WOUXUN®

Multi Bands Two-Way Radio

Warranty Register   Security-cord   Review Transfer

USER'S MANUAL

WOUXUN®

ISO9001:2015
Certificate No.:00121Q36795R5M/5100

ISO14001:2015
Certificate No.:00121E32879R4M/5100

WOUXUN Brand

What is meaning of WOUXUN?

"W" means "World"

"OU" means "Singing" in Chinese, representing the tone of Wouxun products is quiteexcellent 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 usersall over the world.

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 Batterypack and charger to avoid damaging the radio.
4. Please use the company attached antenna to avoid shortening communication distance.
5. Please do not put the transceiver near to the heating appliance or expose it in the sun for a long time.
6. Please do not put the transceiver in extremely dusty、moist、watery or unstable place.
7. Please do not wash the radio with strong chemicals or strong lotion.
8. Please do not transmit before installing the antenna.
9. Turn off the power supply immediately if the transceiver emits an unusual smell or smokes, then take out the battery or Batterypack and notify 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.

Contents

Contents

Contents

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)
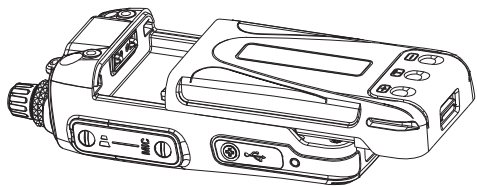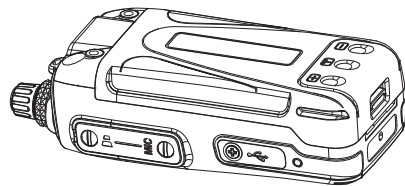
PIC1   PIC2

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.

Repeater
Battery Save
VOX
Lockout
Battery Voltage

AM/FM SW
W/N
Radio FM
Reverse
Last RX
CTCSS/DCS
Priority Channel

`FM ◁ 98.3 MHZ`

`445.12500`

TX Power
Scrambler
TX Status
DTMF Mute
Channel Number
Shift

`144.75500` `CH-003`

Antenna

Flashlight

LCD Screen

UP/DOWN

MENU

Reverse/Scan

Numeric Keys

Lock/Timer

Speaker

Power ON/OFF, Volume Konb

Channel Encoder
RX Indicato r(Green) /TX Indicator (Red)

Exit/Back
Short Press: Areas Switch, Long Press: Bands Switch
Short Press: TDR, Long Press: Word Mode
Short Press: Repeater, Long Press: Talkaround
Microphone

Earphone Jack

USB-C charging

PF1: TX by Sub Area/Selective Call

PTT

PF2: Scan/Backlight/FM Radio/
     Squelch/CTCSS Scan/
     DCS Scan/Display Location

PF3: Scan/Backlight/FM Radio/
     Squelch/CTCSS Scan/
     DCS Scan/Display Location

Description for main functions

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.

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	* SCAN	BAND	1	2	3	*
4 W/N	5 BCL	6 R-CTC	☐	TDR V/M	4	5	6	0
7 T-CTC	8 R-DCS	9 T-DCS	⊞	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〕	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〔SQL〕	SQUELCH	Press UP/Down buttons for settings	Options: 1 to 9 levels	〔MENU〕	〔EXIT〕	P19–20
3. TX-POWER		〔MENU〕 3〔TXP〕	TX-POWER	Press UP/Down buttons for settings	Options: High, Middle, Low	〔MENU〕	〔EXIT〕	P20
4. W-N		〔MENU〕 4〔W/N〕	W-N	Press UP/Down buttons for settings	Options: High, Middle, Low	〔MENU〕	〔EXIT〕	P20
5. BUSYLOCK		〔MENU〕 5〔BCL〕	BUSYLOCK	Press UP/Down buttons for settings	Options: ON, OFF	〔MENU〕	〔EXIT〕	P21
6. RX-CTCSS		〔MENU〕 6〔RXTC〕	RX-CTCSS	Press UP/Down buttons for settings	Options: standard tones from 67.0Hz to 254.1Hz, OFF	〔MENU〕	〔EXIT〕	P21
7. TX-CTCSS		〔MENU〕 7〔TXTC〕	TX-CTCSS	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〔DCS〕	RX-DCS	Press UP/Down buttons for settings	Options: standard tones from D023N to D754I, OFF	〔MENU〕	〔EXIT〕	P22
9. TX-DCS		〔MENU〕 9〔T-DCS〕	TX-DCS	Press UP/Down buttons for settings	Options: standard tones from D023N to D754I, OFF	〔MENU〕	〔EXIT〕	P22–23
10. CH-MDF		〔MENU〕 1〔STEP〕 □	CH-MDF	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〕	OFFSET	Press UP/Down buttons for settings	Options: 0 to 999.995	〔MENU〕	〔EXIT〕	P24
12. SHIFT		〔MENU〕 1〔STEP〕 2〔SQL〕	SHIFT	Press UP/Down buttons for settings	Options: +, -, OFF	〔MENU〕	〔EXIT〕	P24–25
13. CH-NAME		〔MENU〕 1〔STEP〕 3〔TXP〕	CH-NAME	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〔W/N〕	CH-ADD	Press UP/Down buttons for settings	Options: 999 channels	〔MENU〕	〔EXIT〕	P26–27

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	DEL-CH 15	MENU ▶	Press UP/Down buttons for settings	Options: 999 channels	MENU ▶ EXIT	P27–28
16. MUTE-MODE		MENU ▶ 1 STEP 6 R-CTC	MUTE-MODE 16	MENU ▶	Press UP/Down buttons for settings	Options: QT, QT*DTMF, QT+DTMF	MENU ▶ EXIT	P27–28
17. TONESCAN		MENU ▶ 1 STEP 7 T-CTC	TONESCAN 17	MENU ▶	Press UP/Down buttons for settings	Options: CTCSS, DCS	MENU ▶ EXIT	P29
18. SCAN-ADD		MENU ▶ 1 STEP 8 R-DCS	SCAN-ADD 18	MENU ▶	Press UP/Down buttons for settings	Options: ON, OFF	MENU ▶ EXIT	P30
19. SCAN GROUP		MENU ▶ 1 STEP 9 T-DCS	SCAN GROUP 19	MENU ▶	Press UP/Down buttons for settings	Options: All, 1 to 10 groups	MENU ▶ EXIT	P30
20. SCN-MODE		MENU ▶ 2 SQL □	SCAN-MODE 20	MENU ▶	Press UP/Down buttons for settings	Options: TO, CO, SE	MENU ▶ EXIT	P31
21. CALLCODE		MENU ▶ 2 SQL 1 STEP	CALLCODE 21	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 SQL 2 SQL	SCRAMBLE 22	MENU ▶	Press UP/Down buttons for settings	Options: 1 to 8 groups, OFF	MENU ▶ EXIT	P31–32
23. COMPANDER		MENU ▶ 2 SQL 3 TXP	COMPANDER 23	MENU ▶	Press UP/Down buttons for settings	Options: ON, OFF	MENU ▶ EXIT	P32
24. AM MODE		MENU ▶ 2 SQL 4 W/N	AM MODE 24	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		MENU → 1 STEP	BAT-SAVE MAIN H	MENU →	Press UP/Down buttons for settings	Options: ON, OFF	MENU → EXIT	P33
2. ROGER		MENU → 2 SQL	ROGER MAIN H	MENU →	Press UP/Down buttons for settings	Options: OFF, BOT, EOT, BOTH	MENU → EXIT	P33
3. TOT		MENU → 3 TXP	TOT MAIN H	MENU →	Press UP/Down buttons for settings	Options: 60 levels, 15 second every level	MENU → EXIT	P34
4. VOX		MENU → 4 W/N	VOX MAIN H	MENU →	Press UP/Down buttons for settings	Options: 1 to 9 levels, OFF	MENU → EXIT	P34
5. VOICE		MENU → 5 BCL	VOICE MAIN H	MENU →	Press UP/Down buttons for settings	Options: ON, OFF	MENU → EXIT	P35
6. TOA		MENU → 6 DCTC	TOA MAIN H	MENU →	Press UP/Down buttons for settings	Options: OFF, 1 to 10S	MENU → EXIT	P35
7. BEEP		MENU → 7 SCTC	BEEP MAIN H	MENU →	Press UP/Down buttons for settings	Options: ON, OFF	MENU → EXIT	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		MENU → 8 ROCS	LANGUAGE MAIN 8 H	MENU →	Press UP/Down buttons for settings	Options: Chinese, English	MENU → EXIT	P36
9. SCAN MODE		MENU → 9 T4CS	SCAN MODE MAIN 9 H	MENU →	Press UP/Down buttons for settings	Options: TO, CO, SE	MENU → EXIT	P36–37
10. QT-SW		MENU → 1 STEP □	QT-SW MAIN 10 H	MENU →	Press UP/Down buttons for settings	Options: ON, OFF	MENU → EXIT	P37
11. Topkey-DEF		MENU → 1 STEP 1 STEP	Topkey-DEF MAIN 11 H	MENU →	Press UP/Down buttons for settings	Options: ALARM, SOS	MENU → EXIT	P38
12. PF1-DEF		MENU → 1 STEP 2 SQL	PF1-DEF MAIN 12 H	MENU →	Press UP/Down buttons for settings	Options: CALL, VFTX KEY	MENU → EXIT	P38
13. PF2-SHORT		MENU → 1 STEP 3 TXP	PF2-SHORT MAIN 13 H	MENU →	Press UP/Down buttons for settings	Options: DISABLE, SCAN, LAMP, RADIO, MONI, CTC-SCAN, DCS-SCAN, POS-DSP	MENU → EXIT	P39–40
14. PF2-LONG		MENU → 1 STEP 4 W/N	PF2-LONG MAIN 14 H	MENU →	Press UP/Down buttons for settings	Options: DISABLE, SCAN, LAMP, RADIO, MONI, CTC-SCAN, DCS-SCAN, POS-DSP	MENU → EXIT	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 ▸ 1STEP 5BCL	PF3-SHORT ▸ MENU	Press UP/Down buttons for settings	Options: DISABLE, SCAN, LAMP, RADIO, MONI, CTC-SCAN, DCS-SCAN, POS-DSP	MENU	EXIT	P41
16.	PF3-LONG	MENU ▸ 1STEP 6RxCTC	PF3-LONG ▸ MENU	Press UP/Down buttons for settings	Options: DISABLE, SCAN, LAMP, RADIO, MONI, CTC-SCAN, DCS-SCAN, POS-DSP	MENU	EXIT	P41–42
17.	ABR	MENU ▸ 1STEP 7TxCTC	ABR ▸ MENU	Press UP/Down buttons for settings	Options: Always ON, 1S to 20S, Always OFF	MENU	EXIT	P42
18.	SECOND	MENU ▸ 1STEP 8RxDCS	SECOND ▸ MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU	EXIT	P42–43
19.	ST-MSG	MENU ▸ 1STEP 9TxDCS	ST-MSG ▸ MENU	Press UP/Down buttons for settings	Options: BITMAP, BATT-V	MENU	EXIT	P43
20.	ANI-EDIT	MENU ▸ 2SQL ☐	ANI-EDIT ▸ MENU	Press UP/Down buttons for settings	Options: 3 to 6 digits from 100 to 999999, first digit could not be 0	MENU	EXIT	P43–44
21.	SIDETONE	MENU ▸ 2SQL 1STEP	SIDETONE ▸ MENU	Press UP/Down buttons for settings	Options: DT-ST, ANI-ST, DT+ANI, OFF	MENU	EXIT	P44–45

15

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 ▸ 2SQL 2SQL	AUTOLK ▸ MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU	EXIT	P45
23.	PRI-CH	MENU ▸ 2SQL 3TXP	PRI-CH ▸ MENU	Press UP/Down buttons for settings	Options: 999 memory channels	MENU	EXIT	P46
24.	PRI-SCAN	MENU ▸ 2SQL 4W/N	PRI-SCAN ▸ MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU	EXIT	P46
25.	REPEATER	MENU ▸ 2SQL 5BCL	REPEATER ▸ MENU	Press UP/Down buttons for settings	Options: X-DIRPT, X-TWRPT	MENU	EXIT	P46–50
26.	RPT-SPK	MENU ▸ 2SQL 6RxCTC	RPT-SPK ▸ MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU	EXIT	P50
27.	RPT-PTT	MENU ▸ 2SQL 7TxCTC	RPT-PTT ▸ MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU	EXIT	P50
28.	ALERT	MENU ▸ 2SQL 8RxDCS	ALERT ▸ MENU	Press UP/Down buttons for settings	Options: 1750Hz, 2100Hz, 1000Hz, 1450Hz	MENU	EXIT	P51

16

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 → 2SQL 9T4CS	ID-DLY 29 MAIN H	MENU	Press UP/Down buttons for settings	Options: 100ms, 200ms, ……30000ms	MENU	EXIT	P51
30.	PTT-ID	MENU → 3TXP □	PTT-ID 30 H	MENU	Press UP/Down buttons for settings	Options: BOT, EOT, BOTH	MENU	EXIT	P51–52
31.	RING	MENU → 3TXP 1STEP	RING 31 H	MENU	Press UP/Down buttons for settings	Options: 1 to 10 levels, OFF	MENU	EXIT	P52
32.	RPT-TONE	MENU → 3TXP 2SQL	RPT-TONE 32 H	MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU	EXIT	P52
33.	SCAN-QT	MENU → 3TXP 3TXP	SCAN-QT 33 H	MENU	Press UP/Down buttons for settings	Options: ALL, DECODER, ENCODER	MENU	EXIT	P53
34.	SP-MUTE	MENU → 3TXP 4W/N	SP-MUTE 34 H	MENU	Press UP/Down buttons for settings	Options: OFF, TX, RX, TX/RX	MENU	EXIT	P53–54
35.	RESET	MENU → 3TXP 5BCL	RESET 35 H	MENU	Press UP/Down buttons for settings	Options: VFO, ALL	MENU	EXIT	P54

17

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 → 3TXP 6RCTC	BRT-ACTV 36 H	MENU	Press UP/Down buttons for settings	Options: 1 to 10 levels	MENU	EXIT	P54
37.	BRT-STBY	MENU → 3TXP 7TCTC	BRT-STBY 37 H	MENU	Press UP/Down buttons for settings	Options: 1 to 10 levels	MENU	EXIT	P55
38.	FM RADIO	MENU → 3TXP 8RDCS	MEMORY 38 H	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 → 3TXP 9T4CS	DISY MODE 39 H	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 → 4W/N □	TIME DSP 40 H	MENU	Press UP/Down buttons for settings	Options: ON, OFF	MENU	EXIT	P56–57
41.	TIME/ZONE	MENU → 4W/N 1STEP	TIME/ZONE 41 H	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 → 4W/N 2SQL	LOCATION 42 H	MENU	Press UP/Down buttons for settings	Options: GPS SW, DSP POS, SEND TYPE	MENU	EXIT	P57–58

18

Functions list under Sub Menu (Short Press MENU button)

Frequency Step (STEP) ---- MENU 1

In standby, press MENU + 1 STEP , the screen displays ［STEP MAIN 1 H］

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:

5.00KHz, 6.25KHz, 8.33KHz, 10.00KHz, 12.50KHz, 25.00KHz, 50.00KHz and 100KHz.

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 ［SQUELCH MAIN 2 H］

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

19

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 ［TX-POWER MAIN 3 H］

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 W/N , the screen displays ［W-N MAIN 4 H］

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

20

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

In frequency mode, press [MENU] + [5 BCL] , the screen displays [BUSYLOCK 5 / MAIN / H]

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

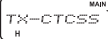Note: This function is invalid in cross band repeater or repeater/transmitter modes.

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

When the transceiver is standby, press the [MENU] + [6 TOT] keys and the screen will display [RX-CTCSS 6 / MAIN / H]

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
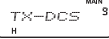Non-Standard CTCSS is ranging from 65.0 to 260.0Hz
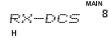
Transmitting CTCSS (TX-CTCSS) ---- MENU 7

When the transceiver is standby, press the [MENU] + [7 T-CTC] keys and the screen will display [TX-CTCSS 7 / MAIN / H]

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.

21

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 W/N] keys and the screen will display [RX-DCS 8 / MAIN / H]

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 T-DCS] keys and the screen will display [TX-DCS 9 / MAIN / H]

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 [#] to select the positive or negative codes, and press [* SCAN] to turn off the DCS tone.

22

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	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

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 presss MENU to confirm, press EXIT to return to standby.

Offset frequency range:0-599.995MHz, 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.

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 + 1STEP 3TXP keys and the screen will display CH-NAME
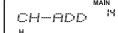
Press MENU to access the menu, and the first digit will flash (which indicates that this digit is being edited).
Press ▲ to choose the required character, press ▼ to edit the next character, press MENU to confirm, and then press EXIT to return to standby.

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 + 1STEP 4W/N , the screen displays CH-ADD
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 + 6₆CTC to access

receiving CTCSS/DCS setting, press ▲ / ▼ to select 67.0Hz, press 【MENU】 to confirm.

2.Press 【MENU】 + 【1STEP】 【1STEP】 to select the offset frequency is 10.000MHz, press 【MENU】 + 【1STEP】 【2SQL】 to set the frequency direction as "+".

3.Press 【MENU】 + 【1STEP】 【4W/N】 to access channel memory, select CH-010 and press 【MENU】 to memorize the channel and return to standby.

In standby, press 【MENU】 + 【1STEP】 【4W/N】 to access channel memory, the screen displays [CH-001] , 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】 + 【1STEP】 【5BCL】 , the screen will display [DEL-CH]
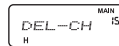
Press 【MENU】 to access the menu, press ▲ / ▼ to select the channel you wish to delete or manually inputting the channel number, press 【MENU】 to confirm and the 【EXIT】 key to return to standby.

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】 + 【1STEP】 【6R.CTC】 , the screen displays [MUTE-MODE]

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

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 + 1STEP 7T-CTC , screen displays TONESCAN 17 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 + 1STEP 8R-DCS , the screen display SCAN-ADD 18

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 + 1STEP 9T-DCS , the screen displays SCAN GROUP 19

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

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

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

When the transceiver is standby, press the 【MENU】 + 【2 SQL】 【□】 , keys and the screen will display ⌈SCAN-MODE²⁰⌋

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 SQL】 【1 STEP】 , the screen displays ⌈CALLCODE²¹⌋

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 SQL】 【2 SQL】 , screen display ⌈SCRAMBLE²²⌋

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 SQL】 【3 TXP】 , screen display ⌈COMPANDER²³⌋
Press 【MENU】 to enter the function, then press 【▲】 / 【▼】 to select the parameter and then 【MENU】 to confirm,
while press to return back to the standby.
There is ON and OFF selectable.

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

In standby, press 【MENU】 + 【2 SQL】 【4 W/N】 , screen displays ⌈AM MODE²⁴⌋
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.

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 [BAT-SAVE]

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

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 SQL] keys and the screen will display: [ROGER]

Press the key to access the menu, and after pressing the [▲] / [▼] keys to choose the required prompt mode, press the [MENU] key to 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 TXP] , the screen displays [TOT]

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 WN] , the screen displays [VOX]

Press [MENU] to enter, press [▲] / [▼] to select VOX level(1-9), then press [MENU] to confirm, finally press [EXIT] to return to standby.
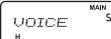
NOTE ⚠
≫ The higher level of VOX is set, the higher volume is needed.
≫ In SCAN and FM radio modes, the VOX function is not available.

Instructions for functions list

Voice Guide (VOICE) ---- MENU 5

In standby, press MENU + 5BCL , the screen displays [*VOICE* MAIN 5 H]

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 + 6R-CTC , the screen displays [*TOA* MAIN 6 H]

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 tra- nsmission is stopped automatically.

Beep Prompt (BEEP) ---- MENU 7

In standby, press MENU + 7T-CTC , the screen displays [*BEEP* MAIN 7]

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 + 8R-DCS , the screen display [*LANGUAGE* MAIN 8 H]

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 + 9T-DCS , the screen display [*SCAN MODE* MAIN 9 H]

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

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 ✱ SCAN for 2 seconds to access the scan mode.

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

In standby, press MENU + 1STEP ▢ , screen displays QT-SW MAIN .

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 Topkey-DEF MAIN .

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 PF1-DEF MAIN .

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 + 1STEP 3TXP , screen displays PF2-SHORT 13 .

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.
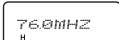
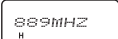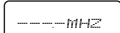Please refer to the description fro above options.

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   76.0MHZ   , then press ✱SCAN to start searching the stations. It stops in the working station for listening.

• Please press PF2 again in RADIO mode, screen displays   889MHZ   , then press RPT screen displays   ----MHZ   , 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.

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

In standby, press [MENU] + [1 STEP] [4 W/N] , screen displays [PF2-LONG 14] .

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 [PF3-SHORT 15] .

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 R-CTC] , screen displays [PF3-LONG 15] .

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 R-CTC] , screen displays [ABR 17] .

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 R-DCS] , The screen display [SECOND 18]

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.

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

In Standby, press MENU + 1STEP 9T-CCS, the screen displays [ST-MSG 19]

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 + 2SQL □, the screen displays [ANI-EDIT 20]

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 + 2SQL □, the screen displays [ANI-EDIT 20]

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 + 2SQL □, the screen displays [ANI-EDIT 20]

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.

Sidetone (SIDETONE) ---- MENU 21

In frequency mode, press MENU + 2SQL 1STEP, The screen display [SIDETONE 21]

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

The transceiver has the following DTMF modes: 1. DT-ST: Keypad sidetone will be activated when tran-smitting; 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** + **2₅QL** **2₅QL** , the screen displays ⌊ᴬᵁᵀᴼᴸᴷ ²²⌋
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** + **2₅QL** **3ₜₓₚ** , the screen display ⌊ᴾᴿᴵ⁻ᶜᴴ ²³⌋
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** + **2₅QL** **4wₙ** , screen displays ⌊ᴾᴿᴵ⁻ˢᶜᴬᴺ ²⁴⌋ .
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

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-

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 + 2SQL 5BCL the screen displays [REPEATER 25]

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 + 2SQL 6R-CTC , the screen display [RPT-SPK 26]

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 + 2SQL 7R-CTC , the screen display [RPT-PTT 27]

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

Scanning Tone Save Modes (SCAN-QT) ---- MENU 33

When the transceiver is in CTCSS/DCS scanning, there are 3 saving types to save the detected CTCSS/

DCS from the others to your transceiver:

1.Save as your transceivers decoder and encoder(ALL).

2.Save as your transceiver encoder(ENCODER)

3.Save as your transceiver decoder(DECODER)

When the transceiver is in standby, press MENU + 3 TXP   3 TXP keys and the screen will display SCAN-QT 33

Press ▲ / ▼ press MENU , and then press EXIT .

Mute Mode in Sub Area (SP-MUTE) ---- MENU 34

Mute function is very practical, especially when the transceiver is in dual receiving mode.

In standby, press MENU + 3 TXP   4 W/N , the screen displays SP-MUTE 34

Press MENU to access and then press ▲ / ▼ to select the parameter you desire, and then press MENU

to confirm.

OFF: Deactivate the function

TX: Transmission on master frequency, the receiving volume of sub-frequency is off.

RX: Receiving on master frequency, the receiving volume of sub-frequency is off.

TX/RX: Both receiving and transmission on master frequency, the receiving volume of sub-frequency is off.

Reset (RESET) Scanning Tone Save Modes (SCAN-QT) ---- MENU 35

Functional Parameter Reset(VFO): resets all functional settings to factory default values, but channel parameters are not reset.

Total Parameter Reset(ALL): resets all of the transceiver's functional settings and channel parameters to factory values.

In standby, press MENU + 3 TXP   5 BCL , the screen displays RESET 35

Press MENU to access, press ▲ / ▼ to select the parameter you desire and then press EXIT to confirm

The screen will display WAIT····

After the transceiver resets(VFO/ALL), it will restart and return to standby mode.

Backlight in Activate mode (BRT-ACTV) ---- MENU 36

In standby, press MENU + 3 TXP   6 R-CTC , screen display BRT-ACTV 36

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

Level selectable for baklight setting: 01 to 10

Backlight in Standby mode (BRT-STBY) ---- MENU 37

In standby, press MENU + 3 TXP 7 T-CTC , screen display BRT-STBY 37

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

Level selectable for baklight setting: 01 to 10

FM Radio mode (FM RADIO) ---- MENU 38

FM Radio Read: In the RADIO mode, enter the menu and select the READ option. There are 20 groups for options.

FM Radio Memory: In the RADIO mode, enter the menu and select the MEMORY option. There are 20 groups for options.

In RADIO mode, please press MENU + 3 TXP 8 R-DCS , screen displays MEMORY 38

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

Theme (DISY MODE) ---- MENU 39

It supports to select different theme(including the Background color and Text color) for the display

screen. Default is White-1.

In standby, please press MENU + 3 TXP 9 T-DCS , screen displays DISY MODE 39

Press MENU to confirm, and press ▲ / ▼ elect the parameter then press MENU to confirm, and press EXIT to back to standby.

White-1: White Background, Black Text and Red Icons

White-2: Light Blue Background, Heavy Blue Text and Red Icons

Black-1: Black Background, Golden Text and Green Icons

Black-2: Black Background, White Text and Green Icons

Customize 1: The colors for background, text and icons could be programmed by software.

Customize 2: The colors for background, text and icons could be programmed by software.

Customize 3: The colors for background, text and icons could be programmed by software.

Customize 4: The colors for background, text and icons could be programmed by software.

Time (TIME DSP) ---- MENU 40

In standby, please press MENU + 4 W/N ☐ , screen displays TIME DSP 40

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

Options: ON, OFF

> **NOTE** ⚠️
>
> » The time displays when the GPS is ON.

Time Zone (TIME/ZONE) ---- MENU 41

In standby, please press 〔MENU〕 + 〔4 w/n〕 〔1 STEP〕 , screen displays [TIME/ZONE 41]

Press 〔MENU〕 to confirm, and press 〔▲〕 / 〔▼〕 to select the parameter then press 〔MENU〕 to confirm, and press 〔EXIT〕 to back to standby.

Location (LOCATION) ---- MENU 42 (Optional)

In standby, please press 〔MENU〕 + 〔4 w/n〕 〔2 SQL〕 , screen displays [LOCATION 42]

Press 〔MENU〕 to confirm, and press 〔▲〕 / 〔▼〕 to select the parameter then press 〔MENU〕 to confirm, and press 〔EXIT〕 to back to standby.

GPS SW (GPS-SW) (Optional): Turn On or OFF for GPS function.

Location Display (DSP POS) (Optional): Display the location when GPS is ON.

> **NOTE** ⚠️
>
> » Press 〔MENU〕 to switch to map scale in display mode, while press 〔#〕 to display the location.
> » Press numeric keys from 1 to 8 to select the received contacts and then press PF1 button to make the selective calls for the contact.

Location Sending Type (SEND TYPE) (Optional):

Settings for the sending types for the location information.

OFF: Not sending.

PTT SEND: Release PTT to send out.

Timing: 1 to 10 minutes for sending

Detailed Guide for some functions

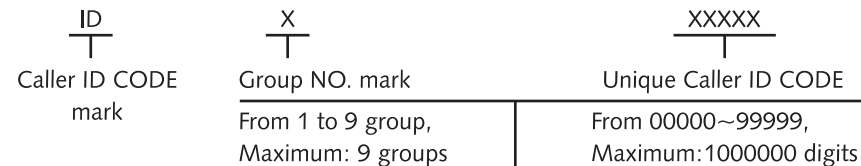### All calls, Group calls and Selective calls

There are Caller ID code transmission, Caller ID code edit and DTMF decoding functions. Without the assistance of the other communication equipments, the all calls,group calls and selective calls are available between the groups.

Before using all calls,group calls and selective calls function, you need to set as followings:

1. Caller ID CODE edit

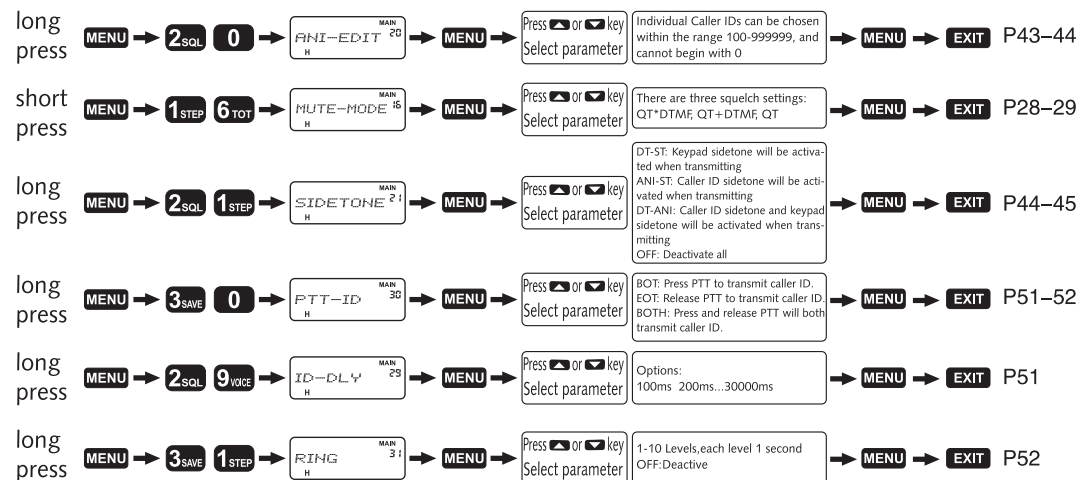Each transceiver in the same group should be edited a unique ANI ID code.

Caller ID CODE: ID -- XXX(3 digits) ID -- XXXX(4 digits) ID--XXXXX(5 digits) ID-- XXXXXX(6digits)

ID   X   XXXXX

Caller ID CODE   Group NO. mark   Unique Caller ID CODE
    mark
              From 1 to 9 group,   From 00000~99999,
              Maximum: 9 groups   Maximum:1000000 digits

                    This is how to set Caller ID CODE.

NOTE: Caller ID Codes should be different for the transceivers in the same group.

Steps are as followings:

long press — MENU → 2SQL 0 → ANI-EDIT 20 → MENU → Press ▲ or ▼ key Select parameter — Individual Caller IDs can be chosen within the range 100-999999, and cannot begin with 0 → MENU → EXIT P43–44

short press — MENU → 1STEP 6TOT → MUTE-MODE 16 → MENU → Press ▲ or ▼ key Select parameter — There are three squelch settings: QT*DTMF, QT+DTMF, QT → MENU → EXIT P28–29

long press — MENU → 2SQL 1STEP → SIDETONE 21 → MENU → Press ▲ or ▼ key Select parameter — DT-ST: Keypad sidetone will be activated when transmitting; ANI-ST: Caller ID sidetone will be activated when transmitting; DT-ANI: Caller ID sidetone and keypad sidetone will be activated when transmitting; OFF: Deactivate all → MENU → EXIT P44–45

long press — MENU → 3SAVE 0 → PTT-ID 30 → MENU → Press ▲ or ▼ key Select parameter — BOT: Press PTT to transmit caller ID. EOT: Release PTT to transmit caller ID. BOTH: Press and release PTT will both transmit caller ID. → MENU → EXIT P51–52

long press — MENU → 2SQL 9VOICE → ID-DLY 29 → MENU → Press ▲ or ▼ key Select parameter — Options: 100ms 200ms...30000ms → MENU → EXIT P51

long press — MENU → 3SAVE 1STEP → RING 31 → MENU → Press ▲ or ▼ key Select parameter — 1-10 Levels,each level 1 second OFF:Deactive → MENU → EXIT P52

NOTE ⚠

≫ Any transceiver in the same group should be with the same frequency point and parameter.

Detailed Guide for some functions

a. How to use all calls function:

　Hold on PTT key to transmit. After transmitting Caller ID Code, input ***SCAN** + **#LOCK** keys directly.

b. How to use group calls function:

　Hold on PTT key to transmit. After transmitting Caller ID Code, input "Group NO." ***SCAN** + **#LOCK**
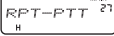
c. How to use selective calls function:

　Hold on PTT key to transmit. After transmitting Caller ID Code, input the Caller ID Code of the sele-

　ctive transceiver that you want to speak to.

Note: Selective call is available via selective call key. Selective call code is programmed via supplied software. Programming the same selective call code of the selective transceiver and Caller ID code of the selected transceiver.

For example, Caller ID Code for the selected transceiver is 123456, selective call code for the selective transceiver should be 123456 too.

Repeater Usage

1.Repeater PTT Switch (RPT-PTT)

When the transceiver is in standby, press **MENU** + **2SQL** **7T-CTC** keys and the screen displays **RPT-PTT**

Press **MENU** to access the settings, and after pressing the **▲** / **▼** keys to activate (ON) the PTT transm-ission, Press **MENU** to confirm, and press the **EXIT** key to return to standby.

2.Repeater speaker switch (RPT-SPK)

When the transceiver is in standby, press **MENU** + **2SQL** **6R-CTC** keys and the screen will display **RPT-SPK**

Press **MENU** to access the settings, and after pressing **▲** / **▼** to activate (ON) the speaker, press to confirm, and press **EXIT** key to return to standby.

3.Repeater Setting (RPT-SET)

Accessing cross-band repeater mode: when the transceiver is in standby, press **MENU** + **2SQL** **5BCL** and the screen will display **REPEATER**

Press **MENU** to access, press **▲** / **▼** to select two-way cross-band repeater mode (X-TWRPT) or direc-tional cross-band repeater mode (X-DIRPT). Press **MENU** to confirm. And then press **EXIT** to return to stan-dby mode, hold on **RPT** key for 2seconds, the transceiver is to access cross-band repeater.

Detailed Guide for some functions

Exit Cross-Band Repeater: In standby, hold **RPT** for 2seconds, the transceiver exit the cross-band repeater mode and access transceiver communication mode.

(1) When "RPT-PTT" is ON, pressing PTT to stop receiving or transmission in cross-band repeater mode. The transmission frequency is the frequency of the master band, release PTT key to access Two-way cross-band repeater mode.

(2) When "RPT-SPK" is ON, any transceiver in cross-band repeater mode can receive the effective signals, and then the repeater receipt tone will be heard.

(3) The difference between directional cross-band repeater and two-way cross-band repeater modes is the transmitter and receiver is unfixed under two way cross-band repeater mode.
Directional cross-band repeater: The master frequency area A is the receiving frequency of the receiver in cross-band repeater mode, the sub-frequency area B is the transmitting frequency.
Two-way cross-band repeater mode:In standby, both master and sub areas are receivers, whichever area receives an effective carrier wave signal, the other area will be the transmitter and start transmitting.

Trouble Shooting

Before assuming your transceiver is broken, please check your transceiver according to the following table; if the problem problem persists, you can reset the transceiver, which sometimes.

Fault	Solution
Reception prompt remains but speaker is silent	» Check that the volume knob has been set to maximum. » Please reset CTCSS/DCS to check whether different channels from other group members have been set. » Check whether mute settings are correct.
Keypad is unresponsive	» Check whether keypad has been locked. » Check whether other keys have been pressed.
Other voices (not from group members) appear in the channel.	» Please change the CTCSS / DCS code.
In standby, automatic transmission without pressing PTT key	» Please check if VOX function is active or VOX level is too low.

Trouble Shooting

Fault	Solution
Can not enter scanning mode	» Please see if the scan group channel, Scan Add function is turned on.
Cannot set up the cross-band repeater	» Please make sure A/B area is on the cross-band repeaters operating frequency.
Cannot transmit in repeat mode	» Please check to see if the receivers squelch and CTCSS / DCS settings are correct.

Announcement

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

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