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ISO9001:2015

Certificate No.:00121Q36795R5M/5100

ISO14001:2015

Certificate No.:00121E32879R4M/5100



TWO-WAY RADIO(Amateur Radio)



Warranty Register



Security-cord



Review Transfer

USER'S MANUAL

FCC Statement:

Any 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 following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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.

WOUXUN Brand

What is meaning of WOUXUN

"W" means "World"

"OU" means "Singing" in Chinese, representing the tone of Wouxun products is quite excellent as the beautiful song.

"XUN" means "Communication" in Chinese.

The completed signification of "WOUXUN" LOGO is that Wouxun company always try the best to provide the communication equipment with the excellent tone to the users all over the world.

Compliance with RF Energy Exposure Standards

Your **Wouxun** two-way radio is designed and tested to comply with a number of national and international standards and guidelines (listed below) regarding human exposure to radio frequency electromagnetic energy. This radio complies with the IEEE (FCC) and ICNIRP exposure limits for occupational/controlled RF exposure environment at duty cycles of up to 50% talk-50% listen and should be used for occupational use only. In terms of measuring RF energy for compliance with the FCC exposure guidelines, your radio radiates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

NOTE

» The approved batteries supplied with this radio are rated for a 5-5-90 duty cycle (5% talk-5% listen-90% standby), even though this radio complies with the FCC occupational RF exposure limits at duty cycles of up to 50% talk.

Your **Wouxun** two-way radio **Complies with the following of RF energy exposure standards and guidelines:**

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J
- American National Standards Institute (ANSI)/Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

Thanks for buying transceiver.

This transceiver offers latest design, enhanced features, solid performances and easy accessibility. We believe you will be pleased with the high quality and reliable features for all your communication needs.

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

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 Battery pack 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 Battery pack and notify dealer.

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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Installing before use

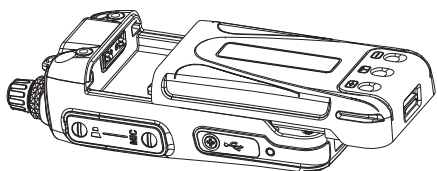
■ Install / remove batterypack

The batterypack is not fully charged before leaving factory. Please charge it before use.

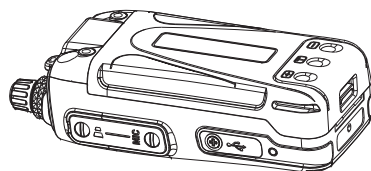
NOTE

- » Do not shortcircuit the terminals or put the batterypack into fire.
- » Do not try to remove the case from the batterypack.

1. Please aim the batterypack at the back of the transceiver, and then push up and press down the batterypack to lock the release latch. (PIC1)
2. If you want to remove the batterypack, push down the release latch, and the batterypack will be released from the transceiver. (PIC2)



PIC1



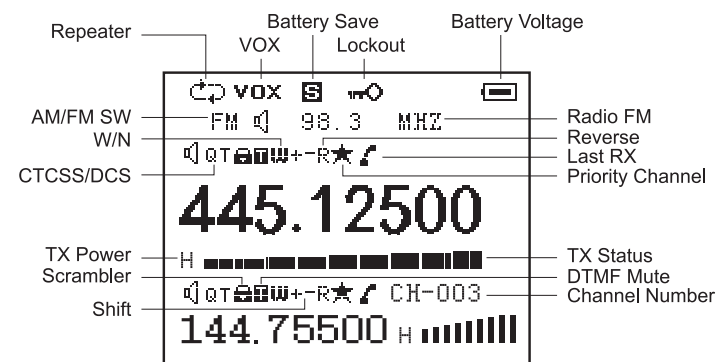
PIC2

Getting Started

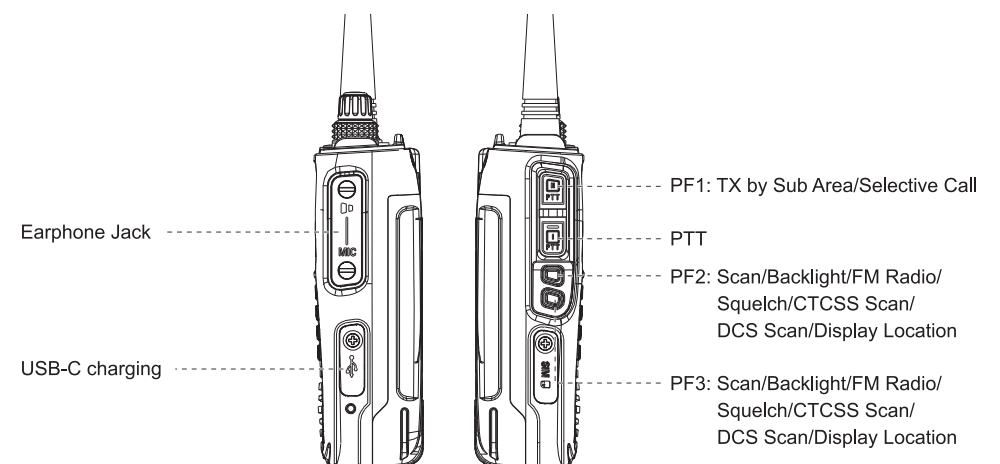
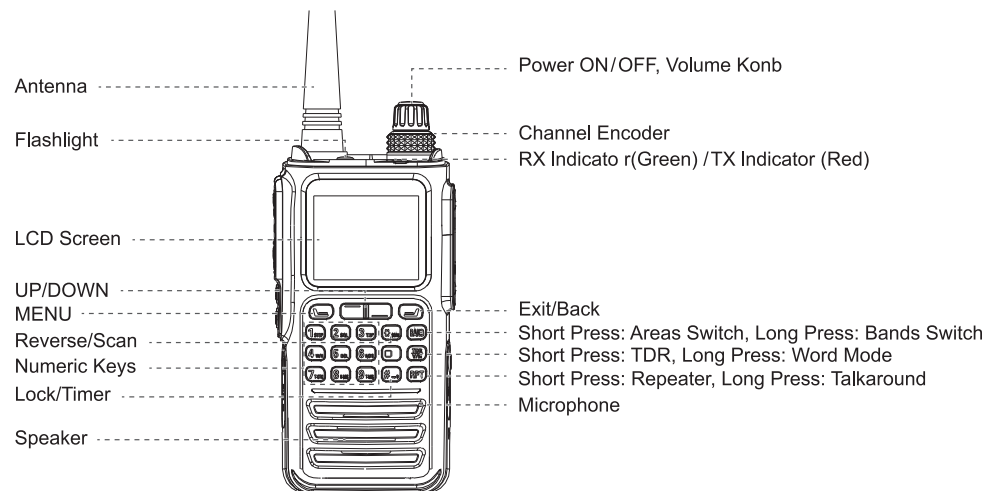
Description of Transceiver

LCD Display

There are various indicators display on the screen when powering on. Please refer the below table to learn what the indicators stand for accordingly.



Getting Started



Description for main functions

Operating Frequency:

VHF Receiving: 50-54MHz, 108-174.9975MHz, 222-225MHz

UHF Receiving: 320-479.9975MHz, 714-824MHz, 849-869MHz, 894-999.9975MHz

Scanning: 50-824MHz, 849-869MHz, 894-960MHz

FM:76-108MHz

VHF Transmit:50-54MHz, 144-148MHz, 222-225MHz

UHF Transmit:430-450MHz

Multi Modes

1. Two-Way Mode

2. Cross-Band Directional Repeater Mode or Cross-Band Two-Way Repeater Mode

Remark: Please make the above settings by RPT button.

- 1) This device is dual display for two areas which are separate display for both work modes. The message on the main area will be amplified display, while the message on the sub area will be reduced display instead.
- 2) Please make the separate settings for both work modes. Please switch it to main area before settings.
- 3) Some functions are disable when Cross-Band Directional Repeater Mode or Cross- Band Two-Way Repeater Mode.

Basic Operations

1. Quick Search

Short press [▲] or [▼] every time is possible to search one of the settings or options, while long press [▲] or [▼] is possible to quickly search the settings or options.

2. MENU

Short press MENU is possible to enter into the sub menu (for main area or sub area) for settings, while long press MENU is possible to enter into the main menu (for whole transceiver) for settings.

3. BAND

Short press BAND is possible to switch the main area and sub area, while long press BAND is possible to switch the bands for this transceiver.

4. TDR V/M

Short press TDR V/M is possible to switch the single display and dual display, while long press TDR V/M is possible to switch the work modes like Frequency, CH-Name, CH-Number, CH-Frequency.

5. RPT

Short press RPT is possible to switch the Two-Way Radio Mode and Repeater Mode, while long press RPT is possible to select talkaround and repeater functions.

6. * SCAN

Short press * SCAN is possible to activate the reverse function, while long press * SCAN is possible to activate scan function.

Description for main functions

7.

Short press  is possible to activate the timer function, while long press  is possible to activate keypad locking function.

8. DTMF

Press the numeric keys or functional buttons when the device is transmitting, then it sends out the DTMF tones. Please check the layout below,

					A	B	C	D
1 STEP	2 SQL	3 TXP	* SSM	BAND	1	2	3	*
4 MIN	5 BCL	6 RCTC		LOG VOM	4	5	6	0
7 RCTC	8 RCTC	9 RCTC	# --O	RPT	7	8	9	#

9. Intelligent Charger

It voice prompts "low voltage" when the batterypack is in the low status, and there is "DI" sound every 5 seconds.

- 1) Please connect the intelligent charger to the power (AC:90-240V) , the red LED flashes once and it gets ready for charging.

- 2) Please insert the batteries into the intelligent charger, the red LED keeps flickering and it is being charged. It is full charged when green LED is ON.

NOTE

- » It starts the trickle-charge at the first beginning of charger if the battery was running out. The red LED turns on during being charged. And it changes to green when full charged.
- » The trickle-charge is helping to protect the battery life.

10. USB-C charging

The radio also supports the USB-C charging. When charging by USB-C, the red LED on the USB port at the right side of the radio is ON. (It displays the charging status if the radio is powered on during being charged.)

NOTE

- » Voltage for USB-C charging is 5V 2A.

Description for Menu Options

Sub Menu Options (short press **MENU**)

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
1. STEP		MENU → 1 STEP		Press UP/Down buttons for settings	Options: 2.5K/5K/6.25K/8.33K/10K/12.5K/25K/50K/100K	→ MENU → EXIT		P19
2. SQUELCH		MENU → 2 SOL		Press UP/Down buttons for settings	Options: 1 to 9 levels	→ MENU → EXIT		P19-20
3. TX-POWER		MENU → 3 TXP		Press UP/Down buttons for settings	Options: High, Middle, Low	→ MENU → EXIT		P20
4. W-N		MENU → 4 WN		Press UP/Down buttons for settings	Options: High, Middle, Low	→ MENU → EXIT		P20
5. BUSYLOCK		MENU → 5 BCL		Press UP/Down buttons for settings	Options: ON, OFF	→ MENU → EXIT		P21
6. RX-CTCSS		MENU → 6 CTC		Press UP/Down buttons for settings	Options: standard tones from 67.0Hz to 254.1Hz, OFF	→ MENU → EXIT		P21
7. TX-CTCSS		MENU → 7 CTC		Press UP/Down buttons for settings	Options: standard tones from 67.0Hz to 254.1Hz, OFF	→ MENU → EXIT		P21-22

Sub Menu Options (short press **MENU**)

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
8. RX-DCS		MENU → 8 RDCS		Press UP/Down buttons for settings	Options: standard tones from D023N to D754I, OFF	→ MENU → EXIT		P22
9. TX-DCS		MENU → 9 TDCS		Press UP/Down buttons for settings	Options: standard tones from D023N to D754I, OFF	→ MENU → EXIT		P22-23
10. CH-MDF		MENU → 1 STEP →		Press UP/Down buttons for settings	Options: Frequency Mode(FREQ), CH-Number(CH), CH-Name(NAME), CH-Frequency(CHFREQ).	→ MENU → EXIT		P23-24
11. OFFSET		MENU → 1 STEP → 1 STEP		Press UP/Down buttons for settings	Options: 0 to 999.9975	→ MENU → EXIT		P24
12. SHIFT		MENU → 1 STEP → 2 SOL		Press UP/Down buttons for settings	Options: +, -, OFF	→ MENU → EXIT		P24-25
13. CH-NAME		MENU → 1 STEP → 3 TXP		Press UP/Down buttons for settings	Options: A to Z letters, 0 to 9 numbers. Max 8 characters.	→ MENU → EXIT		P25-26
14. CH-ADD		MENU → 1 STEP → 4 WN		Press UP/Down buttons for settings	Options: 999 channels	→ MENU → EXIT		P26-27

Description for Menu Options

Sub Menu Options (short press **MENU**)

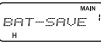
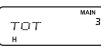
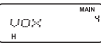
Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
15. CH-DEL		MENU → 1 STEP 5 BCL		MENU	Press UP/Down buttons for settings	Options: 999 channels	MENU → EXIT	P27-28
16. MUTE-MODE		MENU → 1 STEP 6 MCD		MENU	Press UP/Down buttons for settings	Options: QT, QT+DTMF, QT+DTMF	MENU → EXIT	P27-28
17. TONESCAN		MENU → 1 STEP 7 XTC		MENU	Press UP/Down buttons for settings	Options: CTCSS, DCS	MENU → EXIT	P29
18. SCAN-ADD		MENU → 1 STEP 8 XCS		MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU → EXIT	P30
19. SCAN GROUP		MENU → 1 STEP 9 XCS		MENU	Press UP/Down buttons for settings	Options: All, 1 to 10 groups	MENU → EXIT	P30
20. SCN-MODE		MENU → 2 SOL □		MENU	Press UP/Down buttons for settings	Options: TO, CO, SE	MENU → EXIT	P31
21. CALLCODE		MENU → 2 SOL 1 STEP		MENU	Press UP/Down buttons for settings	Options: 1 to 99 codes	MENU → EXIT	P31

Sub Menu Options (short press **MENU**)

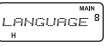
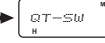
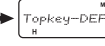
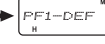
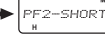
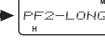
Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
22. SCRAMBLE		MENU → 2 SOL 2 SOL		MENU	Press UP/Down buttons for settings	Options: 1 to 8 groups, OFF	MENU → EXIT	P31-32
23. COMPANDER		MENU → 2 SOL 3 TTP		MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU → EXIT	P32
24. AM MODE		MENU → 2 SOL 4 WU		MENU	Press UP/Down buttons for settings	Options: OFF, AM RX, AM RX+TX	MENU → EXIT	P32

Description for Menu Options

Main Menu Options (long press **MENU**)

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
1. BAT-SAVE	 → 			Press UP/Down buttons for settings	Options: ON, OFF			P33
2. ROGER	 → 			Press UP/Down buttons for settings	Options: OFF, BOT, EOT, BOTH			P33
3. TOT	 → 			Press UP/Down buttons for settings	Options: 60 levels, 15 second every level			P34
4. VOX	 → 			Press UP/Down buttons for settings	Options: 1 to 9 levels, OFF			P34
5. VOICE	 → 			Press UP/Down buttons for settings	Options: ON, OFF			P35
6. TOA	 → 			Press UP/Down buttons for settings	Options: OFF, 1 to 10S			P35
7. BEEP	 → 			Press UP/Down buttons for settings	Options: ON, OFF			P36

Main Menu Options (long press **MENU**)

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
8. LANGUAGE	 → 			Press UP/Down buttons for settings	Options: Chinese, English			P36
9. SCAN MODE	 → 			Press UP/Down buttons for settings	Options: TO, CO, SE			P36–37
10. QT-SW	 →  			Press UP/Down buttons for settings	Options: ON, OFF			P37
11. Topkey-DEF	 →  			Press UP/Down buttons for settings	Options: ALARM, SOS			P38
12. PF1-DEF	 →  			Press UP/Down buttons for settings	Options: CALL, VFTX KEY			P38
13. PF2-SHORT	 →  			Press UP/Down buttons for settings	Options: DISABLE, SCAN, LAMP, RADIO, MONI, CTC-SCAN, DCS-SCAN, POS-DSP			P39–40
14. PF2-LONG	 →  			Press UP/Down buttons for settings	Options: DISABLE, SCAN, LAMP, RADIO, MONI, CTC-SCAN, DCS-SCAN, POS-DSP			P41

Description for Menu Options

Main Menu Options (long press **MENU**)

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
15. PF3-SHORT		MENU → 1 STEP 5 BCL		MENU	Press UP/Down buttons for settings		MENU → EXIT	P41
16. PF3-LONG		MENU → 1 STEP 6 KCT		MENU	Press UP/Down buttons for settings		MENU → EXIT	P41-42
17. ABR		MENU → 1 STEP 7 SCT		MENU	Press UP/Down buttons for settings		MENU → EXIT	P42
18. SECOND		MENU → 1 STEP 8 KCS		MENU	Press UP/Down buttons for settings		MENU → EXIT	P42-43
19. ST-MSG		MENU → 1 STEP 9 KCS		MENU	Press UP/Down buttons for settings		MENU → EXIT	P43
20. ANI-EDIT		MENU → 2 SOL		MENU	Press UP/Down buttons for settings		MENU → EXIT	P43-44
21. SIDETONE		MENU → 2 SOL 1 STEP		MENU	Press UP/Down buttons for settings		MENU → EXIT	P44-45

Main Menu Options (long press **MENU**)

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
22. AUTOLOCK		MENU → 2 SOL 2 SOL		MENU	Press UP/Down buttons for settings		MENU → EXIT	P45
23. PRI-CH		MENU → 2 SOL 3 TRP		MENU	Press UP/Down buttons for settings		MENU → EXIT	P46
24. PRI-SCAN		MENU → 2 SOL 4 WRN		MENU	Press UP/Down buttons for settings		MENU → EXIT	P46
25. REPEATER		MENU → 2 SOL 5 BCL		MENU	Press UP/Down buttons for settings		MENU → EXIT	P46-50
26. RPT-SPK		MENU → 2 SOL 6 KCT		MENU	Press UP/Down buttons for settings		MENU → EXIT	P50
27. RPT-PTT		MENU → 2 SOL 7 SCT		MENU	Press UP/Down buttons for settings		MENU → EXIT	P50
28. ALERT		MENU → 2 SOL 8 KCS		MENU	Press UP/Down buttons for settings		MENU → EXIT	P51

Description for Menu Options

Main Menu Options (long press **MENU**)

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
29. ID-DLY		MENU → 2 SOL 9 100		MENU	Press UP/Down buttons for settings	Options: 100ms, 200ms,30000ms	MENU → EXIT	P51
30. PTT-ID		MENU → 3 TXP		MENU	Press UP/Down buttons for settings	Options: BOT, EOT, BOTH	MENU → EXIT	P51-52
31. RING		MENU → 3 TXP 1 STEP		MENU	Press UP/Down buttons for settings	Options: 1 to 10 levels, OFF	MENU → EXIT	P52
32. RPT-TONE		MENU → 3 TXP 2 SOL		MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU → EXIT	P52
33. SCAN-QT		MENU → 3 TXP 3 TXP		MENU	Press UP/Down buttons for settings	Options: ALL, DECODER, ENCODER	MENU → EXIT	P53
34. SP-MUTE		MENU → 3 TXP 4 WIN		MENU	Press UP/Down buttons for settings	Options: OFF, TX, RX, TX/RX	MENU → EXIT	P53-54
35. RESET		MENU → 3 TXP 5 SOL		MENU	Press UP/Down buttons for settings	Options: VFO, ALL	MENU → EXIT	P54

Main Menu Options (long press **MENU**)

Function order	Function name	Enter function set	Screen display	Select parameter	Selectable parameter explanation	Confirm	Return to standby	See page
36. BRT-ACTV		MENU → 3 TXP 6 REC		MENU	Press UP/Down buttons for settings	Options: 1 to 10 levels	MENU → EXIT	P54
37. BRT-STBY		MENU → 3 TXP 7 SOL		MENU	Press UP/Down buttons for settings	Options: 1 to 10 levels	MENU → EXIT	P55
38. FM RADIO		MENU → 3 TXP 8 RDS		MENU	Press UP/Down buttons for settings	Options: Read: 01 to 20 groups, Memory: 01 to 20 groups	MENU → EXIT	P55
39. DISY MODE		MENU → 3 TXP 9 RDS		MENU	Press UP/Down buttons for settings	Options: White 1/ White 2/Black 1/Black 2/ Customize	MENU → EXIT	P55-56
40. TIME DSY		MENU → 4 WIN		MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU → EXIT	P56-57
41. TIME/ZONE		MENU → 4 WIN 1 STEP		MENU	Press UP/Down buttons for settings	Options: GMT/GMT+-1/ GMT+-2/GMT+-3/GMT+-4/GMT+-5/GMT+-6/ GMT+-7/GMT+-8	MENU → EXIT	P57
42. LOCATION		MENU → 4 WIN 2 SOL		MENU	Press UP/Down buttons for settings	Options: GPS SW, DSP POS, SEND TYPE	MENU → EXIT	P57-58

Instructions for functions list

Functions list under Sub Menu (Short Press **MENU** button)

Frequency Step (STEP) ---- MENU 1

In standby, press **MENU** + **1_{STEP}**, the screen displays 

Press **MENU** to enter, press **▲** / **▼** to select the desired step, then press **MENU** to confirm, finally press **EXIT** to return to standby.

The frequency steps selectable for this transceiver are as follows:

12.50KHz 25.00KHz

Squelch Setting- (SQUELCH) ---- MENU 2

Squelch level is about when the signal is strong enough to turn on the squelch function, and when it is weak enough to turn off. You may hear the voice from the loudspeaker when turning ON the squelch and receiving the same signal from other transceivers. Higher level makes it harder to receive the weak signals, while lower level will be interfered by noises and/or unwanted signals.

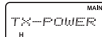
In standby, press **MENU** + **2_{SQL}**, the screen displays 

Press **MENU** to enter, press **▲** / **▼** to select the desired squelch level, then press **MENU** to confirm, finally press **EXIT** to return to standby.

NOTE

» The squelch level for this transceiver has 0-9 levels selectable, and level 0 means turn off the squelch function. The higher level of the squelch is set, the stronger receiving signal is needed.

Transmitting Power Selection (TX-POWER) ---- MENU 3

In standby, press **MENU** → **3_{TXP}** → , display 

Press **MENU** to confirm, and press **▲** / **▼** to select the power level then press **MENU** to confirm, and press **EXIT** to back to standby.

Options: High, Middle, Low

Bandwidth (W-N) ---- MENU 4

In standby, press **MENU** + **4_{WIN}**, the screen displays 

Press **MENU** to enter, it shows 'WIDE', press **▲** / **▼** to select WIDE/NARROW bandwidth, then press **MENU** to confirm, finally press **EXIT** to return to standby.

There are two bandwidths for option:WIDE:25KHz and NARR:12.5KHz

Instructions for functions list

Busy Channel Lockout (BUSYLOCK) ---- MENU 5

In frequency mode, press **MENU** + **5_{BCL}**, the screen displays 

Press **MENU** to enter, press **▲** / **▼** to select ON/OFF this function, then press **MENU** to confirm, finally press **EXIT** to return to standby.

Note: This function is invalid in cross band repeater or repeater/transmitter modes.

Receiving CTCSS (RX-CTCSS) ---- MENU 6

When the transceiver is standby, press the **MENU** + **6_{TOT}** keys and the screen will display 

Press the **MENU** key to access the menu, and after pressing the **▲** / **▼** key to select the CTCSS you desire, press the **MENU** key to confirm, and press the **EXIT** key to return to standby.

CTCSS has a total of 5 groups, ranging from 67.0-254.1Hz. OFF: Deactivate

Non-Standard CTCSS is ranging from 65.0 to 260.0Hz

Transmitting CTCSS (TX-CTCSS) ---- MENU 7

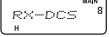
When the transceiver is standby, press the **MENU** + **7_{CT}** keys and the screen will display 

Press the **MENU** key to access the menu, and after pressing the **▲** / **▼** key to select the CTCSS you desire, press the **MENU** key to confirm, and press the **EXIT** key to return to standby.

CTCSS has a total of 5 groups, ranging from 67.0-254.1Hz. OFF: Deactivate

Non-Standard CTCSS is ranging from 65.0 to 260.0Hz

Receiving DCS (RX-DCS) ---- MENU 8

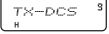
When the transceiver is standby, press the **MENU** + **8_{WIN}** keys and the screen will display 

Press the **MENU** key to access the menu, and after pressing the **▲** / **▼** key to select the DCS you desire, press the **MENU** key to confirm, and press the **EXIT** key to return to standby.

DCS: 105 groups of positive code, 105 groups of negative code, ranging from D023N to D754I.

OFF: Deactivate.

Transmitting DCS (TX-DCS) ---- MENU 9

When the transceiver is standby, press the **MENU** + **9_{DCS}** keys and the screen will display 

Press the **MENU** key to access the menu, and after pressing the **▲** / **▼** key to select the DCS you desire, press the **MENU** key to confirm, and press the **EXIT** key to return to standby.

Non-standard DCS is configured by three numbers from 001 to 777 excluded 8 or 9. For example, 680.719 is illegal non-standard DCS tone.

Please press **#-0** to select the positive or negative codes, and press ***-000** to turn off the DCS tone.

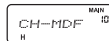
Instructions for functions list

CTCSS										
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	

DCS														
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	D731N	
12	D065N	27	D152N	42	D246N	57	D332N	72	D446N	87	D555N	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	

Work Modes (CH-MDF) ---- MENU 10

In standby, press **MENU** + **1STEP** **□**, screen displays



Press **MENU** to confirm, and press **▲** / **▼** to select the work mode then press **MENU** to confirm, and press **EXIT** to back to standby.

Options: FREQ, CH, CHFREQ, NAME

NOTE

- » It supports to program password to switch the work mode.
- » The password is invalid if the password is configured by six 0 (it means there is no password needed) , otherwise, the password is working.

Offset Frequency (OFFSET) ---- MENU 11

In standby, press **MENU** + **1STEP** **1STEP**, and the screen display

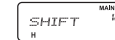


Press **MENU** to access the menu, press **▲** / **▼** to select the parameter you desire, and then press **MENU** to confirm, press **EXIT** to return to standby.

Offset frequency range: 0-999.9975 MHz, The 7th and 8th frequency point depends on the programmed step frequency.

Shift Direction (SHIFT) ---- MENU 12

In standby, press **MENU** + **1STEP** **2SQL**, The screen display



Press **MENU** to enter, press **▲** / **▼** to select the desired frequency shift direction, then press **MENU** confirm, press **EXIT** it return to standby.

Instructions for functions list

There are three selections for the frequency shift direction setting:

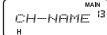
1. Plus shift (+), which means that the transmitting frequency is higher than the receiving frequency.
2. Minus shift (-), which means that the transmitting frequency is lower than the receiving frequency.
3. Turn off this function

NOTE

- » When offset frequency is out of the allowed offset frequency range, the transceiver can not transmit. In this case, please make sure the offset frequency and receiving frequency is within the allowed range.

Channel Name Edit (CH-NAME) ---- MENU 13

Channel names can only be edited in channel mode, and only the name of the present channel can be edited this operation is ineffective in frequency mode.

In standby, press **MENU** + **1 STEP** **3 TXP** keys and the screen will display 

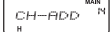
Press **MENU** to access the menu, and the first digit will flash (which indicates that this digit is being edited).

Press  to choose the required character, press  to edit the next character, press **MENU** to confirm, and then press **EXIT** to return to standby.

NOTE

- » 1.Channel names can be maximum of 8 characters long.
» 2.When all 8 characters are empty, the channel will be displayed on the screen as "NO-NAME!"

Channel Adding (CH-ADD) ---- MENU 14

In channel mode or standby, press **MENU** + **1 STEP** **4 MIN**, the screen displays 

Press **MENU** to access the menu, press  /  to select the desired channel order, and then press **MENU** to memorize with a voice prompt. Press **EXIT** to return to standby.

When the transceiver is in channel(MR) mode, the parameters(except channel name and scan adding) will be memorized into the channel.

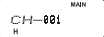
When the transceiver is in frequency(VFO) mode, you can program all the parameters(frequency, offset, offset directions etc.) into the channel to memorize.

Example:

Memorize the parameters: "Receiving frequency 450.025MHz, receiving CTCSS is 67.0Hz, transmission frequency is 460.025MHz" into the Channel NO.10.

1. Inputting 450.025MHz to the transceiver in frequency(VFO)mode, press **MENU** + **6 NET** to access

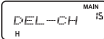
Instructions for functions list

- receiving CTCSS/DCS setting, press ▲ / ▼ to select 67.0Hz, press **MENU** to confirm.
2. Press **MENU** + **1 STEP** **1 STEP** to select the offset frequency is 10.000MHz, press **MENU** + **1 STEP** **2 SQL** to set the frequency direction as "+".
3. Press **MENU** + **1 STEP** **4 WH** to access channel memory, select CH-010 and press **MENU** to memorize the channel and return to standby.
- In standby, press **MENU** + **1 STEP** **4 WH** to access channel memory, the screen displays , input the desired channel number orderly, and then press **MENU** to confirm.

NOTE

- » When the selected channel is empty (without any parameter), the characters of the channel number is blue, while the selected channel is with the memorized parameters, the characters of the channel number is dark red.

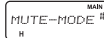
Channel Delete (DEL-CH) ---- MENU 15

- In standby, press **MENU** + **1 STEP** **5 BCL**, the screen will display .
- Press **MENU** to access the menu, press ▲ / ▼ to select the channel you wish to delete or manually inputting the channel number, press **MENU** to confirm and the **EXIT** key to return to standby.

Special Reminder

- » 1st channel can not be deleted.
- » When the selected channel is empty (without any parameter), the color of the channel number is white, while the selected channel is with the memorized parameters, the color of the channel number is purple.

Mute Mode (MUTE-MODE) ---- MENU 16

- In standby, press **MENU** + **1 STEP** **6 RPT**, the screen displays .
- Press **MENU** to access the menu, and after pressing ▲ / ▼ to choose the required mute mode, press **MENU** to confirm, and press **EXIT** to return to standby.

Squelch settings: set the conditions which determine when the speaker shall be turned on, these settings are used during selective calls, group calls and all calls.

The transceiver's mute mode include:

QT: When the transceiver is set to this mode, all signals on the same QT frequency will activate the speaker.

QT+DTMF: only those signals which both satisfy the requirements of QT and whose DTMF carrier wave

Instructions for functions list

signal also match the transceiver will activate the speaker in this mode.

QT*DTMF: When this mode is active, only those signals which either meet QT requirements or DTMF requirements will activate the speaker.

Scanning Tone (TONESCAN) ---- MENU 17

This function is scanning the programmed frequencies or channels with CTCSS/DCS or not. When the CTCSS/DCS are not compatible with the one you are going to communicate with, it stops the regular communication.

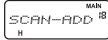
In standby, press **MENU** + **1 STEP** **7 TON**, screen displays  Select CTCSS or DCS, then Press **MENU** to confirm and start the scan.

Special Reminder

- » if there is no carrier received on the scanned frequencies or channels, the function is not activated.
- » pls use the **▲** / **▼** to change the direction for scanning.
- » it stopes on the frequency or channel which is programmed with CTCSS/DCS, pls press **MENU** to save by yourself if needed. Pls press ***SCAN** to continue to scan the next frequencies or channels if not needed.

Scan Adding (SCAN-ADD) ---- MENU 18

This function means whether a channel in scanning when in the startup channel scanning, so the function can be set only in the channel mode under the current channel, is invalid in frequency mode.

In standby, press **MENU** + **1 STEP** **8 ADD**, the screen display 

Press **MENU** to access, press **▲** / **▼** to select ON/OFF. And then press **MENU** to confirm, and press **EXIT** to return to standby.

Note:The function is invalid in cross-band repeater or repeater/transmitter mode.

Scan Group (SCAN GROUP) ---- MENU 19

The scan group settings are the way that a transceiver can divide the programming channels into different scan groups.

Scan group settings are: ALL channel, as well as 1-10 individual scanning groups.

In standby, press **MENU** + **1 STEP** **9 GRP**, the screen displays 

Press **▲** / **▼** to press **MENU** to confirm, press **EXIT** to return.

Note:Scanning group A setting is active in A area.

Instructions for functions list

Scan Mode (SCAN-MODE) ---- MENU 20

When the transceiver is standby, press the **MENU** + **2 SOL**  , keys and the screen will display  . Press the **MENU** key to access the menu, and after pressing the  /  keys to select the required setting, press the **MENU** key to confirm, and the **EXIT** key to return to standby. The transceiver has 3 scan modes: TO, CO, and SE:

Call Code (CALLCODE) ---- MENU 21

In standby, press **MENU** + **2 SOL** **1 STEP**  , the screen displays  . Press **MENU** to access the menu, press  /  to select the desired selective call group number. Press **MENU** to confirm, and the transceiver returns to standby. Selective call code are with 0-99 groups for option. Selective call codes are programmed via supplied software.

Scrambler (SCRAMBLE) ---- MENU 22

This is a special voice process to keep the communication confidential from other non-users. In standby, press **MENU** + **2 SOL** **2 SOL**  , screen display  . Press **MENU** to enter the function, then press  /  to select the parameter and then **MENU** to confirm,

while press **MENU** to return back to the standby. There are 8 groups for selection, OFF is to turn off this function then.

Compander (COMPANDER) ---- MENU 23

This is for decreasing the voice squelch, and it is highly efficient for long-term communication. In standby, press **MENU** + **2 SOL** **3 TXP**  , screen display  . Press **MENU** to enter the function, then press  /  to select the parameter and then **MENU** to confirm, while press **MENU** to return back to the standby. There is ON and OFF selectable.

AM Mode SW (AM MODE) ---- MENU 24

In standby, press **MENU** + **2 SOL** **4 W**  , screen displays  . Press **MENU** to confirm, and press  /  to select the work mode then press **MENU** to confirm, and press **EXIT** to back to standby.

NOTE

» AM mode is only working in A area.

Instructions for functions list

Functions list under Main Menu (Long Press **MENU** button)

Battery Saver (BAT-SAVE) ---- MENU 1

When the power saver function is ON, the receiver circuit will be cut off for a moment, and then re-activate to detect the signals for a while, in order to reduce the battery capacity consumption.

In standby, press **MENU** + **1 STEP**, the screen displays 

Press **MENU** to enter, it shows 'ON', press **▲** / **▼** to select turn ON/OFF the power saver function.

Press **MENU** to confirm, and then press **EXIT** to return to standby.

Roger (ROGER) ---- MENU 2

When the transceiver is standby, press the **MENU** + **2 SOL** keys and the screen will display: 

Press the key to access the menu, and after pressing the **▲** / **▼** keys to choose the required prompt mode, press the **MENU** key to confirm, or the **EXIT** key to return to standby.

The transceiver features 4 kinds of prompt: BOT (beginning of transmission), EOT (end of transmission), BOTH (beginning and end of transmission), and OFF (prompts deactivated).

Transmit Out Timer (TOT) ---- MENU 3

This transceiver can be set in 60 levels with 15 seconds each, between 15 and 900 seconds.

In standby, press **MENU** + **3 TYP**, the screen displays 

Press **MENU** to enter, press **▲** / **▼** to select the desired timer level, then press **MENU** to confirm, finally press **EXIT** to return to standby.

VOX (VOX) ---- MENU 4

In standby, press **MENU** + **4 WIN**, the screen displays 

Press **MENU** to enter, press **▲** / **▼** to select VOX level(1-9), then press **MENU** to confirm, finally press **EXIT** to return to standby.

NOTE

» The higher level of VOX is set, the higher volume is needed.

» In SCAN and FM radio modes, the VOX function is not available.

Instructions for functions list

Voice Guide (VOICE) ---- MENU 5

In standby, press **MENU** + **5_{BCL}** , the screen displays



Press **MENU** to enter, press **▲** / **▼** to select ON or OFF , and then press **MENU** key to confirm, finally press **EXIT** to return to standby.

NOTE

» Turn off MENU 9 and MENU 11 at the same time to turn off all the voice prompt if required.

Transmit Out Alert (TOA) ---- MENU 6

In standby, press **MENU** + **6_{TOA}** , the screen displays



Press the **MENU** key to access the menu, and after pressing the **▲** / **▼** keys to select the required time, press the **MENU** key to confirm, and the **EXIT** key to return to standby.

TOA has a maximum length of 10seconds, each level corresponding to 1second. OFF: Deactivate TOA.

Special Reminder

» When the transmission exceeds the "Time-out timer" set time, a error tone will prompt, and transmission is stopped automatically.

Beep Prompt (BEEP) ---- MENU 7

In standby, press **MENU** + **7_{BCL}** , the screen displays



Press **MENU** to enter, press **▲** / **▼** to turn ON/OFF the beep prompt function, then press **MENU** to confirm, finally press **EXIT** to return to standby.

Language (LANGUAGE) ---- MENU 8

In standby, press **MENU** + **8_{ROS}** , the screen display

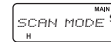


Press **MENU** to access the function, press **▲** / **▼** to select the desired language, and then press **MENU** to confirm, press **EXIT** to return to standby mode.

Two Options:CHINESE and ENGLISH

Scan Mode (SCAN MODE) ---- MENU 9

In standby, press **MENU** + **9_{ROS}** , the screen display



Press **MENU** to access the function, press **▲** / **▼** to select the desired language, and then press **MENU** to confirm, press **EXIT** to return to standby mode.

Two Options:CHINESE and ENGLISH

Instructions for functions list

TO: after finding a carrier wave signal, scanning will continue if no operations are carrier out within 5 seconds.

CO: scanning will stop when a carrier wave signal has been found, and scanning will continue if the carrier wave signal is lost for 3 seconds.

SE: scanning will stop when a carrier wave signal is found.

NOTE

» Hold on  for 2 seconds to access the scan mode.

Scan Tones SW (QT-SW) ---- MENU 10

In standby, press **MENU** + **1STEP** , screen displays .

Press **MENU** to confirm, and press  /  to select if scanning tones then press **MENU** to confirm, and press **EXIT** to back to standby.

Options:

OFF: Will not scan tones when scanning in Channel or Frequency mode.

ON: Will scan tones when scanning in Channel or Frequency mode.

Topkey options (Topkey-DEF) ---- MENU 11

In standby, press **MENU** + **1STEP** **1STEP**, screen displays .

Press **MENU** to confirm, and press  /  to select the option then press **MENU** to confirm, and press **EXIT** to back to standby.

Options: ALARM, SOS

PF1 options (PF1-DEF) ---- MENU 12

In standby, press **MENU** + **1STEP** **2SQL**, screen displays .

Press **MENU** to confirm, and press  /  to select the option then press **MENU** to confirm, and press **EXIT** to back to standby.

Options: CALL, VFTX

NOTE

» Selective Calls could be programmed by the matching software.

Instructions for functions list

PF2 Short Press options (PF2-SHORT) ---- MENU 13

In standby, press **MENU** + **1 STEP** **3 TXP**, screen displays .

Press **MENU** to confirm, and press **▲** / **▼** to select the option then press **MENU** to confirm, and press **EXIT** to back to standby.

Options: DISABLE, SCAN, B-LIGHT, RADIO, MONITOR, CTC-SCAN, DCS-SCAN, POS-DSP.

Please refer to the description fro above options.

1. SCAN

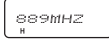
Press PF2 to select the scan option(please go to MENU9 to set the scan mode) and then scanning function activates, press any key or button to stop the scanning.

2. B-LIGHT

Press PF2 to select the B-LIGHT option to activate B-LIGHT function and then press PF2 again to stop the B-LIGHT working.

3. RADIO

- Press PF2 to select the FM RADIO option to activate the RADIO function.
- FM RADIO is working, screen displays , then press **% 500** to start searching the stations.
It stops in the working station for listening.

- Please press PF2 again in RADIO mode, screen displays , then press **RPT** screen displays , which is possible to enter into the station frequency directly.

- Exit from FM RADIO mode

Please press PF2 to exit from FM RADIO mode.

- Memory and Read in FM RADIO mode

Please refer to MENU 38 in details.

4. MONITOR

Press PF2 select MONI option to activate the monitor function. Press PF2 again to turn off monitor function.

5. CTC-SCAN

Press PF2 select CTC-SCAN option to start scanning CTCSS tones. Press PF2 again to turn off the function.

6. DCS-SCAN

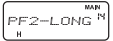
Press PF2 select DCS-SCAN option to start scanning DCS tones. Press PF2 again to turn off the function.

7. POS-DSP

When the GPS is ON, please PF2 to display the location.

Instructions for functions list

PF2 Long Press Options (PF2-LONG) ---- MENU 14

In standby, press **MENU** + **1 STEP 4 WIN**, screen displays .

Press **MENU** to confirm, and press **▲** / **▼** to select the option then press **MENU** to confirm, and press **EXIT** to back to standby.

Options: DISABLE, SCAN, B-LIGHT, RADIO, MONITOR, CTC-SCAN, DCS-SCAN, POS-DSP.

Please refer to the detailed instructions for the options in MENU 13 above.

PF3 Short Press Options (PF3-Short) ---- MENU 15

In standby, press **MENU** + **1 STEP 5 BCL**, screen displays .

Press **MENU** to confirm, and press **▲** / **▼** to select the option then press **MENU** to confirm, and press **EXIT** to back to standby.

Options: DISABLE, SCAN, B-LIGHT, RADIO, MONITOR, CTC-SCAN, DCS-SCAN, POS-DSP.

Please refer to the detailed instructions for the options in MENU 13 above.

PF3 Long Press Options (PF3-LONG) ---- MENU 16

In standby, press **MENU** + **1 STEP 6 RDC**, screen displays .

Press **MENU** to confirm, and press **▲** / **▼** to select the option then press **MENU** to confirm, and

press **EXIT** to back to standby.

Options: DISABLE, SCAN, B-LIGHT, RADIO, MONITOR, CTC-SCAN, DCS-SCAN, POS-DSP.

Please refer to the detailed instructions for the options in MENU 13 above.

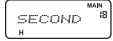
Backlight (ABR) ---- MENU 17

In standby, press **MENU** + **1 STEP 7 RDC**, screen displays .

Press **MENU** to confirm, and press **▲** / **▼** to select the backlight option then press **MENU** to confirm, and press **EXIT** to back to standby.

Options: Always on, 1S to 20S, Always OFF

Second (SECOND) ---- MENU 18

In standby, press **MENU** + **1 STEP 8 RDC**, The screen display .

Press **MENU** to enter, **▲** / **▼** to select ON/OFF, then press **MENU** confirm, press **EXIT** to standby.

Using the stopwatch timer:

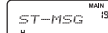
When this function is ON, press **# LOCK** to start counting, while press any key to stop working. Press **MENU** again to re-start counting.

Instructions for functions list

NOTE

» Press any key (except **MENU**) when the stopwatch stops working to exit the stopwatch function.

Startup Message (ST-MSG) ---- MENU 19

In Standby, press **MENU** + **1 STEP 9 100%**, the screen displays 

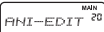
Press **MENU** to enter the function, then press **▲** / **▼** to select the parameter and then **MENU** to confirm, while press **MENU** to return back to the standby.

BITMAP: Picture

BATT-V: Voltage

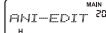
ANI ID Setting (ANI-EDIT) ---- MENU 20

The transceiver's Caller ID code is composed of the arabic numerals 0-9: the first digit cannot be 0, and ID numbers can be as short as 3 digits and as long as 6.

In standby, press **MENU** + **2 SQL □**, the screen displays 

Press **MENU** to access the menu, and after inputting the required numbers, press **MENU** to confirm, and **EXIT** key to return to standby.

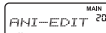
Example 1: editing a 6-digit ANI ID code(123456).

In standby, press **MENU** + **2 SQL □**, the screen displays 

After pressing **MENU** key, the first digit will flash, then input the required value 123456.

Press **MENU** to confirm, and press **EXIT** to return to standby.

Example 2: editing a 3-digit Caller ID code(123)

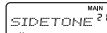
In standby, press **MENU** + **2 SQL □**, the screen displays 

After pressing **MENU**, if a Caller ID code has been already input, it will be displayed, and the first digit will flash. If no Caller ID code has been input, 101 will be displayed, and the first digit will flash. Input 123 at the same time, press **MENU** to confirm, press **EXIT** to return to standby.

Special Reminder

» Each transceiver can have only one ANI ID code, which is shared by Area A and B.

Sidetone (SIDETONE) ---- MENU 21

In frequency mode, press **MENU** + **2 SQL 1 STEP**, The screen display 

Press **MENU** to enter, press **▲** / **▼** to select the required sidetone mode, and press **MENU** to confirm, press **EXIT** it return to standby.

Instructions for functions list

The transceiver has the following DTMF modes: 1. DT-ST: Keypad sidetone will be activated when transmitting; 2. ANI-ST: ANI ID code sidetone will be activated when transmitting; 3. DT+ANI: keypad and caller ID sidetone are both activated when transmitting. OFF: Deactivate sidetone function.

Auto Lockout (AUTOLOCK) ---- MENU 22

In standby, press **MENU** + **2_{SOL}** **2_{SOL}**, the screen displays 

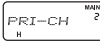
Press **MENU** to access the menu, press **▲** / **▼** to select ON(Activate)/OFF(Deactivate), and then press **MENU** to confirm, press **EXIT** to return to standby.

After activating keypad autolock function, the keypad will be locked automatically without any operation in 15seconds. Hold on **#_{LOCK}** for 2seconds to unlock the keypad.

NOTE

» Manually lock: In standby, hold on **#_{LOCK}** for 2seconds to lock the keypad, hold on **#_{LOCK}** for 2 seconds again to unlock the keypad.

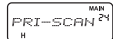
Priority Channel SW (PRI-CH) ---- MENU 23

In standby, press **MENU** + **2_{SOL}** **3_{TRP}**, the screen display 

Press **MENU** to access, press **▲** / **▼** to select ON/OFF. And then press **MENU** to confirm, and press **EXIT** to return to standby

If you want to monitor the other frequency and check the certain preferred frequency at the same time, you can set priority scan function.

Priority Channel Scanning (PRI-SCAN) ---- MENU 24

In standby, press **MENU** + **2_{SOL}** **4_{WIN}**, screen displays 

Press **MENU** to confirm, and press **▲** / **▼** to select if adding the priority channel to scan list press **MENU** to confirm, and press **EXIT** to back to standby.

Options: ON, OFF

Repeater Mode (REPEATER) ---- MENU 25

This transceiver has 2 repeater setting available:

- 1.X-DIRPT: Directional cross-band repeater mode
- 2.X-TWRPT: Two way cross-band repeater mode

Instructions for functions list

Special Reminder

» In cross-band repeater mode, if the channel or frequency set the reverse frequency, offset frequency, or offset direction, its transmitting frequency would out of the transceiver's frequency, then it will not transmit.

Master frequency and sub frequency for repeater should be on different bands. (For example, master frequency is programmed on VHF band, and the sub frequency should be programmed on UHF band, and vice versa.)

X-DIRPT (Directional cross-band repeater): The master VFO's receiving frequency is the cross-band receiver's receiving frequency, and the sub VFO's transmitting frequency is the cross-band transmitter's transmitting frequency.

X-TWRPT (Two way cross-band repeater): In standby, both the master and secondary VFO's are receivers, whichever VFO receives an effective carrier-wave signal, the other VFO will be the transmitter and start transmitting. The transmitter and receiver is unfixed under two way cross-band

repeater mode. The first received VFO is receiver and relatively the other one is transmitter.

After accessing cross-band repeater mode, the operation of receiving /transmission frequencies, CTCSS/DCS encoding& decoding are the same as the transceiver is in transceiver communication mode.

Example:

- A. Before accessing cross-band repeater mode, A area is in channel mode. The receiving frequency and CTCSS/DCS in cross-band repeater mode are the same with the channel in standby. After B area receives the effective signal, A area starts transmission. The transmitting frequency and CTCSS/DCS in cross-band repeater mode are the same with the channel in A area. If setting reverse frequency function, the transmission&receiving frequencies and CTCSS/DCS will be reverted.
- B. Before accessing cross-band repeater mode, A area is in frequency mode. The receiving frequency and CTCSS/DCS in cross-band repeater mode are the same with the setting in standby. After B area receives the effective signal, A area starts transmission. The receiving frequency and CT-

Instructions for functions list

CSS/DCS in cross-band repeater mode are the same with the channel in A area.

If setting reverse frequency function, the transmission&receiving frequencies and CTCSS/DCS will be reverted.

To select if you will open speaker for the receiver in cross-band repeater via MENU26 (RPT-SPK) ,and if you would like to hold on PTT key to transmit in repeater mode via MENU27 (RPT-PTT). But if you press PTT key to transmit, the transceiver exits the repeater mode temporarily.

In standby, press **MENU** + **2 SOL** **5 BCL** the screen displays 

Press **MENU**, press **▲** / **▼** to select the mode you desire, and then press **MENU** again.

Special Reminder

- » In cross-band repeater mode, the screen will display .
- » Switching transceiver communication and repeater modes via **RPT**. In standby, hold on **RPT** for 2 seconds to switch the modes.
- » In order to use the repeating well, there is the Repeating Receipt Tone which is set by MENU 47. The repeating receipt tone timely and effectively reports the working status and increases the efficiency of repeating.

» The Repeating Hold Timer is used for avoiding to press or release PTT too frequently in order to read out the message. When the receiver was released PTT, the hold time is able for the equipment keeping transmitting for a while during waiting for response. If there is no efficient QT/DQT detected within the hold time, then the transmitter will release PTT. The repeating hold timer is setting the hold time for the transmitter to keep transmitting after the QT/QDT receiving signal disappears. The function is programmable by supplied software.

Repeater Speaker Setting (RPT-SPK) ----- MENU 26

In standby, press **MENU** + **2 SOL** **6 INC**, the screen display 

Press **MENU** to access, press **▲** / **▼** to select ON/OFF. And then press **MENU** to confirm, and press **EXIT** to return to standby.

Repeater PTT Setting (RPT-PTT) ---- MENU 27

In standby, press **MENU** + **2 SOL** **7 KTC**, the screen display 

Press **MENU** to access, press **▲** / **▼** to select ON/OFF. And then press **MENU** to confirm, and press **EXIT** to return to standby.