ADVANCED OPERATION

Function Modes

The **[FUNC]** key provides up to 6 quick access function assignments.

- 1. Press the [FUNC] key.
- Select the desired function by pressing the [◄] or [►] key, and then press the [ENT] key.





DUAL WATCH

Activates the dual watch function (see page 21).



RX NOISE

Setting the level of RX noise canceling (see page 22).





DIM/DISP

Enable/Disable the display lamp illumination.



SCAN MEM

The current channel is marked to be scanned (see page 33).



SCAN

Activates the scan function (see page 32).



KEY BEEP

Setting the loudness of key beeps (see page 37).



MEMO

Enters Memory writing mode (see page 30).



LIGHT

The white LED may be used as a flashlight.

To program the function assigned to the function key:

- 1. [MENU] → "SETUP" → "CONFIG" → "KEY AS-SIGNMENT".
- Select the assign number ("1" to "6") to which you want to assign a function by pressing the [▲] or [▼] key, and then press the [ENT] key.
- 3. Select the function you want to assign to the Function Screen by pressing the [◄] or [▶] key, and then press the [ENT] key.

Tip: The default setting:

1: DUAL WATCH 4: RX NOISE 2: SCAN 5: DIM/DISP 3: SCAN MEM 6: LIGHT

Press the PTT switch to return to normal operation.

MEMORY OPERATION

The **FTA-250L** is capable of programming up to 250 user-programmable memory channels with channel frequency, channel tag (name) up to 7 characters, and flag (marking for search refinement).

The stored channels can be assigned to ALL or Group Memory (GP1-GP9), which can be named with up to 8 characters.

The **FTA-250L**'s memory system allows you to store, label, and recall channel frequencies you may use frequently.

Recalling the Memories

- Press the [MENU] key to display the MENU screen.
- Select "MEMORY" on the screen by pressing the [◄] or [►] key, and then press the [ENT] key.





Select a group that the desired channel belongs to, by pressing the [▲] or [▼] key followed by the [ENT] key.



☐ The memory channels belong to either of the following groups.

ALL: Group including all the memory channels

GP1 to GP9 : Groups of memory channels that you can set "GP1" to "GP9" when storing.

The frequency and tag name of the channel listed will be displayed along with the group name selected in step 3.

4. Select a memory channel with the [▲] or [▼] key.



5. To exit the Memory mode, press the [MENU] key, select the mode other than "MEMORY" on the screen by pressing the [◄] or [▶] key, and then press the [ENT] key.

MEMORY OPERATION

Instant Storage

- 1. Select a desired frequency.
- 2. Press and hold the **[ENT]** key.
 - ☐ The "ADD" selection appears on the display, with the frequency, channel name (tag), group name, and scan memory already filled in.



- 3. Press the [▲] or [▼] key to select the item, then press the [ENT] key.
- 4. Input letters and/or numbers with the keypad, or select a setting with the [▲], [▼], [◄], or [▶] key, then press the [ENT] key.
- Select "SAVE MEMORY" by pressing the [▼] key, and then press the [ENT] key to store the frequency into the memory.



Note: You cannot store weather channels to the memory by pressing the [ENT] key during the WX mode.

Maintenance of the Memory

Adding new memory channels, editing the stored information, and deleting the stored addresses are allowed through the SETUP mode.

Adding entries

- 1. [MENU] ➡ "SETUP" ➡ "MEMORY BOOK" ➡ "ADD".
- 2. Select the item, input letters and/or numbers, select a setting, and store the changes in the same way as the instant storage described previously.

Notes: ☐ You cannot skip the input of "**NAME**" (channel tag).

☐ You must input of "FREQ" (channel frequency).

Editing the information

- [MENU] ➡ "SETUP" ➡ "MEMORY BOOK" ➡
 "EDIT".
- Press the [▲] or [▼] key to select the group including the entry you want to edit, then press the [ENT] key.
- 3. Press the [▲] or [▼] key to select the entry you want to edit, then press the [ENT] key.
- Select the item, input letters and/or numbers, select a setting, and then store the changes in the same way as the instant storage described previously.

MEMORY OPERATION

Deleting the memory

- 1. [MENU] → "SETUP" → "MEMORY BOOK" → "DE-LETE".
- 2. Press the [▲] or [▼] key to select the group including the entry you want to delete, then press the [ENT] key.
- 3. Press the [▲] or [▼] key to select the entry you want to delete, then press the [ENT] key.
- 4. Select "OK?" on the screen by pressing the [◄] or [▶] key, and then press the [ENT] key.



Press the PTT switch to return to normal operation.

Setting the group name

- 1. [MENU] ➡ "SETUP" ➡ "MEMORY BOOK" ➡ "GROUP NAME".
- 2. Press the [▲] or [▼] key to select the group including the entry you want to change, and then press the [ENT] key.
- Use the keypad to edit the letters and/or numbers of the group name, then press the [ENT] key.
 The cursor will move to the next digit of the group name.
- 4. Select "FINISH" by pressing the [◄] or [▶] key, and then press the [ENT] key.
- Press the PTT switch to return to normal operation.

SCANNING OPERATION

The **FTA-250L** allows you to scan active channels automatically in the COMM (COM band), MR, and WX modes. It pauses on signals received, so you can talk to the station(s) on the frequency received.

Scanning Channels

- 1. Set the transceiver to the COMM mode.
- Press the [FUNC] key to display the Function screen.



1-/+ 2ABC 3DEF

3. Select "SCAN" on the screen by pressing the [◄] or [▶] key, and then press the [ENT] key.

The scanning starts and the display returns to the COMM mode screen. The "SC" icon appears on the display.



- ☐ The scanner searches signals from the lowest frequency to highest.
- ☐ When the scanner encounters a signal, the scanning pauses and the transceiver remains on that channel until the signal disappears, and the frequency indication on the display blinks.

- ☐ After the signal disappears, scanning resumes.
- ☐ To stop scanning, press the PTT switch or select "SCAN" again in the Function screen.

Note: When you enable the alarm function at reception of the weather alert signal via the **COMM SETUP** menu in the SETUP mode, the last weather channel will be watched as the every second frequency during a scan.

Example: When the last weather channel is 162.400 MHz (WX02), the transceiver scans in the following order.

```
118.000 → 162.400 → 118.025 → 162.400 → 162.400 ...
```

The frequency of the last weather channel, however, will not be displayed until the scanner encounters the weather alert signal.

SCANNING OPERATION

Scanning the Specified Channels

Among the memory and weather channels, you may scan only those on which you want to see if a signal exists.

Marking the channels

- 1. Set the transceiver to the MR or WX mode and tune to the channel that you want to be scanned.
- 2. Press the [FUNC] key.
- 3. Select "MEMO MEM" by pressing the [◄] or [▶] key, and then press the [ENT] key.
- ☐ The current channel is marked to be scanned and the "☑" icon, which indicates that the channel is the target of scanning, will appear at the top side of the memory name when the display returns to the MR or WX mode screen.





4. Repeat steps 1 to 3 above to mark other channels as well.

Scanning the marked channels

- 1. Set the transceiver to the MR or WX mode.
- The scanning starts and the display returns to the MR or WX mode screen.

The **FTA-250L** operates in the same way as it does when scanning all channels described in the previous page, except that it searches marked frequencies only.

Note: When you enable the alarm function of the weather alert signal via the **COMM SETUP** menu in the SETUP mode, the last weather channel will be watched as the every second frequency during a scan.

Example: When the last weather channel is WX02 (162.4 MHz), the transceiver scans in the following order.

001MEM → WX02 → 002MEM → WX02 → WX02

The frequency of the last weather channel, however, will not be displayed until the scanner encounters the weather alert signal.

Note: We do not recommend that any of the default settings be changed until you are thoroughly familiar with the operation of the FTA-250L.

Basic Operation

1. Press the [MENU] key to display the **MENU** screen.



- 2 Select "SETUP" on the MENU screen by pressing the [◀] or [▶] key, and then press the [ENT] key.
- 3 Select the desired menu. item by pressing the [▲] or [▼] key, and then press the [ENT] key.
- 4. Select the desired item by pressing the [▲] or [▼] key, and then press the [ENT] key.
- 5. Select the desired setting by pressing the [◀] or [▶] key.









- 6. Press the [ENT] key to store the selected setting.
- 7. Press the **PTT** switch to return to normal operation.

Menu items

☐ MEMORY BOOK

You may store the frequencies with a tag name to the memory of the transceiver, and maintain the stored entries.

☐ COMM SETUP

You may set and adjust the operations of the transceiver in the COM mode

☐ PRIORITY CH

You may set the priority channel for dual watch.

☐ CONFIG

You may set and adjust the various configurations of the radio.

□ ABOUT

Confirm the version of software installed in the radio.

SETUP MODE

Maintenance of the Memory

See pages 30 to 31 for details.



Setting of the COMM SETUP Mode Operation



Turning on/off the emergency call

You may enable or disable the quick access to the 121.500 MHz emergency frequency (see page 16).



Turning on/off the ANL (Automatic Noise Limiter)

You may enable or disable the ANL (automatic noise limiter) feature (see page 26).



Setting the noise cancel

You may cancel background noise when transmitting and receiving (see page 22).



Turning on/off the weather alert

You may enable or disable the alarm function when receiving the weather alert signal (see pages 20).



Turning on/off the scan stop with the PTT

You may lock out the **PTT** switch during the scan operation (see page 32).



Setting the scan resume time

You may select a waiting time till the resuming of scan after the encountered signal disappears.



The setting changes in the following order.

Tip: The default setting: 3 SEC

SETUP MODE

Setting the operation after stopping a scan

You may select the operations listed below when encountering a signal during a scan.



The setting changes in the following order.

BUSY STOP: Stays on the frequency and will not

resume the scan.

5 SEC STOP: Stays on the frequency for 5 seconds

and then resume the scan.

10 SEC STOP: Stays on the frequency for 10 sec-

onds and then resume the scan.

Tip: The default setting: BUSY STOP

Setting the frequency step for tuning

You may select the channel steps of 8.33*/25 kHz per step (see page 27).



* 8.33 kHz; Europe only

Setting the time-out timer for transmission

You may select a desired remaining time for the TOT function (see page 22).



Setting the microphone configuration

You may change the assignment of microphone controlled with the **PTT** switch.(see page 23).



Setting the side tone operation

You may monitor your own voice when talking into the microphone through the headphones (see page 25).



Setting the audio filter of the receiver

You may select the operation of the audio filter (see page 19).



Turning on/off the VOX operation

You may enable or disable the VOX function (see page 24).



Setting the sensitivity of the VOX system

You may select a VOX gain of the VOX function (see page 24).



Setting the sensing time of the VOX system

You may select a VOX delay time of the VOX function (see page 24).



PRIORITY CH

Setting the polled frequency for dual watch (see page 21).



Setting of the Operation and Configuration of the Transceiver



Setting the loudness of key beeps

You may adjust the loudness in 5 levels.



The setting changes in the following order.

Tip: The default setting: 3

Battery Save

You may select the desired interval of time for the battery saver (see page 23).



KEY ASSIGNMENT

You may program the function assigned to the function screen (see page 28).



PTT LOCK

You may enable or disable the PTT lock function (see page 26).



Setting the brightness of the display

You may adjust the backlight brightness in 5 levels.



The setting changes in the following order.

Tip: The default setting: LV5

Setting the lamp of the display

You may select the operation of the display lighting from the following 4 types.



OFF: No lighting at any time

CONTINUOUS: Lights at all time 5 / 10 / 30 / 60 / 120 / 300 (sec)

Lights for selected time when any

key is pressed.

EXT PO/KEY: Lights for 5 seconds only when any

key is pressed, or lights at all time when the power is supplied through

the **EXT DC** jack.

Setting the contrast of the display

You may adjust the contrast in 30 levels



The setting changes in the following order.

Tip: The default setting: LV15

About the Transceiver

You may confirm the version of the software currently operating on the transceiver.



ABOUT SOFT VER: 1.00 DATE: MAR 23.2017

Summary of the SETUP Menu Memory Book

Item	Description	Default Value	
ADD	Adding new channels or destinations	-	
EDIT	Editing the stored information	-	
DELETE	Deleting the stored chan- nel or destination	-	
GROUP NAME	Editing the group name	GP1: GROUP-1 GP2: GROUP-2 GP3: GROUP-3 GP4: GROUP-4 GP5: GROUP-5 GP6: GROUP-6 GP7: GROUP-7 GP8: GROUP-8 GP9: GROUP-9	

COMM SETUP

Item	Description	Default Value
EMERGENCY CALL	Turning on/off the emergency call	ON
ANL	Turning on/off the auto- matic noise limiter	
NOISE CANCEL	Setting the noise cancel operation	TX MODE : OFF RX MODE : OFF
WEATHER ALERT	Turning on/off the weath- er alert	OFF
PTT SC STOP	Turning on/off the scan stop with the PTT	ON

SC RESUME	Setting the scan resume time	3 SEC	
SC STOP TYPE	Setting the operation after stopping a scan	BUSY STOP	
FREQ STEP	Setting the frequency step for tuning	25 kHz	
тх тот	Setting the time-out timer for transmission	5 MIN	
MIC SELECT	Setting the microphone configuration	INTERNAL	
SIDE TONE	Setting the side tone operation	OFF	
AF PITCH CONT	Setting the audio filter of the receiver	NORMAL	
VOX	Turning on/off the VOX operation	OFF	
VOX LEVEL	Setting the sensitivity of the VOX system	LV2	
VOX DELAY	Setting the sensing time of the VOX system	1.5 SEC	

PRIORITY CH

Item	Description	Default Value
-	Setting the polled frequency for dual watch	-

CONFIG

Item	Description	Default Value
KEY BEEP	Setting the loudness of key beeps	3
BATTERY SAVE	Setting the power save operation	50 %
KEY ASSIGN- MENT	Setting the function assigned to the function screen	1 : DUAL WATCH 2 : SCAN 3 : SCAN MEM 4 : RX NOISE 5 : DIM/DISP 6 : LIGHT
PTT LOCK	Turning enable or disable the PTT Lock function	OFF
BACKLIT LEVEL	Setting the brightness level of the display	LV5
BACKLIT TIM- ER	Setting the backlight timer of the display	EXT PO/KEY
CONTRAST	Setting the contrast of the display	LV15

ABOUT...

Item	Description	Default Value
-	Confirming the version of the software	-

SPECIFICATIONS

General

Frequency Range: TX: 118.000 to 136.975 MHz

RX: 118.000 to 136.975 MHz

161.650 to 163.275 MHz (Weather Channels; USA/Canada only)

Channel Spacing: 25 kHz/8.33 kHz (Europe only)

Emission Type: TX: AM

RX: AM & FM (FM: for receiving the Weather Channels)

Supply Voltage: 6.0 to 9.5 VDC (Battery Terminal)

9.0 to 10.5 VDC (EXT DC JACK with Charging)

Current Consumption (approx.): 300 µA (power off),

70 mA (battery saver on, saver ratio 50%)

90 mA (squelch on), 300 mA (receive), 900 mA (transmit 1.5 W Carrier)

Temperature Range: $+14 \,^{\circ}\text{F} \text{ to} + 140 \,^{\circ}\text{F} (-10 \,^{\circ}\text{C to} +60 \,^{\circ}\text{C})$

Case Size (W x H x D):2.1 x 4.1 x 1.2 inches (52 x 105 x 30 mm) with SBR-25LIWeight (approx.):10.6 oz (300 g) with SBR-25LI, antenna and belt clip

Receiver

Circuit Type: Double-conversion superheterodyne

IFs: 47.25 MHz & 450 kHz

Sensitivity: Better than 0.8 µV (for 6 dB S/N with 1 kHz, 30 % modulation)

Selectivity: Better than 8 kHz/–6 dB
Adjacent CH. Selectivity: Less than 25 kHz/–60 dB
AF Output (@7.4 V): 0.7 W @ 16 Ohms, 10 % THD

Transmitter

Power Output (@ 7.4 V): 5.0 W (PEP), 1.5 W (Carrier Power)

Frequency Stability: Better than ±1 ppm (+14 °F to + 140 °F [-10 °C to +60 °C])

Modulation System: Low Level Amplitude Modulation

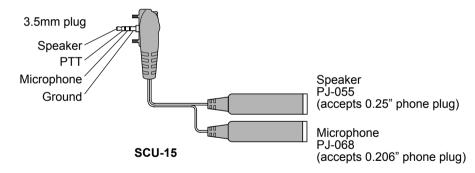
Spurious Emission: >70 dB below carrier

Int. Microphone Type: Condenser Ext Mic. Impedance: 150 Ohms

Specifications are subject to change without notice or obligation.

TROUBLESHOOTING FOR HEADSET CONNECTION

Question	Answer
When connecting the SCU-15 headset adapter cable between the radio and a headset, the "TXT" icon appears on the display and the radio cannot be operated.	This happens when the plug on the SCU-15 headset adapter cable is not properly inserted into the MIC/SP jack. To make proper contact within the radio, the plug must be pushed all the way into the MIC/SP jack and be fixed with the two screws.
Can I purchase the optional PTT Switch from Yaesu?	Contact your Aviation dealer for details regarding purchasing an aftermarket Push-To-Talk switch.
Will my headset work with this radio?	The SCU-15 headset adapter cable is made to operate with most headsets; however to be concretely sure check with the headset manufacturer using the wiring shown below. Please confirm the connections and connector sizes are correct.



Headset specification requirements for SCU-15

Earphone (speaker) impedance: 8Ω or above Microphone impedance: $150 \Omega \pm 20\%$ PTT pressed: Ground PTT not pressed: Open

Note

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée quivalente (p.i.r.e.) ne dépassepas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (identifier le dispositif par son numéro de certification ou son numéro de modèle s'il fait partie du matériel de catégorie I) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Part 15.21: Changes or modifications to this device not expressly approved by YAESU MUSEN could void the user's authorization to operate this device.

Attention in case of use

This transceiver works on frequencies which are not generally permitted. For frequency allocation, apply for a license at your local spectrum management authority. For

actual usage contact your dealer or sales shop in order to get your transceiver adjusted to the allocated frequency range.

List of national codes								
AT	BE BG CY CZ DE							
DK	ES	EE	FI	FR	GB			
GR	HR HU IE IT L1							
LU	J LV MT NL PL PT							
RO	O SK SI SE CH IS							
LI	LI NO							

Disposal of your Electronic and Electric Equipment

Products with the symbol (crossed-out wheeled bin) cannot be disposed as household waste.

Electronic and Electric Equipment should be recycled at a facility capable of handling these items and their waste by products.

In EU countries, please contact your local equipment supplier representative or service center for information about the waste collection system in your country.

YAESU

Copyright 2017 YAESU MUSEN CO., LTD. All rights reserved.

No portion of this manual may be reproduced without the permission of YAESU MUSEN CO., LTD.

YAESU MUSEN CO., LTD. Tennozu Parkside Building 2-5-8 Higashi-Shinagawa, Shinagawa-ku, Tokyo 140-0002 Japan

YAESU USA

6125 Phyllis Drive, Cypress, CA 90630, U.S.A.

YAESU UK

Unit 12, Sun Valley Business Park, Winnall Close Winchester, Hampshire, SO23 0LB, U.K.

1703-AS Printed in Japan

