Two Way Radio

USER'S MANUAL

User's Manual
FM Transceiver

Dear user:
Welcome to use our handheld transceiver. We believe you will be pleased to use it in our daily life and work.

This transceiver adopts advanced technology, we hope you will be satisfied with its quality and functions . This transceiver will bring you convenient, fast, reliable two–way communication.

Notice:
· Please read this manual carefully before using this transceiver.

· Please do not communicate or charge this transceiver in flammable,explosive and area which transceiver communication is

prohibited(such as oil station,gas station, airport etc.)

· Please do not operate this transceiver without licence in government laws banned areas.

· Please make sure this transceiver avoids the sunshine, and avoids to put it near any heating device.

· Please make sure this transceiver avoids any dusty,humid and water splashed place,and also avoids to put it on unstable surface.

· If transceiver smells or smokes, please remove the battery pack from transceiver at once, and then contact our company or local dealer.

· The repair job of this transceiver is in the charge of professionals & technicals, self-disassembly is prohibited.

Directory

Open the box to check

Before use, please open the carton and check in detail the main unit inside the carton and the following If any items are lost or damaged during handling, please contact the delivery person or distributor immediately.

Random accessories

Item	Quantity
Antenna	1
Battery	1
Seat charger	1
Belt Clip	1
Hand strap	1
User's manual	1

Antenna	Battery	Belt Clip
Seat charger	Hand strap	User's manual
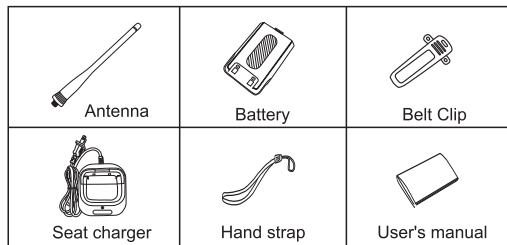
Preparation Work
Caution:
· **Do not charge the battery pack for too long!**
If charging of the battery pack is not completed within the specified time, stop charging. The battery pack may overheat and burst with smoke or suddenly catch fire.

· **Please do not put the battery pack in the microwave and high pressure container!**
The battery pack may overheat and smoke and burst into flames.

· **Please do not let the broken and leaking battery pack near the fire!**
If the battery pack leaks (or gives off a pungent smell), keep it away from flammable areas immediately. Battery pack leakage electrolyte is prone to fire, may cause the battery pack smoke or sudden fire.

· **Do not use abnormal battery packs!**
If the battery pack gives off a pungent smell, looks different in color, is deformed, or behaves abnormally for any reason, remove the battery pack from the charger or operating device and do not use it.

· **Please use a dedicated charger**
The charger is specially designed for this type of walkie-talkie, and the charging of this type of walkie-talkie battery is more scientific, reasonable, safe and reliable.

1. Use lithium battery pack
・Charge the battery pack before use.
To minimize the discharge of the battery pack, remove the battery pack from the device when it is not in use.
・Remove the battery pack from the unit when it is not in use, and store the battery pack in a cool, dry place.
・When storing the battery pack for a long time.
1. Remove the battery pack from the device
2. If possible, discharge the battery pack
3. Store the battery pack in a cool (below 25 degrees Celsius) dry place.

2. Characteristics of lithium battery pack
・The capacity of the battery pack will gradually decrease after repeated charging and discharging.
・Even if the battery pack is never used, it will deteriorate.
・Charging a Li-ion battery pack in a cooler place takes longer time.
・Charging the battery pack in a hotter place will shorten its service life. Storing the battery pack in a hot place
・The battery pack will deteriorate faster when stored in a hot place. Do not leave the battery pack in the vehicle or near a heated appliance.
・Do not leave the battery pack in the vehicle or near a heated appliance.If the battery pack becomes short-lived, replace the battery pack even if it is fully charged. Continue to Continued charging and discharging of the battery pack will result in electrolyte leakage.

3. Charging the lithium battery pack
After the charger is connected to the power supply, put in the battery and make good contact, it turns to red indicator light. The indicator light is lit and charging of the battery begins. When the battery is fully charged, the green indicator light of the charger turns on.
When the battery is fully charged, the green indicator of the charger lights up.

4. Install/remove the battery pack Caution
・Do not short-circuit the battery terminals or throw the battery into a fire.
・Do not attempt to remove the battery pack case.
・Do not install the battery pack in a hazardous environment, sparks will cause an explosion.

(1)   (2)
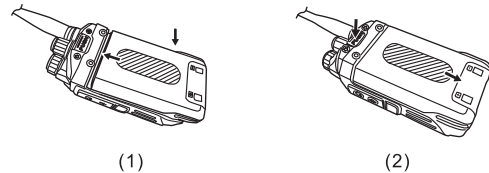
(1)To load the battery pack, press and hold the "PUSH" key then the battery is pushed up along the aluminum case of the intercom.
Push the battery upwards and release the "PUSH" key when the top is tight.

(2) To remove the battery pack, please make sure the intercom is turned off first.
the intercom is turned off, then press and hold the "PUSH" button and
Push the battery down along the aluminum case of the intercom.
After pushing down, release the "PUSH" button.

5. Install the antenna
Hold the antenna base and screw the antenna into the interface on the top of the intercom in a clockwise direction. screw the antenna into the interface on the top of the walkie-talkie until it is tight.

6. Install/remove the belt clip
If necessary, attach the supplied belt clip into the screw hole on the back of the battery pack for easy carrying. screw holes on the back of the battery pack for easy portability. To remove the belt clip, simply unscrew the two screws.

7. Install the walkie-talkie sling
Put the walkie-talkie sling on the walkie-talkie belt clip in the middle of the ring.

Get Familiar With Radio

Antenna

Channel knob

Switch/
Volume Knob

Status Indicator

Speaker
output sound

Microphone
input sound

PTT (Intercom)
button

F1

F2

SP/MIC jack

Battery pack
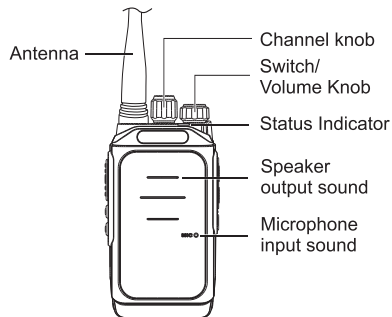
Basic operation

1. Status Indicator
Lights red in transmitting (transmitting) and green in receiving.
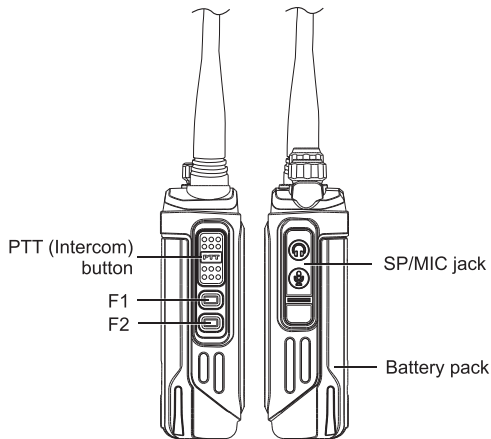
2. CHANNEL switch
Turn this switch to select channel 1~16, counterclockwise to decrease the channel value, clockwise to increase the channel value. Turn this switch to select channel 1~16, counterclockwise to decrease the channel value, clockwise to increase the channel valu.

3. POWER switch/VOLUME knob
Turn it clockwise to turn on the intercom power, to turn off the intercom power, turn it counterclockwise to turn on the intercom power. When the power is turned off, turn it counterclockwise until the sound starts, and turn it to adjust the talkback tone.

4. PTT switch
Press PTT after speaking into the microphone to call each other, the red light indicates If this channel is not set to transmit frequency, the sound and red light is on, when released to receive If there is a signal, the green light will be on and the speaker will be turned on.

5. Definition of side keys
Side key 1 Short press:Report channel tone.
Long press:Alarm function.
Side key 2 Short press:Listening function.

Alarm function: Start the alarm function, the intercom continues to sound the alarm tone. Can choose Local alarm or remote alarm. Local alarm means that the local intercom will sound an alarm Remote alarm means that other intercoms of the same frequency can receive the alarm tone. **Listening function:** Listening to whether someone is talking on the channel you have selected. If If there is no signal, it will sound a "rustle" sound.

6. Squelch level
By adjusting the squelch level to set the intercom when it receives a strong signal Close and open, set the lower the squelch level allows open when the bottom noise is greater, the The lower the squelch level set, the greater the noise level allowed to open, the greater the corresponding distance to talk, but the weaker the anti-interference ability to accept open. This function is set to 3 levels by default in the factory.

7. Transmit timeout
The purpose of transmitting timeout is to prevent the single intercom point with channel time is too long, at the same time If the continuous transmitting time exceeds the limit, the intercom will stop transmitting and sound a warning. If the continuous transmitting time exceeds the limit, the intercom will stop transmitting and sound a warning, to stop the warning If the continuous transmitting time exceeds the limit, the intercom will stop transmitting and the warning sound will sound.

8. Voice selection
Voice selection off, the intercom will not send voice notification, voice selection Chinese When you select Chinese, the Chinese "voice notification" function will be turned on, when you select English, the English "voice notification" function will be turned on. If you choose English, the English "voice notification" function will be enabled.

9. Battery power saving function
Set to enter the power saving mode, available software to set the selection. Note:a. No check mark means the intercom does not save power. b. Check the box to indicate the intercom power saving.

10. Battery voltage prompt
Note: Low voltage: when the voltage is lower than a certain level, if the voice selects off When the voice selects off, then every 15s "de de" sound prompts, if the voice is open, then prompt "please change the battery". If the voice selects Chinese or English, press and hold the PTT key or voice-activated transmitter. If the voice selects Chinese or English, press and hold the PTT key or voice control to send out a "please change the battery" tone prompt, and sound a "beep" tone until PTT release or voice control end.

11. High and low power selection
This function is set to high power by factory default. You can set the channel to work at high power or low power through the "High/Low" option of "Transmit Power". You can set the channel to work at high power or low power through the "High/Low" option of "Transmit Power".

12. Wide and narrow band selection (12.50khz/25.0KHz)

This function is set to wideband by factory default, you can choose whether the channel is working in wideband (25.0KHz) or narrow (12.5KHz) by setting the "Wide/Narrow" option in "Channel Information".

13. VOX

Voice control allows you to transmit without pressing the PTT transmit button, using only the voice of the speaker.
and stop transmitting automatically when you stop talking.

a. When your intercom channel is enabled with VOX voice control.
b. When you speak into the microphone, it will automatically turn on the transmitting and send the voice. When you stop speaking, the intercom automatically stops transmitting and waits for reception. b. When you use a headset with a microphone. To use the voice control function, you must adjust the VOX gain and set the VOX gain so that the intercom can discern the sound level. If the microphone is too sensitive, the surrounding noise will cause the intercom to start transmitting.

If the microphone is not sensitive enough, the intercom will not collect your speech. Be sure to adjust the VOX gain level to make the call go smoothly. Note: If the speaker/microphone is connected to the intercom with the voice control on and the VOX gain set to a higher, more sensitive level, the received signal amplified by the speaker/microphone may cause the intercom to start transmitting.

14. Scrambling function

Scrambling is one of the ways of information encryption, scrambling is achieved by inverting the spectrum to accomplish The purpose of changing the transmission spectrum is to restore the signal after it is received by the recipient, so as to achieve the effect of confidentiality. Each channel can select the scrambling group individually, and there are eight groups of scrambling frequency.

15. Frequency hopping function

The frequency hopping function is the digital sub-tone encryption function of the intercom. You can choose frequency hopping 1.Different frequency hopping items are not interoperable, but must be interoperable under the same hopping item.You can only interoperate under the same frequency hopping item.

16.CTCSS/DCS

When the channel is set to subaudio or digital subaudio signaling, squelch can only be turned on when a signal using the same subaudio or digital subaudio is received.
the same subaudio or digital subaudio signal is received, squelch can be turned on. If the same channel uses different CTCSS/DCS If the same channel is called with different CTCSS/DCS, squelch cannot be turned on, only the Green light.

CTCSS (50 tunes)

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

DCS(116*2 tunes)

D017N	D023N	D025N	D026N	D031N	D032N	D036N	D043N	D047N	D050N
D051N	D053N	D054N	D055N	D065N	D071N	D072N	D073N	D074N	D114N
D115N	D116N	D122N	D125N	D131N	D132N	D134N	D135N	D143N	D145N
D152N	D155N	D156N	D162N	D165N	D172N	D174N	D205N	D212N	D217N
D223N	D225N	D226N	D243N	D244N	D245N	D246N	D251N	D252N	D254N
D255N	D261N	D263N	D265N	D266N	D271N	D274N	D305N	D306N	D311N
D315N	D325N	D331N	D332N	D343N	D345N	D346N	D351N	D356N	D364N
D365N	D371N	D411N	D412N	D413N	D423N	D425N	D431N	D432N	D445N
D446N	D452N	D454N	D455N	D462N	D464N	D465N	D466N	D503N	D506N
D516N	D523N	D526N	D532N	D534N	D546N	D565N	D606N	D612N	D624N
D627N	D631N	D632N	D645N	D654N	D662N	D664N	D703N	D712N	D723N
D731N	D732N	D734N	D743N	D754N	D765N				

D017I	D023I	D025I	D026I	D031I	D032I	D036I	D043I	D047I	D050I
D051I	D053I	D054I	D055I	D065I	D071I	D072I	D073I	D074I	D114I
D115I	D116I	D122I	D125I	D131I	D132I	D134I	D135I	D143I	D145I
D152I	D155I	D156I	D162I	D165I	D172I	D174I	D205I	D212I	D217I
D223I	D225I	D226I	D243I	D244I	D245I	D246I	D251I	D252I	D254I
D255I	D261I	D263I	D265I	D266I	D271I	D274I	D305I	D306I	D311I
D315I	D325I	D331I	D332I	D343I	D345I	D346I	D351I	D356I	D364I
D365I	D371I	D411I	D412I	D413I	D423I	D425I	D431I	D432I	D445I
D446I	D452I	D454I	D455I	D462I	D464I	D465I	D466I	D503I	D506I
D516I	D523I	D526I	D532I	D534I	D546I	D565I	D606I	D612I	D624I
D627I	D631I	D632I	D645I	D654I	D662I	D664I	D703I	D712I	D723I
D731I	D732I	D734I	D743I	D754I	D765I				

Technical indicators

Waveband	VHF/UHF
Frequency range	430–440MHz
Number of channels	16
Audio distortion	<5%
Frequency Stability	± 2.5ppm
Maximum Frequency Skew	≤5KHz/≤2.5KHz
Spurious radiation	≤7uW
Modulation method	FM
Reference sensitivity	≤0.25uV / ≤0.3uV
Squelch On Sensitivity	≤0.2uV / ≤0.25uV
Adjacent channel selectivity	≥65dB
Spurious response suppression	≥55dB
Intermodulation	≥60dB
Current	≤1.6 A
Operating Voltage	7.4V DC

GUARANTEE CARD

Model Number: —————————————————
Serial Number: —————————————————
Purchasing Date: ————————————————
Dealer: ————————— Telephone: —————
User's Name: ————————— Telephone: —————
Address: ————————— Post Code: —————

REMARKS:
1. This guarantee card to be kept by the user,no repl–
   enishment if lost.
2. This guarantee card to be filled & chopped by the dealer,or
   it is invalid.
3. Don't alter the guarantee card,please confirm the serial
   number on the guarantee card is same as that on the machine.
4. One–year guarantee,charger,battery,earphone,antenna and
   can cable are not under guarantee.
5. The user can get repairing service from the following ways:
   a. Go to the shop where you buy the machine
   b. Our local repairing agent