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# Caring tips

Please read the following security information so you can know how to use the transceiver safely.

- Please keep the radio and accessories in where the children can't touch them.
- 2. Please do not disassembly radio, it will cause radio broken when non professional staff handle it.
- 3. Please use the standard battery and charger, avoid to damage the radio.
- 4. Please use the matching antenna, avoid to shorten the communication distance.
- 5. Do not keep the radio under the sunshine with long time, or keep it into the superheat place.
- 6. Do not keep the radio into where is full with the dust and damp.
- 7. Do not use strong chemical products, cleaning agents or strong Lotion to cleaning the radio.
- 8. Please don't transmitting without installing it's antenna.
- If it find that radio have the peculiar smell or smoke, please turn off the supply power of radio promptly, and contact with supplier about this case.
- 10. Please don't connect the battery terminal or put the battery in the fire.

#### Notice

All above mention advise are applied to your radio and it's accessories, if they still can't working normally, please promptly contact with supplier about this case.

If using those parts and accessories those are not producing and not selling by our company, we can't promise that the safety and operation of radio.

# Using instructions

Install/Remove battery pack

Install: Please put the battery pack align with radio backside, then push it with up towards direction, until release plus of radio base is locked.

Removing the battery pack, push it with down towards direction, until release plus of radio base unlocked.

2. Charge steps

The charger plug into the mains of 220V or 110V power outlet, the charger indicator green light flashing, the battery pack or the radio with battery pack insert into the charger card slot.

The charger red light flashing to start charging. Charging then the charger green light flashing, charging end.

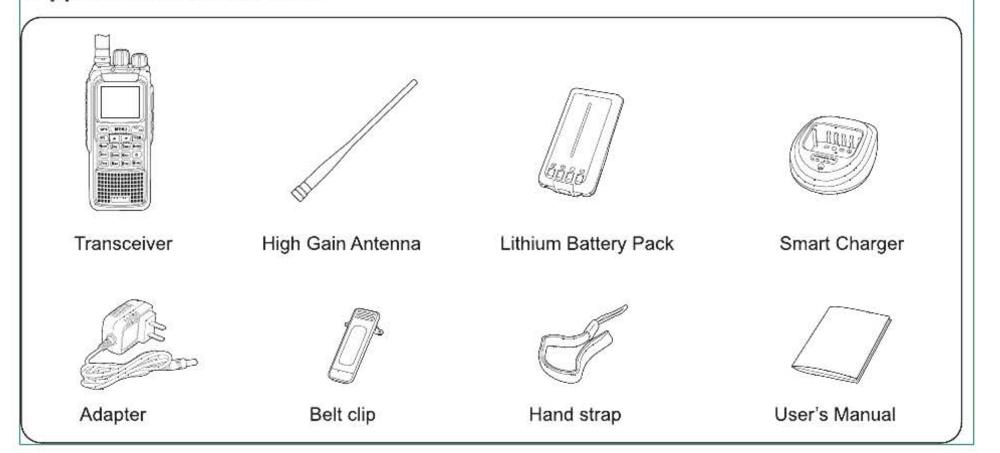
- Install Antenna Install the antenna into the radio connector, holding the antenna base and turning it clockwise until secure.
- Install/Remove belt clip

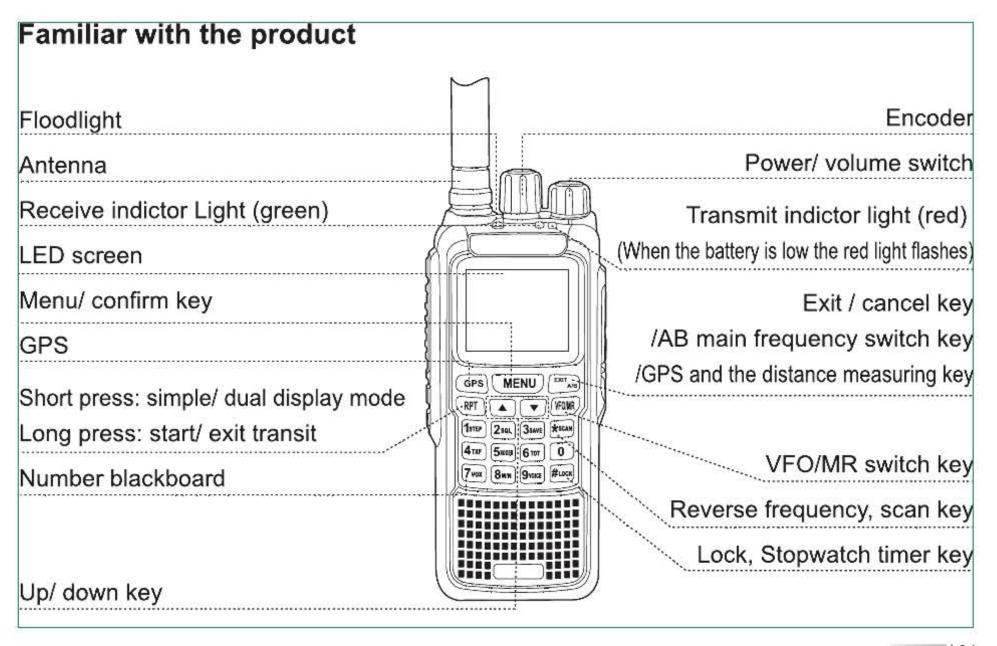
If necessary install the belt clip at the rear of the battery compartment cover.

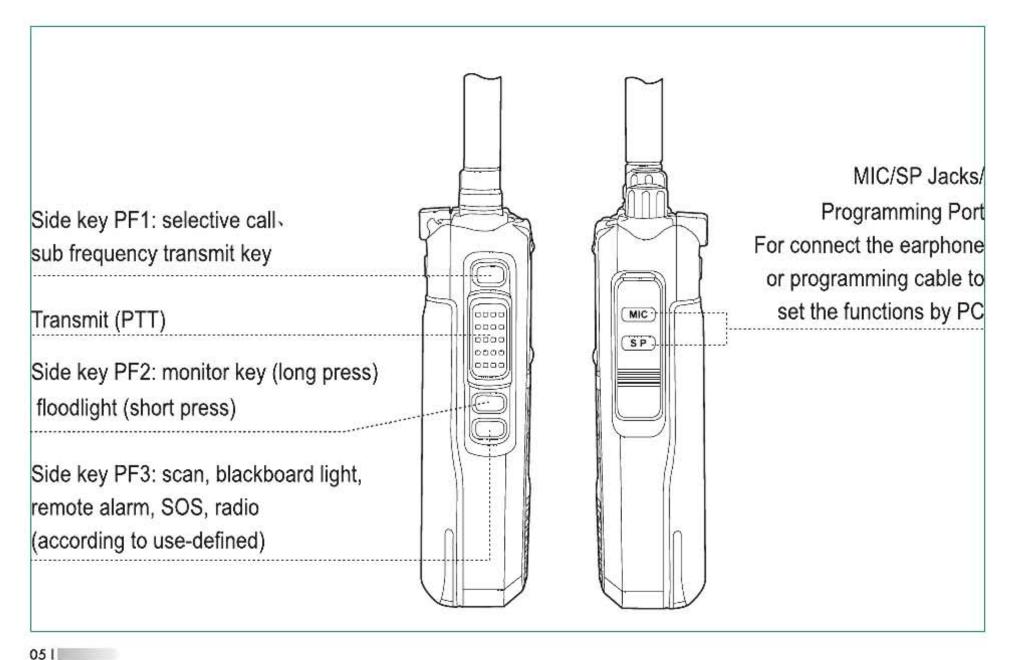
# Unpacking and Checking the Equipment

Please take out the walkie talkie carefully from the box. We recommend that you identify the items in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, please notify your dealer.

# Supplied accessories table







### Functional introduction

- Description of function
- 1. GPS function
- 2. NIGHT mode
- 3. Backlight mode
- 4. Duplex different/ same band transfer function
- 5. Duplex working mode ( A zone transmit, B zone receive )
- 6. Dual receive

AB zone duplex working ( in the same or different frequency, AB zone all can receive contemporary )

- 7. Super colorful LCD display
- 8. Dual display

Large screen dual band display, two completely operation system

- 9. Offset frequency setting and frequency direction setting
- 10. Duplex repeater UHF to VHF or VHF to UHF
- 11. 999 memory channel
- 12. Output power 10W
- 13. CTCSS /DCS, CTCSS /DCS scan function
- 14. VOX function

- 15. Definition function of Multi side key
- Caller ID display
- 17. Main caller ID display
- 18. DTMF
- 19. All Calls, Group Calls and Selective Calls
- 20. SOS function
- 21. Priority Scan Function
- 22. Remote emergency alarm
- 23. Wide/Narrow bandwidth Selection (12.5KHZ/25KHZ)
- 24.SingleTone Pulse Frequency: 2100Hz/1750Hz/1000Hz/1450Hz (signaling for activating repeater)
- 25. Reverse Frequency
- 26. Stopwatch function

#### 2. Variety working modes of the radio

- (1) Working models.
- (2) Cross section directional transfer mode of work or dual transit work mode, the same frequency dual transfer function.
  Note: the working mode is set by RPT key.
- (—) Walkie talkie display LCD screen is divided into A, B two zones, respectively, to display the working information of the two channels. The top right of the main channel will show [MAIN], this symbol is very important, all of the following operations and instructions for the symbol of the channel, there is no symbol of the channel, we call it the sub frequency.
- (=) The parameters of the two working channels of the interphone can be respectively set, and when the channel set to be set is set as the main frequency, the setting is set up.
- (≅) Work in the cross directional radio relay, cross section, two-way transit mode, some functions will prohibit the placement with walkie talkie.

#### 3 Basic operation

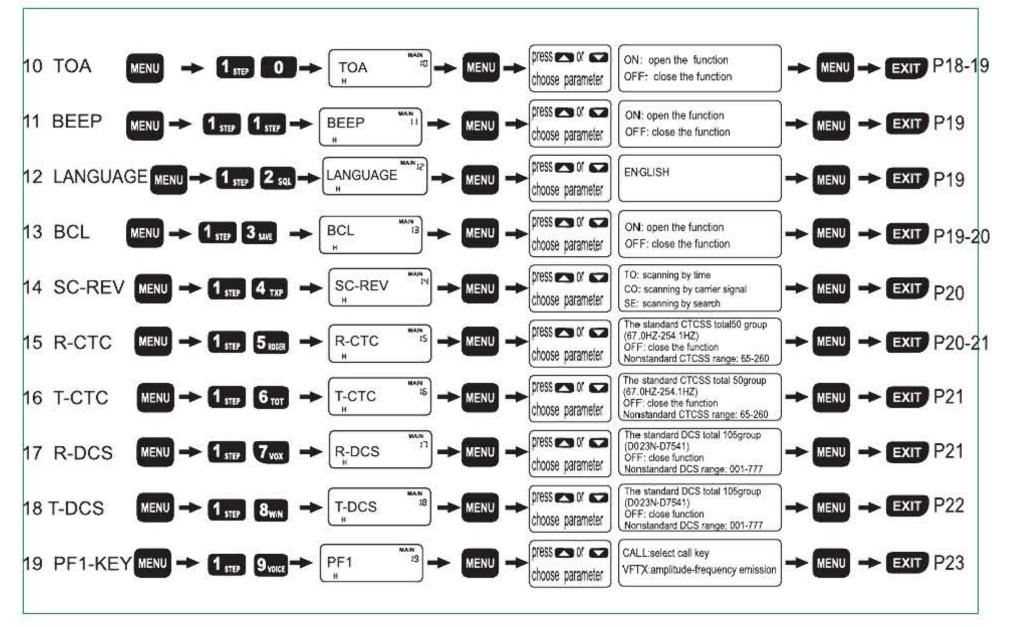
1. Quick search function

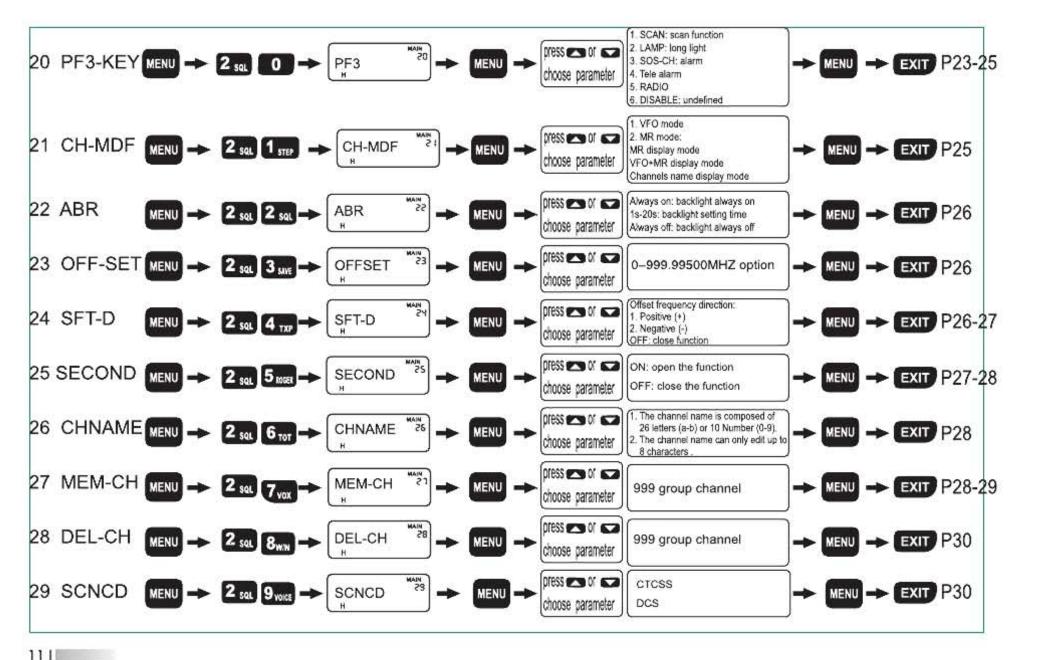
Press [UP] or [DOWN] to set function or parameter, Long press [UP] or [DOWN] to quick search function.

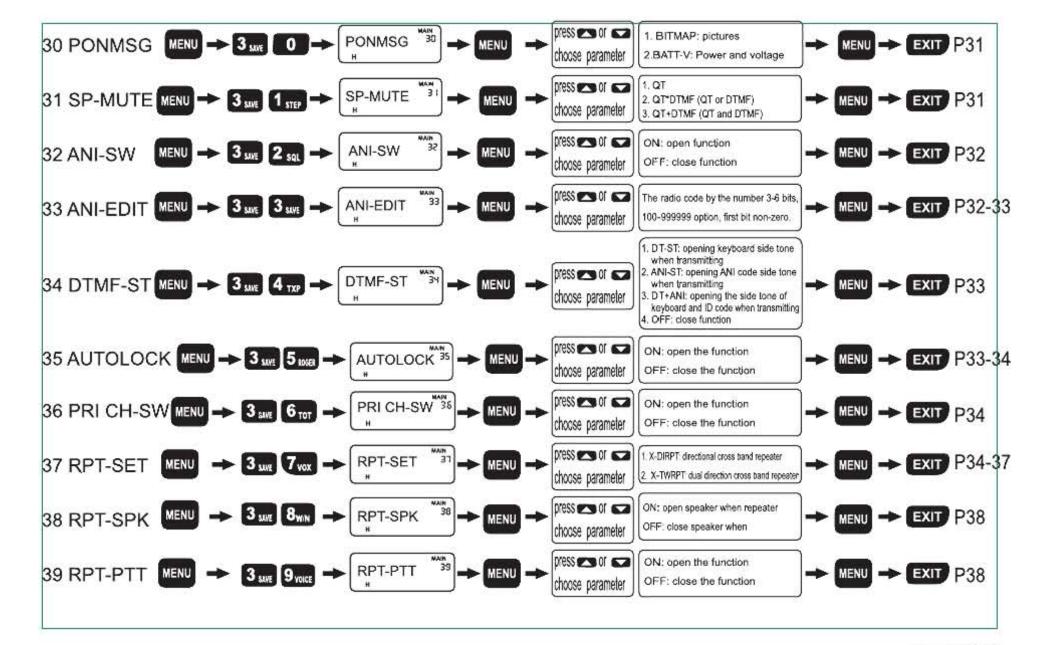
- 2. DTMF
- Reverse frequency function

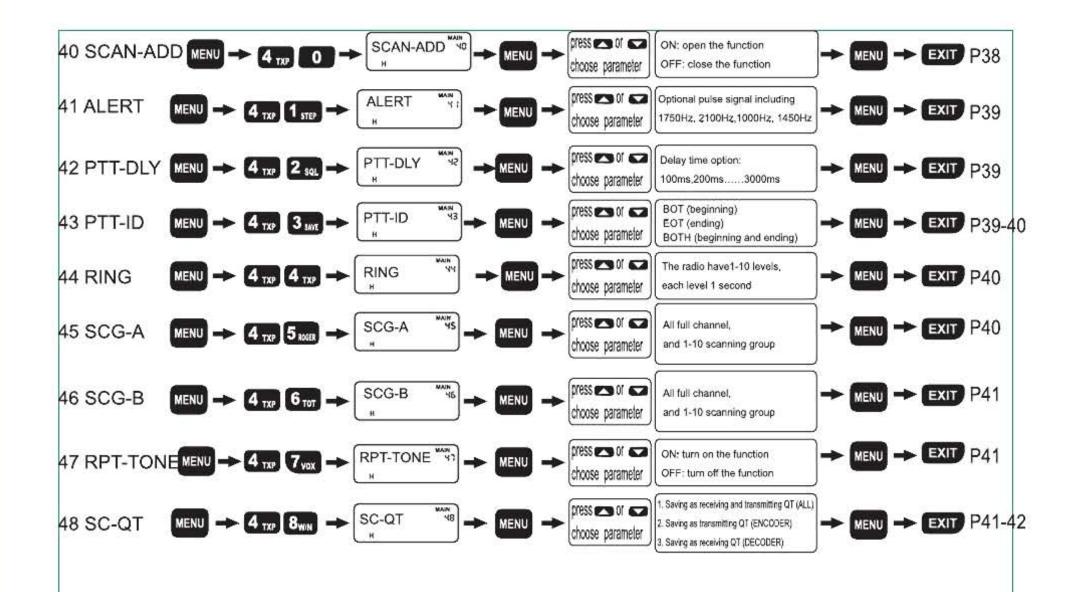
When using this function TX and RX frequency will be exchanged, with CTCSS /DCS code will be exchanged; the Operating: Under of standby states, press [\*SCAN] to open this function, then press [\*SCAN] again to turn off.

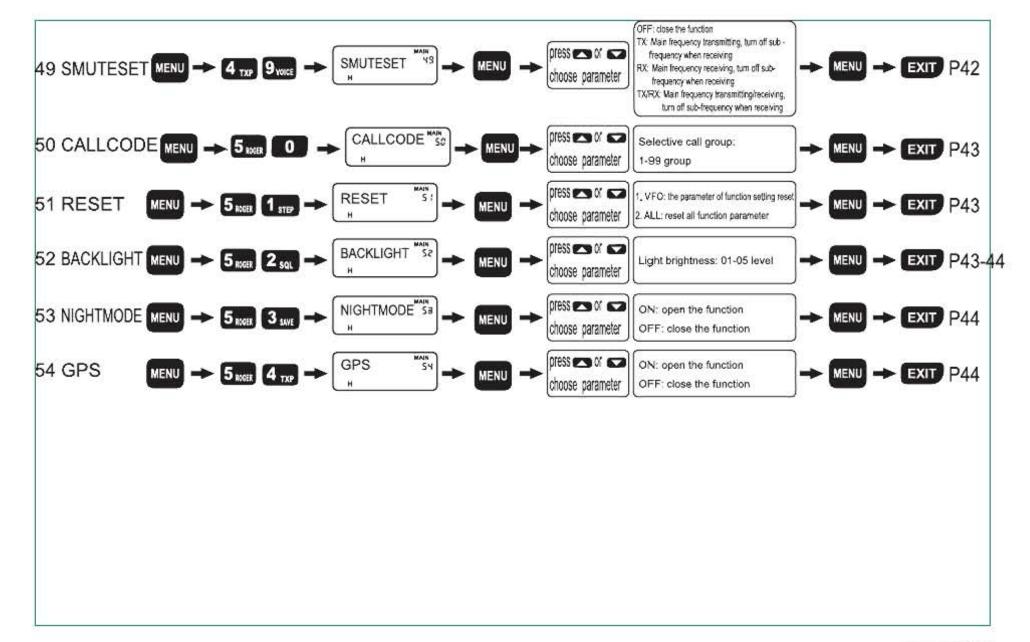
#### Functional menu process Return to Page standby Function No. Name Enter function Screen display Optional parameters Confirm Have 7 type Frequency step, STEP → MENU → EXIT P15 → 1<sub>step</sub> → STEP 25K, 50K, 100K; press or 2 SQL-LE → MENU → EXIT P15-16 ON: open the function 3 SAVE → MENU → EXIT P16 4 TXP → MENU → EXIT P16 $\rightarrow$ 4 TXP $\rightarrow$ TXP LOW: low power 5 ROGER → MENU → EXIT P16-17 OFF,BOT,EOT,BOTH press CT W Have 60 grade of times 6 TOT → 6<sub>101</sub> → TOT → MENU → EXIT P17 press or 🕶 Have the grades "1~10" 7 VOX → MENU → EXIT P17 press or WIDE: wide bandwidth (25K) → MENU → EXIT P18 8 W/N → 8<sub>W/N</sub> → W/N DIESS OF ON: open the function 9 VOICE → MENU → EXIT P18











# Functional operation introduction

Frequency step (STEP) --- Menu 1

In the standby, Press [MENU]+[1 STEP], LCD display: STEP

Press [MENU], then Press [UP]/[DOWN] to select the freq step, and press [MENU] to confirm, final press [EXIT] back to standby.

# Tips: 🛕

>> The radio have 7 type Freq step, including 5K, 6.25K, 10K, 12.5K, 25K, 50K, 100K.

### SQL level (SQL-le)---Menu 2

The SQL level selection is actual that Open this function or close this function when signal up to what is level. When open this function and set up in the same signaling ,the speaker will issue the voice; if select higher level of this function will cause the weak signal so as to not receive very well; if select lower level of this function, will cause the disturb of noise and other signal.

In the standby, press [MENU]+ [2 SQL]. LCD Display: SQL

Press [MENU], then Press [UP]/[DOWN] to select the SQL level, and press [MENU] to confirm, final press [EXIT] back to standby.

# Tips: 🔨

>> The radio have level "0~9" to select, selecting "0" will keep this function closing, the level "1~9", the level higher and the function higher.

### Power save mode (SAVE)---Menu 3

In order to reduce battery consume, This function will be shut down the receiver circuit of radio for some time, then open for a moment to checking the received signal.

In the standby, press [MENU]+[3 SAVE]. LCD Display: SAVE

Press [MENU], then Press [UP]/[DOWN] to select ON(open function )/OFF(close function), and press [MENU] to confirm, final press [EXIT] back to standby states.

### Power Level (TXP)---Menu 4

Under the standby states, press [MENU]+[4 TXP]. LCD Display:

Press [MENU], then Press [UP]/[DOWN] to select level, and press [MENU] to confirm, final press[EXIT] back to standby states.

The radio have 3 power level: HIGH/MEDIUM/LOW

## Transmitting prompt voice (ROGER)---Menu 5

In the standby, press [MENU]+[5 ROGER]. LCD Display: ROGER \*\*

Press [MENU], then Press [UP]/[DOWN] to select the prompt mode, and press [MENU] to confirm, final press [EXIT] back to standby states.

The radio have 4 type prompt mode of Transmitting prompt voice: BOT, EOT, BOTH, OFF.

### Transmitter time-out timer (TOT)---Menu 6

In the standby, press [MENU]+[6 TOT], LCD Display: TOT

Press [MENU], then Press[UP]/[DOWN] to select the times, and press [MENU] to confirm, final press [EXIT] back to standby.

The radio have total 60 grade of times, From 15s to 900s, 15s increment per level.

### VOX function (VOX)---Menu 7

In the standby, press [MENU]+[7 VOX], LCD Display: vox

Press [MENU], then Press [UP]/[DOWN] to select the VOX grade, and press [MENU] to confirm, final press [EXIT] back to standby states.

The radio have the grades "1~10" of VOX function. OFF: turn off function.

# Tips: 🔬

- >> VOX Function open higher level grade, the used sound will be higher.
- >> It can't open this function under the scanning states or FM states.

### Wide/Narrow Band setting (W/N)---Menu 8

In the standby, press [MENU]+[8 W/N], LCD Display: W/N

Press [MENU], then Press [ UP]/[DOWN] to select the bandwidth, and press [MENU] to confirm, final press [ EXIT] back to standby.

The radio have 2 type of bandwidth, WIDE: Wide bandwidth(25K) and NARR: narrow bandwidth(12.5K).

### Operation prompt voice (VOICE)---Menu 9

In standby states, press [MENU]+[9 VOICE], LCD Display: VOICE

Press [MENU], then press [UP]/[DOWN] to select the prompt mode, and press [MENU] to confirm, final press [EXIT] back to standby.

The radio have 2 type prompt mode: ON (open function)/OFF( close function)

# Tips: 🔬

>> If want to turn off all operation prompt voice, it must be turn of Menu 9 operation prompt voice setting (VOICS) and Menu11 beep prompt setting (BEEP)

#### Transmit overtime alarm (TOA) ---MENU 10

In standby, press [MENU]+[1 STEP][0DW], screen display:

Press [MENU] enter, press [UP]/[DOWN] choose time, then press [MENU] confirm, final press [EXIT] back to standby.

Transmit overtime alarm have 10 seconds, total is 10 level, each level 1 second. Off: close the over time alarm.

# Tips: <u>∧</u>

>> If transmit time continuous exceed "overtime alarm", error voice then stop transmit.

### Beep (BEEP)---Menu 11

In the standby states, press [1 STEP][1 STEP], LCD Display:

Press [MENU], then Press [UP]/[DOWN] to select ON/OFF, and press [MENU]to confirm, final press [EXIT] back to standby.

### Screen English(LANGUAGE)---Menu 12

In the standby, press [MENU]+[1 STEP][2 SQL], LCD Display: LANGUAGE

Press [MENU], then Press [UP]/[DOWN] to select language, and press [MENU]to confirm, final press [EXIT] back to standby.

The radio only 1 language display: ENGLISH

# Busy channel lock-out (BCL)---Menu 13

# Tips:

>> when radio working under the mode of cross band repeater and transmit, this is function is prohibit.

### Scan mode (SC-REV) ---Menu 14

In the standby, press [MENU]+[1 STEP][4 TXP], LCD Display: SC-REV

Press [MENU], then press [UP]/[DOWN] to select scan mode, and press [MENU] to confirm, final press [EXIT] back to standby.

To: scanning the carrier signal, and not any operation within 5 seconds will continue to scan.

CO: scanning the carrier signal will stop scanning, carrier signal will disappear after 3 seconds then continue to scan.

SE: scanning the carrier signal will stop scanning.

# Tips: 🛕

>> Press [\*SCAN] with 2 second, then can enter into scanning states.

# Receiving CTCSS(R-CTC) --- Menu 15

In the standby, press [MENU]+[1 STEP][5 ROGER], LCD Display: R-CTC

Press [MENU], then press [UP]/[DOWN] to select CTCSS, and press [MENU] to confirm, final press [EXIT] back to standby.

The standard CTCSS total 50 group, the range of CTCSS: 67.0-254.1Hz. OFF: turn off function.

The range of non-standard CTCSS: 65.0-260.0HZ.

### Transmit CTCSS(T-CTC)---Menu 16

Under the standby states, press[MENU]+[1 STEP][6 TOT], LCD Display: المحمد المحمدة ال

Press [MENU], then press [UP]/[DOWN] to select CTCSS, and press [MENU]to confirm, final press [EXIT] back to standby.

The standard CTCSS total 50 group, the range of CTCSS: 67.0-254.1Hz. OFF: turn off function.

The range of non-standard CTCSS: 65.0-260.0HZ

### Receive DCS(R-DCS) --- Menu 17

Under the standby states, press [MENU]+[1 STEP][7 VOX], LCD Display: R-DCS

Press [MENU], then Press [UP]/[DOWN] to select DSC, and press [MENU]to confirm, final press [EXIT] back to standby states.

The standard DCS total 105 grouporthocode, 105 group reverse code the range: D023N-D754l. OFF: turn off function.

#### Transmit DCS(T-DCS)---Menu 18

In the standby, press [MENU]+[1 STEP][8 W/N], LCD Display: T-DCS

Press [MENU], then Press [UP]/[DOWN] to select DCS, and press [MENU] to confirm, final press [EXIT] back to standby.

The standard DCS total 105 grouporthocode, 105 group reverse code the range: D023N-D754I. OFF: turn off function. In the non standard digital tone range 001-777, any number containing 8 or 9 digits. (such as numerical 680.719 and the such number are not the legitimate non standard digital subsonic) non-standard subsonic set can pass the over positive code or complement, according to the \*\* off.

1	67.0	11	94.8	21	131.8	31	171.3	41	203.5
2	69.3	12	97.4	22	136.5	32	173.8	42	206.5
3	71.9	13	100.0	23	141.3	33	177.3	43	210.7
4	74.4	14	103.5	24	146.2	34	179.9	44	218.1
5	77.0	15	107.2	25	151.4	35	183.5	45	225.7
6	79.7	16	110.9	26	156.7	36	186.2	46	229.1
7	82.5	17	114.8	27	159.8	37	189.9	47	233.6
8	85.4	18	118.8	28	162.2	38	192.8	48	241.8
9	88.5	19	123.0	29	165.5	39	196.6	49	250.3
10	91.5	20	127.3	30	167.9	40	199.5	50	254.1

1	D023N	16	D074N	31	D165N	46	D261N	61	D356N	76	D462N	91	D627N
2	D025N	17	D114N	32	D172N	47	D263N	62	D364N	77	D464N	92	D631N
3	D026N	18	D115N	33	D174N	48	D265N	63	D365N	78	D465N	93	D632N
4	D031N	19	D116N	34	D205N	49	D266N	64	D371N	79	D466N	94	D645N
5	D032N	20	D122N	35	D212N	50	D271N	65	D411N	80	D503N	95	D654N
6	D036N	21	D125N	36	D223N	51	D274N	66	D412N	81	D506N	96	D662N
7	D043N	22	D131N	37	D225N	52	D306N	67	D413N	82	D516N	97	D664N
8	D047N	23	D132N	38	D226N	53	D311N	68	D423N	83	D523N	98	D703N
9	D051N	24	D134N	39	D243N	54	D315N	69	D431N	84	D526N	99	D712N
10	D053N	25	D143N	40	D244N	55	D325N	70	D432N	85	D532N	100	D723N
11	D054N	26	D145N	41	D245N	56	D331N	71	D445N	86	D546N	101	D7311
12	D065N	27	D152N	42	D246N	57	D332N	72	D446N	87	D565N	102	D732N
13	D071N	28	D155N	43	D251N	58	D343N	73	D452N	88	D606N	103	D734N
14	D072N	29	D156N	44	D252N	59	D346N	74	D454N	89	D612N	104	D743N
15	D073N	30	D162N	45	D255N	60	D351N	75	D455N	90	D624N	105	D754N

### Side Key 1 definitions (PF1-KEY) ---Menu 19

In the Standby, press [MENU] + [1 STEP] + [9 VOICE], LCD Display: PF1

Press the [MENU], press the [UP] / [DOWN] to select the desired parameter type Press [MENU] confirm, press [EXIT] back to standby.

The radio side keys 2 parameters: CALL (call option), FTX (amplitude-frequency emission)

Selective call code by our supporting software for editing.

### Define the side key 3 (PF3-KEY) ---Menu 20

In the Standby, press [MENU] + [2SQL] + [0] key, LCD display: PF3

Press the [MENU], press the [UP] / [DOWN] keys to select the desired parameter type, then Press [MENU] button to confirm, press [EXIT] go back to standby.

The radio side key 1 parameter: SCAN, LAM, SOS, Tele Alarm, RADIO, DISABLE. Default set is FM radio.

The above parameters are selected to achieve their each function:

1. PF3 selecting SCAN function

In the standby, press PF3 key to enter Scan state (scan mode base on the menu functions (14), the scanning process, press any key to stop scanning.

PF3 selecting LAMP long light

In the standby, press PF3 key to start the lamp, press the PF3 key to close the long light.

PF3 selecting SOS-CH alarm

In the standby, press PF1 key, the speaker alarm in 2 seconds, and pronounce alarm tone.

# Tips: 🛕

- >> Transmission time is 10 seconds, 5 minutes in the next time. Press any key to exit.
- 4. PF3 Select Tele Alarm

In the standby, press PF3, speaker alarm sound and alarm code, press the PTT key to exit.

- 5. PF3 Select RADIO
- a. Open the radio:

In the standby, press PF3 key to open the radio.

Open the radio the screen display [76@mHZ] long press [\* SCAN] key to enter the radio to automatically search for radio stations, receipt the signal of radio stop automatically.

The radio stays in the search to a radio station.

b. Set radio frequency:

Activate the radio, press [\* SCAN] screen display \_\_\_\_mHZ , can press number0-9 to set radio channel.

c. Exit radio:

Exit radio, press the PF3 key.

d. Radio can storage the last station

# Tips:

>> FM radio working, the current frequency or channel still in standby, will automatically return to radio status when receiving a signal. Automatically return to FM radio in 5 seconds after Signal disappearing. Press the PTT key, will automatically return to radio in 5 seconds.

# Working mode (CH-MDF) ---Menu 21

In the Standby, press [MENU] + [2 SQL] [1 STEP], screen displays: CH-MDF

Press the [MENU], press the [UP] / [DOWN] keys to select the desired working mode, press the [MENU] to confirm, press [EXIT] back to standby.

The product have two working mode

- 1. VFO mode
- 2. MR mode

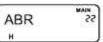
①CH ②CHFREQ ③NAME

# Tips:

- >> The setting of exchanged password only through by the software of our company.
- >> Setting 6 number of password all is "0", will cancel the exchanged password setting, setting of exchanged password is not all "0", is right.

#### Backlight (ABR) ---Menu 22

In the standby, press [MENU] + [2 SQL] [2 SQL], screen display: ABR



Press [MENU] to enter, press the [UP] / [DOWN] to select the desired setting, press the [MENU] button to confirm, press [EXIT] key to return to standby.

Always ON: Backlight always on

1S-20S: backlight light setting time

Always OFF: Backlight always off (TIPS: This function is invalid, because display is colorful)

### Offset frequency (OFFSET) --- Menu 23

In the Standby, press [menu]+[2SQL]+[3SAVE], the screen displays: OFF-SET Topics



Press the [MENU] to enter, press [UP] / [DOWN] keys to select the desired offset frequency, then press [MENU] to confirm, press [EXIT] back to standby.

The radio is the offset frequency between 0 ~ 999.99500MHz, the frequency of the input frequency difference of 7 8-bit stepping frequency automatic judgment.

# Offset frequency direction setting (SHIFT-D) --- Menu 24

In the standby, press [menu]+[2SQL]+[4TXP], the screen displays: SFT-D

Press [MENU] to enter, press [UP] / [DOWN] keys to select the desired offset frequency direction, then press

#### [MENU] to confirm, press [EXIT] back to standby.

The radio offset frequency direction:

- a. Transmit frequency is higher than the receiver offset frequency is positive (+).
- b. Transmit frequency is lower than the receiver offset frequency is negative (-).
- c. Turn off offset frequency direction(off).

>> If offset frequency over the range of valid, it can't transmit. In this case, please adjust the receive frequency or poor frequently poor in order to make transmission frequency band range.

### (SECOND) ---Menu 25

In the Standby, press [MENU] + [2 SQL] [5 ROGER], the screen displays: | SECOND \*\*\*

Press the [MENU] to enter, press [UP] / [DOWN] key to select ON / OFF and press [MENU] to confirm, press [EXIT] to back standby.

Second instruction

when the second is on, press the [#LOCK] key to start the counting, press any key except [#LOCK] to stop the counting; press [#LOCK] the second restart.

>> stop second should press any key (except ) exit the second function.

### Channel Name setting (CHNAME) --- Menu 26

Edit channel name only in channel mode to edit the current channel, frequency mode operation is invalid.

In the standby, press [MENU] + [2 SQRT] [6 TOT], the screen displays: CHNAME

Press the [MENU] to enter, then the first character flashing(this character instructions being edited), press [UP] keys to select the desired character, press the [DOWN] [DOWN] key to edit the next one, press the [#AB] to confirm, press [EXIT] to exit.

# Tips:

- >> 1. The channel name can edit up to eight characters.
- >> 2. When the edited eight characters are all empty, the default channel name is blank, channel name displayed as NO-NAME!
- >> 3. The channel name can edit twelve ENGLISH character through the programming software.

Channel memory setting (MEM-CH) --- Menu 27

In channel mode or frequency mode, press [MENU] + [2 SQL] [7 VOX], the screen displays: [MEM-CH [Press [MENU]]]

Press [MENU] to enter, press [UP] / [DOWN] keys to select the desired channel number storage, press the [MENU] to confirm, press the [EXIT] key to exit.

When the working mode is MR mode. Will copy all parameter expect MR name and scan will in channel.

When the working mode is VFO mode, you can set different offset frequency and frequency direction and other channel parameter enter storage channel, so you can set the same spectrum frequency or different frequencies pilot frequency your channel.

Example "RX frequency 450.025MHz, CTCSS 67.0Hz, TX frequency 460.025MHz, stored in the first 10 channels.

- In the frequency mode, frequency 450.025, press [MENU] + [1 STEP] [5 ROGER] setting RX CTCSS function, press [UP] / [DOWN] keys to select 67.0Hz, press [MENU] to confirm.
- Press the [MENU] + [2 SQL] [3 SAVE] to set the offset frequency 10.000MHz, Choose offset frequency direction is positive +.
- Press the [MENU] + [2 SQL] [7 VOX] into the storage channel, select the channel no.10, Press [MENU] to confirm and back to standby.

In the standby, press [MENU] + [2 SQL] [7 VOX] to enter the channel stored, To input channel number of hundred's digit, ten's digit and unit's digit, press [MENU] to confirm.

# Tips: 🛕

>> When the selected channel is a blank channel, the channel number font is displayed in blue; if the selected channel is originally had set the parameters of the channel, the channel number is displayed font is dark red.

### Channel Delete setting (DEL-CH) --- Menu 28

In the Standby, press [MENU] + [2 SQL] [8 W / N], the screen displays: DEL-CH PEL-CH PRODUCT P

# Tips: 🛕

- >> The first channel can't be deleted.
- >> When the selected channel is a blank channel, the channel number font is displayed in blue; if the selected channel is originally had set the parameters of the channel, the channel number is displayed font is dark red.

### SCNCD scan setting --- Menu 29

This function scan all CTCSS frequency, If there is a launch CTCSS frequency to determine the launch party. When you are with a group of people are using CTCSS frequency does not match, can use this function to determine CTCSS frequency.

In the standby, press [MENU] + [2 SQL] [9 VOICE] key, the screen displays: SCNCD Press the [MENU] to enter the CTCSS scan.

# Tips: 🔨

- >> Current working channel or frequency corresponding to the carrier signal is not received, the function is not working.

  Reverse the scan direction, press [UP]/[DOWN] keys or rotate the channel knob.
- >> When scan the CTCSS frequency, it will stay in screen, then you can press to save. If scan no we need, can press.

# Power message setting (PONMSG) ---Menu 30

In the Standby, press [MENU] + [3 SAVE] [0], the screen displays: PONMSG

Press [MENU] to enter, press [UP] / [DOWN] keys to select the desired parameter press [MENU] to confirm, press [EXIT] back to standby.

- >> There are two kinds of display mode
  - 1. BITMAP
  - 2. BATT-V

### Mute mode (SP-MUTE) ---Menu 31

In the Standby, press [MENU] + [3 SAVE] [1 STEP], the screen displays: |SP-MUTE | 31

Press the [MENU] to enter, press [UP] / [DOWN] keys to select the desired quiet mode and press the [MENU] to confirm, press [EXIT] back to standby.

Mute mode: when the speaker is open condition, this setting is particularly suitable for selective calling, group calling, all calling.

Mute mode:

QT: matching QT audio sub-carrier signal, the speaker will turn on.

QT+DTMF: matching QT and other tone signaling carrier signal, the speaker will turn on.

QT\*DTMF: matching QT or other tone signaling carrier signal, the speaker will turn on.

#### ANI code setting (ANI-SW) ---menu 32

In the Standby, Press [MENU] + [3 SAVE] [2 SQL], the screen displays: ANI-SW

Press the [MENU] enter, press [UP] / [DOWN] key to select ON / OFF, and press the [MENU] button to confirm, press [EXIT] back to standby.

### ANI code edit (ANI-EDIT) ---Menu 33

The radio ANI code by the Arabic numerals 0-9, first bit non-zero, minimum three bits, maximum six bits.

In the standby, press [MENU] + [3 SAVE] [3 SAVE], the screen displays: ANI-EDIT 33

Press the [MENU] to enter, put into the desired number and press the [MENU] button to confirm, press [EXIT] back to standby.

Ex1. Edit 6 bits of ANI code (123456)

In the Standby, press [MENU] + [3 SAVE] [3 SAVE], the screen displays: ANI-EDIT

Press [MENU], First bit flicker, put into [1 STEP][2 SQL][3 SAVE][4 TXP][5 ROGER][6 TOT] then press [MENU] to confirm, And press [EXIT] back to standby.

Ex2. Edit 3 bits of ANI code (123)

In the Standby, press [MENU] + [3 SAVE] [3 SAVE], the screen displays: | ANI-EDIT 33

Press [MENU], if edited ANI code display ANI code directly, and first bit flicker. If not be edited display 101 and first bit flicker, then put into [1 STEP] [2 SQL][3 SAVE], press[MENU]to confirm, And press [EXIT] back to standby.

>> Every radio only have one unique ANI code, A area /B area editing are the same ANI code.

### ANI code side tone (DTMF-ST) ---Menu 34

In the Standby, press [MENU]+[3 SAVE][4 TXP], the screen displays:



Press [MENU] to Enter, Press [UP/DOWN] to select the ID Side Tone you need, then press [MENU] to confirm, and press [EXIT] back to standby.

- >> The radio ANI code Side Tone like below.
- DT-ST: Opening Keyboard Side Tone when transmitting.
- >> ANI-ST: Opening ANI code side tone when transmitting.
- >> DT+ANI: Opening the side tone of keyboard and ID code when transmitting.

### Automatic keyboard lock setting (AUTOLOCK) ---Menu 35

In the Standby, press [MENU]+[3 SAVE][5 ROGER], the screen displays: AUTOLOCK 35

Press [MENU] to Enter, Press [UP/DOWN] to select ON/OFF, then press[MENU]to confirm, and press[EXIT] back to standby.

After the automatic lock is ON, The keyboard will automatic lock Within 15 seconds when radio have not any

operation, please hold [#LOCK] for 2seconds or more and will be unlocked.

# Tips:

>> Manual Lock: In the standby, Press hold [#LOCK] for 2seconds or more and will be locked, then hold [#LOCK] for 2seconds or more and will be unlocked.

### Priority channel switch setting (PRI CH-SW) --- Menu 36

In the Standby, press [MENU]+[3 SAVE][6 TOT], the screen displays: | PRI CH-SW 36

Press [MENU] to Enter, Press [UP/DOWN] to select ON/OFF, then press[MENU] to confirm, and press [EXIT] back to standby.

Sometimes it needs check some activity of priority frequency while monitoring other frequency. Then you can use priority scanning function.

Ex: Scanning 6 common channel CH1、CH2、CH3、CH4、CH5、CH6, and Ch6 will be set to priority channel.

The scanning process CH1 $\rightarrow$ CH6 $\rightarrow$ CH2 $\rightarrow$ CH6 $\rightarrow$ CH3 $\rightarrow$ CH6 $\rightarrow$ CH4 $\rightarrow$ CH6 $\rightarrow$ CH5 $\rightarrow$ CH6.

If the radio detects a signal on the "priority channel", it will call-up this frequency; it can go ahead select the priority channel through our software.

### Repeater setting (RPT-SET) --- Menu 37

The Menu of repeater setting has 2 mode of X-DIRPT directional cross band repeater, X-TWRPT dual direction cross band repeater.

# Tips: \land

>> Under the mode of X-DIRPT directional cross band repeater, or X-TWRPT dual direction crossband repeater, Setting reverse frequency of working channel or frequency, Frequency difference direction or frequency difference frequency, the frequency of the corresponding frequency is beyond the range of the frequency of transmission, then the area can't be transmitted.

Two working channel must be two cross band frequency and channel (Radio receive frequency in UHF band on the A area, and transmit frequency in VHF band on the B area). of course, can setting of Radio transmitting frequency in VHF band on the A area, and receive frequency in UHF band on the B area.

- 1. X-DIRPT directional cross section transfer: the main frequency area is defined as the middle switch, while the secondary frequency is defined as the repeater transmitter; the receiver is only responsible for receiving, the transmitter is only responsible for transmitting.
- 2. X-TWRPT two-way cross section repeater: in the standby, main and auxiliary frequency area are converted to the receiver, when the frequency of first received carrier signal effectively after the side frequency region is automatically defined as cross section relay transmitter, of course the standby state side frequency region first received carrier signal effectively, frequency is defined as the cross section area automatically transit transmitter.

The receiver and transmitter of the bidirectional cross section are not fixed, the first receiving area is the receiver, and the other is the transmitter.

After entering into the cross section, the receiving frequency and the transmitting frequency are the same.

#### Ex1:

A area, the channel mode enters into the cross section relay, and the reception frequency of the A area is the receiving frequency of the channel when the standby time is received.

After receiving the effective carrier signal in the B area, the A area starts the transmission, and the transmitting frequency is the transmitting frequency of the channel.

If you set the frequency conversion function, then the A transceiver frequency and send and receive sub tone will be inverted.

#### Ex 2:

A area to the frequency mode into the cross section of the relay, then standby A area waiting for the receiving frequency is the frequency of the frequency of the mode of reception, the reception is still in the frequency of the sub model of the received sub tone.

When the B area receives the effective carrier signal, when the A area is started, the frequency of the frequency of the received frequency or the frequency difference is taken as the transmitting frequency.

If you set the frequency conversion function, then the A transceiver frequency and send and receive sub tone will be inverted.

The cross section model through the menu 38 (RPT-SPK) transit horn switch, 39 menu (RPT-PTT) transfer PTT

switch settings, select the audio conversion receiver and transmitter speaker is open the machine according to whether to support the [PTT] in transit or relay transmission. However, the signal will be temporarily interrupted when PTT is transmitted.

In the standby, press [MENU]+[3 SAVE][7 VOX], the screen displays: RPT-SET 31

Press [MENU] to enter, press [UP] / [DOWN] keys to select the desired parameter press [MENU] to confirm.

# Notice: ∕!∖

- >> The RPT key on the speaker and repeater mode to switch on the waiting state, long press [RPT] 2 second can realize conversion between speaker and repeater mode.
- >> Under the mode of directional/dual cross band repeater, the screen display
- >> In order to use the repeater platform repeater receipt sound can be timely and effectively reflect the repeater state of the work, improve the use efficiency of the simulator, you can use the menu function [47] to set.
- >> Keep the timer relay to prevent hand response messages and communication have been repeatedly press and release the button. When the mobile receiver release button, "holding time " allows the hand while waiting for the moment to launch in response to user. If the QT/DQT is not detected during the duration of the hold time, the transmitter is allowed to release the key. This parameter determines that the duration of the state of the key is maintained when the valid QT/DQT receiver signal disappears. The function may be set by our company to write software.

### Repeater speaker setting (RPT-SPK) ---Menu 38

In the standby, Press [MENU]+[3 SAVE][8 W/N], the screen display

Press [MENU] to enter, Press [UP]/[DOWN] to select ON/OFF, then Press [MENU] to confirm, and Press [EXIT] back to standby.

## Repeater PTT setting (RPT-PTT) --- Menu 39

In the standby, Press[MENU]+[3 SAVE] [9 VOICE], the screen display RPT-PTT 39

Press [MENU] to enter, Press [UP]/[DOWN] to select ON/OFF then Press [MENU] to confirm, and Press [EXIT] back to standby.

## Scan Add setting (SCAN-ADD)---Menu 40

SCAN-ADD function can only be set in the channel mode, the current channel can be set, the frequency mode settings are invalid.

In the standby, Press[MENU]+[4 TXP][ 0 ], the screen display

Press [MENU] to enter, Press[UP]/[DOWN] to select ON/OFF then Press[MENU] to confirm, and Press [EXIT] back to standby.

The radio working under the cross band repeater or repeater /Transmitting mode, this function is prohibited.

>> The radio working under the cross band repeater or repeater /Transmitting mode, this function is prohibited.

# Single tone pulse frequency (ALERT)---Menu 41

# Tips:

>> The repeater system for starting the Single tone pulse frequency, some repeater need one to activate, if the repeater starting, not need it to activate, Optional pulse signal including 1750Hz,2100Hz,1000Hz,1450Hz.

In the standby, Press [MENU]+[4 TXP][1 STEP], the screen display ALERT

Press [MENU] to enter, Press [UP]/ [DOWN] to select the need parameter then Press [MENU] to confirm, and Press [EXIT] back to standby.

In launching state by pressing the side button PF2, the selected tone pulse frequency to send out.

### ANI code transmission delay setting (PTT-DLY)---Menu 42

In the standby, Press [MENU]+[4 TXP][2 SQL], the screen display

Press [MENU] to enter, Press[UP]/[DOWN] to select the need times then Press [MENU] to confirm, and Press [EXIT] back to standby.

The radio have ANI code transmission delay time is 100~3000 milliseconds, divide into 30levels, each level is 100 milliseconds.

# ANI code transmission mode (PTT-ID) ---Menu 43

In the standby, Press [MENU]+[4 TXP][3 SAVE], the screen display PTI-ID

Press [MENU] to enter, Press [UP]/ [DOWN] to select the need mode then Press [MENU] to confirm, and Press [EXIT] back to standby states.

The radio have 3 ID code transmission mode: BOT(Beginning), EOT(Ending), BOTH.

## Ringing Time setting (RING)---Menu 44

In the standby, Press [MENU]+[4 TXP][4 TXP], the screen display RING

Press [MENU] to enter, Press [UP]/[DOWN] to select the need time then Press [MENU] to confirm, and Press [EXIT]

back to standby.

The radio have 10 seconds of ringing time, divide 10 levels, each level 1 seconds. OFF: close the function.

# Scanning channel group A (SCG-A)---Menu 45

Scanning group is a set of radio which can be grouped by writing data channels, and specify the group of channel scanning, scanning the channel only for this group of channels.

Scanning group: All full channels, and 1-10 scanning group.

In the standby, Press [MENU]+[4 TXP][5 ROGER], the screen display

Press [UP]/[DOWN] to select then Press [MENU] to confirm, and Press [EXIT] back to standby.

# Notice: /!\

Channel scanning group A only can working in area A.

### Scanning channel group B(SCG-B)---Menu 46

Scanning group is a set of radio which can be grouped by writing data channels, and specify the group of channel scanning, scanning the channel only for this group of channels.

Scanning group: All full channels, and 1-10 scanning group.

Under the standby states, Press [MENU]+[4 TXP][6TOT], the screen display

Press [UP]/[DOWN] to select then Press [MENU] to confirm, and Press [EXIT] back to standby.

# 

>> Scanning channels group B only can working in area B.

## Repeater Prompt Tone switch setting (RPT--TONE)---Menu 47

In the standby, Press[MENU]+[4 TXP][7 VOX], the screen display RPT-TONE (RPT-TONE)

Press [MENU] to enter, Press [UP]/[DOWN] to select the desired parameter then Press [MENU] to confirm, and

Press [EXIT] back to standby states.

ON: Turn on the function

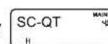
OFF: Turn off the function

# CDCSS/DCS scanning save type setting (SC-QT)---Menu 48

The radio is scanning QT, When scanning to the other side for them, Have 3 optional type to saving:

- Saving as receiving and transmitting QT (ALL).
- 2. Saving as transmitting QT (ENCODER).
- 3. Saving as receiving QT (DECODER).

In the standby, Press[MENU]+[4 TXP][8W/N], the screen display



Press [UP]/[DOWN] to select then Press[MENU] to confirm, and Press [EXIT] back to standby.

### Sub-Frequency Mute setting---Menu 49

Mute function is a very useful feature, especially in the dual frequency receiver is more useful.

In the standby, Press [MENU]+, [4 TXP][9 VOICE] the screen display SMUTESET HAND



Press [MENU] to enter, Press [UP]/ [DOWN] to select the desired parameter then Press [MENU] to confirm, and

Press [EXIT] back to standby.

Off: close the function

# 

- >> TX: Main frequency transmitting, turn off sub frequency when receiving.
- >> Rx: Main frequency receiving, turn off sub-frequency when receiving.
- >> TX/RX: Main frequency transmitting/receiving, turn off sub-frequency when receiving.

### Call code setting (CALLCODE)---Menu 50

In the standby, Press [MENU]+[5 ROGER][0], the screen display

Press [MENU] to enter, Press [UP]/[DOWN] to select the desired call code then Press [MENU] to confirm, and Press [EXIT] back to standby.

The radio have 1-20 group call code available to select, this can program by software.

### Reset setting (RESET) --- Menu 51

The parameter of reset (VFO): Will reset all functional setting and renew factory default parameter of function setting, but not resetting the parameter of channels.

The parameter of reset (ALL): Will reset all functional setting and the parameter of all channels, and renew factory default of function.

In the standby, Press[MENU]+[5 ROGER][3 SAVE], the screen display

Press [MENU] to enter, Press [UP]/[DOWN] to select the desired the parameter then Press [MENU] to confirm, the screen display

#### BACKLIGHT --- Menu 52

In the standby, Press [MENU]+[5 ROGER][2 SQL], the screen display

Press [MENU] to enter, Press [UP]/[DOWN] to select the desired the parameter then Press [MENU] to confirm, the screen display.

Select screen light brightness: 01-05 level.

#### NIGHT MODE --- Menu 53

In the standby, Press [MENU]+[5 ROGER][3 SAVE], the screen display NIGHTMODE S3

Press [MENU] to enter, Press [UP]/ DOWN] to select the desired the parameter then Press [MENU] to confirm, and Press [EXIT] back to standby.

After open IGHT mode, all of screen is dark, back to bright color when close the function.

### GPS setting (GPS) ---Menu 54

In the standby, Press [MENU]+[5 ROGER][4 TXP] the screen display

Press [MENU] to enter, Press [UP]/ DOWN] to select the desired the parameter, then Press [EXIT] can measure the distance between you and your partner, and Press [MENU] to confirm, and Press [EXIT] back to standby.

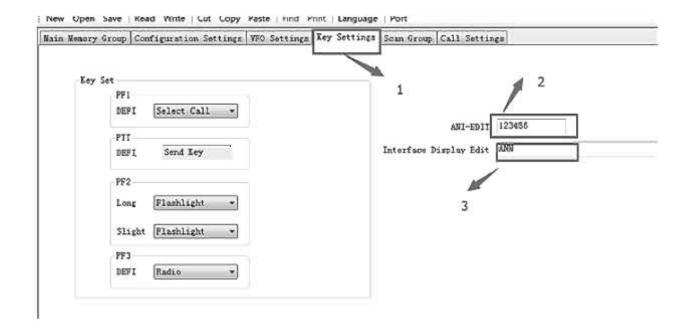
If you open the GPS module, even if it is not in the GPS mode, it will not stop the GPS module. If the GPS module

does not stop, there is a GPS logo on the right side of the screen.

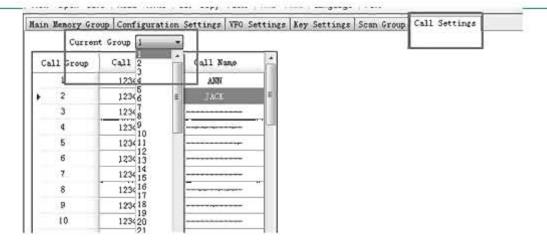
# Description of part function

#### 1. GPS function

1. Open the programming software, the walkie talkie to read the data, ① select the "side key settings". The "ANI code" is set to a maximum of 6 digits of the Arabia number (note: The ANI code of the transceiver must be the same as the call code). ③ The "display interface editor" into English or Arabia digital up to 14 words. (note: that the contents of the display interface editing as far as possible with the name of the call code to facilitate identification.)



① Select the "select call settings", the "current call group" set to (in a group of all walkie talkie) unified in a group (such as the election of the 1 groups).



Set the "call code" to a Arabia number of up to 12 words per radio identity code. Set the "call name" to 10 digits in English or Arabia and can be set to a maximum of 5 characters (note: as much as possible with the "display interface editor" content.)

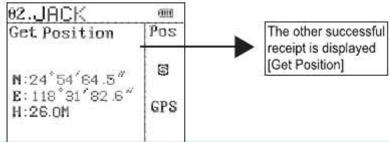
② After the completion of the proposed edit file name to save the data, and then write the data to the transceiver.

Curren	t Group 1	•			
Call Group	Call Code	Call Name	-		
1	123456	ANN			
2	123456	JACK			
3	123456				
4	123456				
5	123456	*********			
6	123456	********			
7	123456	**********			
8	123456	********			
9	123456	*********			
10	123456	*************			
100			7/1		

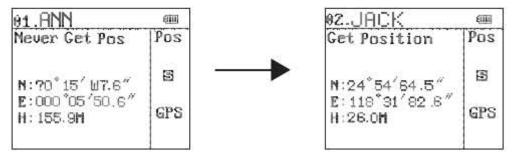
GPS self positioning: quick opening and closing can press the keyboard GPS key.

My Position	(BU)	My Position	(010
Pos Success		Searching	
15:48:45 N:24 <sup>*</sup> 54 <sup>'</sup> 63.3"	g	08:01:52 N:24°54'62.3"	9
E:118*31'84.6" H:4.0MM	GPS	E:118*31'85.0" H:98.0M	GPS

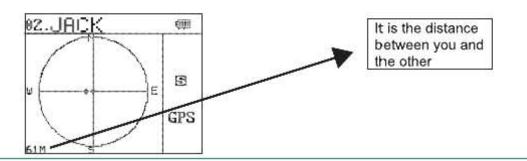
Press GPS to enter the GPS state (to be installed on the Interphone Antenna), place the walkie talkie in an open space or receive a better location for a better signal for GPS positioning, usually about 30 seconds can do work. If the time exceeds the successful positioning, more, please consider is a poor signal, change the location, or consulting professionals. If the information said to get the machine position, then display the current time, latitude and altitude, which N said north latitude, S said E said south latitude, east longitude, W west longitude, altitude H. 3. Take the initiative to launch its position: GPS positioning is successful, the side button 1 (orange side key) default to send location information, can be directly by side key 1 to send the location information (Note: send location information to confirm each other or multiple receiver walkie talkie "main" frequency " and "sub-frequency" frequency is consistent with their own it may receive relevant information.)



4. Get location: In GPS mode, press the [Up] key or the [Down] key to select the key you want to get the location of the person, at this time the LCD is displayed on the other side of the group and the name. After confirmation, press the PTT request both parties share the location, after the end of the launch, keep the walkie talkie in a state of acceptance. After the other part receiving the information, LCD display from the "not get location" to "get location", then the LCD will display his location information.

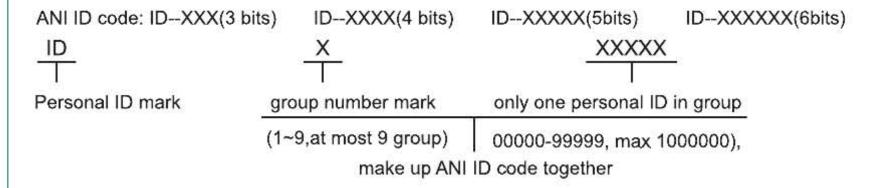


At this point, you can press (A/B) key to switch to the distance from the interface, the other side of the specific location and distance with you (for the middle point of your own, dot flashing point for each other's position, the lower left corner of your distance.)



### 2. All call, select call, group call

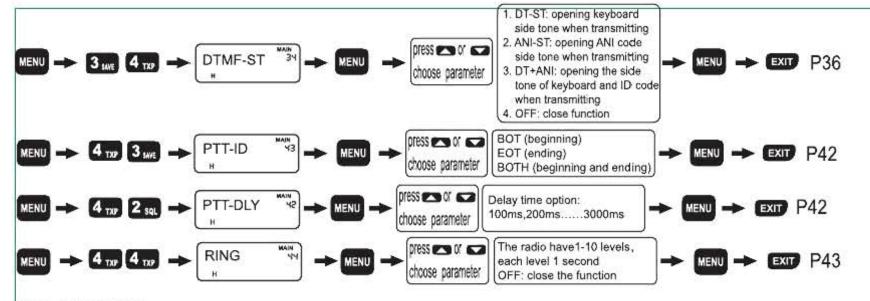
The radio have the functions including ANI ID, Edit personal ID code, and DTMF decode, Without the aid of other communication equipment, it can achieve the Communication operation including all call, group call and select call; The ready work for communication of using all call, group call and select call: Editing ID.



# Tips: 🛕

>> It must edit the different ANI ID code for each radio when they are use in group.

#### The detail steps like below:



#### ALL call using:

Pressing [PTT] don't put, when sending out the radio ID code, and press \* key + # key, then the other party's walkie talkie will ring, after ringing can talk together. (When speaking, such as 15 seconds without operation and all call end, again use all call need to repeat the above action.)

#### Group call using:

Pressing [PTT] don't put, when sending out the radio ID code, and press the identity of the other party first digit +#key, then the other party's walkie talkie will ring, after ringing can talk together. (When speaking, such as 15 seconds without operation and group call end, again use group call need to repeat the above action.)

#### Select call using:

Pressing [PTT] don't put, when sending out the radio ID code, and press the identity of the other party, then the

other party's walkie talkie will ring, after ringing can talk together. (When speaking, such as 15 seconds without operation and select call end, again use select call need to repeat the above action.)

#### 3. The using of radio repeater function:

1. The selective of "RPT-PTT" repeater PTT

Under the standby states, press [MENU]+[3 SAVE][9 VOICE], Screen display

Press [MENU] to enter, Press [UP]/[DOWN] to select ON(open) then Press[MENU] to confirm, and Press [EXIT] back to standby.

The selective of "RPT-SPK" repeater SPK

Under the standby states, press [MENU]+[3 SAVE] [8 W/N], Screen display RPT-SPK RPT-SPK

Press [MENU] to enter, Press [UP]/[DOWN] to select ON (open) then Press [MENU] to confirm, and Press [EXIT] back to standby.

The repeater type selective of "RPT-SET"

Entering into cross band repeater: under the standby states, press [MENU]+[3 SAVE][8 W/N], the Screen display

Press [MENU] to enter, Press [UP]/[DOWN] to select dual direct cross band repeater (X-TWRPT), or select the directional cross band repeater (X-DIRPT) then Press [MENU] to confirm, exiting to menu and back to standby states, long press [RPT] with 2 seconds, now the radio enter into cross band repeater states.

# Technical specifications

7	tion	Receiver	Wide Band	Narrow Band	
Frequency	suitable for different countries or areas 136-174MHz & 400-470MHz 136-174MHz & 400-480MHz	Adjacent Channel Selectivity	≤70dB	≤60dB	
Range	136-174MHz & 420-520MHz 144-146MHz & 430-440MHz	Inter Modulation	≤65dB	≤60dB	
	144-148MHz & 420-520MHz	Spurious Response	≤70dB	≤70dB	
Step	5KHz/6.25KHz/10KHz/12.5KHz/25KHz/50KHz/100KHz	Audio Response	+1~-3dB	+1~-3dB	
Channel	999		(0.3~3KHz)	(0.3~3KHz)	
Number		Signal to Noise Ratio	≥45dB	≥40dB	
Work Mode	F2D/F3E	Audio Distortion	≤5%		
Operating	-20℃~+40℃	Audio Power	≤1W		
Temperature		,			
Voltage	7.4VDC	9	UHF/VHF: 0.25μV (12dB SINAD)		
Antenna	50Ω	Sensitivity			
Impedance					
Weight	490g				
Size	133.5 x 57.5 x 40 (mm)				
Antenna Impedance Weight	50Ω 490g	Sensitivity	UHF/VHF: 0.25μ	V (12dB \$	

Transmitter	Wide	Narrow	Transmitter	Wide	Narrow	
Adjacent Channel	≥70dB	≥60dB	Max Frequency Deviation	±5KHz	±2.5KHz	
Selectivity	6		Frequency Stability	±2.5	PPM	
Type of Modulation	16K F3E	11K F3E	Audio Distortion	≤5%		
Spurious	≥60dB	≥60dB	Output Power UHF: H:10		OW, M:4W, L:1W	
Audio Response	+1~-3dB(0.3~3KHz)	+1~-3dB(0.3~3KHz)		VHF: H:10W, M:5W, L:1W		

# **Warranty Card**

Model:	
Series No.:	
Date of Purchase:	
Dealer:	
User Name:	
Add:	Zip Code:

#### Warranty Instructions:

- 1. This warranty card shall be kept by the customer as a proof of warranty. It cannot be replaced when lost.
- 2. This card will not come into effect without a seal and a date filled by the POS.
- This card shall not be altered. Please make sure the serial number on this card is consistent with the number on the purchased device. Otherwise, it is invalid.
- The warranty period is ONE year. The charger, battery, headset, antenna and feeder are consumables and not in the coverage of warranty.
- 5. The user can choose the following channels to obtain maintenance services:
- The original place of purchase.
- A local maintenance point of our company.
- Mail to or visit our company.

#### Announce

we 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.