To Customers

Thank you very much for using our FM VHF/UHF Two Way Radio. This radio of modern design is reasonable structure with stable functions. It is designed to meet customer's needs for the high quality with easy operation and perfect capability. We believe you are pleased with the finished shape and the reasonable price.

This manual is suitable for using the model of PX-888K.

Contents

Warning 1

SInstructional Icons

This radio is not intended for use by general population in an uncontrolled environment. It is only for occupational use and only applied to work-related conditions.
The radio must be only used by users, who are fully aware of the hazards of the exposure and who are able to exercise control over their RF exposure to qualify for the higher exposure limits.
The radio should be not be using more than 50% duty factor in PPT and VOX function;
The following icons are available through this manual:

Notice to the User:
■ Government laws prohibit radio communication without permission in government districts.
■ Illegal operation is subject to punishment by fine and/or imprisonment.
■ Refer service to the well-trained professional technicians only.

Safety:
It is important that the user is aware of and understands hazards common to the operation of any radio.

Warning:
Turn off your radio before entering any area with a potentially explosive atmosphere (where the air contains gas, dust and smog, etc.), such as while taking on fuel, or while parking at a gasoline service station.

Attentions:
Please comply with the following attentions to avoid fire, bodily injury and damage to the radio.
■ Long time transmitting or continuous working in high power mode will make the rear side of the radio generate heat.

■ Please do not disassemble or assemble the radio under any circumstance.

■ Please do not expose the radio to direct sunlight for a long time; do not place the radio near any heating device, either.

■ Please do not put the radio in extremely dusty, moist or dabbling places; do not place it on any unstable surface, either.

■ If the radio emits smoke or strange odors, turn it off and remove the battery from the radio and contact your local authorized Kirisun dealer without delay.

RF Energy Exposure Compliance

● Your 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 and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty factors of up to 50% transmitting and is authorized by the FCC 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 in VOX and PTT mode), not when it is receiving (listening) or in standby mode.

● The device complies with SAR and/or RF field strength limits of RSS-102 requirement and contact information where the user can obtain Canadian information on RF exposure and compliance.

Your 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

● The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

Transmit and Receive

To transmit (talk), push the Push-To-Talk (PTT) key; to receive, release the PTT key.

EU Regulatory Conformance

The equipment is in compliance with the essential requirements and other relevant provisions of the Directive 1999/5/EC.

Operational Instructions and Training Guidelines

To ensure optimal performance and compliance with the occupational/controlled environment RFenergy exposure limits in the above standards and guidelines, users should transmit no more than 50% of the time (during talking in VOX and PTT mode) and always adhere to the following procedures: and should transmit no more than 50% of the time (during talking in VOX and PTT mode), although the hardware support transmission up to 100% of the time in analog mode.

CE0700 ①

Note: The above information is applicable to EU countries only.

FCC Licensing Information

FCC Licensing Requirements

A license from Federal Communications Commission is required prior to use. Your dealer will program each radio with your authorized frequencies, signaling codes, etc., and will be there to meet your communications needs as your system expands. Contact your dealer for more information.

To ensure that your expose to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

CAUTION

Warning 2

SAFETY TRAINING INFORMATION

Your Icom radio generates RF electromagnetic energy during transmit mode. This radio is designed for and classified as Occupational Use Only" , meaning it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the General Population in an uncontrolled environment.

This radio has been tested and complies with the FCC RF exposure limits for Occupational Use Only . In addition, your Icom radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
  American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields RF and Microwave.
- The following accessories are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC requirements for wireless RF exposure.; Belt Clip (MB-115), Rechargeable Li-Ion Battery Pack (BP-254), Alkaline Battery Case (BP-237) and Speaker-microphone (HM-184).

- **DO NOT** operate the radio without a proper antenna attached, as this may damaged the radio and may also exceed FCC RF exposure limits. A proper antenna is the antenna supplied with this radio by Icom Inc. or antenna specifically authorized by Icom Inc. for use with this radio.
- **DO NOT** transmit for more than 50% of total radio use time (50% duty cycle). 50% duty cycle is also applicable to PSTN (Public Switched Telephone Network) mode and VOX Mode.Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the TX indicator lights red. You can cause the radio to transmit by pressing the PTT switch.
- **ALWAYS** keep the antenna at least 2.5 cm (1 in.) away from the body when transmitting and only use the Icom belt-clips listed on p. 24 when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5 cm (2 in.) from your mouth, and slightly off to one side.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to assure that this radio operates with the FCC RF exposure limits of this radio.

UNPACKING AND CHECKING EQUIPMENT

Carefully unpack the radio. We recommend that you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, file a claim with the carrier immediately.

Supplied Accessories

ITEMS	QUANTITY
Antenna	1
Battery	1
Rapid Charger	1
Belt Cilp	1
User's Manual	1

Optional Accessories

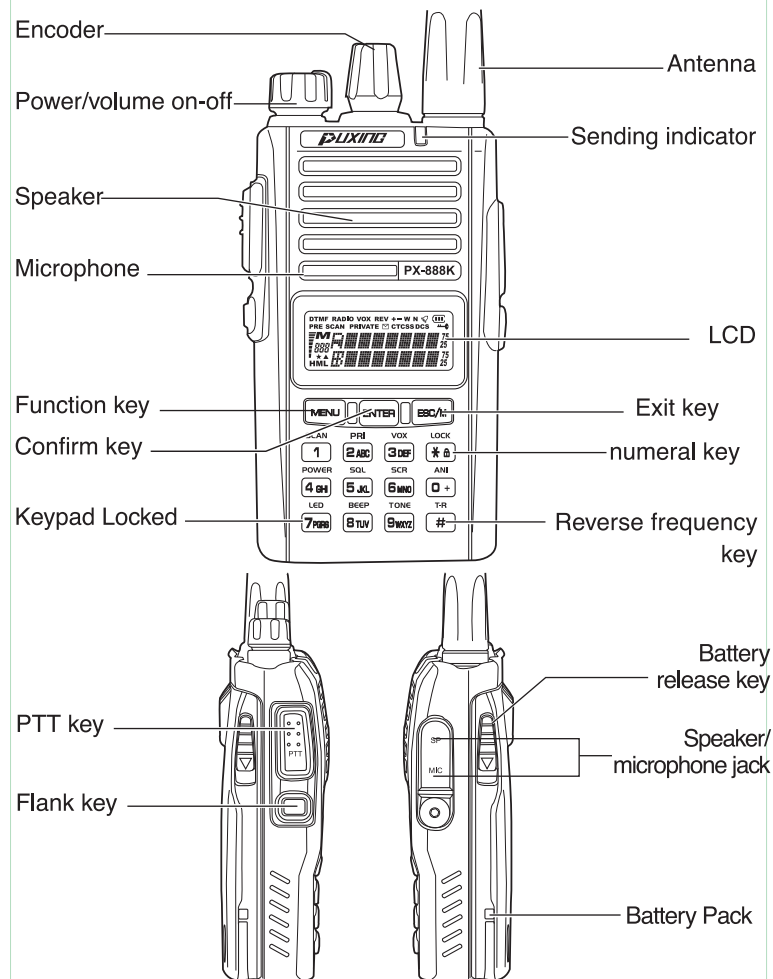| ITEMS |
|---|
| Earphone\Micorphone |
| Programming cable |
| Programmable software |

Maintenance

Your Two Way Radio is an electronic product of exact design and should be treated with care .The suggestions below will help you to fulfill any warranty obligations and to enjoy this product for many years.

- Do not attempt to open the unit. Non-expert handling of the unit may damage it.
- When using regulated power supply, take notice of power voltage must be between 6V and 8V to avoid damaging the unit.
- Do not store the Radio under the sunshine or in hot areas. High temperatures can shorten the life of electronic devices, and warp or melt certain plastics.
- Do not store the Radio in dusty, dirty areas.
- Keep the Radio dry. Rainwater or damp will corrode electronic circuits.
- If it appears that the Radio diffuses peculiar smell or smoke, please shut off its power immediately and take off charger or battery in the Radio, then contact with local agency.
- Do not transmit without antenna.

Features

- VHF 5W/UHF 4W Output Power
- 128 groups of memory channels
- Two lines dot-matrix display
- Automatic Numbering Identification (ANI) code
- Built-in Voice Operate Transmit (VOX) function
- CTCSS and DCS/5 Tone/MSK/DTMF encoder
- Scan Function
- Scrambler
- Three color LCD backlight adjustable
- Emergency alarm
- Built-in FM radio receiver

Accessories and optional

Encoder

Power/volume on-off

Speaker

Microphone

Function key

Confirm key

Keypad Locked

PTT key

Flank key

Antenna

Sending indicator

PX-888K

LCD

Exit key

numeral key

Reverse frequency key

Battery release key

Speaker/ microphone jack

Battery Pack

Instruction Manual

Key, Knob, Switch, Indicator

|	
■ Power/volume On-off	For opening and closing power, and control volume
■ Sending indicator	Press PTT switch and it glows, which indicates talking is in sending status.
■ Busying indicator	When monitor key and squelch are opened, ▮ shows on the LCD which means the radio is busying status.
■ PTT key	Switch in sending and receiving signal.
■ ESC/M	exit key and other functions.

Socket and Connector

■ SMA Connector	For connecting the supplied antenna
■ Speaker/microphone jack	If you want to use speaker、microphone or programming cable, connect them with this socket. If not, prevent water from dropping into it.

Screen

You can see various icon shows on the screen when power on. The following table can help you identification the icon meaning which display on LCD.
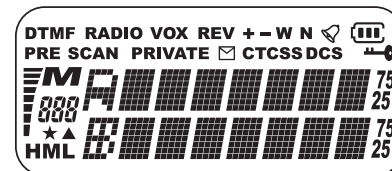
▣	▥	Battery power display
▣	✚	Higher TX frequency than RX frequency
▣	—	Lower TX frequency than RX frequency
▣	⚿	Keypad locked
▣	DCS	Display when DCS is turned on
▣	CTCSS	CTCSS turned on
▣	VOX	VOX turned on
▣	✇	Bell Function
▣	REV	Display reverse frequency
▣	PRE	Priority scan active
▣	▮	Received signal strength and power display
▣	▤▤	Frequency in use
▣	888	Function menu
▣	★	The LCD displays this icon when the optional signaling of the selected channel is 5 tone.

Basic operation

Connected antenna

Insert the base of the attached antenna into SMA connector and coincided with each other by clockwise rotate antenna, then make sure the antenna has set down. Take out the antenna from the base by counter clockwise rotation until pull out it from SMA connector.

Turn on and off the power

If you want to turn on the power, rotate PWR/VOL knob by clockwise until beep sound is heard. All icons and frequencies appeared on the screen. (Due to have automatic squelch function, the speaker will not send out any sound before receiving call.) You can adjust your desired volume by turning the button. If you want to turn off the power, turn PWR/VOL knob in counter clockwise rotation until beep is heard. If the screen no displays, it means that the radio is off.

Monitoring function

Press [MENU] key for 2 seconds and adjust your desired volume by PWR/VOL knob, you can directly hear sound without waiting for receiving any signals, press [PTT] key to shut off the squelch.

Transmitting

Press [PTT] key then speak to the radio in ordinary tone.
Transmitting indicator is lighting during holding down [PTT] key.
If you are too close to the microphone or your voice is too loud, it's not clear in receiving.
Release the [PTT] key so as to listen a response from your partner.

Emergency Alarm

Press the flank key 2, which was defined as "Emergency Alarm", the radio will emergency alarm, send out the alarm sound and ANI to your partner

at the same time.

Emergency call channel

Press [#] key, no matter under what status the transceiver can tune out emergency call channel and the screen will display "CAL".

Setting Reverse Frequency Function

In channel/Frequency mode, hold down [#] for two seconds display "T*R?". When the "REV" appears on LCD means Reverse frequency function turns on. To cancel it hold down [#] for two seconds.

T*R ?

Scanning

Scanning is applicable to monitor your need frequency without manual.
1. Frequency or channel scan
In channel /frequency status, press [MENU] and [1] key the radio will scan from current channel through all the channels, whenever any signal is detected, the radio will suspend the scan for 8 seconds, then press [PTT] key transmitting, it will then continue to scan after 8 seconds. Press any key except [PTT] key to end scanning, and it will return to where it started scanning channels or frequencies.

2. Priority channel scan
Priority scan means that scan the priority channel first then scan other channel, for example, priority channel is 1, then press 1-2; 1-3; 1-4......., so it scan like this.
In channel mode, press [MENU] and [2ABC] the radio will scan priority channel, whenever any signal is detected, the radio will suspend the scan for 8 seconds, then press [PTT] key transmitting, it will then continue to scan after 8 seconds. Press any key except [PTT] key to end scanning, and it will return to where it started scanning.

3. CTCSS/DCS Scan

In frequency mode, press [MENU] key turn encoder to the item 21 of menu ("021 CTC.S?") or item 22 ("022 DCS.S?") enter CTCSS (50 groups) or DCS (104 groups) scan, when scanned the same CTCSS & DCS, open SQ and exit scan, at this time, the radio will memorize the scanned CTCSS & DCS.

Select scan type

Press [MENU] key and rotate encoder to 13 items, the screen will display "$_{013}$ SCANS?", then press [MENU]now you are into the scanning mode selection.There have three optional, turn encoder to select: TO/CO/SE.

■ **Time-operated scan (TO)**

When the radio detects a signal it will stop scanning, the status will remain about 5 seconds, the radio will continue to scan even if the signal is still there.

■ **Carrier-operated scan (CO)**

The radio will stop scanning when detects a signal and remain the same frequency until the signal missing. Between signal loss and scanning recovery, there have some time to delay respond to, so it have the time to start transmission.

■ **Search Scan (SE)**

When the radio detects a signal it will stay in this channel and stop scanning.

Select Mode

This unit have three mode to select: 1) Dual-waiting mode 2) Channel mode 3) Frequency mode.
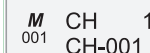
1. Dual-waiting mode

Press [ENTER] key, enter or exit the dual-waiting mode. When enter the dual-waiting mode, it will display two channel A or B, when display A,

it means the current channel A can receive and transmit, but the other channel can only receive, cant transmit; when display B, it means channel B can receive and transmit, but the other channel can only receive, can't transmit. Short-press [ENTER] key switching A and B channel.

2. Channel Mode

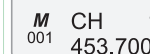You can press the [ESC/M] key to switch channel mode and frequency mode.

1) Display the current channel name and channel number

| *M* CH   1 |
| 001 CH-001 |

CH 1: indicate the current channel name; it can be edited by user.

CH-001: indicate the current channel is the first channel.
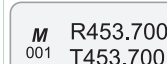
2) display the current channel name and the frequency

| *M* CH   1 |
| 001 453.700 |

CH 1: means the current channel name, it can be edited by user.

453.700: means the current channel frequency.
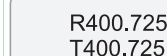
3) display the receive frequency and transmit frequency of the current channel

| *M* R453.700 |
| 001 T453.700 |

R 453.700: means the receive frequency of the current channel

T453.700: means the transmit frequency of the current channel

3. Frequency Mode

| R400.725 |
| T400.725 |

R 400.725: means receive frequency

T 400.725: means transmit frequency

The display difference between channel mode and frequency mode is that whether the left of the screen show $_{001}^{M}$.

Radio Function

This radio has FM radio function.

Press [MENU] key +flank key 2 enter the radio status, and you can press the number key or rotate encoder to select your favorite radio frequency, press [✳🔒] key or [#] key to search the radio frequency, press the [MENU] + flank key 2 to exit the radio.

Flank Key Definition

Use the programming software we can define the flank key 2 as: 1) optional tone call; 2) emergency alarm; 3) sends 1750Hz tone; 4) instant monitoring. When defined as one of the above, the flank key have the correspond function of th code.

DTMF Code

This radio has DTMF function. In channel/frequency mode, in the transmitting status, input the number on the keypad or other function key, then it will have the corresponding DTMF code issue. The DTMF code issued by the function keys are as follows:
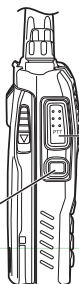MENU stands for A, ENTER stands for B, ESC/M stands for C, Flank key 2 stands for D.

MENU ⟶ A   ESC/M ⟶ C

ENTER ⟶ B   Flank key 2 ⟶ D

Flank Key Operation

The flank key was defined as: 1) Optional tone call;
2) Emergency alarm;
3) Sends 1750Hz tone;
4) Instant monitoring

PTT: transmit key, press means transmit, release means transmit turn off.

DTMF/MSK/5-Tone Operation

Using DTMF /5-Tone to achieve select call /STUN/remove STUN etc. function. Take advantage of the programming software set the ID code of DTMF/5-Tone, STUN transmitting/remove STUN transmitting/STUN receive/transmitting code. Define the flank key as optional call signaling, when the channel optional signaling select DTMF or 5-Tone, press the flank key defined as optional signaling, the screen will show "CALL?", at this time you can press the number key to select the stored optional signaling. Press [PTT] key transmit or [MENU] +[9WXYZ] key input your desired code. If the input number is mistake, or you decide no dial the number, rotate the encoder. Counter clockwise rotate to delete one by one, to exit rotate clockwise. Input your desired number, press [PTT] key to call. When your partner receives the correct code it will execute the corresponding function.

■ **5-Tone Encoder**

1) 5-Tone Call: Define flank key 2 as "optional signaling call" Select the 5-Tone channel optional signaling, press [MENU] + [9WXYZ]key, the screen display "5-T In", then input select call /STUN/remove STUN codes, press [PTT] key to call.

2) 5-Tone encoder: There are nine groups to set by local dealers.

■ **DTMF (Dual Tone Multi-Frequency) Call**

Achieved the radio select call、group call and broadcast call by DTMF.
DTMF select call、group call and broadcast call function set by local dealers.

MSK Encoder

MSK encoder was setting by local dealer, there are 9 groups, you can input: 0-9、A-D, every group can set 4 characters.

MSK call: Define flank key 2 as "optional signaling call" , select optional signaling channel of MSK, press [MENU] + [9WXYZ] key the screen display "MSK In", then you can input the calling code by keypad, press [PTT] key to call .

ANI Operation

ANI means Automatic Numbering Identification, there are three ways of transmitting: start transmitting, end transmitting, both transmitting; you have three signaling to select: MSK/ DTMF/5-Tone, if you choose different type of signaling, your partner must be the same decoding.

Use the programming software to set above information, at the same time the two way radio shortcuts can also turn on and turn off the display function of ANI, namely use [MENU] and [0+] to select start transmitting、 end transmitting and both transmitting.

Store

Store
In frequency mode select desired frequency or any other items (like CTCSS/ DCS/ potential difference/ frequency difference direction). Press [MENU] then press [ESC/M] key. When the channel need to store is blinking at the left bottom of the screen; select the channel number you want to store (turn encoder or input keypad numbers), press [ESC/M] key to complete channel storage, and return to the state of the frequency mode outgoing status.

Emergency call channel storage
Press [MENU] + [ESC/M] + [#] key will display "CAL" , if the emergency call channel have stored content before, the "CAL" character is blinking, ensure to cover the channel content, then press [ESC/M] key to store.
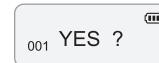
Delete
1. Delete one store channel
In channel frequency , turn off the power, hold down [ESC/M] key and turn on the power at the same time. The screen display "001 DEL?" and the channel to delete. Select which you need to delete (rotate encoder). Press [ENTER] key the screen display "001 YES?" If you really want to delete this channel, press [ENTER] to confirm, if you don't want to delete, press [ESC/M] exit. Repeat this operation to complete all channels (1-128) delete.

001 DEL ?

001 YES ?

2. Delete the parameters of frequency mode
Press [MENU] key and turn on the power at the same time, the screen will display "RESET?"; press [ENTER] key, it will show "VFO?"; then press [ENTER] to confirm and delete all setting of frequency mode.

RESET ?

VFO ?

3. Delete all contents of frequency mode and channel mode

Press [MENU] key and turn on the power at the same time, the screen will display "RESET?" press [ENTER] key, it shows that "VFO?", rotate encoder to choose "FULL?",then press [ENTER] key, and delete all setting of channel mode and frequency mode.

FULL ?

Shortcuts Key Operation

MENU + [0 +] =enter ANI select

MENU + [1] = enter scan mode

MENU + [2 ABC] = enter priority scan mode

MENU + [3 DEF] = enter VOX Sensitivity setting

MENU + [4 GHI] = enter transmit power setting

MENU + [5 JKL] = enter SQL setting

MENU + [6 MNO] = enter scrambler setting

MENU + [7 PQRS] =enter backlight color setting

MENU + [8 TUV] =enter beep setting

MENU + [9 WXYZ] =enter optional signaling call code input

MENU + [#] =enter receive and transmit CTC/DCS setting

MENU + [* 🔒] =enter+/- potential difference setting

Menu Function

Menu Operation

1. Press [MENU] key into menu mode.
2. Turn the Encoder to select menu.
3. Press [ENTER] key into menu mode to set, according to some function, you can press the number key directly, but some you have to rotate the encoder to find what menu optional you desired to set and then press [ENTER] to confirm all the settings.
4. Press [ESC/M] key to exit Menu Mode when you complete all settings.

Menu Function List

Item optional	Display and instruction	Setting contents
1	SCAN (Channel Or Frequency Scan)	CHANNEL OR FREQUENCY SCAN
2	PRI (Priority Channel Scan)	PRIORITY CHANNEL SCAN
3	VOX (VOX Sensitivity)	OFF~9
4	POW(Transmit Power)	HIGH/LOW
5	SQL(Squelch Threshold Setting)	0~9
6	SCRM (Scrambler)	OFF/1-8 scrambler group
7	LIGHT(Backlight Color Select)	1/2/3
8	BEEP(Beep)	OFF/ON
9	VOICE(Voice Prompts)	OFF/ENG/CHS
10	ANI (Automatic Number Identification)	OFF/BOT/EOT/BOTH
11	KEYBO(Keypad Lock)	MANUAL/AUTO
12	TOT(Time Out Timer)	OFF~270

13	SCANS(Scan Selection)	CO/TO/SE
14	N/W(Wide/Narrow band select)	WIDE/NARROW
15	DIFFR(Potential Difference)	0-42.000 (VHF) 0-80.000 (UHF)
16	C-CDC(Receiving and Transmitting CTC/DCS)	OFF-254.1/D023-D754
17	R-CDC(Receiving CTCSS/DCS)	OFF-254.1/D023-D754
18	T-CDC(Transmitting CTCSS/DCS)	OFF-254.1/D023-D754
19	S-D(+/-Potential Difference)	+/-/0
20	STEP(Channel Stepping)	5K/10K/6.25K/12.5K /25K
21	CTC.S (CTCSS Scan)	CTCSS Scan
22	DCS.S (DCS Scan)	DCS Scan
23	LED(Backlight switch setting)	OFF/ON/AUTO
24	ROGER(Transmitting end beep)	ROG OFF/1~10
25	SADD(Scan add)	ADD/DEL
26	NAME (channel name edit)	------

■ The 15-22 item only in frequency mode, and 25-26 item only in channel mode.

Menu Function introduction and setting

VOX Sensitivity Setting

This function activate transmitting when speaks to microphone without pressing PTT button. It stops transmitting automatically once you stop speaking.

In Frequency mode, press [MENU]and [3DEF] key, the screen will display "$_{003}$ VOX?", then press [ENTER] key it will show "VOX OFF", press the number key (0-9) on the keypad or rotate the encoder to adjust the sensitivity level you desired, after that press [ENTER] key to confirm, then press [ESC/M] to exit.

003   VOX ?

VOXOFF

Power Setting

In channel/frequency mode, press [MENU] and [4 GHI] key, the screen will display "$_{004}$ POW?", press [ENTER] display "POW L" means low power, display "POW H" means high power, turn the encoder knob to select your desired power level.

004   POW ?

POW H

POW L

Squelch Threshold Setting

In channel/frequency mode, press [MENU] and [5 JKL] key, the screen will show "$_{005}$ SQL?", then press [ENTER] key display "SQL 5"(Factory Settings "SQL 5"), press the keypad number (0-9) or rotate the encoder to select your desired squelch level. Press [ENTER] key to confirm and press [ESC/M] key to exit.

005   SQL ?

SQL 5

Scrambler Setting

In channel/frequency mode, press [MENU] and [6 MNO] key display "$_{006}$ SCRM?", then press [ENTER] key display "OFF"

006   SCRM ?

18

means scrambler off, turn encoder to selct (1-8), press [ENTER] to confirm, press [ESC/M] to exit.

OFF

Backlight Color Select

In channel/frequency mode, press [MENU]and [7PGRS] key, the screen will show "$_{007}$ LIGHT?", press [ENTER] key, the screen shows one of the "LIGHT1" "LIGHT2" "LIGHT3",you can select the three status by rotate the encoder.

007   LIGHT ?

LIGHT2

Beep On/Off

In channel/frequency mode, press [MENU] and [8 TUV] key, display "$_{008}$ BEEP?", then press [ENTER] key display "ON" means beep on, "OFF" means beep off, you can turn encoder to choose on/off. After that press [ENTER] key to confirm, then press [ESC/M] key to exit.

008   BEEP ?

ON

OFF

Voice Tone Function Switching

In channel/frequency mode, press [MENU] key turn encoder to item 9 screen display "$_{009}$ VOICE?", press [ENTER] key, the screen display "OFF" means voice tone turn off, turn encoder to select "CHS/ENG", press [ENTER] to confirm, and [ESC/M] key to exit.

009   VOICE ?

OFF

ANI On/Off Setting

Press [MENU] and [0 +] key, the screen display"$_{010}$ ANI?", press [ENTER] key, display "OFF" means ANI turn off, rotate encoder to select BOT/EOT/BOTH. Press [ENTER] to confirm and [ESC/M] key to exit.
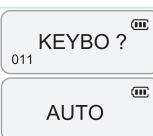
010   ANI ?

OFF

Keypad Lock Function Setting

In channel/frequency mode, press [MENU] key turn encoder

19

to item11,the screen display "$_{011}$ KEYBO ?" press [ENTER] key, it display "AUTO" means keypad lock turn on automatically. Turn encoder select "MANUAL" " AUTO" then press [ENTER] to confirm, press [ESC/M] to exit.

KEYBO ?
$_{011}$

AUTO

Transmitting TOT Setting

To prevent accidental prolonged transmission to damage the radio. This unit can set OFF/30-270 seconds continued transmitting limit, it will send out warning sound when the limit transmitting time is coming.
In channel/frequency mode, press [MENU] key turn encoder to item12, display "$_{012}$ TOT ?", press [ENTER] key, display "OFF" means transmitting TOT off, turn encoder choose "OFF~270", then press [ENTER] key to confirm, press [ESC/M] to exit.

TOT ?
$_{012}$

OFF

Wide/Narrow Band

In channel/frequency mode, press [MENU] key turn encoder to item14, display "$_{014}$ N/W", press [ENTER] key, display "WIDE" means wide band, turn encoder to select "NARROW/WIDE", then press [ENTER] to confirm, press [ESC/M] to exit.

N/W ?
$_{014}$

WIDE

Repeater offset Setting

This function is used to determine the difference (Potential Difference) between sending frequency and receiving frequency.
In frequency mode, press [MENU] key, turn encoder to item 15, display "$_{015}$ DIFFR?", press [ENTER] key to set and input needed frequency. VHF range from00.000-42.000(MHz), UHF range from 00.000-80.000(MHz), press [ENTER] key to confirm, press [ESC/M] to exit.

DIFFR?
$_{015}$
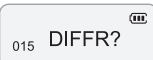
Select CTCSS and DCS

In frequency mode, press [MENU] and [#] key, display "$_{016}$ C-CDC?", press [ENTER] key, turn encoder to select desired CTCSS(OFF-254.1), press [*🔒] key to switch CTCSS and DCS.DCS range from(OFF-D754N),press [ENTER] key to confirm, press [ESC/M] to exit.

C-CDC?
$_{016}$

+/- Potential Difference Setting

In frequency mode, press [MENU] and [*🔒] key, display "$_{019}$ S-D?", press [ENTER] key, display "S-D 0" means same frequency, "S-D+" means plus, "S-D-" means minus, you can turn encoder to select, press [ENTER] to confirm, press [ESC/M] to exit.

S-D ?
$_{019}$

S-D O

S-D +
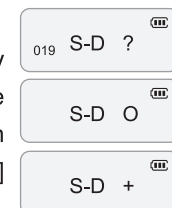
Select Frequency Stepping

In frequency mode, press [MENU] key, turn encoder to item 20, display "$_{020}$ STEP?", Press [ENTER] key, turn encoder to select frequency stepping from: 5k/10k/6.25k/12.5k/25k/then press [ENTER] key to confirm, press [ESC/M] to exit.

STEP?
$_{020}$
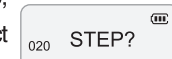
Backlight On/Off Setting

In channel/frequency mode, press [MENU] key, turn encoder to item 23,the screen will show "$_{023}$ LED?", press [ENTER] key, the screen shows "ON" means backlight on, turn encoder to select "ON" "OFF" "AUTO". Then press [ENTER] to confirm, press [ESC/M] key to exit.

LED ?
$_{023}$

ON

OFF

AUTO

Transmitting End Roger

In channel/frequency mode, press [MENU] key turn encoder to item24, display "$_{024}$ ROGER?", press [ENTER] key, display

ROGER?
$_{024}$

"ROGOFF" means transmitting over roger off, turn encoder or press the number key on keypad(1-10) to select, then press [ENTER] to confirm, press [ESC/M] to exit.

ROGOFF

Scan Add Setting

In channel mode, press [MENU] key, turn encoder to item25, display "$_{025}$ SADD?", press [ENTER] key, display "ADD" means add channel scan, turn encoder to choose "ADD/DEL", then press [ENTER] to confirm, press [ESC/M] exit.

025 SADD?

ADD

Channel Name Edit

In channel mode, press [MENU] key, turn encoder to item 26, display "$_{026}$ NAME?", press [ENTER] key, display "-----" , turn encoder to choose your desired character, press [#] to edit next character, press [*🔒] return to previous character. Pressing [ENTER] key to confirm, and press [ESC/M] key to exit.

026 NAME?

Enclosed chart

50 CTCSS Frequency Code (Hz)

67.0	85.4	107.2	136.5	165.5	186.2	210.7	254.1
69.3	88.5	110.9	141.3	167.9	189.9	218.1	
71.9	91.5	114.8	146.2	171.3	192.8	225.7	
74.4	94.8	118.8	151.4	173.8	196.6	229.1	
77.0	97.4	123.0	156.7	177.3	199.5	233.6	
79.7	100.0	127.3	159.8	179.9	203.5	241.8	
82.5	103.5	131.8	162.2	183.5	206.5	250.3	

104+1 DCS Code

023	065	132	205	255	331	413	465	612	723
025	071	134	212	261	332	423	466	624	731
026	072	143	223	263	343	431	503	627	732
031	073	145	225	265	346	432	506	631	734
032	074	152	226	266	351	445	516	632	743
036	114	155	243	271	356	446	523	645	754
043	115	156	244	274	364	452	526	654	
047	116	162	245	306	365	454	532	662	
051	122	165	246	311	371	455	546	664	
053	125	172	251	315	411	462	565	703	
054	131	174	252	325	412	464	606	712	

Note: CTCSS and DCS can be random set between the highest frequency and the lowest frequency.

Technical Specification

General

Frequency Range	136-174MHz 400-470MHz
Working Temperate	-20℃ ~ +50℃
Operating Voltage	DC 7.4V
Operate Mode	Simplex or Semi-duplex
Dimension	115mm X 57mm X 30mm (Not including Antenna)
Weight	About 223g (Including Battery)
Antenna Impedance	50 Ω

Transmitter

Frequency Stability	±2.5ppm
Output Power	U:4.2±0.5W V: 4.8±0.5W
Max Frequency Deviation	≤5KHz
Audio Distortion	≤5%
Modulation Character	+3dB~-3dB
Adjacent Channel Power	≥65dB
Spurious Radiation	≤7.5uW
Occupied Bandwidth	≤16KHz

Receiver

RF Sensitivity	<0.2uV
Audio Distortion	≤5%
Audio Response	+2dB~-10dB
Co-channel Rejection	≥-8dB
Adjacent Channel Selectivity	≥55dB
Intermodulation Rejection	≥55dB
Blocking	≥85dB

Notice: Other frequency ranges can be custom by dealers. Above technical specification is for reference only.