DUAL BAND
PROFESSIONAL RADIO

RECYCLED PACKAGING

PREFACE

Thank you for purchasing our dual band portable two way radio. This easy−to−use radio will deliver you secure, instant and reliable communications at peak efficiency. Please read this manual carefully before use. The information presented herein will help you to derive maximum performance from your radio.

Contents

Unpacking And Checking Equipment

Carefully unpack the transceiver. 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, please contact the carrier or the dealers immediately.

Supplied Accessories

Item	Quantity
Antenna	1
Li–polymer Battery	1
Charger	1
Adaptor	1
Belt Clip	1
Hand Strap	1
User Manual	1

Note: If you need to know more information about optional accessories. Please contact us.

Product Overview
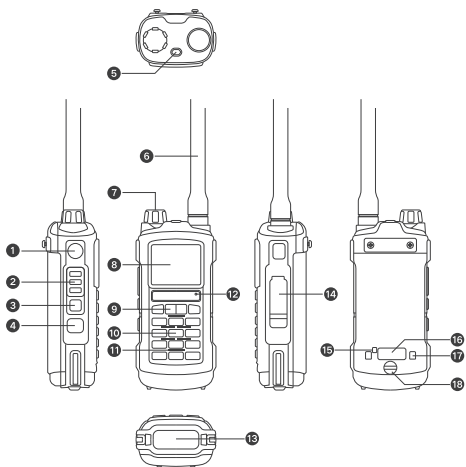
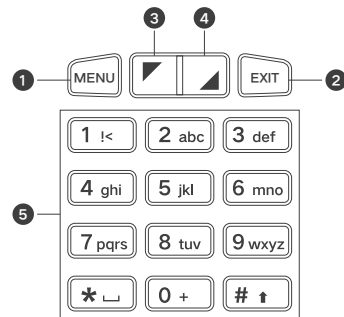| No.	Part Name	No.	Part Name
1	PF1 Key (LAMP Key)	10	Numeric Keypad
2	PTT-1	11	Speaker
3	PTT-2	12	Microphone
4	PF2 Key (Programmed Key)	13	Flashlight
5	LED Indicator	14	Accessories Jack
6	Antenna	15	Charging Indicator
7	Power On/Off Volume Knob	16	USB Charging Port
8	LCD Display	17	Battery Contacts
9	Function Keypad	18	Battery Screw

Function Keypad

| No.	Key	Function
1	【MENU】	Menu/Enter Key
2	【EXIT】	Exit/Delete Key Switch A/B Band in standby mode
3	【UP】	Press for 2 Seconds to up rapidly Change the Scan direction in scan status
4	【DOWN】	Press for 2 Seconds to down rapidly Change the Scan direction in scan status
5	【Numeric Keypad】	In Standby status: Input frequency in VFO mode Input channel number in Channel mode In Transmitting status: Input DTMF Code in transmitting status

Function Keypad
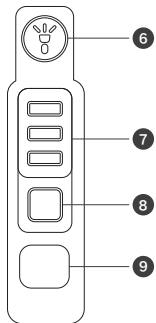
No.	Key	Function
6	【PF1】	LAMP Key, Short press to turn on/off flashlight Long press for emergency alarm
7	【PTT-1】	Press PTT-1 key to transmitting A Band
8	【PTT-2】	Press PTT-2 key to transmitting B Band
9	【PF2】	Short Press: FM/TX Power/Monitor/Scan Default: FM Long Press: FM/TX Power/Monitor/Scan Default: TX Power Note: PF2 Key can be setup in PC software.

Before Use

■ Charging the Battery Pack

Use only the charger and battery specified by the manufacturer. The charger LED indicates the charging progress.
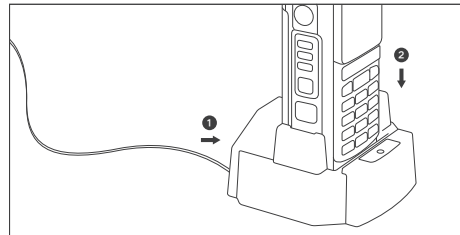
1.As ① shown, Plug the AC adaptor into the AC outlet, and then plug the cable of the AC adaptor into the DC jack located on the back of the charger.

2.As ② shown, Plug the radio into the charger. Make sure the battery terminals are good in contact with charging terminals.

3.The indicator light turns to red, the charging begins.

4.The indicator light turns to green, the charging is completed.

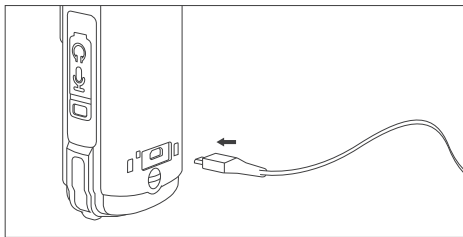### ■ Charger LED indicator and charging status

LED indication	Charging status
Constant Green	Standby (no-load)
Constant Red	Charging
Constant Green	Fully charged

Before Use

■ USB Charging

Use only the USB charging cable specified by the manufacturer. Charger LED can indicate the charging status.

1. Plug the USB charging cable into the charging port on the back of the battery.
2. The indicator light turns to red, the charging begins.
3. The indicator light turns to green, the charging is completed.

■ Battery LED Indicator and battery status

LED indication	Charging status
Constant Red	Charging
Constant Green	Fully Charged

Preparation

Installing/Removing the Antenna

Screw the antenna into the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise until secure.

Note: Turn the antenna counter-clockwise until you can remove it.
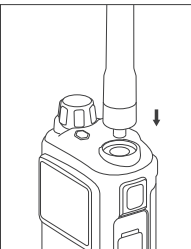
Installing/Removing the Belt Clip

1. Attach the belt clip above the corresponding holes on the back of the radio, and screw it clockwise with the two supplied screws.
2. Loosen the screws to remove the belt clip.
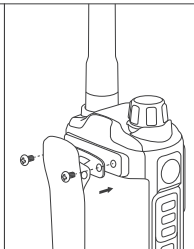
Installing/Removing the Battery

1. Match the two top grooves of the battery pack on the back of the radio and then push it.
2. Screw it clockwise to install the battery.
3. Unscrew counter-clockwise to remove the battery.
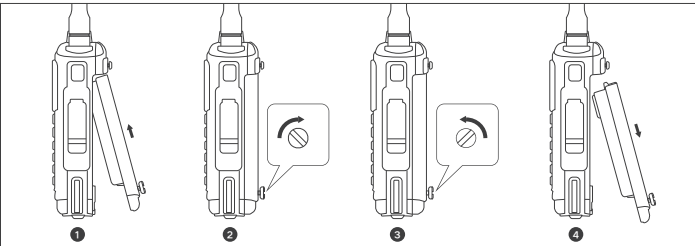
Preparation

Installing the Optional Speaker/Microphone(or Headset)

Insert the speaker/microphone (or headset) plugs into the speaker/microphone jacks.

Status Indication

LED Indicator

The top LED indicator will help you easily identify current radio status.
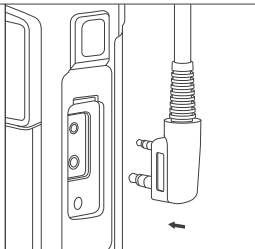
Radio Status	LED Indicator
Transmitting	LED glows red
Receiving	LED glows green

LCD Icons

Icon	Radio status
📶	Signal Strength Level
L	Low Power
H	High Power
♫	DTMF activated
CT	CTCSS activated
DCS	DCS activated
⊕	Position: TX frequency = RX frequency + Offset frequency
⊖	Negative: TX frequency = RX frequency − Offset frequency
⌇	Dual watch/ dual reception functions activated
🔒	Keypad lock function activated. Press 【 * 】 Key for 2 Seconds to unlock the keypad
😊	VOX function enabled
N	Narrow Band selected
🔋	Battery Level indicator
▶	A/B Band Direction, Operation frequency
☼	Bluetooth programming function activated

Basic Operations

Powering On/Off
Turn the 【Power/Volume knob】 clockwise to switch the transceiver power ON till a click is heard.

Adjusting the Volume
Rotate the 【Power/Volume knob】 to adjust the volume. Turn clockwise to increase the volume and counter-clockwise to decrease the volume.

VFO/Channel Switch
Long Press 【MENU】 Key to switch between VFO and channel mode.

Channel Mode
In channel mode, input the channel numbers by the keypad. For example, If you want to switch to channel 1, input 0+0+1 (total 3 digits), and it will switch to channel 1.

Frequency Mode
In VFO Frequency mode, input the VFO frequency directly by the keypad.

Push To Talk
Press 【PTT-1】 to transmit in A Band.
Press 【PTT-2】 to transmit in B Band.

Enter/Exit Menu
Short Press 【MENU】 Key to enter menu, and press 【UP/DOWN】 key to select the function. Press 【MENU】 Key to confirm, Press 【EXIT】 to exit.

A/B Band Switch
In standby, press 【EXIT】 Key to switch A/B Band.

Keypad Lock/Unlock
In standby, long press 【*】 Key to lock/unlock keypad.

Flashlight
Short press 【PF1】 to turn on/off flashlight.

Emergency Alarm (SOS Mode)
Long press 【PF1】 to turn on/off alarm function.

Scan
In frequency mode, long press 【#】 key to turn on/off scan function.

1750Hz Tone for Access to Repeater
In transmitting status, press 【PF1】 to transmit a 1750Hz tone.

Battery Voltage
In standby, long press 【0】 Key to check the current battery voltage.

Menu Functions

Menu	Function/Description	Available settings
Radio Set	SQL(Squelch Level)	Level 0/1/2/3/4/5
	Transmit Power	High/Low
	Bandwidth	Wide 25K/Narrow 12.5K
	Busy Channel Lockout	ON/OFF
	TOT(Trans over time)	OFF/30/60/90/120/150/180/210/240s
VOX Level	Voice Operated Transmission	OFF/Level1/2/3
Setting	Battery Save	ON/OFF
	Dual Standby	ON/OFF
	SOS Mode	On Site/ Send Sound/Send Code
	Scan Mode	Time/Carrier/Search
	Back Light Time	Bright/5s/10s/15s/20s/30s/1min/2min/3min
	Beep Prompt	ON/OFF
	VOX Delay	0.5S/0.6S/....2.0S
	Menu Exit Time	5S/10S/15S...60S
	Keypad Auto Lock	ON/OFF
CTCSS/DCS	Receive CTCSS	OFF/67.0HZ...241.HZ
	Receive DCS	OFF/D023N...D754I
	Transmit CTCSS	OFF/67.0HZ...241.HZ
	Transmit DCS	OFF/D023N...D754I
	Encryption	ON/OFF

Menu Functions

Menu	Function/Description	Available settings
Frequency Mode	Step	2.50/5.00/6.25/10.00/12.50/25.00/50KHz
	Direction	None/Plus/Minus
	Offset	00.000....69.990MHz
Channel Storage	CH−Memory	000,CH−001....CH−127
	CH−Delete	000,CH−001....CH−127
	CH−Edit Name	Name display can be set by PC software.
Search Frequency	Search the other radio's TX frequency and CTCSS/DCS Code when it is in transmitting	
Bluetooth	Program on the dedicated APP	ON/OFF
About Radio	Hardware Version, Software Version	
Reset	VFO Mode	Delete all the setting in VFO mode
	Reset All	Delete all settings

Bluetooth Programming Function (Option)
Press MENU Key to select Bluetooth to turn on this function.
After connecting the walkie talkie through the mobile phone bluetooth, you can modify the frequency, channel information, function setting on the dedicated APP. The bluetooth function will turn off automatically after finished the programming on the APP.
Note: When bluetooth programming function is on, the radio can not program via programming cable.

Search Frequency
If you want to search other radio's frequency, pls turn on the search frequency function on our radio, and keep a distance of 20−40cm from that radio when it is transmitting, after a while, the transmitting radio's TX frequency and CTCSS/DCS Code will be displayed on our screen. Press Menu key to save the frequency.
Note: Frequency offset is about ± 2.5KHz.

Troubleshooting

If the solutions below cannot fix the problems for you, or you may have some other queries, please contact us or your local dealer for more technical support.

Phenomena	Analysis	Solution
Power−on Failure	The battery may be improperly installed.	Remove the battery and reassemble it.
	The battery power may be used up.	Recharge or replace the battery.
	The battery is poorly connected due to dirtied or damaged battery contacts.	Clean the battery contacts. If the problem cannot be solved, contact your dealer or authorized service center for inspection and repair.
During receiving, the voice is weak, discontinuous or totally inactive.	Low battery voltage.	Recharge or replace the battery.
	Low volume level.	Increase the volume by rotating the Volume Control knob.
	The antenna may be loosened or improperly installed.	Reassemble the antenna after turning off the radio.
	The speaker may be blocked or damaged.	Clean the surface of the speaker. If the problem cannot be solved, contact your dealer or authorized service center for inspection and repair.
Unable to communicate with other members.	The frequency or signaling may be inconsistent with that of other members.	Set your TX/RX frequency and signaling to the same as that of other members.
	The channel type (digital/analog) may be set inconsistently.	Make sure all members are on the same digital/analog channel.
	You may be too far away from the group members.	Move towards other members.
Irrelevant communication or noise is heard on the channel.	You may be interrupted by radios using the same frequency.	Change the frequency, or adjust the squelch level.
	The radio may be set with no signaling.	Set signaling for all member radios to avoid interference at the same frequency. And change the signaling settings for all portable radios at the same time.
The noise is too loud.	You may be too far away from other members.	Move towards other members.
	You may locate in an unfavorable position. For example, your communication may be blocked by high buildings or frustrated in the underground areas.	Move to an open and flat area, and restart the radio to try again.
	You may suffer from external disturbance (such as electromagnetic interference).	Stay away from equipment that may cause interference.

Care and Cleaning

To guarantee optimal performance as well as a long service life of the product, please follow the tips below.

• Do not puncture or scratch the product with hard objects.

• Do not place the product in corrosive agents, solutions or water.

• Do not handle the radio by its antenna or external microphone directly.

• When not in use, keep the accessory jacks covered with the protective caps.

⚠️

Power off the product, and remove the battery before cleaning.

• Clean up the dust and fine particles on the product parts with a clean and dry lint−free cloth or a brush regularly.

• Use a non−woven fabric with neutral cleanser to clean the keys, control knobs, and shell after long−time use. Do not use chemical preparations such as stain removers, alcohol, sprays or oil preparations.

• Make sure the product is completely dry before use.