

### **Fujian Information Bureau (Radio Management Office) Remind:**

The unit or individual who uses and the radio device must go to the related radio authority to apply for the formalities, after getting radio license can be allowed to use the radio. Set the radio station unauthorizedly, interfere radio service, work does not based on approved project and violate radio management rules, the radio regulatory agency will make an administrative punishment. The serious radio violations maybe violate the item 288 of Criminal Law or item 28 of Security Administration Punishment Act, who will be sentenced to imprisonment of not more than 3 years, joint or single fine、detained or controlled by Public Security Organs.

#### **Warning**

- » Please turn off the transceiver in explosive environment (e.g. Coal gas、Dust、Steam etc.)
- » Please turn off the transceiver while refueling or parking at the gas station.

## Precautions

Radios are high-quality with excellent design and advanced technology. The following suggestions will help user fulfil the obligation of warranty, and realize the security of using the transceiver.

1. Please put the transceiver and all accessories away from the children.
2. Please do not disassemble the transceiver as non-professional user maybe damage the transceiver.
3. Please use the company attached batterypack and charger to avoid damaging the radio.
4. Please use the company attached antenna to avoid shortening communication distance.
5. Please do not put the transceiver near to the heating appliance or expose it in the sun for a long time.
6. Please do not put the transceiver in extremely dusty, moist, watery or unstable place.
7. Please do not wash the radio with strong chemicals or strong lotion.
8. Please do not transmit before installing the antenna.
9. Turn off the power supply immediately if the transceiver emits an unusual smell or smokes, then take out the battery or batterypack and notify Seller.

## NOTE

- » All the above suggestions are used for radios and accessories. Please contact with dealer once the radios and accessories cannot be used.
- » Once the accessories are not produced by company, the radio security and operation will not be warranted.

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## Function operation and description

### Frequency Step (STEP) --- menu 1

Function description: Set the VFO frequency to adjust the step value.

Options: 2.5K / 5K / 6.25K / 8.33K / 10K / 12.5K / 25K / 50K / 100K

Default value: 12.5K

### Output Power (TX-POWER) --- menu 2

Function description: Set the output power level of the walkie-talkie.

Options: H / L

Default value: H

### Battery Save (BAT-SAVE) --- menu 3

Function description: Set to turn off or turn on the power saving function.

Options: OFF / ON

Default value: ON

### Voice control level (VOX) --- menu 4

Function description: The use of VOX does not require you to press the [PTT] key every time you transmit.

Once the VOX circuit detects that you are speaking into the microphone, the walkie-talkie will

Automatically enter the transmitting state, please select the VOX gain when using it. In order to ensure the continuity of VOX detection, you can also set the VOX control delay in menu 23.

Options: OFF / 1-9 level

Default value: OFF

### Bandwidth Settings (W-N) --- menu 5

Function description: Set the walkie-talkie to work in wide (25K) / narrow (12.5K) band mode.

Options: W-N

Default value: W

### Screen saver Time (ABR) --- menu 6

Function description: Set the screen backlight on time.

Options: Off/ALWAY ON / 1-30 seconds

Default value: 10 seconds

### Beep (Beep) --- menu 7

Function description: Set the intercom operation prompt, operation error or malfunction prompt sound.

Options: OFF / ON

Default value: ON

### Transmit Timeout Timer (TOT) --- menu 8

Function description: Set the time limit for each transmission of the walkie-talkie.



## Function operation and description

Options: Off / 15-900 seconds, 15 seconds step

Default value: 60 seconds

### **Receive DCS Setting (RX-DCS) -- menu 9**

Function description: Set the walkie-talkie to receive DCS.

Options: OFF / 105 groups of standard DCS / non-standard DCS (001-777)

**Note:** Non-standard sub-audio can be programming through the programming software. The positive code and negative code of digital sub-tone can be switched through side key PF 2 after entering the DCS setting menu.

### **Receive CTCSS Setting (RX-CTCSS) -- menu 10**

Function description: Set the Two way radio to receive CTCSS.

Options: OFF / 50 groups of standard analog tones / non-standard CTCSS code (65. 0-260. 0)

**Note:** Non-standard CTCSS code can be written through the programming software.

### **Transmit DCS Setting (TX-DCS) -- menu 11**

Function description: Set the walkie-talkie to receive digital sub-audio.

Options: OFF / 105 groups of standard DCS/non-standard DCS (001-777)

**Note:** Non-standard sub-audio can be set through the programming software. The positive code and negative code of DCS can be switched through side key PF 2 after entering the DCS setting menu.

### **Transmit CTCSS Setting (TX-CTCSS) -- menu 12**

Function description: Set the walkie-talkie to receive analog sub-audio.

Options: OFF / 50 groups of standard analog tones / non-standard analog tones (65. 0-260. 0)

**Note:** Non-standard CTCSS can be written through the programming software.

### **Squelch Level (SOL) -- menu 13**

Function description: Set the correct squelch level to reduce unnecessary signal interference. The higher the level, the stronger the signal needs to be to be received.

Options: 0-9 levels

Default value: 5

### **Time Over Alarm (TOA) -- menu 14**

Function description: Set the pre-warning before the radio transmission timeout, at this time the transmission indicator flashes.

Options: OFF / 1-10 seconds, 1 second step

Default value: OFF

### **Roger (ROGER) -- menu 15**

Function description: Set the prompt tone for the walkie-talkie to press PTT to transmit and release PTT to end transmission.

## Function operation and description

Options: OFF / BOT (prompt sound when PTT is pressed) / EOT (prompt sound when PTT is released) / BOTH (both when PTT is pressed and released Beep)

Default value: OFF

### Voice Prompt (VOICE) --- menu 16

Function description: Set the voice prompt for the operation of the two-way radio.

Options: OFF / CHINESE / ENGLISH

Default value: ENGLISH

### Busy Channel Lockout (BCL) --- menu 17

Function description: Set the walkie-talkie to detect whether the channel or frequency is occupied. After enabling it, it can prevent conflicts with other communicating radio stations.

Options: OFF / ON

Default value: OFF

### Scan Mode (SC-REV) --- menu 18

Function description: Set the scanning mode of the walkie-talkie.

Options: TO / SE / CO

TO: After scanning the carrier signal, continue scanning without doing any operation within 5 seconds.

SE: Stop scanning when the carrier signal is scanned.

CO: Stop scanning when the carrier signal is scanned, and continue scanning after the carrier signal disappears for 5 seconds.

Default value: TO

### Mute Mode (SP-MUTE) --- menu 19

Function description: Set the mute mode of the walkie-talkie. It is used to turn on the local speaker in the state of receiving the carrier signal.

Options: QT / QT \* DT / QT + DT

QT: As long as the matching sub-audio carrier signal can turn on the speaker.

QT \* DT: The speaker can be turned on as long as one of the carrier signals of the QT condition or dual tone signaling is met.

QT + DT: Only the carrier signal that meets the QT condition and its matching dual-tone signaling at the same time can turn on the speaker.

Default value: QT

### DTMF Sidetone (DTMF-ST) --- menu 20

Function description: Set whether the speaker turns on the dual-tone sound when the two-way radio sends the ID code or dual-tone encoding.

Options: OFF / DT-ST / ANI-ST / DT+ANI

Default value: DT+ANI

## Function operation and description

### **PTT ID (PTT-ID) -- menu 21**

Function description: Set the way to send the ID code of the walkie-talkie.

Options: OFF / BOT / EOT / BOTH

BOT: The ID code is sent when PTT is pressed.

EOT: ID code is sent when PTT is released.

BOTH: ID code is sent when PTT is pressed and released.

Default value: OFF

### **ANI ID Code Edit (ANI-EDIT) -- menu 22**

Function description: set and edit the ID code of the walkie-talkie

Options: 0-9

Default value: 101

Identity code editing method: 1. Edit through supporting programming software. 2. Intercom operation keyboard editing.

Intercom operation keyboard editing: When the intercom is in standby mode, press the MENU button to enter the menu, and press the up / down button to select menu 23

"ID-EDIT" , press the MENU button to enter the ID code editing, press the up / down button to select 0-9 digits, press the side button 2 to select the previous digit, press

Side key 3 to select the next digit to edit, and press the MENU key to confirm the identity code editing.

### **VOX Delay (VOX-DLY) --- menu 23**

Function description: Set the delay time to turn off the PTT after the voice control is activated when the voice control is turned on.

Options: OFF / 1-5, 1 second per level.

Default value: 1

### **Transmitting ANI ID Code delay (PTT-DLY) -- menu 24**

Function description: Set the length of time that the walkie-talkie presses PTT to delay sending the ID code.

Options: 100MS-3000MS, 100 milliseconds per level.

Default value: 1000MS

### **Ring Time (RING) -- menu 25**

Function description: Set the ringing duration before turning on the speaker when the two-way radio is called.

Options: OFF / 1-10S, 1 second per level.

Default value: 5

### **Offset Frequency (OFFSET) -- menu 26**

Function description: Set the frequency difference of the walkie-talkie.

Options: 000. 00000-999. 99996

Default value: 000, 00000

## Function operation and description

### Frequency Shift Direction (SFT-D) -- menu 27

Function description: Set the radio frequency to be higher than (+) or lower than (1) the receiving frequency.

Options: OFF / + / -

Default value: OFF

### Working Mode (WORK-MODE) -- menu 28

Function description: Switch the work mode of radio

Options: FREQ / CH / CHFREQ / NAME

Default value: FREQ

### Channel Name (CH-NAME) -- menu 29

Function description: Set the channel name of the walkie-talkie.

Options: 26 words, 0-9 numbers, special characters.

Default value: no channel name

Channel name editing method: 1. Edit through supporting programming software. 2. Two-way Radio operation keyboard editing.

Two-way Radio operation keyboard editing: When the intercom is in standby mode, press the MENU button to enter the menu, and press the up / down button to select the 26 menu

"CH-NAME" , press the MENU key to enter the channel name editing, press the up / down keys to cycle through the 26 words, 0-9 numbers, special Character, press the side key 2 to select the previous digit to edit, press the side key 3 to select the next digit to edit, and press the MENU button to confirm the editing of the channel name.

### Channel Memory (CH-MEM) -- menu 30

Function description: Set and store the frequency parameters required by the walkie-talkie in the channels.

Options: CH001-CH400

Default value: CH001

Storage channel editing method: 1. Edit through supporting programming software. 2. Two-way Radio operation keyboard editing.

Two-way operation keyboard editing: When the intercom is in standby mode, press the MENU button to enter the menu, and press the up / down button to select the 29 menu

"MEM-CH" , press the MENU button to enter the channel memory editing, press the up/down button to select the channel number to be stored, and press the MENU button to confirm

Editing of channel storage.

**Note:** When the current channel selected by pressing the up and down keys is an empty channel, N will be displayed behind.



## Function operation and description

### Delete Channel (CH-DELETE) — menu 31

Function description: Set to delete unnecessary channels of the walkie-talkie.

Options: CH001-CH400

Default value: CH001

Two-way radio operation keyboard editing: when the intercom is in standby mode, press the MENU button to enter the menu, press the up / down button to select 30 menu

"DEL-CH" , press the MENU key to enter the channel delete editing, press the up / down key to select the channel number to be deleted, and press the MENU key to confirm the message

Read deleted edits.

**Note:** When the current channel selected by pressing the up and down keys is an empty channel, N will be displayed behind.

### Priority Scan setting (PRICH-SET) — menu 32

Function description: Set a channel as the priority channel during scanning.

Options: CH001-CH400

Default value: CH001

Two-way radio operation keyboard editing: When the intercom is in standby mode, press the MENU button to enter the menu, and press the up / down button to select 31 menu

"PR-CH" , press the MENU button to enter the priority channel editing, press the up / down button to

select the desired priority channel, press the MENU button to confirm the priority channel

Edit the channel first.

**Note:** When the current channel selected by pressing the up and down keys is an empty channel, N will be displayed behind.

### Priority Scan switch (PRICH-SW) — menu 33

Function description: Set the priority channel function of the walkie-talkie when scanning is turned on or off.

Options: OFF / ON / Rx Close (Turn off priority when receiving)

Default value: OFF

### Single tone setting (ALERT) — menu 34

Function description: Set the single tone pulse frequency required by the walkie-talkie.

Options: 1000 / 1450 / 1750 / 2100 /

Default value: 1750

### QT Swith (QT- SW) --- menu 35

Function description: CTCSS / DCS matching needs to be judged during scanning

Optional: OFF / ON

Default value: OFF

## Function operation and description

**KEY + PTT:** Lock the keys and side keys PF1, PF2 and PTT keys.

**KEY + ENC:** Lock buttons and channel encoder.

**ALL:** All locked.

Default value: KEY

### **Call code (CALLCODE) — menu 42**

Function description: Set the selective calling group corresponding to the DTMF code when the selective calling function defined by the side key is pressed under the current channel or frequency of the walkie-talkie.

Options: 1-20

Default value: 1

### **Second (SECOND) — menu 43**

Function description: Set the on or off of the stopwatch function of the walkie-talkie.

Options: ON / OFF

Default value: OFF

Short press the EXIT key to turn on / off the stopwatch timing.

### **Side Key 1 Short Press (PF1-SHORT) — menu 44**

Function description: Setting defines the side key programming function of the walkie-talkie.

Options: OFF / Monitor (MONI) / scan (SCAN) / backlight (BACK-LT) / VOX switch (VOX) / power switch (TXPOW) / selective call (CALL) / Offline (TALK-A) / Lighting (FLASHLT)

Default value: Backlight (BACK-LT)

### **Side Key 1 Long Press (PF1-LONG) — menu 45**

Function description: Setting defines the side key programming function of the walkie-talkie.

Options: OFF / Monitor (MONI) / scan (SCAN) / backlight (BACK-LT) / VOX switch (VOX) / power switch (TXPOW) / selective call (CALL) / Offline (TALK-A) / Lighting (FLASHLT)

Default value: Power switch (TXPOW)

### **Side Key 2 Short Press (PF2-SHORT) — menu 46**

Function description: Setting defines the side key programming function of the walkie-talkie.

Options: OFF / Monitor (MONI) / scan (SCAN) / backlight (BACK-LT) / VOX switch (VOX) / power switch (TXPOW) / selective call (CALL) / Offline (TALK-A) / Lighting (FLASHLT)

Default value: Scan (SCAN)

### **Side Key 2 Long Press (PF2-LONG) — menu 47**

Options: OFF / Monitor (MONI) / scan (SCAN) / backlight (BACK-LT) / VOX switch (VOX) / power switch (TXPOW) / selective call (CALL) / Offline (TALK-A) / Lighting (FLASHLT)

Default value: Monitor (MONI)

## Function operation and description

### **Top Key Long Press (TOP-DEF) --- menu 48**

Function description: Settings define the top key programming function of the walkie-talkie.

Options: OFF / emergency alarm (ALARM) / site alarm (SOS)

Default value: emergency alarm (ALARM)

**Notice:** Short press top key power on the flashlight (FLASHLT).

### **Repeater Receipt Tone (RPT-TONE) --- menu 49**

Transfer Receipt Tone (RPT-RCT) -Menu 46 Function Description: Set to turn on or off the offline confirmation tone when the walkie-talkie receives the signal from the relay station.

Options: ON / OFF

Default value: OFF

### **Voltage (VOLTAGE) -- menu 50**

Function description: Check the current battery voltage.

### **Scramble setting (SCRAMBLE) -- menu 51**

Function description: select the intercom call encryption function.

Options: OFF / 1-8 group default value: OFF

### **RESET (RESET) --- menu 52**

Function description: Select the reset method.

Options: VFO / ALL

VFO: All menu are reset to factory defaults.

ALL: Clear all channels and menus and restore to factory defaults.

### **Amplitude Modulation Switch (AM MODE) -- menu 53**

Function description: Choose to turn on / off the AM function.

Available options: OFF / AM RX / AM \* RT.

OFF: AM off

AM RX: AM receiving on

AM \* RT: AM receiving and transmitting on

**Note:** When the AM function is turned on, some menu functions will be automatically blocked and cannot be used. Such as: mute, dual tone, single tone, scramble, alarm and other related functions will be automatically closed, and the corresponding menu prohibits setting.

## Announcement

Endeavors to achieve the accuracy and completeness of this manual, but it is still not perfect for any possible omissions or printing errors. ALL the above is subject to be updated without prior notice.

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