Memory Recall

1. While operating in the VFO mode, press the [✱MR] key to enter the Memory mode.
2. Press the [▲] or [▼] key to select the desired memory channel.
3. To return to the VFO mode, press the [#VFO] key.

When the transceiver is already set to the Memory mode, an easy way to recall a memory channel is to enter the memory channel number using the numeric keypad.

For example: in the Memory Mode to recall memory channel #002, press the [**2**] key.

> ℹ️ • To recall Memory Channel #200, enter "200". To recall Programmable Memory channels "**L1/U1**" through "**L10/U10**" enter "**201/202**" through "**210/220**".

Changing the memory label (tag) name

1. Press the [✱MR] key to recall the memory channel that you wish to label or rename.
2. Press and hold the **F** key to enter the Set Mode.
3. Press the [▲] or [▼] key to select Set Mode item "**20 NAME TAG**".
4. Press the **F** key to enter (or edit) the channel name tag.
   "**NAME-TAG**" message will appear.
5. Press the Alphabet / Numeric keys to enter the characters or symbols for the memory channel "Tag" (label).
   • To move the cursor to the next character, press the [▲] key.
   • To correct a mistake, press the [▼] key repeatedly until the cursor returns to the character position.

> 📖 For more details on character/symbol input, see page 38.

6. Press the **PTT** switch to save the new setting and return to the memory channel.

Memory Mode

HOME Channel Memory Recall

A "HOME" channel memory is provided for each operating band, to allow quick recall of a favorite operating frequency on each band. The default home channels are below:

Default Home Channels	
Band	**Frequency**
144 MHz Band	**144.000 MHz**
FM Radio Band	**95.000 MHz**

1. Press the **F** key, then press the [**P1**] key.

   The default home channel, as listed above, is displayed.
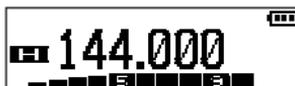
2. Press the **F** key, then press the [**P1**] key to exit to normal operation.
   Repeat this process to recall the HOME channel on any operating band.

Changing the Home Channel Frequency

The home channel frequencies may be changed from the default settings.

1. While operating in the VFO mode, select the desired frequency.
2. Press and hold the [**✱MR**] key.

   A blank memory channel will be displayed.

3. Press the [**P1**] key.
   • "HOME-IN" will be displayed, and then exit to normal operation.
   • The home channel frequency is changed and overwriting is complete.

Memory Offset Tuning

Once a particular memory channel is recalled, it is easy to tune off that channel, as though you were in the "VFO" mode.

1. Recall the memory channel.
2. Press the [**#VFO**] key to activate the "Memory Channel Tuning" feature.
   The Memory Channel number on the LCD display will be replaced by "tun".

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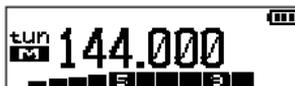
> ℹ️ When an alpha-numeric Tag is shown in place of the memory channel operating frequency display, the display will automatically revert to display the operating frequency along with the "tun" indication. It is not necessary to enter the Menu and change from the alpha-numeric Tag display to the operating frequency display.

3. Press the [▲] or [▼] key to tune to the desired frequency.
4. To return to the original memory frequency, just press the [**#VFO**] key. The display will revert to a display of the alpha-numeric Tag (if any) that may have originally appeared on the LCD.

> ℹ️ To store the new frequency while using Memory Offset Tuning, press and hold the [**✱MR**] key (per the normal memory storage procedure). The next-available clear memory location will be displayed. Then press and hold the [**✱MR**] key again to save the new frequency the available memory channel.

Deleting Memories

All excerpt the Memory Channel "001" and the Home Channels may be easily deleted.

> ❗ Once deleted, the channel data cannot be recovered, so make a note of the information (Memory Channel settings, etc), before deleting the memories.

1. Press and hold the **F** key to enter the Set Mode.
2. Press the [▲] or [▼] key to select Set Mode item "**18 MEM DEL**".
3. Press the **F** key to enable adjustment of this Item.
4. Press the [▲] or [▼] key to select the memory channel to be "deleted".
5. Press the **F** key to delete the selected memory channel.

```
  18 MEM DELETE
→ 24:LONDON
  25:145 .215
  26:Glasgow
```

6. Press the **PTT** switch to return to normal operation.

Memory Mode

Weather Broadcast Channels

In the USA, the VHF Weather Broadcast Station Memory Channel Bank has been pre-programmed at the factory for immediate access to NOAA weather information stations.

1. Press and hold the [**1**] key to recall the Weather Broadcast Memory Bank.

2. Press the [▲] or [▼] key to select the desired Weather Broadcast channel.
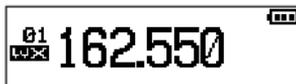
3. To scan for additional or stronger Weather stations, just press the **PTT** switch (or press and hold the [▲] or [▼] key).
   When the scanner pauses on a station, press the **PTT** switch once to halt the scan, or press it again to restart the scan.

CH	Frequency	CH	Frequency
01	162.550 MHz	06	162.500 MHz
02	162.400 MHz	07	162.525 MHz
03	162.475 MHz	08	161.650 MHz
04	162.425 MHz	09	161.775 MHz
05	162.450 MHz	10	163.275 MHz

4. To return to normal operation, press the [✱**MR**] key, or press and hold the [**1**] key again.

Severe Weather Alert

In the event of extreme weather disturbances, such as severe thunderstorms and hurricanes, the NOAA (National Oceanic and Atmospheric Administration) sends a weather alert accompanied by a 1050 Hz tone and subsequent weather report on one of the NOAA weather channels.

The **FT-25R/E** makes available scanning of the stored memory channels, or scanning of the entire operating band, or scanning of a programmable sub band portion. Scanning will halt when signals are encountered, and communication may be initiated on that frequency.

Operation is basically the same in each of the above scanning modes. Before beginning, take a moment to select the way the scanning will resume after it halts on a signal.

Setting the Scan-Resume Technique

Three options for the Scan-Resume mode are available:

Display	Description
BUSY (default setting)	In **BUSY** mode, the scanner will halt on a signal it encounters. Scanning will resume one second after the other station signal ceases transmitting. In the case of constant-carrier signals like Weather Station broadcasts, the scanner will likely remain on this frequency indefinitely.
HOLD	In **HOLD** mode, the scanner will halt on a signal it encounters. Scanning will only resume when it is manually re-initiated.
TIME	In **TIME** mode, the scanner will halt on a signal it encounters, scanning will resume after five seconds even if a signal is still on the frequency. To cancel scanning, press the the **PTT** switch, [▲] or [▼] key.

1. Press and hold the **F** key to enter the Set mode.
2. Press the [▲] or [▼] key to select Set Mode Item "**25 RESUME**".
3. Press the **F** key to enable adjustment of this Set Mode Items.
4. Press the [▲] or [▼] key to select the desired scan-resume mode.
5. Press the **PTT** switch to save the setting and exit to normal operation.

```
25 RESUME
   →BUSY
```

Scanning

VFO Scanning

The **FT-25R/E** provides two VFO scanning functions: "Manual VFO Scanning" and "Programmed Mode (VFO) Scanning."

Manual VFO Scan

1. If necessary, press the [✳**MR**] key to change to the VFO mode.
2. Press and hold the [▲] or [▼] key to initiate upward or downward scanning, respectively.
3. When scanning encounters a signal strong enough to open the squelch, the scanner will halt temporarily; the decimal point of the frequency display will blink to indicate this "Resuming" condition.
4. The scanning will resume according to the Scan-Resume mode selected in the Set Mode Item "**25:RESUME**".
5. To cancel scanning, press the **PTT** switch, [▲] or [▼] key.

Programmed Mode (VFO) Scan

1. Press and hold the [**#VFO**] key.
2. Press the [▲] or [▼] key to select the bandwidth for Programmed Mode (VFO) scanner.

```
PROG VFO SCAN
    →BAND
```

Available selections are ±1 MHz, ±2 MHz, ±5 MHz, ALL, PMS-X, and BAND.

Display	Description
BAND (default setting)	The scanner will sweep frequencies on the current operating band.
±1MHz	The scanner will sweep ±1 MHz from the operating frequency.
±2MHz	The scanner will sweep ±2 MHz from the operating frequency.
±5MHz	The scanner will sweep ±5 MHz from the operating frequency.
ALL	The scanner will sweep all frequencies.
PMS-X	The scanner will sweep frequencies designated by the currently selected PMS (Programmable Memory Scan) frequency pair.

> **i** **PMS-X** will appear in the [**#VFO**] selections after setting a PMS frequency pair.

3. Press the [**#VFO**] key to save the new setting and return to normal operation.
4. Press the **F** key, then press the [**#VFO**] key to start scanning.
5. When scanning encounters a signal strong enough to open the squelch, the scanning will halt temporarily; the decimal point of the frequency display will blink during this "Pause" condition.
6. The scanner will then resume according to the Scan-Resume mode selected in the "RESUME" setting.
7. To cancel scanning, press the **PTT** switch, [▲] or [▼] key.

Input Character/Symbol List

On a character inputting display such as the memory mode "tag" display, the characters and symbols may be input as below:

Key	Key Assignment	Key	Key Assignment
1	1	**7 PQRS**	7 P Q R S p q r s
2 ABC	2 A B C a b c	**8 TUV**	8 T U V t u v
3 DEF	3 D E F d e f	**9 WXYZ**	9 W X Y Z w x y z
4 GHI	4 G H I g h i	**0 SET**	0 (blank character)
5 JKL	5 J K L j k l	**✱ MR**	✱ + - , . / : ; @ (blank character)
6 MNO	6 M N O m n o		

Set (Menu) Mode

The **FT-25R/E** Set Mode, already partially described in the previous chapters, may be activated to select or change various transceiver functions. Many of the useful parameter configurations have not been fully detailed in this manual. Refer to the chart below for a list of the Set Mode Items and their various parameters.

1. Press and hold the **F** key to enter the Set Mode.
2. Press the [▲] or [▼] key to select the Set Mode Item to be adjusted.
3. Press the **F** key momentarily to enable adjustment of the Set Mode Item.
4. Press the [▲] or [▼] key to adjust or select the parameter to be changed on the Set Mode Item selected in above step.
5. After completing your selection and adjustment, press the **PTT** switch momentarily to save the new setting and exit to normal operation.

> ℹ️ Press and hold the **F** key to move from the lower menu contents to the upper menu contents in the Set Mode.

Item (lower menu item)	Function	Values	Default Value
1 APO	Setting of the Automatic Power-Off feature.	OFF / 0.5H to 12.0H (Step 0.5H)	OFF
2 ARTS	Selects the Beep option and the Polling Interval during ARTS™ operation.	BEEP= INRANG / ALWAYS / OFF INTV= 25SEC / 15SEC	BEEP=OFF INTV= 25SEC
3 BATTSAVE	Selects the Receive-mode Battery Saver interval ("sleep" ratio)	200mS / 300mS / 500mS / 1SEC / 2SEC / OFF	200mS
4 B-CH.L/O	Enables/Disables the Busy Channel Lock-Out feature.	OFF / ON	OFF
5 BEEP	Beep function Enable/Disable on presssing the keypad, or stopping the receiver scanning.	KEY+SC / KEY / OFF	KEY+SC
6 BELL	Select the number of CTCSS/DCS/PAGER/ ARTS™ Bell ringer repetitions.	OFF / 1Time / 3Times/ 5Times / 8Times / CONTINUE	OFF
7 COMPANDE (COMPANDER)	Enables/Disables the Voice Compander feature	OFF / ON	OFF

Set (Menu) Mode

Item (lower menu item)	Function	Values	Default Value
8 CTCSS (CTCSS TONE)	Setting the CTCSS Frequency TX and RX	50 CTCSS tones / OFF	TX=100.0Hz RX=100.0Hz
9 CW ID	CW Identifier during ARTS™ operation.	TX= OFF / ON ID= ------ (6 characters)	TX= OFF ID= blank
10 DC VOLT	displays Battery DC Voltage.	–	–
11 DCS CODE	Setting the DCS CODE TX and RX	104 DCS CODEs / OFF	TX=023 RX=023
12 DTMF SET	Selects the MANUAL or AUTO DTMF tones. Setting the DTMF autodialer sending delay time and Speed.	MODE= MANUAL / AUTO DELAY= 50mS / 250mS / 450mS / 750mS / 1000mS SPEED= 50mS / 100mS	M=MANUAL D=450mS S=50mS
13 DTMF WRT	Programming to DTMF autodialer.		
14 EDG.BEEP	Enables/Disables the Band-edge beeper while selecting the frequency via the [▲] or [▼] key.	BEEP OFF / BEEP ON	BEEP OFF
15 KEY LOCK	Keyboard Lock function	KEY / PTT / P+K	KEY
16 LAMP	Selects the LCD/ Keypad Lamp mode.	5secKey / 10secKey / 30secKey / CONT / OFF	5secKey
17 LED	Selects the enable or disable TX/BUSY LED function.	TX= ON / OFF BUSY= ON/ OFF	TX=ON BUSY=ON
18 MEM DEL (MEM DELETE)	Deletes Memory Channel	–	–
19 MON/T-CL (MON/T-CALL)	Selects the **MONI** or **T.CALL** switch function.	MONITOR / T-CALL1750 / T-CALL2100 / T-CALL1000 / T-CALL1450	MONITOR (*) or T-CALL1750 (*)
20 NAME TAG	Renames Alpha-Numeric "Tags" for the Memory channels.	–	–

Set (Menu) Mode

Item (lower menu item)	Function	Values	Default Value
21 PAGER	Setting the TX CTCSS of 2 tone and the RX CTCSS of 2 tone. Enables/disables the Answer Back function.	TX: ** ** RX: ** ** ACK : ON / OFF	TX=05 47 RX=05 47 ACK=OFF
22 PASSWORD	Enables/disables the Password feature	OFF / ON /	OFF
23 PRI.RVT	Enables/disables the Priority Revert feature.	RVT.OFF / RVT. ON	RVT.OFF
24 REPEATER	ARS / MODE / SHIFT function setting	ARS= ON / OFF MODE=SIMPLEX / +RTP / -RTP SHIFT= 0.05 MHz - 99.95 MHz (per 50KHz)	ARS=ON MODE=SIMPLEX SHIFT=**.**M (*)
25 RESUME	Selects the Scan Resume mode.	BUSY / HOLD / TIME	BUSY
26 RF SQL	Adjusts the RF Squelch threshold level.	S-1 / S-2 / S-3 / S-4 / S-5 / -6 / S-8 / S-FULL / OFF	OFF
27 SCN.LAMP	Enables/Disables the Scan lamp while paused.	ON / OFF	ON
28 SKIP (SKIP SCAN)	Selects the Memory Scan "Skip" channel-selection mode.	–	–
29 SQL TYPE	Selects the Tone Encoder and/or Decoder mode.	OFF / R-TONE / T-TONE / TSQL / REV TN / DCS / PAGER	OFF
30 STEP	Setting of the frequency steps.	5 / 6.25 / 10 / 12.5 / 15 / 20 / 25 / 50 / 100 kHz, or AUTO	AUTO
31 TOT	Setting of the TOT time.	1 min - 30 min (per 1 min) or OFF	3min
32 TX PWR	Selects TX Power	HI(5W) / MID(2.5W) / LOW(0.5W)	HI(5W)

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Set (Menu) Mode

Item (lower menu item)	Function	Values	Default Value
33 TX SAVE	Enables/Disables the Transmitter Battery Saver.	SAVE OFF / SAVE ON	SAVE OFF
34 VFO.SPL	Enables or disables "VFO Split" operation.	VSP.OFF / VSP.ON	VSP.OFF
35 VOX	Enable / Disable VOX function.	VOX OFF / VOX ON	VOX OFF
36 WFM.RCV	Broadband FM Radio(WFM) function Enables/Disables	WFM.ON / WFM.OFF	WFM.ON
37 WIDE/NAR	Select Wide (±5 kHz) or Narrow (±2.5 kHz) TX Deviation.	WIDE / NARROW	WIDE
38 WX ALERT	Enables/Disables the Weather Alert Scan feature.	ALT.OFF / ALT. ON	ALT.OFF
39 SCRAMBLE(*)	Inversion scrambling (Encryption)	SCRB.OFF/SCRB.ON	SCRB.OFF

(*) : This function may be displayed, depending on the transceiver version.

If you suspect 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.

There is no sound.

- Is the squelch level (or S meter squelch) set too high?
  Press the **MONI/T.CALL** key and verify that you can hear white noise.
  Adjust the squelch level (or S meter squelch) when receiving a weak signal.
- Is the volume low?
  Rotate the **PWR/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.
  For more details on the DCS code, refer to the Advance Manual.

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 is inhibited when receiving a signal, even if the **PTT** switch is pressed. Wait until the signal being received stops and then press the **PTT** switch.
- Is the transmission frequency on a ham radio band?
  Transmission cannot be performed on the FM Radio Broadcast Band/Information Radio Band.
- Is the voltage of the battery pack correct?
  Check the remaining charge on the battery pack.
  In addition, using an inadequate power supply where voltage drops during transmission will prevent the **FT-25R/E** from operating at full capability.

The keys or DIAL do not respond.

- Is the Keypad Lock or PTT Lock on?

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Troubleshooting

The battery pack cannot be charged or 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-20B/C/U/G) or the rapid charge cradle (SBH-22).
- Is the battery pack in use exhausted?
  If the "Charging Error" appears on the desktop charger lamp when charging, there is a chance the battery pack is over discharged. If the error is repeatedly 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 an exhausted battery pack with a new one immediately. Battery packs can be charged and reused up to approximately 300 times.

Some specific combinations of signals may cause internal beats ("birdies") from
high frequencies, caused by the internal oscillator. This is not a malfunction.
(See the calculation formula below: "n" is for the arbitrary integer). Also, depending on the combination of simultaneously received signals, there may be fluctuations in receive sensitivity.

- Receive Frequency = 13 MHz × n multiplicative
- Receive Frequency = 19.2 MHz × n multiplicative

Specifications

General

Frequency Ranges:	RX	136 - 174 MHz
	TX	144 - 146 (148) MHz
	FM Broadcast	65-108 MHz
Channel Steps:		5 / 6.25 / 10 / 12.5 / 15 / 20 / 25 / 50 / 100 kHz
Frequency Stability:		±5 ppm (–10 °C to +60 °C, +14 F to +140F)
Repeater Shift:		±600 kHz (144 MHz), ±1.6 / 5.0 / 7.6 MHz
Emission Type:		F2D, F3E
Antenna Impedance:		50 Ohms
Supply Voltage:		Nominal: 7.4V DC, Negative Ground
Current Consumption:		215 mA (Receive) 200 mW Output
(Approx. @7.2V)		110 mA (Standby, Saver Off)
		30 mA (Standby, Saver On)
		4 mA (Auto Power Off)
		1.5 A (5 W Tx , 144 MHz) 7.4 V DC
Operating Temperature:		– 4 °F to +14 °F (– 20 °C to + 60 °C)
Case Size:		2.1" (W) x 4.1" (H) x 1.2" (D) (52.5 x 104.5 x 31 mm)
		(W/O knob and antenna)
Weight:		9.17 Oz (260 g) with SBR-25LI and antenna

Transmitter

RF Power Output:	5.0 W (High) / 2.5 W (Middle) / 0.5 W (Low)
	(@ 7.4 V with SBR-25LI)
Modulation Type:	Variable Reactance F2D, F3E
Maximum Deviation:	±5.0 kHz (F2D, F3E)
Spurious Emission:	At least 60 dB down (@ High and Middle power)
	At least 40 dB down (@ Low power)
Microphone Impedance:	2 kOhms

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Specifications

Receiver

Circuit Type:	Direct-Conversion
Sensitivity :	0.2 µV for 12 dB SINAD (140 - 150 MHz, NFM)
	0.2 µV for 12 dB SINAD (420 - 470 MHz, NFM)
Selectivity:	12 kHz / 35 kHz (–6 dB /–60 dB)
AF Output:	0.8 W @ 16 ohms for 10% THD (@ 7.4 V)
	(Internal SP Max Power 1 W)
	0.8 W @ 16ohms for 10%THD (@ 7.4 V)
	(EXT SP Jack Max Power 1 W)

Specifications are subject to change without notice, and are guaranteed within the 144 MHz amateur band only. Frequency ranges will vary according to transceiver version; check with your dealer.

"AUTO" Mode Preset Operating Parameter

USA Version

Frequency Range (MHz)	Mode	step
136.000-144.000	FM	12.5 kHz
144.000-148.000	FM	5k Hz
148.000-156.000	FM	12.5 kHz
156.000-157.450	FM	25 kHz
157.450-160.600	FM	12.5 kHz
160.600-160.975	FM	25 kHz
160.975-161.500	FM	12.5 kHz
161.500-162.900	FM	25 kHz
162.900-174.000	FM	12.5 kHz
65.000-108.000 (RX only)	WFM	100kHz

Asian/European Version

Frequency Range (MHz)	Mode	step
136.000-160.600	FM	12.5 kHz
160.600-162.025	FM	25 kHz
162.025-174.000	FM	12.5 kHz
65.000-108.000 (RX only)	WFM	100 kHz

1. Changes or modifications to this device that are not expressly approved by YAESU MUSEN could void the user's authorization to operate this device.

2. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference including received, interference that may cause undesired operation.

3. The scanning receiver in this equipment is incapable of tuning, or readily being altered, by the User to operate within the frequency bands allocated to the Domestic public Cellular Telecommunications Service in Part 22.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

DECLARATION BY MANUFACTURER

The Scanner receiver is not a digital scanner and is incapable of being converted or modified to a digital scanner receiver by any user.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.

Note

YAESU
The radio

CE 0

EH066N100