



RECYCLED PACKAGING

WATERPROOF RADIO

HIGH POWER OUTPUT/HIGH-CAPACITY LI-ION BATTERY
Built-in CTCSS/DCS Programmable Channels VOX Transmit

Tx:420-450Mhz Rx: 400-520Mhz

USER'S MANUAL

Troubles	Solution
No power.	The battery has been exhausted. Replace or recharge it; The battery is installed incorrectly. Remove it and install again.
The operating time becomes short, even the battery is fully charged.	Replace the battery.
Unable to communicate with the transceivers of the same group.	Confirm if the CTCSS/DCS is the same; The distance is out of range.
The voice of another group can be heard.	Change all QT/DQT of the group.

Thank you for purchasing this our radio. We believe this easy-to-use radio will provide reliable and dependable communication. our radio incorporates the latest advanced technology. As a result, we know that you will be pleased with the quality and features of this product.

PRECAUTIONS BEFORE USING

- ◆ Maintenance can only be performed by professional technicians.
 - ◆ Please use the standard battery pack and charger in order not to destroy the radio.
 - ◆ Do not expose the radio to sunlight for a long time, nor put it near the heat, nor use it in a high temperature environment.
 - ◆ Do not put it in extreme dust, wet or on unsteady surfaces.
- Keep it dry. (Rain or moisture will erode the electronic board).

CONTENTS

Unpack and check Equipment	01
Familiar with this machine	02
Function	07
Monitor	07
High/Low Power	07
VOX ON/OFF	07
Busy Channel Lockout	07
VOX Sensitivity	07
Squelch Level	08
Voice Guide	08
Time Out Timer	08
CTCSS/DCS	08
Wide/Narrow Band	09
Battery Save	09
SCAN	09
Lower Power Alert	09
Voice Comband	10
ANI Code	10
Programming password	10
CTCSS/DCS	11
Failure Guide	13

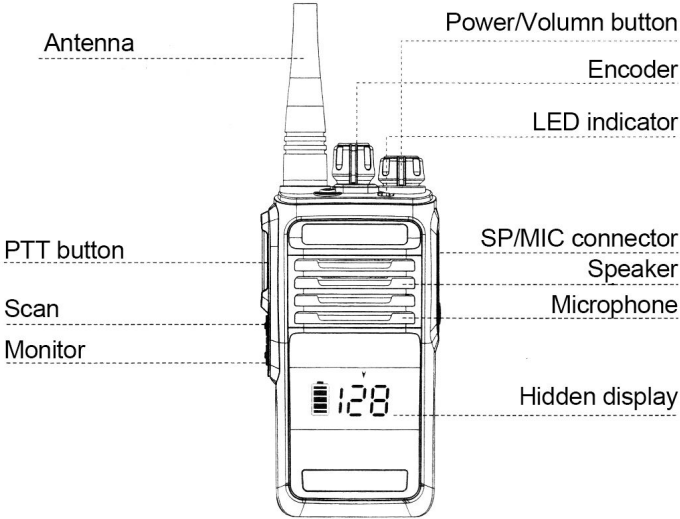
UNPACK AND CHECK EQUIPMENT

Carefully unpack the portable radio. We suggest that you check the following items before you throw away the packing materials

Standard supplied accessories

ITEM	QTY
Antenna	1
Battery charger kit	1
Li-ion battery pack	1
Belt cliil	1
Screws	1
Hand strap	1
User manual	1

FAMILIAR WITH THIS MACHINE



PTT

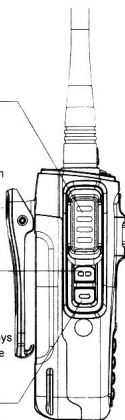
Press and hold down the [PTT] button to transmit; Release it to receive.
Busy forbidden, issued a forbidden tone;
TOT time to issued forbidden tone.

SK- SIDE KEY 1

Short press to turn on FM, short : press again to turn of FM.
Long press to start the reverse frequency function, the icon displays [R] ; then long press to activate the of-line function, [T] is displayed, then long press to close.

SK- SIDE KEY 2

Short press [flashlight] : reserved
Long press [C Monitor] : press and hold the monitor, the speaker turns on, release it to exit



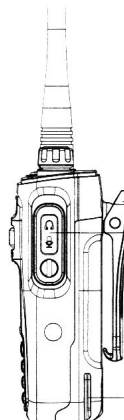
Belt clip

Mic/speakerjack/ programming port

Used to connect headset or external programming cable Programmable via PC programming software.

Li-ion battery

For charging the radio.



PTT(PUSH-TO-TALK) SWITCH

Press PTT then speak into the microphone to call and lights red.

Release PTT to receive signal and lights green.

- Side key1: Programmable

Side key2: Programmable

Speaker/Microphone Jack

Jack for speaker mic or Programming cable.

PTT(PUSH-TO-TALK) SWITCH

The radio side key1& side key2 (short press/long press) can be program to these function

CLOSED, MONITOR, HIGH/LOW POWER,VOX ON/OFF

PREPARATION

Lithium-ion battery charging instructions (applicable to models with lithium-ion batteries)

- 1.Plug the power adapter into the AC power outlet and the charger indicator will turn green.
- 2.Insert the lithium-ion battery pack or the walkie talkie equipped with the lithium-ion battery pack into the charger, confirm that the battery pack is in good con-tact with the charging terminal, and the indicator light turns red during charging.
- 3.When the battery is charged to 90%, the indicator light turns orange.
- 4.When the battery is fully charged, the indicator light of the charging stand turns green.

After charging the battery pack for 9 hours,remove it from the charger.



WARNING

If the battery pack is fully charged, do not recharge it again, other wise the life of the battery pack will be shortened or damaged.

After charging the battery pack, remove it from the battery charger.

Charging the battery pack for more than 5 days will shorten the life of the bat-tery pack due to overcharging.



NOTE

The ambient temperature during charging is between 5 and 40 degrees Celsius, Outside this range, the battery pack cannot be fully charged during charging,

Please turn off the power of the walkie -talkie equipped with the lithiumion battery pack before charging. Using the walkie- -talkie while charging will prevent the battery pack from charging correctly,

If the use time does not increase even after the correct charging, the life of the battery pack has expired, please replace the battery pack with a new one,

FUNCTION

Monitor

Press it and turn the volume knob to test the speaker volume.

High/Low Power

Press the defined High/Low power function, the radio output power will be switch between high power and low power.

VOX ON/OFF

Press the defined VOX ON/OFF function to active and close VOX function.

Busy Channel Lockout

This function can prevent other two way radio from disturbance. This function can be programmed by PC software to ON or OFF, If this function enable, the radio transmitter function was disabled and there is "du" beep when press PTT, in this case it will not disturb other communicate in this channel, If this function disable, it will be talking in normally.

VOX Sensitivity

You can speak to radio to activate transmitting without press PTT button Vox sensitivity is the sensitivity level refer to your voice.

PC programming is available to program the sensitivity level.

There is 0-9 levels option, level 1 is less sensitivity than level 9.

Squelch Level

It means the signal strength to open receiver, 0-9 levels can be programmed by PC software. Level 9 signal strength is stronger than level 1, it will always open squelch if set to level 0

Voice Guide

There is voice guide when power ON or select channels, you can use PC software to program it as OFF, Chinese, English

Time Out Timer

- This function is to prevent any person from using the channel for an extended period of time. If you continuously transmit for 300 seconds, the radio will stop transmitting and a tone will sound,
- To stop the tone, release PTT and press PTT again to resume transmitting.
- There is OFF 30s/60s/90s/300s can be programmed by PC software.

CTCSS/DCS

Some channels may have pre-programmed CTCSS/DCS, it is a sub tone which allows you to ignore calls from others who are using the same channel. When you receive a signal that has a tone different from the one set up in your radio, you will not hear the signal. Likewise, signals that you transmit will only be heard by those whose CTCSS/DCS matches the tone set up in your radio.

Wide/Narrow Band

It allows you to select wide band (25khz) or narrow band (12.5khz) by PC software

Battery Save

The function decreases the power used when a signal is not being received and no operations are being performed (no keys are being pressed, and no switches are being turned) While the channel is not busy and no operation is performed for 10s, battery save turns ON. When a signal is received or an operation is performed, battery save turns OFF.

SCAN

The radio can scan in 16th channel, it will scan the activate channels to talk.

There is Carrier scan or Time scan which can program by PC software,

➡ Carrier Scan:

the radio will scan and stop at the activated channel until the signal disappeared.Z

➡ Time Scan:

the radio will scan and stop at this channel for 5 seconds then continue to scan next activated channels.

Lower Power Alert

If the radio battery power is low, the radio will sound the low power annunciation or sounds the "du." (programmed by PC)

Voice Comband

This function is use to avoid from the interference, you can use it when there is too much Disturbed environment You can program it ON/OFF by PC software

ANI Code

The radio use DTMF sending ANI code, it provides four sending mode which set by PC software.

- 1) Closed: whatever press PTT or release PTT, it will not send DTMF code
- 2) PRE-ONLY: Press PTT and sending the DTMF code at the same time
- 3) POST-ONLY, it sending DTMF code when release PTT button
- 4) BOTH: it sending DTMF code when Press or release PTT button

Programming password

The radio have the function to set password for reading and write frequency This will prevent unauthorized person to program the radio.

CTCSS						
67.0	88.5	114.8	151.4	177.3	203.5	250.3
69.3	91.5	118.8	156.7	179.9	206.5	254.1
71.9	94.7	123.0	159.8	183.5	210.7	
74.4	97.4	127.3	162.2	186.2	218.1	
77.0	100.0	131.8	165.6	189.9	225.7	
79.7	103.5	136.5	167.9	192.8	229.1	
82.5	107.2	141.3	171.3	196.6	233.6	
85.4	110.9	146.2	173.8	199.5	241.8	

DCS									
D023N	D065N	D132N	D205N	D255N	D331N	D413N	D465N	D612N	D723N
D025N	D071N	D134N	D212N	D261N	D332N	D423N	D466N	D624N	D731N
D026N	D072N	D143N	D223N	D263N	D343N	D431N	D503N	D627N	D732N
D031N	D073N	D145N	D225N	D265N	D346N	D432N	D506N	D631N	D734N
D032N	D074N	D152N	D226N	D266N	D351N	D445N	D516N	D632N	D743N
D036N	D114N	D155N	D243N	D271N	D356N	D446N	D523N	D645N	D754N
D043N	D115N	D156N	D244N	D274N	D364N	D452N	D526N	D654N	
D047N	D116N	D162N	D245N	D306N	D365N	D454N	D532N	D662N	
D051N	D122N	D165N	D246N	D311N	D371N	D455N	D546N	D664N	
D053N	D125N	D172N	D251N	D315N	D411N	D462N	D565N	D703N	
D054N	D131N	D174N	D252N	D325N	D412N	D464N	D606N	D712N	

FCC COMPLIANCE STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

Replacement of any transmitter component (crystal, semiconductor, etc.) not authorized by the FCC equipment authorization for this radio could violate FCC rules.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment. Do not use this device when the antenna shows obvious damages. Hold this transmitter approximately 25 mm away from your face and speak normal with the antenna pointed up and away. Use the supplied belt clip for body-worn configuration as other accessories may not comply to the limits.

WARNING:

MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.