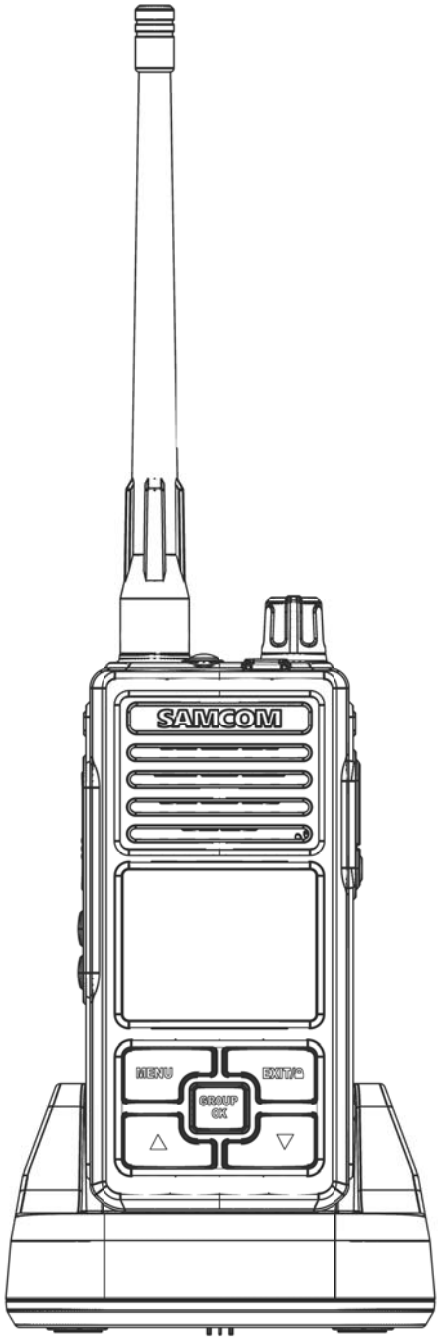
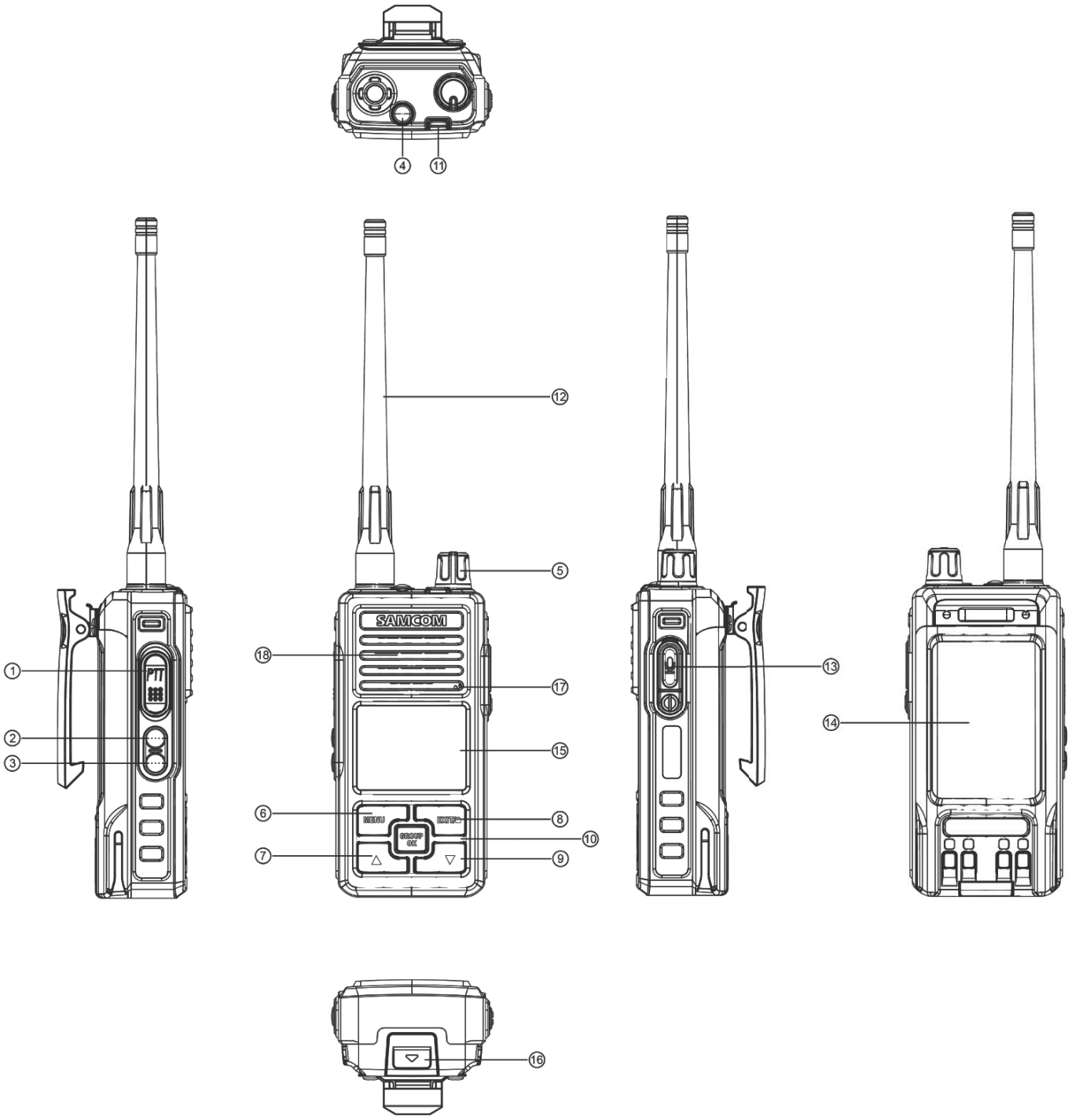
FPCN50A

USER MANUAL



SAMCOM Support Team
Email Address : sanconsales@outlook.com
sanconmarketing2@outlook.com
Phone Number : 3853366504
FB Page : Samcom Radios

1. Product Layout

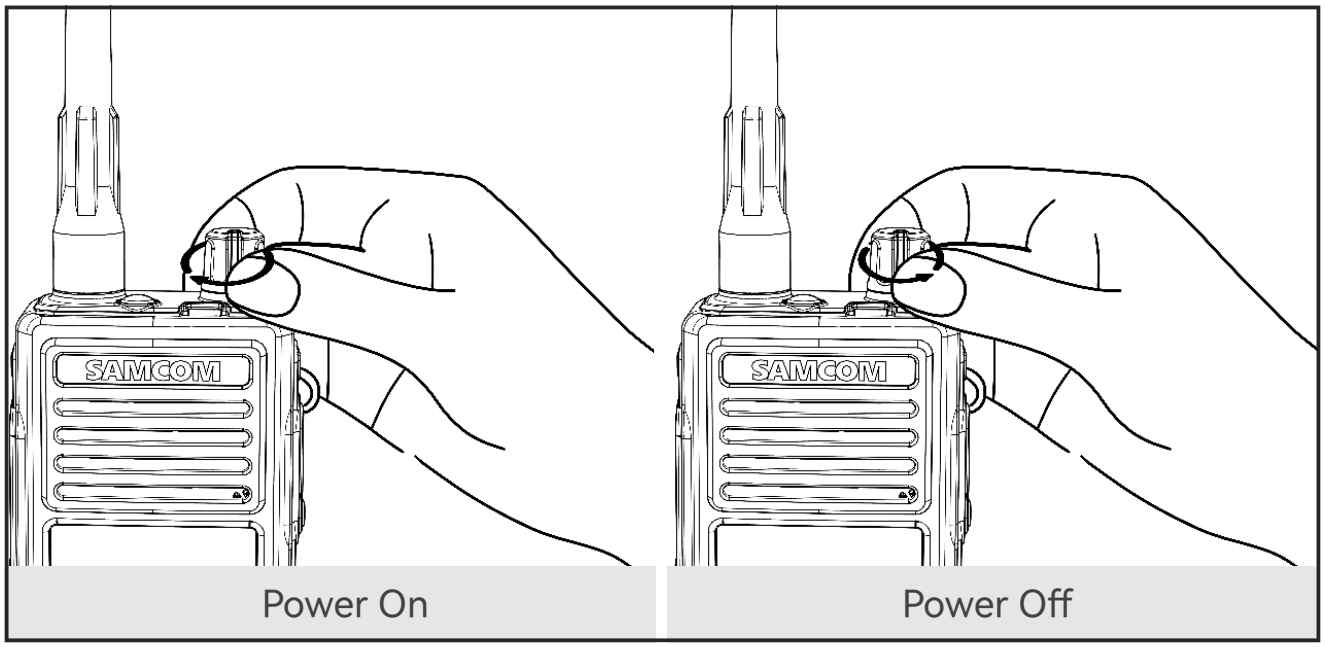


NO.	Part Name	NO.	Part Name
1	Push-to-Talk (PTT) key	10	GROUP Key
2	Side Key 1 (SK1)	11	LED Indicator
3	Side Key 2 (SK2)	12	Antenna
4	Emergency Alarm Key	13	USB-C Jack
5	On-Off/Volume Control Knob	14	Battery
6	OK/Menu Key	15	LCD Display
7	Up Key	16	Battery Latch
8	Back/Keyboard Lock Key	17	Microphone
9	Down Key	18	Speaker

Notes:
(1) The keys of number 2 and number 3 are programmable keys. Their functions can be modified through the programming software.
(2) By default, key 2 is set as the monitoring function and key 3 is set as the scanning function when leaving the factory.

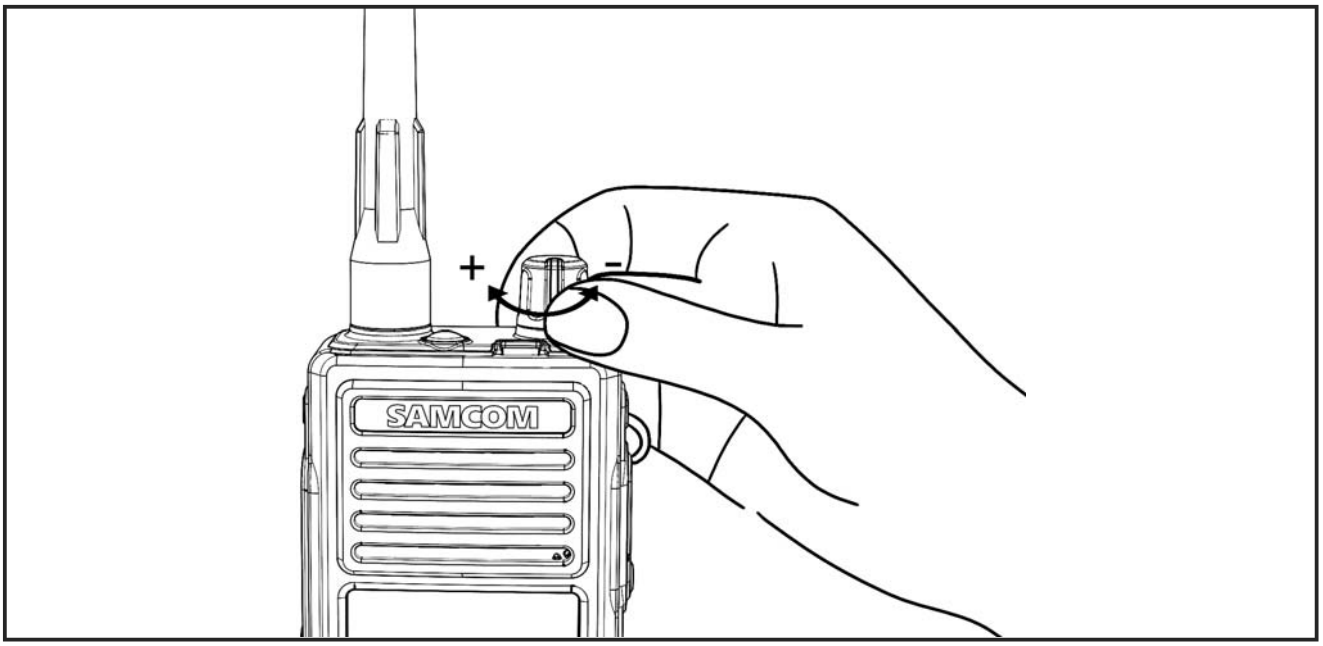
2. General Operation

① Turn on/off operating



Power On | Power Off

② Volume Adjustment Operation

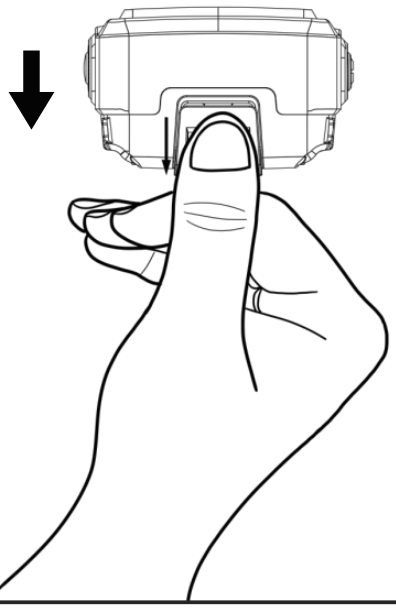


3. Battery Removal/Installation

① Battery Removal

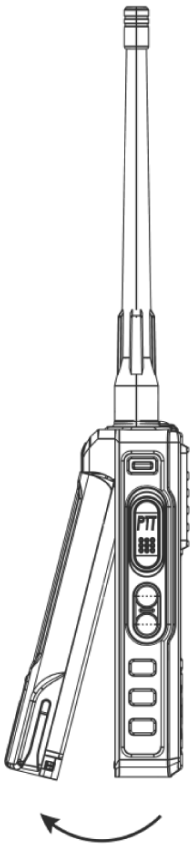
STEP 1

Locate the battery latch at the bottom of the device and place your hand on the latch.



STEP 2

Hold the latch and pull it outward in the direction shown in the diagram to remove the battery.



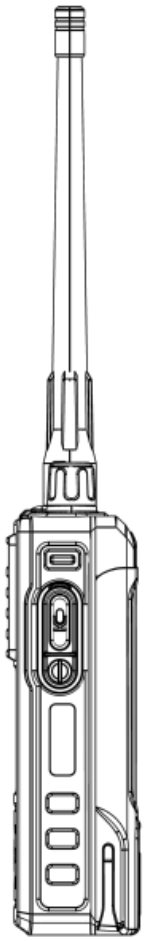
② Battery Installation

To install the battery, align it with the slot in the same direction as removal and press it back in until you hear a "click" sound, indicating successful installation.

4. Headset Installation

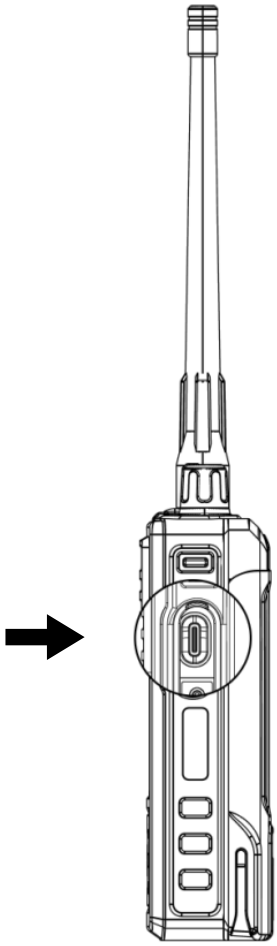
STEP 1

Locate the silicone cover on the side of the radio with a microphone icon.



STEP 2

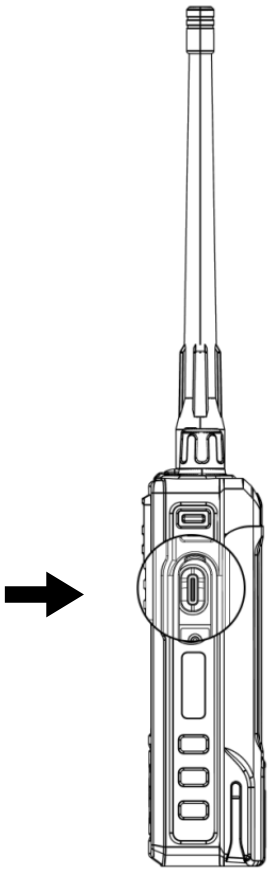
Open the silicone cover and insert the Type-C headset cable into the port to complete the headset installation.



5. Charging Method

Charging with a Dock Charger

Charging with a Type-C Cable



6. FPCN50A Function and Operation Manual

The menu lists differ between Digital Mode and Simulation Mode, with certain menu items omitted in Simulation Mode.
Nevertheless, the functionalities available in Simulation Mode remain consistent in content and definition with those in Digital Mode, ensuring a uniform user experience.

A. Contacts Function Operation Instructions

1. Contacts (Menu → Contacts)

1.1 Default Contacts 4/200:

At the factory, four contacts are preset by default. These include the All-Call contact, Contact 1, Contact 2, and Contact 3.

1.2 All-Call Contact:

The All-Call contact is the default transmitting contact. You can enter the All-Call contact to view its name (“All-Call”), along with your own radio number and its category, which is “All-Call.”

1.3 Modifying the All-Call Contact:

You may change the All-Call contact to a specifically designated Contact 1 or to an independently set contact. In this case, PTT communication will be limited to a two-party conversation, and no one else will be able to listen or participate.

1.4 Deleting Unused Contacts:

You may also delete any specific contacts that are no longer needed.

2. Manual Dialing

2.1 Direct Calling:

Enter Manual Dialing mode to input a contact's extension number for a direct call.

2.2 Extension Number Format:

The extension number is typically set as an 8-digit number.

2.3 Editing the Number:

A “-” cursor appears beneath the digits.

Use the ▲and ▼ arrow keys to move the “-” cursor to the digit you wish to modify.

When the “-” cursor is positioned under the desired digit, press the MENU key. The “-” cursor will start blinking, indicating that the digit is in edit mode.

Each press of the adjustment key will cycle the digit sequentially from 0 to 9.

Once you have selected the desired digit, press the MENU key again. The “-” cursor will stop blinking, confirming that the digit has been set.

Finally, press the Return key to go back to the Contacts menu.

3. Creating a New Contact

3.1 Editing the Number

3.1.1 You can set an 8-digit extension number.

3.1.2 A “-” cursor appears beneath the digits. Use the ▲and ▼ arrow keys to move the cursor to the digit you want to modify. When the “-” is positioned under the desired digit, press the MENU key. The cursor will start blinking, and each press of the adjustment key will cycle the digit sequentially from 0 to 9. Once you have selected the correct digit, press the MENU key again; the “-” will stop blinking, indicating that the digit is set. Then, press the Return key to go back to the Contacts menu.

NOTE: The first digit can only be “0” or “1.”

3.2 Editing the Name

3.2.1 When you see the “-” cursor, press the MENU key. The cursor will begin blinking, and each press of the adjustment key will cycle through the letters A, B, C, ⋯ up to Z. Once you have chosen the desired letter, press the MENU key to confirm; the cursor will stop blinking, indicating that the letter is set.

3.2.2 Press the ▲ and ▼ key again to move the cursor to the next letter position. Repeat the process: press MENU, cycle through the letters until you find the one you want, then press MENU to lock it in. Continue until you have entered the full name.

3.3 Saving the Contact

Once you have finished setting up the new contact, press the Save key. A “Save Successful” message will be displayed, and the contact’s name and number will be added to the Contacts list.

4. Deleting a Contact

4.1 In the Contacts list, select the contact you want to delete.

4.2 Once selected, you will see the option “Delete Contact” in the list. Select this option to delete the contact.

B. Message Function Operation Instructions

1. Message (Menu → Message)

All messages can only receive and send preset content from the quick file. To customize SMS content, you must preset it using the configuration software.

1.1 Inbox

1.1.1 Inbox List (0/20):

A maximum of 20 messages can be stored. Older messages will be overwritten by the latest ones. Press the MENU button once to view a message; messages are displayed from the most recent to the oldest.

1.1.2 Viewing or Deleting Messages:

Press the Return key, then use the Up/Down keys to choose whether to view the SMS content or delete it.

1.1.3 Delete All Messages:

You can also delete all messages in the Inbox.

1.2 Quick Text

1.2.1 Viewing Quick Text:

Press the MENU button to view all preset quick text messages.

1.2.2 Sending Quick Text:

Use the Up/Down keys to select the content you wish to send, then press the MENU button to choose the recipient. After selecting the recipient, press the MENU button again to send the message successfully.

C. Call Log Function Operation Instructions

1. Outgoing Calls (Menu → Call Log)

1.1 Outgoing Call Log (0/20):

The system can store up to 20 outgoing call records. Older entries will be overwritten by newer records. Press the MENU key to view the contact's name, number, and time of call.

1.2 Delete All Records:

You can also delete all outgoing call records.

2. Received Calls

2.1 Received Call Log (0/20):

The system can store up to 20 received call records. Older entries will be overwritten by newer records. Press the MENU key to view the contact's name, number, and time of call.

2.2 Delete All Records:

You can also delete all received call records.

3. Missed Calls

3.1 Missed Call Log (0/20):

The system can store up to 20 missed call records. Older entries will be overwritten by newer records. Press the MENU key to view the contact's name, number, and time of call.

3.2 Delete All Records:

You can also delete all missed call records.

D. Call Log Function Operation Instructions

(Menu → Scan)

1. Scan Switch:

Select to enable or disable the scanning function.

2. Scan List:

Choose a scan list to specify the channel range for scanning.

3. Custom Scan Range:

If you have modified the scan range using the programming software, select the desired scan range from the scan list.

Note: The default factory setting scans all channels, with 10 analog channels and 10 digital channels preset.

E. GROUP Function Operation Instructions

(Menu → GROUP)

1. Dual-Channel Monitoring:

This function enables the radio to monitor two channels simultaneously. One channel is used for PTT (Push-To-Talk) communications, and the other is accessed via the "GROUP" button. These channels are referred to as the PTT channel and the Group channel.

2. Emergency Communications:

When the GROUP channel is set to the same frequency as the PTT channel, it can be used for emergency communications. In this configuration, even if the primary channel is on a different frequency, the GROUP channel remains available for emergency use.

3. Simultaneous Dual-Channel Operation:

When the GROUP channel is set to a different frequency, the radio can quickly operate on two channels simultaneously, enhancing communication flexibility.

4. Disabling the GROUP Function:

When the GROUP channel is set to "None," this function is disabled. In this state, pressing the GROUP button will neither transmit nor receive any calls.

F. Settings Function Operation Instructions

(Menu → Settings → Audio Settings)

1. Audio Settings

The Audio Settings offer both analog and digital modes. In each mode, you can toggle the MIC AGC option on or off.

MIC AGC (MIC Automatic Gain Control):

When enabled, the MIC AGC automatically adjusts the microphone volume based on the speaker's voice level to ensure that the received audio remains within an optimal range. This feature can be disabled if desired.

(Menu → Settings → Radio Settings)

2. Radio Settings

2.1 Transmission(Tx) Power Level:

Switch between high power and low power transmission modes.

2.2 Backlight:

Choose the backlight duration: options include 15, 30, 45, or 60 seconds.

2.3 Brightness:

Adjust the backlight brightness across 9 levels by press ▼ or ▲ key.

2.4 Prompt Tone:

Enable or disable audio cues for receiving, transmitting, and key presses.

2.5 Squelch Level:

Adjust the level of noise suppression. The higher the level, the better the noise suppression effect.

2.6 Language:

Switch the device language. Currently, the available options are Chinese and English.

2.7 Voice Operated Transmitter(VOX):

Adjust the IVOX sensitivity across 5 levels, or disable the IVOX function entirely.

2.8 Time Zone:

Select the correct UTC time based on your country or region.

2.9 Date&Time:

Modify date and time.

Note: The date and time can only be modified when GPS is turned off. If GPS is enabled, the current date and time will automatically be set according to the GPS location.

2.10 Lone Worker:

(This feature is under software discussion and is TBD.)

3. Device Information (Menu → Settings → Device Information)

View relevant details about your device, including:

Extension number	DMR version
Name	Hardware version
Model name	Software version
Frequency	Programming date

Notes
ID: Extension Number
Freq: Frequency
DMR: DMR Version
HW: Hardware Version
SW: Software Version
D: Programming Date

G. Positioning Function Operation Instructions

(Menu → Positioning)

1. Position Sending

This radio is equipped with a GPS positioning chip and antenna, allowing it to send GPS location data during communication. Users can select one of the following options based on their needs:

1.1 Off:

Disables the position-sending function; no location data will be transmitted.

1.2 PTT:
Sends location data once every time the PTT button is pressed.

1.3 Every 30 seconds:
Sends location data to the contact every 30 seconds.

1.4 Every 1 minute:
Sends location data to the contact every 1 minute.

1.5 Every 3 minutes:
Sends location data to the contact every 3 minutes.

1.6 Every 5 minutes:
Sends location data to the contact every 5 minutes.

1.7 Every 15 minutes:
Sends location data to the contact every 15 minutes.

1.8 Every 30 minutes:
Sends location data to the contact every 30 minutes.

1.9 Every 60 minutes:
Sends location data to the contact every 60 minutes.

2. Position Display

Displays the device's current time, longitude, latitude, altitude, and heading angle.

Note: Ensure that the correct UTC time zone is set in the radio settings; otherwise, the displayed time may be inaccurate.

3. Azimuth Map Display

This feature provides a visual representation of the device’s orientation relative to the North and South Poles, functioning as a compass.

4. Azimuth Calibration

To calibrate the position coordinates, slowly rotate the device horizontally twice. The system will automatically adjust the positioning.

7. Extension of Battery Life

1) The performance of the battery will be reduced when the temperature drops below 0℃. In cold weather, it is advised to spare another battery for emergency. Please do not dispose the cold batteries that can not work at low temperature but may be usable at room temperature

2) It may affect the normal use or charge of the battery, if it is covered with dust. Please clean the battery with dry cloth before loading or charging it

Knowledge about Battery Storage

1) Since the battery will self-discharge, please do charge it fully before putting it aside so as to prevent damages caused by over discharge.

2) Please take out the battery after storage for some time to fill it, in order to avoid the reduction of the battery capacity resulting from over discharge. It is proposed for lithium-ion /lithium-polymer batteries to be filed in every 6 months of storage.

3) Please pay attention to the humidity of the battery storage environment. Batteries are supposed to be stored in the environment of room temperature, cool and dry air, to reduce the self-discharge.

8. User Security Information

Handheld transceiver product safety and RF radiation

Warning:

Warning: Please read the manual carefully before using. lt contains the important safety using operation instruction, and RF energy and control information contributing to meet the RF radiation limitation requirement of national and international standards. information provided in this manual may replace the general safety information of the editions before.

Handheld Transceiver Safety Guidelines and Instruction

To control the transceiver radiation, ensure to meet the general or non-controlled environment radiation limitation standard please operate following below procedures. Press PTT key when talking: and release PTT key when receiving.

Because measured RF energy radiation will be generated when transmitting, so transmitting time should not exceed 50% of the using time.

Place the transceiver vertically on the front, make sure the microphone (and other parts including the antenna) is no less than 1 to 2inches (i.e. 2.5 to 5cm) away from your lips when transmitting signals. It is very important to keep the correct distance from the transceiver, since the farther away the less radiation.

If you carry the portable transceiver around your body, please put into SAMCOM specially designed fixture, leather, box or other annex. Only use the certified and provision antenna, battery and accessories or other alternatives by SAMCOM. If not, the body by radiation will be out of range of general or non-controlled environment RF radiation limitation that required by Radio Authority. Ministry of Information industry.

If you do not use any accessories, not place the transceiver on the front specified location, please make sure that it is no less than.

1 inch (about 2.5cm) away from your body when transmitting signals. It is very important to keep the correct distance from the transceiver, since the farther the less radiation.

Attention:

This radio complies with IEEE and ICNIRP exposure limits for Occupational / Controlled RF exposure environment at operating duty factors of up to 50% and is authorized by the FCC for Occupational / Controlled use only. An appropriate warning label is affixed to all units. In order to comply with RF exposure requirements, a minimum distance of 2.5 cm must be maintained when held-to-face, and body-worn operations are restricted to the approved original accessories (belt clip), a minimum distance of 0 cm. Do not use this device when antenna shows obvious damages.

This product is compliance to FCC RF Exposure requirements and refers to FCC website https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm search for FCC ID: 2BPIZ-FPCN50A to gain further information include SAR Values.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.