”.

Real-Time Navigation Function

GPS position information and voice signals are simultaneously transmitted in the V/D mode of C4FM digital. For this reason, the position and direction of the remote station can be displayed in real time even during communication.

1. In the normal operation screen, press the [F MENU] key → touch [DISP].
   - If [DISP] is not displayed, touch [FWD →] to display [DISP] and then touch it.
   - If the GPS information screen is displayed, touch the compass display to switch to the navigation display screen.
2. Touch [ ] to switch to the remote station location information display.
3. The distance and direction to the remote station operating on the same frequency in the V/D mode are displayed.

4. Press the [F MENU] key to return to the normal operation display.

Backtrack Function

By registering a point such as the departure point in advance, the distance and direction to the registered point from your current position can be displayed in real time.

- Registering Your Current Position (Departure Point) (up to 3 Positions can Be Registered)

1. In the normal operation screen, press the [F MENU] key → touch [DISP].
   - If [DISP] is not displayed, touch [FWD →] to display [DISP] and then touch it.
   - If the GPS information screen is displayed, touch the compass display to switch to the navigation display screen.
2. Touch [ ] to switch to your own station location information display.

   You can register the other partner’s callsign and current location by touching [ ] and performing the registration operation while the remote station’s location information is displayed.
3. Touch [MEM].

“★”, L1” and “L2” blink.

4. Touch one of the blinking indicators to which you want to register the position information.
   • The location information is registered with the selected indicator.
5. Press the [F MENU] key return to normal operation display.

● Using the Back Track Function

1. In the normal operation screen, press the [F MENU] key → touch [DISP].
   • If [DISP] is not displayed, touch [FWD →] to display [DISP] and then touch it.
   • If the GPS information screen is displayed, touch the compass display to switch to the navigation display screen.
2. Touch the indicator ([★], [L1] or [L2]) to which you want to register the location information for back tracking.

The arrows in the circle indicate the direction of the registered point (departure point). You can return to the departure point by moving forward so that the arrow always points up (In case of heading up display).
3. Press the [F MENU] key to return to normal operation display.

● Description of the BACK TRACK Function Screen

Distance to the registered position
H-UP: Heading Up
N-UP: North Up
Registration point
Direction of registration point
Functions to Use as Necessary

AF-DUAL Receive Function

The AF-DUAL Receive Function allows reception of a radio broadcast during standby reception of A-band or B-band frequency (or frequency registered to a memory channel). When standby reception is active, no audio is heard on the standby frequency, however if a voice signal is detected, the reception of the broadcast radio will be paused, and the receiver frequency will be heard.

Dual Receive is a similar function. When using the Dual Receive function, every time the transceiver checks for a signal on the specified memory channel during radio reception, the radio reception is interrupted (approximately every 5 seconds). When using the AF-DUAL Receive Function, the radio reception is interrupted only when there is a calling signal from another transceiver.

1. Set the A-band or B-band frequency for standby receive during broadcast radio reception.
2. Press the [F MENU] key → [A.DUAL].
   - If [A.DUAL] is not displayed, touch [BACK ←] to display [A.DUAL] and then touch it.
   - The AF-DUAL function is activated, and AF DUAL “ icon will be displayed.
   - Pressing the [BAND] key each time switches between the AM broadcast (middle wave band) and FM broadcast.
3. Rotate the DIAL knob to tune to the frequency of the broadcast station.

- The AF-DUAL receive function can also be used to monitor a radio frequency registered to a memory channel or memory bank.
- Pressing [MONI] switch during radio reception, allows receiving the standby frequency.
- While listening to the radio using the AF-DUAL function, in standby receive mode, the transceiver cannot simultaneously receive broadcasts on the AM frequency (middle wave band) on either the A-band or B-band, and FM frequency.

● Disable the AF DUAL function
1. Press the [F MENU] key → [A.DUAL].
DTMF Operation

DTMF (Dual Tone Multi Frequencies) are the tone signals sent to make telephone calls, or control repeaters and network links. Up to 10 registers of 16-digit DTMF tone codes can be stored as telephone numbers to make calls through the public telephone network using a phone patch or connect through the WIRES-X analog node station.

Setting the DTMF Memory

1. Press and hold the [F MENU] key → touch [SIGNALING] → [5 DTMF MEMORY].
2. Rotate the DIAL knob to select the desired channel (1 to 10) to register the DTMF code, then press the [F MENU] key.
   The DTMF memory channel input screen is displayed.
3. Use the numeric keypad or DIAL knob to input the DTMF code maximum of 16 digits.
   • Using the DIAL knob:
     The DTMF codes from 0 to 9 may be input.
     • • • ⇐ 0 to 9 ⇐ A to D ⇐ * ⇐ - ⇐ # ⇐ • • •
4. Press the PTT switch to save the setting and return to normal operation.

Transmitting the Registered DTMF Code

1. Press and hold the [F MENU] key → touch [SIGNALING] → [4 DTMF MODE].
2. Rotate the DIAL knob to select the “MODE”.
3. Press the [F MENU] key, and then turn the DIAL knob to select the setting.
   AUTO ➧: The registered DTMF code is automatically transmitted.
   MANUAL: The DTMF code may be transmitted manually by pressing each numeric key.
4. Press the PTT switch to save the setting and return to normal operation.
   When set to “AUTO”, the DTMF icon “ DateTimeOffset” will be shown on the display.

Transmitting DTMF code automatically using DTMF memory

1. Set “AUTO ➧” by referring to “Transmitting the Registered DTMF Code” (above).
2. While pressing and holding the PTT switch, touch [DTMF].
3. Touch a numeric [0] to [9].
   • The DTMF code registered in the DTMF memory channel is automatically transmitted.
   • Even after releasing the PTT switch, the transmission continues until the DTMF code is completed. The transceiver is automatically returned to receive mode.

Manually Transmitting the DTMF Code

1. Set “MANUAL” by referring to “Transmitting the Registered DTMF Code” (above).
2. While pressing and holding the PTT switch, touch [DTMF].
   • Touch each corresponding key to send the DTMF code
   • The transmission may continue for one second after releasing the PTT switch.
Using the Transceiver for Packet Communication

You can perform packet communication with your transceiver by connecting a TNC (Terminal Node Controller) using an optional Microphone Adapter (CT-44).

After connecting the TNC to the transceiver, set the output signal level to the TNC by adjusting the sound volume level of the transceiver. Also, adjust the signal level input to your transceiver using the output level adjustment volume on the TNC (Input level cannot be adjusted on your transceiver).

When sending a vast volume of data, the transmission takes a longer time and the transceiver may be overheated. If the transmission is continued for a long time, the overheat prevention circuit will operate and the transmission power decreases. If the transmission is continued further, the transmission will be automatically stopped to prevent the transceiver from overheating and consequently malfunctioning. If the overheat prevention circuit has operated the transceiver returns to the receive mode, turn the transceiver OFF, or leave it in the receive mode until the temperature falls.

- Set the receive battery Save Function to OFF during packet communication by pressing and holding the [F MENU] key → touch [CONFIG] → [17 SAVE RX].
- Reception can be interfered with by noise generated by the Personal Computer.
- If the transceiver enters an abnormal receive state, disconnect the transceiver from the PC, and reconnect it to the PC using a photo coupler device or noise filter.
- For details on how to connect a TNC to the PC, refer to the TNC instruction manual.
Clone Operation

Data and various settings saved in your transceiver can be copied to any other FT5DR/DE transceiver.

1. Turn OFF the power of both FT5DR/DE transceivers, then connect an optional clone cable (CT-168) to the DATA terminal of each transceiver.
2. While pressing and holding the [F MENU] keys on both FT5DR/DE transceivers, press the POWER switch.
   The two transceivers are turned on and placed in the clone mode. The “CLONE” appears on the display.
   The “WAIT” appears on the display.
   • The “TX” appears on the display and data transfer starts.
   • When data transfer starts, the display on the receiving transceiver changes from “WAIT” to “RX”.
   • When data transfer begins, the data transfer amount indicator appears on the LCD.
5. When copying is completed, the receiving side transceiver returns to the normal mode. On the transmission side transceiver, the indication on the LCD returns from “TX” to “CLONE”.
6. Turn OFF the power of both transceivers, then disconnect the clone cable.

- When the “ERROR” appears on the LCD during data transfer, copying cannot be completed. Check the clone cable connection, and redo the operation from the beginning.
- Time data cannot be copied.
Connecting to a PC

Updating the FT5DR/DE firmware

To update the transceiver firmware, connect a PC to the DATA terminal of the FT5DR/DE with the supplied USB cable, as described below:

When a new firmware update for the FT5DR/DE is available, download the data from the YAESU website to update the FT5DR/DE to the latest version.

USB Cable (supplied)

DATA jack
Caution
When the All Reset function is performed, all data registered in the memory is deleted. Be sure to note
the settings on paper or back up the data on a microSD memory card. For details on how to save data
onto a microSD memory card, refer to “Setup Menu: SD CARD Menu Operations”.

All Reset
To restore all transceiver settings and memory content to the factory defaults.
1. Turn the transceiver OFF.
2. Press and hold the \[F MENU\] key, the \[A/B\] key and the \[BAND\] key and turn the
transceiver ON simultaneously.
The beep sounds and the confirmation screen is displayed.
3. Touch [OK].
   - The beep will sound, and the transceiver will reset all factory defaults.
   - After resetting all defaults, the call sign input message appears on the LCD. Set the
call sign.
   - To cancel the resetting, touch [CANCEL].

Setup Menu Reset
Reset only the Setup Menu parameters, and restore them to the default settings.
1. Turn the transceiver OFF.
2. Press and hold the \[F MENU\] key and the \[A/B\] key and turn the transceiver ON
simultaneously.
The beep sounds and the confirmation screen is displayed.
3. Touch [OK].
   - The beep will sound, and the transceiver will reset all Setup Menu settings to defaults.
   - To cancel the resetting, touch [CANCEL].
   - To reset all the following items, perform All Reset (see above).

[DISPLAY]
8 OPENING MESSAGE

[_SIGNALING_]
1 BELL
2 DCS CODE
3 DCS INVERSION
5 DTMF MEMORY
6 PAGER
7 PR FREQUENCY
9 SQL S-METER
11 SQL TYPE
12 TONE SQL FREQ

[W I R E S - X]
1 RPT/WIRES FREQ
2 SEARCH SETUP
3 EDIT CATEGORY TAG

[C A L L S I G N]
CALLSIGN

[TX/RX]
1-1 ANTENNA ATT
1-2 FM DEVIATION
1-3 RX MODE
2-4 DIGITAL VW

[SCAN]
5 SCAN WIDTH

[CONFIG]
6 CLOCK TYPE
12 PASSWORD
15 RPT SHIFT
16 RPT SHIFT FREQ
18 STEP

[OPTION]
2 Bluetooth
3 DEVICE LIST
4 Bluetooth AUDIO

[MEMORY]
1 BANK LINK
2 BANK NAME
3 MEMORY NAME
5 MEMORY SKIP

[GM]
1 DP-ID LIST

[APRS]
6 APRS MSG GROUP
7 APRS MSG TEXT
13 BEACON INFO
15 BEACON STATUS TEXT
17 COM PORT SETTING
18 DIGI PATH
19 GPS SETUP
23 CALLSIGN (APRS)
24 MY POSITION
25 MY SYMBOL
Using Setup Menu

The Setup Menu permits configuring the various functions according to individual operating needs and preferences.

Setup Menu Operation

1. Press and hold the [F MENU] key.
   The Setup Menu screen will be displayed.

2. Touch the desired item in Setup Menu.
   • The Sub-menu screen will be displayed.
   • You can also turn the DIAL knob to indicate a menu item, and then press the [F MENU] key to select it.

3. Touch the desired Setup Menu sub-menu.
   • Turn the DIAL knob to display a sub-menu that is not displayed, then touch it.
   • You can also turn the DIAL knob to indicate a menu item, and then press the [F MENU] key to select it.

4. Rotate the DIAL knob to select the desired item to set.
   [When there is no deeper level of menu items]
   Go step 6.
   [When there is deeper level of menu items]

5. Touch the desired item to set.
6. Rotate the DIAL knob to select the desired item to set.
7. Press the PTT switch to save the settings and return to normal operation.
   On some setting screens, pressing PTT switch does not exit from Menu Mode. In this case, press the [BACK] key several times to return to the frequency display screen.
# Tables of Setup Menu Operations

<table>
<thead>
<tr>
<th>Setup Menu no. / Item</th>
<th>Description</th>
<th>Selectable options (Options in bold are the default settings)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DISPLAY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 TARGET LOCATION</td>
<td>Set what to display using the smart navigation function.</td>
<td>COMPASS / NUMERIC</td>
</tr>
<tr>
<td>2 COMPASS</td>
<td>Set the compass display of the smart navigation function.</td>
<td>HEADING UP / NORTH UP</td>
</tr>
<tr>
<td>3 BAND SCOPE</td>
<td>Set the number of search channels for the band scope function.</td>
<td>19ch / 39ch / 79ch</td>
</tr>
<tr>
<td>4 LAMP</td>
<td>Set the duration time of the back light and keys to be lit.</td>
<td>KEY: OFF / 2 sec to 180 sec / CONTINUOUS KEY 30 sec SAVE: ON / OFF</td>
</tr>
<tr>
<td>5 LANGUAGE</td>
<td>Switch between Japanese/English for the menus and Setup Menu, etc.</td>
<td>ENGLISH / JAPANESE</td>
</tr>
<tr>
<td>6 LCD BRIGHTNESS</td>
<td>Set the brightness level of the LCD back light and numeric keypad light.</td>
<td>LEVEL1 to LEVEL6</td>
</tr>
<tr>
<td>7 DISPLAY COLOR</td>
<td>Set the font color of the operating band frequency.</td>
<td>WHITE / BLUE / RED</td>
</tr>
<tr>
<td>8 OPENING MESSAGE</td>
<td>Set the opening message type.</td>
<td>OFF / DC / MESSAGE</td>
</tr>
<tr>
<td>9 SENSOR INFO</td>
<td>Display the voltage.</td>
<td>DC</td>
</tr>
<tr>
<td>10 SOFTWARE VERSION</td>
<td>Display the software version.</td>
<td>Main / Sub / DSP</td>
</tr>
<tr>
<td><strong>TX/RX</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1 MODE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 ANTENNA ATT</td>
<td>Switch the attenuator between ON/OFF.</td>
<td>ON / OFF</td>
</tr>
<tr>
<td>2 FM DEVIATION</td>
<td>Set the FM transmission modulation level.</td>
<td>WIDE / NARROW</td>
</tr>
<tr>
<td>3 RX MODE</td>
<td>Select the receive mode.</td>
<td>AUTO / FM / AM</td>
</tr>
<tr>
<td><strong>2 DIGITAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 DIGITAL POPUP</td>
<td>Set the POP UP time.</td>
<td>OFF / BAND 2 s / BAND 4 s / BAND 6 s / BAND 8 s / BAND 10 s / BAND 20 s / BAND 30 s / BAND 60 s / BND CONTINUE</td>
</tr>
<tr>
<td>2 LOCATION SERVICE</td>
<td>Set whether or not to display your current location in digital mode.</td>
<td>ON / OFF</td>
</tr>
<tr>
<td>3 STANDBY BEEP</td>
<td>Switch the standby beep function between ON/OFF.</td>
<td>ON / OFF</td>
</tr>
<tr>
<td>4 DIGITAL VW</td>
<td>Turn the VW mode selection ON or OFF.</td>
<td>OFF / ON</td>
</tr>
<tr>
<td>5 AUDIO PITCH</td>
<td>Set the quality of received audio in digital mode.</td>
<td>FLAT / HIGH BOOST / LOW BOOST</td>
</tr>
<tr>
<td><strong>3 AUDIO</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 MIC GAIN</td>
<td>Adjust the microphone gain level.</td>
<td>LEVEL1 to LEVEL9 LEVEL5</td>
</tr>
<tr>
<td>2 MUTE</td>
<td>Set the muting level on the non operating band side when a signal is received on the operating band side.</td>
<td>OFF / MUTE 30% / MUTE 50% / MUTE 100%</td>
</tr>
<tr>
<td>3 RX AF DUAL</td>
<td>Set the resumption time of radio reception in the AF Dual mode.</td>
<td>Transmit and receive 1 second to 10 seconds, Fixed, or transmission 1 second to 10 seconds. Transmit and receive 2 seconds</td>
</tr>
<tr>
<td>4 SP SELECT</td>
<td>Set Speaker switching operation when connecting an external SP/MIC.</td>
<td>AUTO / FIX</td>
</tr>
<tr>
<td>5 VOX</td>
<td>VOX function setting.</td>
<td>VOX: OFF / LOW / HIGH DELAY: 0.5 sec / 1.0 sec / 1.5 sec / 2.0 sec / 2.5 sec / 3.0 sec</td>
</tr>
<tr>
<td>6 RECORDING</td>
<td>Voice recode function setting.</td>
<td>BAND: A / B / A+B MIC: ON / OFF</td>
</tr>
<tr>
<td>Setup Menu no. / Item</td>
<td>Description</td>
<td>Selectable options (Options in bold are the default settings)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>MEMORY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 BANK LINK</td>
<td>Set the memory bank link.</td>
<td>BANK1 to BANK24</td>
</tr>
<tr>
<td>2 BANK NAME</td>
<td>Assign a name to each memory bank.</td>
<td>BANK1 to BANK24</td>
</tr>
<tr>
<td>3 MEMORY NAME</td>
<td>Input the memory channel tag.</td>
<td>Up to 16 letters</td>
</tr>
<tr>
<td>4 MEMORY PROTECT</td>
<td>Set whether to allow or prohibit memory channel registration.</td>
<td>ON / OFF</td>
</tr>
<tr>
<td>5 MEMORY SKIP</td>
<td>Set for skip memory / specify memory.</td>
<td>OFF / SKIP / SELECT</td>
</tr>
<tr>
<td>6 MEMORY WRITE</td>
<td>Set the automatic channel number increment when registering to a memory channel.</td>
<td>NEXT / LOWER</td>
</tr>
<tr>
<td><strong>SIGNALING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 BELL</td>
<td>Set the bell function settings.</td>
<td>SELECT: OFF / BELL RINGER: 1 time to 20 times / CONTINUOUS</td>
</tr>
<tr>
<td>2 DCS CODE</td>
<td>Set the DCS code.</td>
<td>DCS 023 to DCS 754</td>
</tr>
<tr>
<td>3 DCS INVERSION</td>
<td>Select a combination of DCS inversion codes in terms of communication direction.</td>
<td>RX (Receive): NORMAL (Homeomorphic) / INVERT (Inversion) / BOTH (Both Phase) TX (Transmission): NORMAL (Homeomorphic) / INVERT (Inversion)</td>
</tr>
<tr>
<td>4 DTMF MODE</td>
<td>Set the transmission of DTMF code registered to a DTMF memory channel, DTMF code transmission delay time, and DTMF code transmission speed.</td>
<td>MODE: MANUAL / AUTO DELAY: 50 ms / 250 ms / 450 ms / 750 ms / 1000 ms SPEED: 50 ms / 100 ms</td>
</tr>
<tr>
<td>5 DTMF MEMORY</td>
<td>Set the DTMF auto dialer channel and code (16 characters).</td>
<td>CH1 to CH10</td>
</tr>
<tr>
<td>6 PAGER</td>
<td>Turn the pager answer back Function ON/OFF, and specify a personal code (transmit/receive).</td>
<td>ANS-BACK: ON / OFF CODE-RX: 01 to 50 for each, 05 47 CODE-TX: 01 to 50 for each, 05 47</td>
</tr>
<tr>
<td>7 PR FREQUENCY</td>
<td>Set a non-communication squelch.</td>
<td>300Hz to 3000Hz 1600Hz</td>
</tr>
<tr>
<td>8 SQL LEVEL</td>
<td>Select a squelch level.</td>
<td>LEVEL0 to LEVEL15 LEVEL1 LEVEL0 to LEVEL8 LEVEL1 (AM Radio) LEVEL0 to LEVEL8 LEVEL2 (FM Radio)</td>
</tr>
<tr>
<td>9 SQL S-METER</td>
<td>Select an S-Meter squelch level.</td>
<td>OFF / LEVEL1 to LEVEL10</td>
</tr>
<tr>
<td>10 SQL EXPANSION</td>
<td>Set a squelch type separately for Receive and transmit.</td>
<td>ON / OFF</td>
</tr>
<tr>
<td>11 SQL TYPE</td>
<td>Select a squelch type.</td>
<td>OFF / TONE / TONE SQL / DCS / REV TONE / PR FREQ / PAGER / (D CD) / (TONE-DCS) / (D CD-TONE SQL)</td>
</tr>
<tr>
<td>12 TONE SQL FREQ</td>
<td>Set a tone frequency.</td>
<td>67.0Hz to 254.1Hz 100.0 Hz</td>
</tr>
<tr>
<td>13 TONE SEARCH</td>
<td>Set the audio output during tone search. Turn the muting function on/ off and select a tone search speed.</td>
<td>MUTE: ON / OFF SPEED: FAST / SLOW</td>
</tr>
<tr>
<td>14 WX ALERT</td>
<td>Enables/Disables the Weather Alert Feature.</td>
<td>ON / OFF</td>
</tr>
<tr>
<td><strong>SCAN</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 DW TIME</td>
<td>Set the priority memory channel monitoring interval.</td>
<td>0.1 sec to 10 sec 5.0 sec</td>
</tr>
<tr>
<td>2 SCAN LAMP</td>
<td>Set whether or not to light up the scan lamp when scanning stops.</td>
<td>ON / OFF</td>
</tr>
<tr>
<td>3 SCAN RE-START</td>
<td>Set the scanning restart time.</td>
<td>0.1 sec to 10 sec 2.0 sec</td>
</tr>
<tr>
<td>4 SCAN RESUME</td>
<td>Configure the scan stop mode settings.</td>
<td>SCAN: BUSY / HOLD / 2.0 sec to 10 sec 5.0 sec DW: BUSY / HOLD / 2.0 sec to 10.0 sec</td>
</tr>
<tr>
<td>Setup Menu no. / Item</td>
<td>Description</td>
<td>Selectable options</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>5 SCAN WIDTH</td>
<td>Set the scan mode operation.</td>
<td>VFO: ALL / BAND MEMORY: ALL CH / BAND BANK LINK: ON / OFF</td>
</tr>
<tr>
<td>6 PRIORITY REVERT</td>
<td>Turn the “Priority Channel Revert” feature ON or OFF during Dual Receive.</td>
<td>ON / OFF</td>
</tr>
</tbody>
</table>

**GM**
* For details of the functions, refer to the GM Function Instruction Manual.

| 1 DP-ID LIST          | Displays the DP-ID list screen. | – |
| 2 RADIO ID CHECK      | Display the transceiver specific number (ID). (Uneditable) | – |

**WIRES-X**
* For details of the functions, refer to the WIRES-X Instruction Manual.

| 1 RPT/WIRES FREQ      | Set the frequency to be used for Repeater/WIRES. | MANUAL / PRESET |
| 2 SEARCH SETUP       | Set the WIRES ROOM selection method. | HISTORY / ACTIVITY |
| 3 EDIT CATEGORY TAG  | Edit category tags. | C1 to C5 |
| 4 REMOVE ROOM/NODE   | Delete registered Category ROOMs. | C1 to C5 |
| 5 DG-ID               | Set the DG-ID number for WIRES-X. | 01 to 99 / AUTO |

**CONFIG**

<p>| 1 APO                 | Set the length of time until the transceiver turns off automatically. | OFF / 30 min to 12 hour 00 min |
| 2 BCLO                | Turn on/off the busy channel lockout function. | ON / OFF |
| 3 BEEP                | Set the beep emitting function, and set whether or not to emit the beep sound when a band edge/CH1 is encountered. | SELECT: KEY&amp;SCAN / KEY / OFF EDGE: ON / OFF |
| 4 BEEP LEVEL          | Beep volume setting. | LOW / HIGH |
| 5 BUSY LED            | Turn on/off the BUSY indicator. | A BAND: ON / OFF B BAND: ON / OFF RADIO: ON / OFF |
| 6 CLOCK TYPE          | Set the clock shift function. | A / B |
| 7 GPS LOG             | Set the GPS log recording time interval. | OFF / 1 sec / 2 sec / 5 sec / 10 sec / 30 sec / 60 sec |
| 8 HOME VFO            | Enable/disable VFO transmission in Home Channel. | ENABLE / DISABLE |
| 9 LOCK                | Configure the lock mode setting. | KEY&amp;DIAL / PTT / KEY&amp;PTT / DIAL&amp;PTT / ALL / KEY / DIAL |
| 10 MONI/T-CALL        | Select the function of the MONI/T-CALL switch. | MONI / T-CALL The default setting: MONI (USA version), T-CALL (European/Asian version) |
| 11 TIMER              | Switch the timer between ON and OFF. | POWER ON: 00:00 ~ 23:59 POWER OFF: 00:00 ~ 23:59 |
| 12 PASSWORD           | Input the password. | OFF / ON: - - - - |
| 13 PTT DELAY          | Set the PTT delay time. | OFF / 20 ms / 50 ms / 100 ms / 200 ms |
| 14 RPT ARS            | Turn the ARS function on/off. | ON / OFF |
| 15 RPT SHIFT          | Set the repeater shift direction. | SIMPLEX / -RPT / +RPT |
| 16 RPT SHIFT FREQ     | Set the repeater shift width. | 0.000MHz to 150.000MHz |
| 17 SAVE RX            | Set the receive save time. | OFF / 0.05 sec (1:1) to 20.0 sec (1:400) |
| 18 STEP               | Set the channel step. | AUTO / 5.0 kHz / 6.25 kHz / (8.33 kHz) / (9.0 kHz) / 10.0 kHz / 12.5 kHz / 15.0 kHz / 20.0 kHz / 25.0 kHz / 50.0 kHz / 100.0 kHz |</p>
<table>
<thead>
<tr>
<th>Setup Menu no. / Item</th>
<th>Description</th>
<th>Selectable options (Options in bold are the default settings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 DATE &amp; TIME ADJ</td>
<td>Set the built-in clock.</td>
<td>-</td>
</tr>
<tr>
<td>20 TOT</td>
<td>Set the timeout timer.</td>
<td>OFF / 30sec to 10MIN</td>
</tr>
<tr>
<td>21 VFO MODE</td>
<td>Select the frequency selection range in the VFO mode.</td>
<td>ALL / BAND</td>
</tr>
<tr>
<td>22 BAND SELECT</td>
<td>Set the frequency bands that can be selected for A-band and B-band (“OTHER” includes 50MHz band*, VHF (1), VHF (2), UHF (1), UHF (2)*)</td>
<td>AIR: ON / OFF VHF: ON / OFF UHF: ON / OFF OTHER: ON / OFF SW*: ON / OFF AM*: ON / OFF FM*: ON / OFF *A-Band only.</td>
</tr>
<tr>
<td>23 DIAL KNOB CHANGE</td>
<td>Select a vibrator mode and set up the vibrator function.</td>
<td>-</td>
</tr>
</tbody>
</table>

**APRS**

* For details of the functions, refer to the APRS Instruction Manual.

<p>| 1 APRS AF DUAL       | Turn ON/OFF the muting function when both the APRS function and AF dual function are active. | ON / OFF |
| 2 APRS DESTINATION  | Display the model code. | APY05D (Uneditable) |
| 3 APRS FILTER        | Select the filter function. | Mic-E: ON / OFF POSITION: ON / OFF WEATHER: ON / OFF OBJECT: ON / OFF ITEM: ON / OFF STATUS: ON / OFF OTHER: ON / OFF ALTNET: ON / OFF |
| 4 APRS MODEM         | Set the APRS baud rate. | OFF / 1200bps / 9600bps |
| 5 APRS MSG FLASH     | Set the strobe to flash when there is an incoming message. | MSG: OFF / 2 sec to 60 sec / CONTINUOUS / EVERY 2 s to EVERY 10 m 4 sec GRP: OFF / 2 sec to 60 sec / CONTINUOUS 4 sec BLN: OFF / 2sec to 60sec / CONTINUOUS 4sec |
| 6 APRS MSG GROUP     | Group filtering for received messages. | G1: ALLxxxxxxxx G2: CQxxxxxxx G3: QSTxxxxxx G4: YAESUxxx G5: - - - - - - - - B1: BLNxxxxxxx B2: BLNx B3: BLNx |
| 7 APRS MSG TEXT      | Input the fixed text message. | 1 to 8 |
| 8 APRS MUTE          | Set the B-band AF muting function on/off when APRS is active. | ON / OFF |
| 9 APRS POPUP         | Set the beacon type, message type and time for pop-up display. | The setting values of Mic-E, POSITION, WEATHER, OBJECT, ITEM, STATUS, OTHER, MY PACKET, MSG, GRP and BLN are as follows. OFF / ALL 2 s to ALL 60 s / ALL CNT / BND 2s to BND 60 s / BND CNT <strong>ALL 10 s</strong> The setting values of MY MSG, DUP.BCN, DUP:MSG, ACK.REJ and OTHER MSG are as follows.: OFF / BND 2 s to BND 60 s <strong>BND 10 s</strong> |</p>
<table>
<thead>
<tr>
<th>Setup Menu no. / Item</th>
<th>Description</th>
<th>Selectable options</th>
</tr>
</thead>
</table>
| 10 APRS RINGER              | Set the bell ring on/off when a beacon or message is received.              | Mic-E: **ON** / **OFF**  
POSITION: **ON** / **OFF**  
WEATHER: **ON** / **OFF**  
OBJECT: **ON** / **OFF**  
ITEM: **ON** / **OFF**  
STATUS: **ON** / **OFF**  
OTHER: **ON** / **OFF**  
MY PACKET: **ON** / **OFF**  
MSG: **ON** / **OFF**  
GRP: **ON** / **OFF**  
BLN: **ON** / **OFF**  
MY MSG: **ON** / **OFF**  
DUP.BCN: **ON** / **OFF**  
DUP.MSG: **ON** / **OFF**  
ACK.REJ: **ON** / **OFF**  
OTHER MSG: **ON** / **OFF**  
TX BCN: **ON** / **OFF**  
TX MSG: **ON** / **OFF** |
| 11 APRS UNIT                | Select the units for APRS display.                                          | POSITION: **MM.MM”** / **MM’S’’**  
DISTANCE: **km** / **mile**  
SPEED: **km/h** / **knot** / **mph**  
ALTITUDE: **m** / **ft**  
TEMP: **°C** / **°F**  
RAIN: **mm** / **inch**  
WIND: **m/s** / **mph** |
| 12 APRS TX DELAY            | Set the data sending delay time.                                            | 100ms to 1000ms **300ms** |
| 13 BEACON INFO              | Set the transmission beacon information.                                   | AMBIGUITY: **OFF** / 1 digit / 2 digit / 3 digit / 4 digit  
SPD/CSE: **ON** / **OFF**  
ALITUDE: **ON** / **OFF** |
| 14 BEACON INTERVAL          | Set a beacon automatic sending interval.                                   | 30 sec / 1 min / 2 min / 3 min / 5 min / 10 min / 15 min / 20min / 30 min / 60min |
| 15 BEACON STATUS TEXT       | Input setting for status text.                                             | S.TXT: **ON** / **OFF**  
TX RATE: 1/1 to 1/8  
TEXT: **TEXT1** to **TEXT5** |
| 16 BEACON TX                | Select automatic or manual sending of beacon.                              | AUTO / MANUAL / (SMART) |
| 17 COM PORT SETTING         | Set the COM port.                                                          | STATUS: **ON** / **OFF**  
SPEED: 4800 / **9600** / 19200 / 38400  
INPUT: **OFF** / **GPS**  
OUTPUT: **OFF** / **GPS** / **WAY.P**  
WAYPOINT: **NMEA9** / **NMEA6** / **NMEA7** / **NMEA8**  
Mic-E: **ON** / **OFF**  
POSIT: **ON** / **OFF**  
WEATHER: **ON** / **OFF**  
OBJECT: **ON** / **OFF**  
ITEM: **ON** / **OFF** |
| 18 DIGI PATH                | Set the digital repeater route.                                             | P1 OFF  
P2(1) 1 **WIDE1-1**  
P3(2) 1 **WIDE2-1** / **WIDE2-1**  
P4(2) 1………. / 2………..  
P5(2) 1………. / 2………..  
P6(2) 1………. / 2………..  
P7(2) 1………. / 2………..  
P8(8) 1………. to 8……….. |
| 19 GPS SETUP                | Select a datum used for the GPS function.                                 | DATUM: **WGS-84** / Tokyo (Mean)  
PINNING: **ON** / **OFF**  
DGPS: **ON** / **OFF** |
<p>| 20 GPS POWER                | Turn the GPS function ON/OFF.                                              | GPS ON / GPS OFF |</p>
<table>
<thead>
<tr>
<th>Setup Menu no. / Item</th>
<th>Description</th>
<th>Selectable options (Options in bold are the default settings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 GPS TIME SET</td>
<td>Turn on/off the GPS time and date automatic acquisition function.</td>
<td>AUTO / MANUAL</td>
</tr>
<tr>
<td>22 GPS UNIT</td>
<td>Select the units for GPS display.</td>
<td>AUTO / MANUAL / POSITION: ‘MM’ / ‘SS’</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SPEED: km/h / knot / mph</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ALTITUDE: m / ft</td>
</tr>
<tr>
<td>23 CALLSIGN (APRS)</td>
<td>Specify the call sign of your station.</td>
<td>- - - - - -</td>
</tr>
<tr>
<td>24 MY POSITION</td>
<td>Set your location.</td>
<td>GPS / Manual / P1 to P10</td>
</tr>
<tr>
<td>25 MY SYMBOL</td>
<td>Set your station symbol.</td>
<td>48 icons including 1/[Human/Person]) / 2/[b Bicycle] / 3/[Car] / 4/[YY Yaesu Radios]</td>
</tr>
<tr>
<td>26 POSITION COMMENT</td>
<td>Set up the position comment function.</td>
<td>Off Duty / En Route / In Service / Returning / Returning / Commit / Special / Priority / Custom 0 to 6 / EMERGENCY!</td>
</tr>
<tr>
<td>27 SmartBeaconing</td>
<td>Set the smart beaconing function.</td>
<td>STATUS: OFF / TYPE1 / TYPE2 / TYPE3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* For details on the following setting items</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for each type, refer to the APRS Instruction Manual.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW SPD, HIGH SPD, SLOW RATE,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FAST RATE, TURN ANGL, TURN SLOP,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TURN TIME</td>
</tr>
<tr>
<td>28 TIME ZONE</td>
<td>Set the time zone.</td>
<td>UTC -13:00 to UTC 0:00 to UTC +13:00 / UTC 0:00</td>
</tr>
<tr>
<td>SD CARD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 BACKUP</td>
<td>Save the data stored on the transceiver onto a microSD memory card. or load</td>
<td>Write to SD / Read from SD</td>
</tr>
<tr>
<td></td>
<td>the data from a microSD card.</td>
<td></td>
</tr>
<tr>
<td>2 MEMORY CH</td>
<td>Save or load the memory channel information onto or from a microSD memory</td>
<td>Write to SD / Read from SD</td>
</tr>
<tr>
<td></td>
<td>card.</td>
<td></td>
</tr>
<tr>
<td>3 MEMORY INFO</td>
<td>Displays the total capacity and free space of the SD Memory Card.</td>
<td>-</td>
</tr>
<tr>
<td>4 FORMAT</td>
<td>Initialize microSD memory cards.</td>
<td>-</td>
</tr>
<tr>
<td>OPTION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 USB CAMERA</td>
<td>Set the USB camera resolution and Speaker.</td>
<td>SIZE: 320x240 / 160x120</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QUALITY: LOW / NORMAL / HIGH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SP SEL: CAMERA / INT SP</td>
</tr>
<tr>
<td>2 Bluetooth</td>
<td>Sets the Bluetooth function.</td>
<td>OFF / ON CONNECT/DISCON</td>
</tr>
<tr>
<td>3 DEVICE LIST</td>
<td>Bluetooth device list.</td>
<td>-</td>
</tr>
<tr>
<td>4 Bluetooth Audio</td>
<td>Set the received audio to be heard from both the Bluetooth® headset and the</td>
<td>AUTO / FIX</td>
</tr>
<tr>
<td></td>
<td>transceiver speaker, or only from the connected Bluetooth® device.</td>
<td></td>
</tr>
<tr>
<td>CALLSIGN</td>
<td>Set the call sign.</td>
<td>xxxxxxxxxxxxxx</td>
</tr>
</tbody>
</table>
Setup Menu Operations

DISPLAY Menu

1 TARGET LOCATION
Set what to display on the smart navigation screen.

1. Press and hold the [F MENU] key → touch [DISPLAY] → [1 TARGET LOCATION]
2. Rotate the DIAL knob to select what is displayed on the screen.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPASS</td>
<td>Displays the compass.</td>
</tr>
<tr>
<td>NUMERIC</td>
<td>Displays the latitude and longitude.</td>
</tr>
</tbody>
</table>

Remark: The default setting: COMPASS

2 COMPASS
Set the compass display.

1. Press and hold the [F MENU] key → touch [DISPLAY] → [2 COMPASS]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEADING UP</td>
<td>The heading direction is indicated at the top of the compass.</td>
</tr>
<tr>
<td>NORTH UP</td>
<td>The north direction is indicated at the top of the compass.</td>
</tr>
</tbody>
</table>

Remark: The default setting: HEADING UP

3 BAND SCOPE
Set the number of channels to be displayed for the band scope when the BAND SCOPE function is used.

1. Press and hold the [F MENU] key → touch [DISPLAY] → [3 BAND SCOPE]
2. Rotate the DIAL knob to select the number of channels to search for.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>19ch / 39ch / 79ch</td>
<td></td>
</tr>
</tbody>
</table>

Remark: The default setting: 39ch

4 LAMP
Change the LCD and key lighting condition.

1. Press and hold the [F MENU] key → touch [DISPLAY] → [4 LAMP]
2. Rotate the DIAL knob to select [KEY], then press the [F MENU] key.
3. Rotate the DIAL knob to select the lighting condition.

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 sec (KEY) to 180 sec (KEY)</td>
<td>When the DIAL is rotated or a key is pressed, the LCD and key lights remain illuminated for the set time.</td>
</tr>
<tr>
<td>CONTINUOUS</td>
<td>The LCD and key lights remain illuminated.</td>
</tr>
<tr>
<td>OFF</td>
<td>The LCD and keys do not light up.</td>
</tr>
</tbody>
</table>

Remark: The default setting: 30 sec (KEY)

4. Press the [BACK] key.
5. Rotate the DIAL knob to select [SAVE], then press the [F MENU] key.
6. Rotate the DIAL knob to select the lighting status after the set illumination time elapses.

<table>
<thead>
<tr>
<th>OFF</th>
<th>After the illumination time selected for [KEY] elapses, the lights dim to [LEVEL 1] of the LCD dimmer setting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>After the illumination time selected for [KEY] elapses, lights turn off.</td>
</tr>
</tbody>
</table>

**Remark** The default setting: OFF

When [KEY] is set to CONTINUOUS, regardless of the [SAVE] setting, the illumination stays lit according to the "6 LCD BRIGHTNESS" setting level.

---

**5 LANGUAGE**
Select the display language from Japanese and English.
1. Press and hold the [F MENU] key → touch [DISPLAY] → [5 LANGUAGE]
2. Rotate the DIAL knob to select the desired language.

<table>
<thead>
<tr>
<th>JAPANESE</th>
<th>Japanese is selected.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>English is selected.</td>
</tr>
</tbody>
</table>

**Remark** The default setting: English

---

**6 LCD BRIGHTNESS**
Adjust the brightness level of the LCD back light and key button light.
1. Press and hold the [F MENU] key → touch [DISPLAY] → [6 LCD BRIGHTNESS]
2. Rotate the DIAL knob to select the desired brightness level.
3. Select from LEVEL 1 to LEVEL 6.

**Remark** The default setting: LEVEL 6

---

**7 DISPLAY COLOR**
Set the color of the operating band frequency.
1. Press and hold the [F MENU] key → touch [DISPLAY] → [7 DISPLAY COLOR]
2. Rotate the DIAL knob to select the desired color.
3. Select from WHITE / BLUE / RED.

**Remark** The default setting: WHITE
8 OPENING MESSAGE
You can select the message under the “YAESU” logo displayed when turning on the transceiver.

1. Press and hold the [F MENU] key → touch [DISPLAY] → [8 OPENING MESSAGE]
2. Rotate the DIAL knob to select the desired message referring to the following table.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Displays the receive frequency instead of the opening message immediately after turning on the power.</td>
</tr>
<tr>
<td>DC</td>
<td>Displays the power-supply voltage and time when turning on the power.</td>
</tr>
<tr>
<td>MESSAGE</td>
<td>Displays a message comprising up to 16 characters when turning on the power. Press the [F MENU] key to switch the screen to the message registration screen. For details on how to enter the message to be displayed, refer to the “Text input screen” in the Operating Manual. Press the [F MENU] key when you have finished entering the characters.</td>
</tr>
</tbody>
</table>

Remark The default setting: DC

9 SENSOR INFO
Display the battery voltage. When the optional external power supply adapter with a cigarette plug (SDD-13) is connected, the power supply voltage of this adapter is displayed.

1. Press and hold the [F MENU] key → touch [DISPLAY] → [9 SENSOR INFO]
2. The battery voltage is shown on the LCD.

• The indication differs depending on the type of the power supply used.
  Battery pack: “Lit”
  Battery case: “Dry”
  External power supply adapter: “Ext”
• During mono band receive, the voltage can be displayed on the LCD constantly.

10 SOFTWARE VERSION
Display the software version.

1. Press and hold the [F MENU] key → touch [DISPLAY] → [10 SOFTWARE VERSION]
2. The software versions of “Main”, “Sub” and “DSP” are shown.
TX/RX Menu

1 MODE

1 ANTENNA ATT
If the signal from the remote station is too strong or, a strong signal exists nearby that interferes with reception, use the attenuator (ATT) function to reduce interference.

1. Press and hold the [F MENU] key → touch [TX/RX] → [1 MODE] → [1 ANTENNA ATTN]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>OFF</th>
<th>Disable the attenuator (ATT) function OFF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Enable the attenuator (ATT) function ON.</td>
</tr>
<tr>
<td></td>
<td>The amount of attenuation by the attenuator (ATT) is about 10 dB.</td>
</tr>
</tbody>
</table>

Remark The default setting: OFF

2 FM DEVIATION

The FM deviation can be set to half of its usual level.
Select [WIDE] for normal amateur operation.

1. Press and hold the [F MENU] key → touch [TX/RX] → [1 MODE] → [2 FM DEVIATION]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>WIDE</th>
<th>Normal FM mode (Full deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NARROW</td>
<td>Narrow FM mode (Half deviation)</td>
</tr>
</tbody>
</table>

Remark The default setting: WIDE

3 RX MODE

Manually switch to a suitable mode (radio wave type) according to the frequency band.
Press and hold the [F MENU] key → touch [TX/RX] → [1 MODE] → [3 RX MODE].
For details, refer to “Fixing the Communication Mode” in the Operating Manual.

2 DIGITAL

1 DIGITAL POPUP
Set the time duration to display the remote station information such as the call sign, on the LCD.

1. Press and hold the [F MENU] key → touch [TX/RX] → [2 DIGITAL] → [1 DIGITAL POPUP]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>OFF</th>
<th>The remote station information is not displayed.</th>
</tr>
</thead>
</table>
| BAND 2 s to BAND 60 s (seconds) | Set the time duration to display the remote station information (2 to 60 seconds).  
BAND 2 s / BAND 4 s / BAND 6 s / BAND 8 s / BAND 10 s / BAND 20 s / BAND 30 s / BAND 60 s |
| BAND CONTINUE | The remote station information is continuously displayed. |

Remark The default setting: BAND 10 s (seconds)
2 LOCATION SERVICE

Set whether or not to display your location in digital mode.

1. Press and hold the [F MENU] key → touch [TX/RX] → [2 DIGITAL] → [2 LOCATION SERVICE]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>ON</th>
<th>Displays your location.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Does not display your location.</td>
</tr>
</tbody>
</table>

Remark: The default setting: ON

3 STANDBY BEEP

Set whether or not to emit the standby beep sound when the remote station completes transmission.

1. Press and hold the [F MENU] key → touch [TX/RX] → [2 DIGITAL] → [3 STANDBY BEEP]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>ON</th>
<th>Emits the standby beep sound.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Does not emit the standby beep sound.</td>
</tr>
</tbody>
</table>

Remark: The default setting: ON

4 DIGITAL VW

Set the digital voice FR (VW) mode selection.

1. Press and hold the [F MENU] key → touch [TX/RX] → [2 DIGITAL] → [4 DIGITAL VW]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>ON</th>
<th>The digital voice FR (VW) mode may be selected.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>The digital voice FR (VW) mode may not be selected.</td>
</tr>
</tbody>
</table>

Remark: The default setting: OFF

5 AUDIO PITCH

Set the digital voice FR (VW) mode selection.

1. Press and hold the [F MENU] key → touch [TX/RX] → [2 DIGITAL] → [5 AUDIO PITCH]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>FLAT</th>
<th>Normal sound quality.</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH BOOST</td>
<td>Emphasizes the treble range.</td>
</tr>
<tr>
<td>LOW BOOST</td>
<td>Emphasizes the bass range.</td>
</tr>
</tbody>
</table>

Remark: The default setting: FLAT
3 AUDIO

1 MIC GAIN

You can adjust the input level of the built-in microphone or an optional external microphone.

1. Press and hold the [F MENU] key → touch [TX/RX] → [3 AUDIO] → [1 MIC GAIN]
2. Rotate the DIAL knob to select the desired microphone sensitivity level.
3. Select a microphone gain level from LEVEL 1 to LEVEL 9.

Remark The default setting: LEVEL 5

- Increasing the microphone gain excessively can distort the sound or pick up the surrounding noise, impairing intelligibility.
- Be sure to check the microphone gain whenever the microphone is changed.

2 MUTE

In dual receive mode, while receiving signals in the operating band and subband at the same time, the subband can be automatically muted (100%, 50%, 30%) or not muted.

1. Press and hold the [F MENU] key → touch [TX/RX] → [3 AUDIO] → [2 MUTE]
2. Rotate the DIAL knob to select the desired mute setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Disable the muting audio.</td>
</tr>
<tr>
<td>MUTE 30%</td>
<td>Mute the audio level to 30%.</td>
</tr>
<tr>
<td>MUTE 50%</td>
<td>Mute the audio level to 50%.</td>
</tr>
<tr>
<td>MUTE 100%</td>
<td>Mute the audio level to 100%.</td>
</tr>
</tbody>
</table>

Remark The default setting: MUTE 100%

3 RX AF DUAL

Set the time to resume radio broadcast reception after transmit/receive when using simultaneously receive mode.

Press and hold the [F MENU] key → touch [TX/RX] → [3 AUDIO] → [3 RX AF DUAL].
For details, see “AF-DUAL Receive Function” (page 32).

4 SP SELECT

Speaker operation switching settings when connecting to an External SP/MIC or an Earpiece Microphone.

1. Press and hold the [F MENU] key → touch [TX/RX] → [3 AUDIO] → [4 SP SELECT]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO</td>
<td>The receiver audio is heard only from only the external SP/MIC.</td>
</tr>
<tr>
<td>FIX</td>
<td>The receiver audio is heard from both the external SP/MIC and the of the transceiver speaker.</td>
</tr>
</tbody>
</table>

Remark The default setting: AUTO
5 VOX
Set the VOX function settings.
Press and hold the [F MENU] key → touch [TX/RX] → [3 AUDIO] → [5 VOX].
For details, refer to “VOX Operation” in the Operating Manual.

6 RECORDING
Set the Voice Recording function settings.
Press and hold the [F MENU] key → touch [TX/RX] → [3 AUDIO] → [6 RECORDING].
For details, refer to “Using the Voice Recording” in the Operating Manual.

MEMORY Menu

1 BANK LINK
You can link multiple registered memory banks so that you can recall frequently used memory banks immediately.
1. Press and hold the [F MENU] key → touch [MEMORY] → [1 BANK LINK]
2. Rotate the DIAL knob to select the memory bank you want to link, then press the [F MENU] key.
   The check box is checked.
3. Repeat step 2 to link the memory banks one by one from BANK 1 to BANK 24.

2 BANK NAME
You can assign a name to each memory bank using up to 16 characters.
1. Press and hold the [F MENU] key → touch [MEMORY] → [2 BANK NAME]
   For details, see “Assigning a Name to a Memory Bank” (page 19).

3 MEMORY NAME
You can assign a name such as a call sign and broadcast station name to each memory channel and home channel.
1. Press and hold the [F MENU] key → touch [MEMORY] → [3 MEMORY NAME]
   For details, refer to “Using Memory Tag” in the Operating Manual.

4 MEMORY PROTECT
A memory channel may be protected so that a new frequency or memory channel tag name cannot be registered to it.
1. Press and hold the [F MENU] key → touch [MEMORY] → [4 MEMORY PROTECT]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Allows registering to registering to memory channels.</td>
</tr>
<tr>
<td>ON</td>
<td>Prohibits registering to memory channels.</td>
</tr>
</tbody>
</table>

Remark  The default setting: OFF
**5 MEMORY SKIP**

You can set the scan method for scanning memory channels.

1. Press and hold the [F MENU] key → touch [MEMORY] → [5 MEMORY SKIP]

For details, see “Setting Skip Memory Channel and Specified Memory Channel” (page 21).

**6 MEMORY WRITE**

Set whether to register to the lowest unused memory channel number following the channel number you most recently used, or to the lowest unused memory channel number.

1. Press and hold the [F MENU] key → touch [MEMORY] → [6 MEMORY WRITE]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>NEXT</th>
<th>Registers to the smallest unused memory channel number which comes after the channel number you used most recently.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOWER</td>
<td>Registers to the unused memory channel having the lowest memory number.</td>
</tr>
</tbody>
</table>

Remark The default setting: NEXT

**SIGNALING Menu**

**1 BELL**

Set whether or not to alert you of a call from a remote station using the bell.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [1 BELL]

For details, see “Notification of a Call from a Other Station by the Bell Function” (page 14).

**2 DCS CODE**

Select the DCS code out of the 104 codes from 023 to 754.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [2 DCS CODE]

For details, see “Setting the DCS CODE” (page 11).

**3 DCS INVERSION**

The transmit and receive DCS code phase may be inverted when using the digital code squelch function.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [3 DCS INVERSION]
2. Rotate the DIAL knob to select the phase combination for transmit/receive.

<table>
<thead>
<tr>
<th>RX</th>
<th>Homeomorphic / Both Phase / Inverted Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>TX</td>
<td>Homeomorphic / Inverted Phase</td>
</tr>
</tbody>
</table>

Remark The default setting: Receive [Homeomorphic], Transmit [Homeomorphic]

**4 DTMF MODE**

Set the transmission method of the registered DTMF code.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [4 DTMF MODE]

For details, see “Transmitting the Registered DTMF Code” (page 33).
5 DTMF MEMORY

The maximum of 16 digit DTMF code can be registered for a telephone number to make a call through the public telephone line from a phone patch.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [5 DTMF MEMORY]
For details, see “Setting the DTMF Memory” (page 33).

6 PAGER

When using transceivers with a group of friends, specifying individual personal codes permits directing a call to a specific station.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [6 PAGER]
For details, see “Two-Tone CTCSS Pager Function” (page 12).

7 PR FREQUENCY

Set a no-communication squelch frequency in steps of 100 Hz within the range from 300 Hz to 3000 Hz.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [7 PR FREQUENCY]
2. Rotate the DIAL knob to select a no-communication squelch frequency.
3. Select a no-communication squelch frequency in steps of 100 Hz within the range from 300 Hz to 3000 Hz.

Remark The default setting: 1600 Hz

8 SQL LEVEL

Set the squelch level to mute the raspy noise heard when there is no signal.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [8 SQL LEVEL]
2. Rotate the DIAL knob to adjust the squelch level from LEVEL 0 to LEVEL 15 (LEVEL 0 to LEVEL 8: AM and FM radio).

Remark The default setting: LEVEL1 (LEVEL 2: FM radio)

9 SQL S-METER

You can set A-Band and B-Band individually to emit audio only when receiving a signal stronger than the S-meter Squelch level setting.

To adjust the S-Meter squelch, first set the operating band by pressing the [A/B] key.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [9 SQL S-METER]
2. Rotate the DIAL knob to select the setting value referring to the table below.

<table>
<thead>
<tr>
<th>Display</th>
<th>Operating Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>S-Meter squelch function is OFF.</td>
</tr>
<tr>
<td>LEVEL1 to LEVEL 10</td>
<td>Outputs the audio of a signal as strong or stronger than the S-Meter level 1 to level 10.</td>
</tr>
</tbody>
</table>

Remark The default setting: OFF
10 SQL EXPANSION
You can add squelch types to [11 SQL TYPE] for transmit and receive, respectively.
1. Press and hold the [F MENU] key → touch [SIGNALING] → [10 SQL EXPANSION]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th></th>
<th>Add squelch types for transmit and receive, respectively.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>Does not add squelch types for transmit and receive, respectively.</td>
</tr>
</tbody>
</table>

Remark: The default setting: OFF

11 SQL TYPE
Select [11 SQL TYPE] to open the squelch only when a signal containing the specified tone or code is received.
For details, see “Selecting the Squelch Type in the Analog FM Mode” (page 9).

12 TONE SQL FREQ
Select [12 TONE SQL FREQ] to select the tone frequency from 50 types between 67.0 Hz and 254.1 Hz.
For details, see “Setting CTCSS Tone frequency” (page 10).

13 TONE SEARCH
The audio may be muted during tone search. The operation speed of the tone search can also be changed.
1. Press and hold the [F MENU] key → touch [SIGNALING] → [13 TONE SEARCH]
2. Rotate the DIAL knob to select [MUTE], then press the [F MENU] key.
3. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th></th>
<th>Mutes the audio during the tone search operation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td></td>
</tr>
<tr>
<td>OFF</td>
<td>Does not mute the audio during the tone search operation.</td>
</tr>
</tbody>
</table>

Remark: The default setting: ON
4. Press the [BACK] key.
5. Rotate the DIAL knob to select [SPEED], then press the [F MENU] key.
6. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th></th>
<th>Speed up the tone search operation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAST</td>
<td></td>
</tr>
<tr>
<td>SLOW</td>
<td>Slow down the tone search operation.</td>
</tr>
</tbody>
</table>

Remark: The default setting: FAST
For details, see “Searching for the CTCSS Tone transmitted by the other Station” (page 10).
**14 WX ALERT**

Setting the weather Alert Feature, used for notifying storms and hurricanes, ON or OFF.

1. Press and hold the [F MENU] key → touch [SIGNALING] → [14 WX ALERT]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>ON</th>
<th>Enables the Weather Alert Feature.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Disables the Weather Alert Feature.</td>
</tr>
</tbody>
</table>

**Remark** The default setting: OFF

**SCAN Menu**

**1 DW TIME**

When the dual receive function is active, the interval time at which the priority channel is monitored can be set.

1. Press and hold the [F MENU] key → touch [SCAN] → [1 DW TIME]
2. Rotate the DIAL knob to select the monitoring interval from 0.1 sec to 10 sec.

**Remark** The default setting: 5.0 sec (seconds)

**2 SCAN LAMP**

Set whether or not the LCD backlight is turned on when a signal is received during scanning.

1. Press and hold the [F MENU] key → touch [SCAN] → [2 SCAN LAMP]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>ON</th>
<th>The LCD backlight will illuminate when a signal is received.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>The LCD backlight will not illuminate when a signal is received.</td>
</tr>
</tbody>
</table>

**Remark** The default setting: ON

**3 SCAN RE-START**

Set the time interval to resuming scanning after a received signal ends during scanning.

1. Press and hold the [F MENU] key → touch [SCAN] → [3 SCAN RE-START]
2. Rotate the DIAL knob to select the time to resume scanning from 0.1 sec to 10 sec.

**Remark** The default setting: 2.0 sec (seconds)

**4 SCAN RESUME**

Set the receive operation for when scanning stops.

1. Press and hold the [F MENU] key → touch [SCAN] → [3 SCAN RESUME]

For details, refer to “Setting the Receive Operation When Scanning Stops” in the Operating Manual.
5 SCAN WIDTH

You can set the frequency range for scanning in VFO mode and Memory mode.

1. Press and hold the [F MENU] key → touch [SCAN] → [5 SCAN WIDTH]
2. Rotate the DIAL knob to select [VFO], then press the [F MENU] key.
3. Rotate the DIAL knob to select the desired setting referring to the table below.

<table>
<thead>
<tr>
<th>ALL</th>
<th>Scans all bands from the current frequency within the 1.8 MHz to 999 MHz range.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND</td>
<td>Starting with the current frequency, scans within the current band.</td>
</tr>
</tbody>
</table>

**Remark** The default setting: ALL

4. Press the [BACK] key.
5. Rotate the DIAL knob to select [MEMORY], then press the [F MENU] key.
6. Rotate the DIAL knob to select the desired setting referring to the table below.

<table>
<thead>
<tr>
<th>ALL CH</th>
<th>Scans all memory channels (1 to 900) starting with the currently specified memory channel. When “Selected memory channel” is selected, all specified memory channels are scanned.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND</td>
<td>Scans only the memory channels to which the frequencies are registered, within the same frequency band*1 as the currently specified memory channel. When the memory channels are registered as the specified memory channels, scans only the specified memory channels to which the frequencies are registered, within the same frequency band.**1</td>
</tr>
</tbody>
</table>

**Remark** The default setting: ALL CH

*1: For the relationship between frequency bands and receive frequencies, see “Selecting a Frequency Band” in the Operating Manual.

7. Press the [BACK] key.
8. Rotate the DIAL knob to select [BANK LINK], then press the [F MENU] key.
9. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>ON</th>
<th>During memory bank link scanning, memory channels registered in two or more previously specified banks can be scanned.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Only the memory channels assigned to the recalled memory bank are scanned.</td>
</tr>
</tbody>
</table>

**Remark** The default setting: ON
6 PRIORITY REVERT
Determines the operation of the PTT switch when pressed during the Dual Receive.
1. Press and hold the [F MENU] key → touch [SCAN] → [6 PRIORITY REVERT]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>OFF</th>
<th>When a signal is received on Priority Memory Channel, dual receive pauses, press the PTT switch to deactivate the Dual Receive operation and transmit on the Priority Memory Channel. (The Dual Receive does not resume.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Press the PTT switch to transmit on the Priority Memory Channel. Release the PTT switch to receive the Priority Memory Channel for about five seconds, then Dual Receive operation continues.</td>
</tr>
</tbody>
</table>

Remark The default setting: OFF

GM Menu
For details on how to set each item, refer to “FT5DR/DE GM Function Instruction Manual” which is available on Yaesu website.

WIRES-X Menu
For details on how to set each item, refer to “FT5DR/DE WIRES-X Instruction Manual” which is available on Yaesu website.

CONFIG Menu

1 APO
Set whether or not to turn the transceiver OFF automatically if there is no operation for a certain period of time.
1. Press and hold the [F MENU] key → touch [CONFIG] → [1 APO]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>OFF</th>
<th>Does not turn the power OFF automatically.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 minutes to 12 hours</td>
<td>Turns off the power when no operation is performed for a specified period of time.</td>
</tr>
</tbody>
</table>

Remark The default setting: OFF

- When the auto power-off function is active, appears on the LCD.
- Once the time for automatic power-off is set, the new setting is retained. Unless “OFF” is selected in step 3, the next time the transceiver is turned on, if you perform no operation for the set period of time, the transceiver will automatically turn OFF.)
2 BCLO
Preventing transmissions when the receive channel is busy.
1. Press and hold the [F MENU] key → touch [CONFIG] → [2 BCLO]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Permits starting a transmission while receiving a signal.</td>
</tr>
<tr>
<td>ON</td>
<td>Disables transmissions while receiving a signal.</td>
</tr>
</tbody>
</table>

Remark The default setting: OFF

3 BEEP
Set whether or not a beep sound is emitted to confirm when keys are operated, when scanning reaches the end of a frequency band, or when a band edge/CH1 is encountered.
1. Press and hold the [F MENU] key → touch [CONFIG] → [3 BEEP]
2. Rotate the DIAL knob to select [SELECT], then press the [F MENU] key.
3. Rotate the DIAL knob to select the desired setting referring to the table below.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEY &amp; SCAN</td>
<td>Emits the beep sound when a key is operated or scanning stops.</td>
</tr>
<tr>
<td>KEY</td>
<td>Emits the beep sound when a key is pressed.</td>
</tr>
<tr>
<td>OFF</td>
<td>Mutes the beep sound.</td>
</tr>
</tbody>
</table>

Remark The default setting: KEY & SCAN

4. Press the [BACK] key.
5. Rotate the DIAL knob to select [EDGE], then press the [F MENU] key.
6. Rotate the DIAL knob to select the desired setting referring to the table below.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>No confirmation sound is emitted when a band edge/CH1 is encountered.</td>
</tr>
<tr>
<td>ON</td>
<td>Emits the confirmation sound when a band edge/CH1 is encountered.</td>
</tr>
</tbody>
</table>

Remark The default setting: OFF

4 BEEP LEVEL
Set the volume of the beep sound.
1. Press and hold the [F MENU] key → touch [CONFIG] → [4 BEEP LEVEL]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>Volume level set to HIGH</td>
</tr>
<tr>
<td>LOW</td>
<td>Volume level set to LOW</td>
</tr>
</tbody>
</table>

Remark The default setting: LOW
5 BUSY LED
When listening to the radio continuously or to extend the remaining battery operating time, turn off the BUSY indicator to save battery power consumption.

1. Press and hold the [F MENU] key → touch [CONFIG] → [5 BUSY LED]
2. Rotate the DIAL knob to select “A BAND”, “B BAND” or “RADIO”, then press the [F MENU] key.
3. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ON</td>
<td>Turns the BUSY indicator ON.</td>
</tr>
<tr>
<td>OFF</td>
<td>Turns the BUSY indicator OFF.</td>
</tr>
</tbody>
</table>

*Remark* The default setting: ON

4. Press the [BACK] key.
5. To change the setting for other bands, repeat steps 2 to 4.

6 CLOCK TYPE
Set the micro computer Clock Shift function may be activated to eliminate an internally generated spurious high frequency signal. Select [A] for normal use.

1. Press and hold the [F MENU] key → touch [CONFIG] → [6 CLOCK TYPE]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Automatically switches the Clock Shift function between ON &amp; OFF.</td>
</tr>
<tr>
<td>B</td>
<td>Activates the Clock Shift function constantly.</td>
</tr>
</tbody>
</table>

*Remark* The default setting: A

7 GPS LOG
Set the interval at which the current position GPS information is saved to the microSD memory card.

1. Press and hold the [F MENU] key → touch [CONFIG] → [7 GPS LOG]
2. Rotate the DIAL knob to select the time interval:
   - OFF / 1 sec / 2 sec / 5 sec /10 sec / 30 sec / 60 sec

*Remark* The default setting: OFF

3. If OFF is selected, no GPS Information is saved onto the microSD memory card

- Data saved onto the microSD memory card is saved in GPSyymmddhhmmss.LOG format.
- Saved data may be viewed by using OEM PC applications*.
  * Yaesu does not provide technical support for PC applications.

8 HOME VFO
Set whether or not to permit tuning off of the home channel and transfer to the VFO.

1. Press and hold the [F MENU] key → touch [CONFIG] → [8 HOME VFO]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENABLE</td>
<td>Turning the home channel DIAL knob shifts the frequency from the home cancel to the VFO, and then changes the VFO mode.</td>
</tr>
<tr>
<td>DISABLE</td>
<td>Turning the Dial on the home channel does not switch to the VFO.</td>
</tr>
</tbody>
</table>

*Remark* The default setting: ENABLE
9 LOCK
Select keys/DIAL knob to which you want to apply the lock function.
1. Press and hold the [F MENU] key → touch [CONFIG] → [9 LOCK]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEY&amp;DIAL</td>
<td>Locks the DIAL knob and keys on the front side of the transceiver.</td>
</tr>
<tr>
<td>PTT</td>
<td>Locks PTT switch.</td>
</tr>
<tr>
<td>KEY&amp;PTT</td>
<td>Locks PTT switch and the keys on the front side of the transceiver.</td>
</tr>
<tr>
<td>DIAL&amp;PTT</td>
<td>Locks the DIAL knob and PTT switch.</td>
</tr>
<tr>
<td>ALL</td>
<td>Locks the DIAL knob, PTT switch and the keys on the front side of the transceiver.</td>
</tr>
<tr>
<td>KEY</td>
<td>Locks the keys on the front side of the transceiver.</td>
</tr>
<tr>
<td>DIAL</td>
<td>Locks the DIAL knob.</td>
</tr>
</tbody>
</table>

Remark: The default setting: KEY & DIAL

10 MONI/T-CALL
Set how the transceiver functions when the MONI/T-CALL key is pressed.
1. Press and hold the [F MENU] key → touch [CONFIG] → [10 MONI/T-CALL]
2. Touch [10 MONI/T-CALL].
3. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONI</td>
<td>Monitors frequencies.</td>
</tr>
<tr>
<td>T-CALL</td>
<td>Functions as the tone call.</td>
</tr>
</tbody>
</table>

Remark: The default setting: MONI (USA version), T-CALL (European/Asian version)

11 TIMER
You can turn the transceiver to ON or OFF at the specified time. Before using this function, adjust the clock referring to “11 TIMER” (page 60).
1. Press and hold the [F MENU] key → touch [CONFIG] → [11 TIMER]
2. Rotate the DIAL knob to select the desired option.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER ON</td>
<td>Turns the transceiver ON at the specified time.</td>
</tr>
<tr>
<td>POWER OFF</td>
<td>Turns the transceiver OFF at the specified time.</td>
</tr>
</tbody>
</table>

3. Press the [F MENU] key.
4. Rotate the DIAL knob to set the hour, then press the [F MENU] key.
5. Rotate the DIAL knob to set the minute, then press the [F MENU] key.
6. Touch [TIMER ON] or [TIMER OFF] to set the timer function to ON or OFF.
7. Touch [TIMER OFF] to deactivate the timer function.

Remark: The default setting: (TIMER OFF)
12 PASSWORD

A 4-digit password may be entered to prevent a third party from using the transceiver without permission. Once a password is set, the transceiver cannot be used unless the valid password is entered.

1. Press and hold the [F MENU] key → touch [CONFIG] → [12 PASSWORD]
2. Rotate the DIAL knob to select [ON].

<table>
<thead>
<tr>
<th>ON</th>
<th>Set the password.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Does not set the password.</td>
</tr>
</tbody>
</table>

**Remark** The default setting: OFF

3. Press the [F MENU] key.
4. Use the numeric keypad to input the desired 4 letters using 0 to 9, A to D, *, or #.
5. Press the [F MENU] key.

The registered 4 letters appear.

- To deactivate the password function, select [OFF] in step 3, then press PTT switch.
- When the on-timer function is activated, the password function is disabled.

---

**Inputting the Password to Use the Transceiver**

1. Press and hold the Power (Lock) switch to turn the transceiver ON.

   The password input screen appears.

2. Use the numeric keypad on the display to input the password.

3. When the valid password is entered, the frequency display screen appears.

   **Remark** If an invalid password is entered, the transceiver is turned OFF automatically.

   - If you have forgotten the registered password, carrying out all resetting allows you to turn on the transceiver without entering the password.
   - It should be noted that performing all resetting resets (initializes) all information such as the information registered to memory channels and various setting values. It is recommended that the password be written down on paper.

---

13 PTT DELAY

Set a timed delay before actual transmission begins after PTT switch is pressed.

1. Press and hold the [F MENU] key → touch [CONFIG] → [13 PTT DELAY]
2. Rotate the DIAL knob to select the desired setting.

   OFF / 20 ms / 50 ms / 100 ms / 200 ms

3. Selecting OFF disables the PTT delay time function.

   **Remark** The default setting: OFF
14 RPT ARS
Enable or disable the automatic Repeater Shift operation ARS (Repeater operation is initiated by tuning to the repeater frequency).

1. Press and hold the [F MENU] key → touch [CONFIG] → [14 RPT ARS]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>ON</th>
<th>Enables the ARS function.</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Disables the ARS function.</td>
</tr>
</tbody>
</table>

Remark The default setting: ON

15 RPT SHIFT
Set the TX frequency shift direction for repeater use.

1. Press and hold the [F MENU] key → touch [CONFIG] → [15 RPT SHIFT]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>SIMPLEX</th>
<th>No TX frequency offset.</th>
</tr>
</thead>
<tbody>
<tr>
<td>-RPT</td>
<td>Shifts TX to a lower frequency.</td>
</tr>
<tr>
<td>+RPT</td>
<td>Shifts TX to a higher frequency.</td>
</tr>
</tbody>
</table>

Remark The default setting differs depending frequency

16 RPT SHIFT FREQ
Set the repeater shift offset frequency.

1. Press and hold the [F MENU] key → touch [CONFIG] → [16 RPT SHIFT FREQ]
2. Rotate the DIAL knob to select the desired shift offset.
3. The offset frequency can be set in steps of 0.05 MHz between 0.000 MHz and 150.000 MHz.

Remark The default setting differs depending frequency

17 SAVE RX
Sets the Receive OFF Battery save interval (sleep ratio) to reduce power consumption.

1. Press and hold the [F MENU] key → touch [CONFIG] → [17 SAVE RX]
2. Rotate the DIAL, then touch [17 SAVE RX].
3. Rotate the DIAL knob to select the desired setting (the time interval for disabling the receiver operation).

<table>
<thead>
<tr>
<th>0.05 sec(1:1) / 0.1 sec(1:2) / 0.2 sec(1:4) / 0.5 sec(1:10) / 1.0 sec(1:20) / 2.0 sec(1:40) / 5.0 sec(1:100) / 10.0 sec(1:200) / 20 sec(1:400) / OFF</th>
</tr>
</thead>
</table>

Selecting OFF disables this function.

Remark The default setting: 0.2 sec (1:1)
18 STEP
Sets the frequency step when the dial knob is turned.
1. Press and hold the [F MENU] key → touch [CONFIG] → [18 STEP]
For details, refer to "Changing the Frequency Step" in the Operating Manual.

19 DATE & TIME ADJ
Set the date and time function of the built-in clock of the FT5DR/DE.
In the factory settings, the date and time are automatically set when positioning the GPS signal, so in this case no manual setting is necessary.
1. Press and hold the [F MENU] key → touch [CONFIG] → [19 DATE & TIME ADJ]
2. Rotate the DIAL knob to select the year, month, day, hour and minute.
3. To activate the time signal (alarm goes off every hour on the hour), touch [SIGNAL].
   The check box will be checked.
4. Touch [OK].

20 TOT
Set the transceiver to automatically return to receive mode after transmitting continuously for a certain period of time. The TOT function limits inadvertent transmission of unnecessary signals, and unwanted battery power consumption (time-out timer function).
1. Press and hold the [F MENU] key → touch [CONFIG] → [20 TOT]
2. Rotate the DIAL knob to set the time for the transceiver to automatically return to receive mode state in steps of 30 seconds.
   OFF/30 sec to 10 min 00 sec
3. Selecting OFF disables the TOT function.
   Remark The default setting: 3 min 00 sec
   • When the time-out timer function is active, a beep is emitted when a continuous transmission nears the set time. About 10 seconds later, the transceiver returns to the receive mode.
   • The TOT setting is retained until "OFF" is selected in step 3 above.

21 VFO MODE
Sets the frequency tuning range while operating in VFO mode.
1. Press and hold the [F MENU] key → touch [CONFIG] → [21 VFO MODE]
2. Rotate the DIAL knob to select the desired tuning range.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL</td>
<td>Tuning continues to the next band when reaching the end of a band.</td>
</tr>
<tr>
<td>BAND</td>
<td>Tuning continues to the other end of the current band when reaching the end of the band.</td>
</tr>
</tbody>
</table>

Remark The default setting: ALL
22 BAND SELECT

Set the selectable bands (frequency band) for A band and B band individually. Stored memory channels can be recalled regardless of this setting.

1. Press the [A/B] key to set the A band or B band as the operating band.
2. Press and hold the [F MENU] key → touch [CONFIG] → [22 BAND SELECT]
3. Rotate the DIAL knob to select a band, then press the [F MENU] key to remove the check mark.

   The frequency bands without check marks cannot be selected by operating the BAND key, DIAL knob, VFO scan, etc.
   - AIR:
   - VHF:
   - UHF:
   - OTHER: Including 50MHz band\(^2\), VHF(1), VHF(2), UHF(1), and UHF(2)\(^2\)
   - SW\(^1\):
   - AM\(^1\):
   - FM\(^1\):

   **Remark** The default setting: All bands are checked.

   **NOTE:** Not all bands can be unchecked.

\(^1\)Can be set only with the A band.

\(^2\)Not included in the B band.

23 DIAL KNOB CHANGE

1. Press and hold the [F MENU] key → touch [CONFIG] → [23 DIAL KNOB CHANGE]
2. Press the [CHANGE] key.
3. The VOL and DIAL knob functions are swapped.

   **Remark** The default setting: the upper knob is DIAL.

APRS Menu Operations

For details on setting each item, refer to “FT5DR/DE APRS Function Instruction Manual” which is available on Yaesu website.
Setup Menu: SD CARD Menu Operations

1 BACKUP

Settings information can be saved to a microSD memory card, also the saved information can be loaded to the transceiver.

1. Press and hold the [F MENU] key → touch [SD CARD] → [1 BACKUP]
2. Rotate the DIAL knob to select the operation to be performed.

<table>
<thead>
<tr>
<th>Write to SD</th>
<th>Saves the transceiver setting information to a microSD memory card.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read from SD</td>
<td>Loads the information to the transceiver from a microSD memory card.</td>
</tr>
</tbody>
</table>

3. Press the [F MENU] key.
   A pop-up window appears on the LCD.
5. When [Write to SD] is selected and data writing completes, a beep sounds and “COMPLETED” appears on the LCD.
6. When [Read from SD] is selected and data reading completes, a beep sounds, then the transceiver restarts with the settings read from the microSD memory card applied.

2 MEMORY CH

Memory channel setting information can be saved onto a microSD memory card, or saved information can be loaded to the transceiver.

1. Press and hold the [F MENU] key → touch [SD CARD] → [2 MEMORY CH]
2. Rotate the DIAL knob to select the operation to be performed.

<table>
<thead>
<tr>
<th>Write to SD</th>
<th>Saves the memory channel information saved on the transceiver onto a microSD memory card.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read from SD</td>
<td>Loads the information to the transceiver from the microSD memory card.</td>
</tr>
</tbody>
</table>

3. Press the [F MENU] key.
   A pop-up window appears on the LCD.
5. When [Write to SD] is selected and data writing completes, a beep sounds and “COMPLETED” appears on the LCD.
6. When [Read from SD] is selected and data reading completes, a beep sounds, then the transceiver restarts with the settings read from the microSD memory card applied.
3 MEMORY INFO
Display information from SD Memory Card.
1. Press and hold the [F MENU] key → touch [SD CARD] → [3 MEMORY INFO]
   The bar graph and the following information will be displayed.
   Used space: x,xxx MB
   Free space: x,xxx MB
   Capacity: x,xxx MB

4 FORMAT
Format a new microSD memory card.
For details, refer to “Formatting a microSD Memory Card” in the Operating Manual.

OPTION Menu

1 USB CAMERA
Image size and quality can be set for the optional microphone with camera (MH-85A11U).
1. Press and hold the [F MENU] key → touch [OPTION] → [1 USB CAMERA]
2. Rotate the DIAL knob to select [SIZE], then press the [F MENU] key.
3. Rotate the DIAL knob to select one of the following image size settings.
   160*120 / 320*240
   Remark The default setting: 160*120
4. Press the [BACK] key.
5. Rotate the DIAL knob to select [QUALITY], then press the [F MENU] key.
6. Rotate the DIAL knob to select one of the following image quality levels.
   LOW / NORMAL / HIGH
   Remark The default setting: LOW
7. Press the [BACK] key.
8. Rotate the DIAL knob to select [SP SEL], then press the [F MENU] key.
9. Rotate the DIAL knob to select the speaker.
   CAMERA: The audio is routed to MH-85A11U speaker (internal speaker is OFF).
   INT SP: The audio is routed to the internal speaker (MH-85A11U speaker is OFF).
   Remark The default setting: CAMERA
   • If image size is set to large or image quality is set to high, the data transmission time becomes longer.
   • The transmission time varies depending on the image size.

2 Bluetooth
Make Bluetooth settings and connect to a Bluetooth headset.
For details, refer to “Bluetooth® Operation” in the Operating Manual.
3 DEVICE LIST
Displays a list of registered or searched Bluetooth devices. You can select and connect a Bluetooth headset.
For details, refer to “Display device list” in the Operating Manual.

4 Bluetooth Audio
Set whether received audio is heard from both the Bluetooth® headset and the transceiver speaker, or only from the connected Bluetooth® device.

1. Press and hold the [F MENU] key → touch [OPTION] → [4 Bluetooth Audio]
2. Rotate the DIAL knob to select the desired setting.

<table>
<thead>
<tr>
<th>AUTO</th>
<th>The received audio comes from only the Bluetooth headset.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIX</td>
<td>The received audio comes from both the Bluetooth headset and the speaker of this transceiver.</td>
</tr>
</tbody>
</table>

Remark: The default setting: AUTO

CALLSIGN Menu

1. Press and hold the [F MENU] key → touch [CALLSIGN]
2. Enter a call sign using the alphabet input screen and the ten key input screen.
   • The alphabet input screen can be switched to the number input screen by touching [123].
   • The number input screen can be switched to the alphabet input screen by touching [ABC].
   • Up to 10 characters can be entered.
   • Characters that may be entered for the call sign are the numbers 0-9, letters “A – Z” in upper case, the hyphen and the slash.

3. After inputting the call sign, press the PTT switch or press and hold the [F MENU] key.
The folder configuration of the micro-SD card

A commercially available microSD memory card may be inserted into the FT5DR/DE to save various data files. The data of each function is stored in the following folders.

- (root)
- FT5D
  - BACKUP: Various setting data (BACKUP.dat)
  - GPSLOG: GPS Log data (yymmddhhmmss.log)
- FT5D_MEMORY-CH: Memory Channel Information (MEMORY.dat)
- PHOTO: image data (H+RADIO ID+xxxxx.jpg)
- QSOLOG: Message data
- VOICE: Voice recording data (yymmddhhmmss.wav)

The [yymmddhhmmss] part of the file name consists of year (yy), month (mm), day (dd), hour (hh), minute (mm), and second (ss).
Preset receiver channel lists

The preset receiver function presets the frequencies and memory tags (names) of 156 channels and various radio stations into the following three categories:

- Weather Broadcast Stations (10 channels)
- International VHF Marine Radio (57 channels)
- International Worldwide Broadcast (89 channels)

Recall a preset receiver

1. Press the [A/B] key to set the A-band as the operating band.
2. Press [F MENU], and then touch [P.RCVR]. If [P.RCVR] is not displayed, touch [BACK ←] to display [P.RCVR] and then touch it.
3. Press the [BAND] key repeatedly, to select the desired preset receiver band.
   • • • → WX CH → INT VHF → SW → • • •
4. Rotate the DIAL knob to select the desired channel or frequency.

● Return to normal mode

1. Press the [BACK] key or Press [F MENU] and then touch [P.RCVR].

Weather Broadcast Stations (10 channels)

The frequencies (10 channels) used for the VHF Weather Broadcast Stations are registered.

<table>
<thead>
<tr>
<th>Memory channel No.</th>
<th>Frequency (MHz)</th>
<th>Memory channel No.</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>162.550</td>
<td>6</td>
<td>162.500</td>
</tr>
<tr>
<td>2</td>
<td>162.400</td>
<td>7</td>
<td>162.525</td>
</tr>
<tr>
<td>3</td>
<td>162.475</td>
<td>8</td>
<td>161.650</td>
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<tr>
<td>4</td>
<td>162.425</td>
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<td>161.775</td>
</tr>
<tr>
<td>5</td>
<td>162.450</td>
<td>10</td>
<td>163.275</td>
</tr>
</tbody>
</table>
### International VHF Marine Radio (57 channels)

The frequencies used for international VHF (marine) radio are registered.

<table>
<thead>
<tr>
<th>Memory channel No.</th>
<th>Frequency (MHz)</th>
<th>Memory channel No.</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>156.050</td>
<td>60</td>
<td>156.025</td>
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<tr>
<td></td>
<td>160.650*</td>
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<td>160.625*</td>
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<tr>
<td>2</td>
<td>156.100</td>
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<td></td>
<td>160.700*</td>
<td></td>
<td>160.675*</td>
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<td>3</td>
<td>156.150</td>
<td>62</td>
<td>156.125</td>
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<tr>
<td></td>
<td>160.750*</td>
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<td>160.725*</td>
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<td>4</td>
<td>156.200</td>
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<td>156.175</td>
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<td></td>
<td>160.800*</td>
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<tr>
<td>5</td>
<td>156.250</td>
<td>64</td>
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<tr>
<td></td>
<td>160.850*</td>
<td></td>
<td>160.825*</td>
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<td>6</td>
<td>156.300</td>
<td>65</td>
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<td></td>
<td></td>
<td></td>
<td>160.875*</td>
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<td>7</td>
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<td></td>
<td>160.950*</td>
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</tr>
<tr>
<td></td>
<td>162.000*</td>
<td></td>
<td>157.425</td>
</tr>
</tbody>
</table>

* indicates the frequency of the VHF marine base station. For example: if the preset receiver memory channel 1 is selected, the base station frequency 160.650 MHz appears and lights up. Touching [F MENU] followed by [REV] displays the Ship Station frequency 156.050 MHz appears and blinks. The frequency lower than the base station frequency by 4.6 MHz is the Ship Station frequency and duplex operation may commence. To return to the base station frequency, press [F MENU] followed by [REV].
The major shortwave broadcast stations around the world are registered.

<table>
<thead>
<tr>
<th>CH No.</th>
<th>Frequency (MHz)</th>
<th>Name</th>
<th>Broadcast Station Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6.030</td>
<td>VOA</td>
<td>USA</td>
</tr>
<tr>
<td>2</td>
<td>6.160</td>
<td>VOA</td>
<td>USA</td>
</tr>
<tr>
<td>3</td>
<td>9.760</td>
<td>VOA</td>
<td>USA</td>
</tr>
<tr>
<td>4</td>
<td>11.965</td>
<td>VOA</td>
<td>USA</td>
</tr>
<tr>
<td>5</td>
<td>9.555</td>
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<td>Canada</td>
</tr>
<tr>
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<td>Canada</td>
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<td>6.195</td>
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<td>29</td>
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<tr>
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<td>6.055</td>
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<td>Japan (Nikkei)</td>
</tr>
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Receive Mode: AM
In case of a malfunction

Check the following items before requesting a repair.

- **The transceiver does not turn ON.**
  - Is the battery depleted?
  - Charge the battery pack after purchase, and when the transceiver has not been used for a long time.
  - Is the battery pack properly attached?
    Refer to “Installing the Battery Pack” and securely mount the battery pack.
  - Is the external power supply properly connected?
    When using an external power supply, connect the external power supply adapter with a cigarette lighter plug (SDD-13) or an external power cable (E-DC-6) to DC input jack.
  - Is the voltage of the battery pack or the SDD-13 correct?
    Be sure that there is a charge left in the battery pack (do not completely discharge). Check that the output voltage of the SDD-13 is approximately 12V.

- **There is no sound.**
  - Is the level of squelch (or S meter squelch) set too high?
    Press the Monitor Switch and verify that white noise can be heard.
    Adjust the level of squelch (or S meter squelch) when receiving a weak signal.
  - Is the volume low?
    Rotate the VOL knob clockwise to increase the volume.
  - Is the tone squelch or DCS on?
    When the tone squelch or DCS is on, the sound is not output until the transceiver receives a signal containing the same tone frequency or DCS code set.
  - Is the C4FM digital mode on?
    When the AMS function is on, the sound is not output until the transceiver receives a signal containing the Analog FM mode.
    Also, when the DG-ID function is on and set the DG-ID number to except for “00”, the sound is not output until the transceiver receives a signal correspond to the DG-ID number.

- **There is no transmission of radio waves.**
  - Are you pressing the PTT switch properly?
  - Is the PTT lock on?
  - Is the Busy TX Block (BCLO function) on?
    When the Busy TX Block (BCLO function) is on, transmission cannot be done when receiving a signal even if PTT is pressed. Wait until signal being received stops and then press PTT.
  - Is the transmission frequency on a ham radio band?
    Transmission cannot be performed on the AM Radio Broadcast Band, the Short-Wave Radio Band, the FM Radio Broadcast Band, the Air Band, or the Information Radio Band.
  - Is the voltage of the battery pack or external power source correct?
    Check the remaining charge on the battery pack.
    In addition, using an inadequate power supply where voltage drops during transmission will prevent the FT5DR/DE from operating at full capability.

- **The keys or DIAL do not respond.**
  - Is the Key Lock or DIAL Lock on?

- **The battery pack cannot be charged, or the battery power depletes immediately after charging.**
  - Is the battery pack being charged with a charger specified by Yaesu?
    Charge the battery pack using the accessory battery charger (SAD-25) or the rapid charge cradle (CD-41). When using an external power supply, use the external power supply adapter with a cigarette lighter plug (SDD-13) or an external power cable (E-DC-6).
    When charging with an external power supply, charge in the input voltage range of 10.5 to 16 VDC with the EXT DC IN terminal.
  - Is the battery pack in use exhausted?
    If the “Charging Error” appears on the LCD when charging, there is a chance the battery pack is over discharged. If the error is repetitively displayed after charging the battery pack several times, the battery pack may have reached its service life or be defective. Battery packs are consumables. Please replace the battery pack with a new one immediately. Battery packs can be charged and reused up to approximately 300 times.