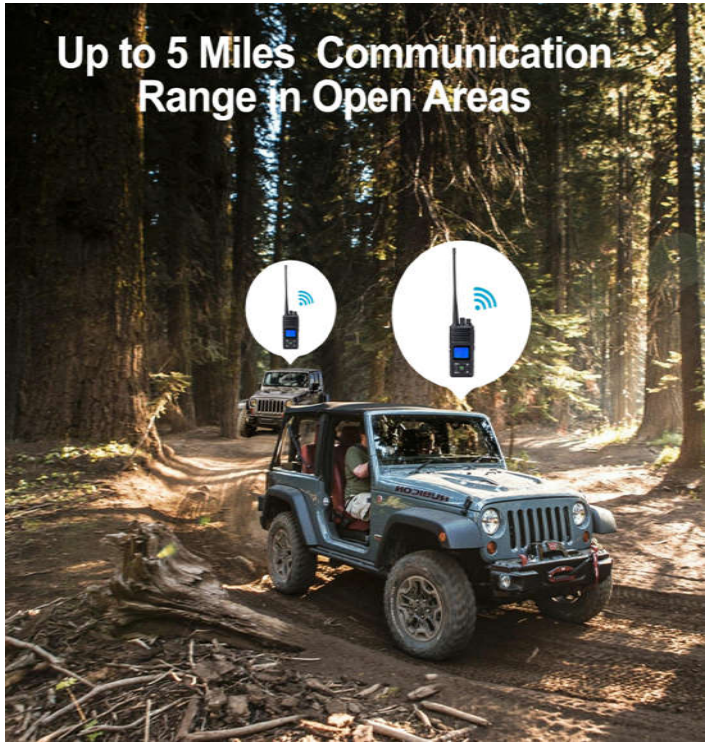
User Manual

SAMCOM FPCN30A





Features

- With GROUP button
- Voice commander/scramble
- 20 Memory Channel
- VOX Sensitive settings
- With LCD Display
- Key Lock and Tone Setting
- Squelch tail elimination

Sancon Inc.

User Security Information

Handheld transceiver product safety and RF radiation

Warning: Please read the manual carefully before using. It contains the important safety using operation instruction, and RF energy and control information contributing to meet the RF radiation limitation requirement of national and international standards. Information provided in this manual may replace the general safety information of the editions before.

Handheld Transceiver Safety Guidelines and Instruction

To control the transceiver radiation, ensure to meet the general or non-controlled environment radiation limitation standard, please operate following below procedures. Press PTT key when talking; and release PTT key when receiving.
Because measured RF energy radiation will be generated when transmitting, so transmitting time should not exceed 50% of the using time.
Place the transceiver vertically on the front, make sure the microphone (and other parts including the antenna) is no less than 1 to 2 inches (i.e. 2.5 to 5cm) away from your lips when transmitting signals. It is very important to keep the correct distance from the transceiver, since the farther away the less radiation. If you carry the portable transceiver around your body, please put into SANCON specially designed fixture, leather, box or other annex. If not, the body by radiation will be out of range of general or non-controlled environment RF radiation limitation that required by Radio Authority, Ministry of Information Industry.
If you do not use any accessories, not place the transceiver on the front specified location, please make sure that it is no less than 1 inch (about 2.5cm) away from your body when transmitting signals. It is very important to keep the correct distance from the transceiver, since the farther away the less radiation. Only use the certified and provision antenna, battery and accessories or other alternatives by SANCON. If not, the radiation will be out of range of RF radiation that required by Radio Authority, Ministry of Information Industry. Below web site lists the approved parts and accessories by SANCON

Electromagnetic Interference / Electromagnetic Compatibility

Remark: Electromagnetic Interference (EMI) occurs in nearly every electronic equipment, by not enough shielding, improper design or incorrect electromagnetic compatibility configuration. Not allowed to change the transmitting frequency, to increase the transmission power (including the installation of additional RF power amplifier).
Not allowed to use an external antenna or other transmitting antenna.
Shall not cause harmful interference to a variety of legitimate radio services while using, if found harmful interference, should immediately stop using, and to take measures to eliminate the interference before continuing.
Prohibition of interconnection with the public telephone network, public mobile communication network and other telecommunication networks.

Place

To avoid electromagnetic interference and other problems caused by electromagnetic incompatibility, please turn off the transceiver in the place where there is a sign showing “No transceiver". Hospitals or medical institutions may use external RF energy very sensitive equipment. Prohibit the use of airports and aircraft radio.

Medical devices

Pacemaker

Advanced Medical Technology Association of the United States proposes holding the handheld transceiver with pacemakers should be kept the distance of at least 6 inches (15cm). These proposals are consistent with the provisions by the U.S. Food and Drug Administration.

With pacemakers should observe the following items:

When the transceiver is turned on, the distance between the pacemaker and the transceiver at least 6 inches (15cm);
Do not put the transceiver in a breast pocket; Please use the pacemaker the other side of the ear to listen, to minimize potential interference;
If you suspect transceiver interference with the pacemaker, immediately turn off it.

Hearing Aids

Some transceivers may interfere with some hearing aids. When there is such interference, you can consult the hearing aid manufacturer to discuss alternatives.

Other Medical Equipments

If you use other personal medical device, consult the device manufacturer to determine whether these devices can effectively shield radio frequency energy. Your doctor can provide you with such help.

Safe Driving

Check your car seat using the transceiver the relevant laws and regulations, and follow the regulations.

If you use the transceiver while driving, please note the following:

Concentrate on driving, pay attention to the situation of the road. If possible, try to use the walkie-talkie-free function operation.

If the provision of using the transceiver while driving prohibited, please drive the car to the roadside stop, and then make a call.

Operation warning

Car with an airbag

In the car with an airbag, do not put the transceiver within the reach of the expansion of the airbag, because the airbag inflates with great force. If the transceiver put within the reach of expansion of the air bag, when the airbag inflates, the transceiver may be driven by the tremendous force generated, resulting in severe injuries inside the vehicle.

Possible gas explosion

Some places have potentially explosive gas, if your handheld transceiver can not be safely used in these types of places (such as factory, CSA, UL or ENELEC), please power off it before entering the places. Shall not remove, install the battery or charge to the battery in these areas. Because of such gases in the spark will cause an explosion or fire resulting in casualties. Mentioned above with a potentially explosive gas areas include:

Fuel zone, like the area below deck on boats, and the transmission or storage sites for fuel or chemical agents; places where air contains particles, like chemicals or such as straw, dust or metal powders.

Areas contain potentially explosive gases will have general warning, but not all areas have this warning.

Fuse and blasting areas

To avoid possible interference with blasting operations, please switch off your transceiver when get close to blasting areas and areas where deployed some detonators. Those places posted with the words to switch off wireless radio, you have to turn off it. Please observe all signs and instructions.

To prevent the magnetization

With weak external magnetic of transceiver speakers, please keep your transceiver larger than 10cm away from TV sets, computer monitors etc, to avoid being magnetized.

Notes

Antenna

Caution Not use the handheld transceiver with damaged antenna. It will cause skin mild burns if touch the damaged antenna.

Battery

If some of your body exposed conductive material contact the battery outside terminals, it will cause damage to property, or burns on human body. These conductive materials include jewelry, keys, or beaded necklace, they will form a loop with the battery (causes short circuit), generate considerable heat. Rechargeable battery storage must be very careful, especially been put in the pocket, purse or other container with metal objects. Waste batteries should not be abandoned in a fire.

Earphone

Before using the earphone, first turn the volume down so as to avoid excessive hearing damage.

Speaker

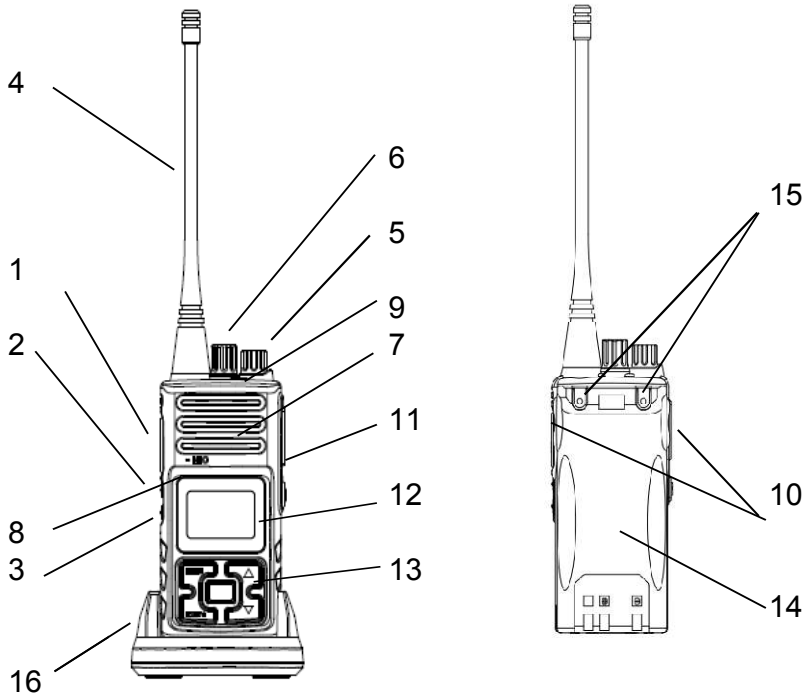
When the volume setting is high, the transceiver can not be too close to your ear, otherwise it will damage hearing.

Charging Equipment Notes

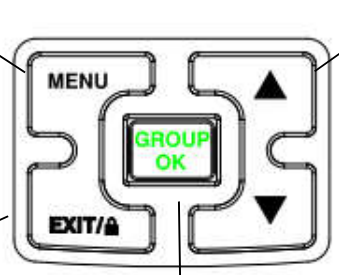
1. Do not expose the charger to rain or snow.
2. Chargers by severe impact, or has been dropped, or subject to any damaged, do not use again.
3. Can not disassemble the chargers by severe impact, or has been dropped, or subject to any damaged.
4. Can not replace the original power cord and plug provided. If plugs and sockets do not match, please ask the qualified electrician to install an outlet to avoid electric shock.
5. To avoid damage to the power cord or outlet, holding and pull out the plug from the wall socket, do not pull the power cord to pull the plug.
6. To avoid electric shock, pulling out the charger plug from the wall socket prior to maintenance or cleaning.
7. The use of non proposed or supply attachments may cause fire, electric shock or personal injury.
8. Take care the power cord location, it should not be trampled, do not stumble, will not suffer damage or compression.
9. Unless absolutely necessary, do not use extension cords. Improper use of extension cords can cause fire or electric shock.
   If you must use an extension cord, make sure:
   to use the same extension cord plug pins.
   plug specifications same as the charger plug.
   length of 30 meters or less using 18AWG wire, the length of 45 meters or less using 16AWG wire.
10. Can not replace the charger power cord. When the power cord is damaged, should immediately stop using the charger.

Get Familiar with the transceiver

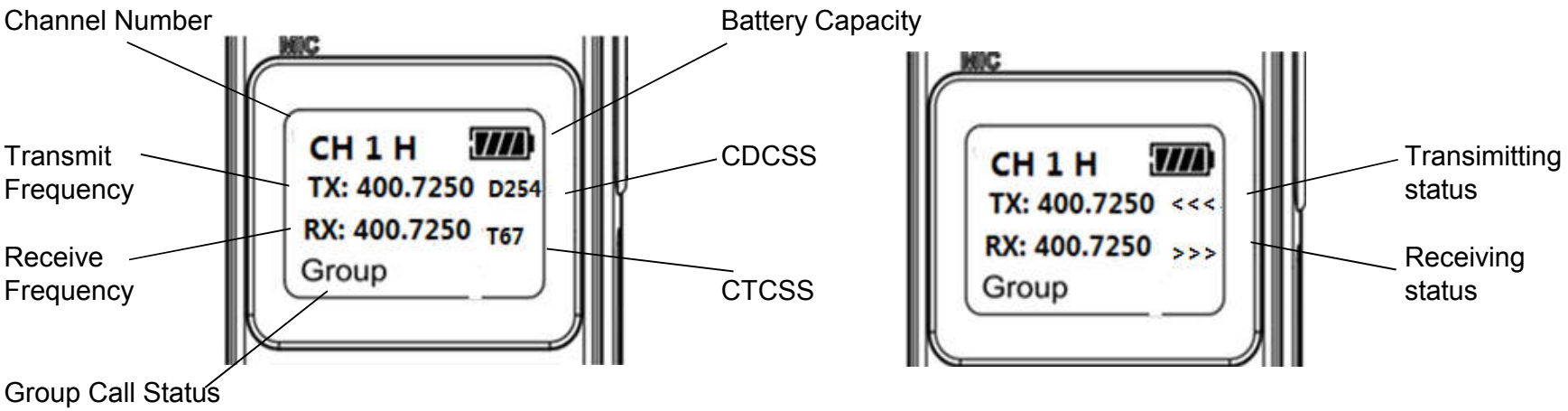
(1) PTT Transmitting
(2) MONI (monitor) button
(3) Scan/call button
(4) Antenna
(5) Channel selection knob
(6) Power/volume switch
(7) Speaker
(8) Microphone
(9) Status indicator
(10) Battery release button
(11) Earphone cap
(12) LCD Display
(13) Keys
(14) Battery
(15) Belt screw
(16) Charger



Press the MENU key，enter into the menu selecting mode Press ▲ or ▼ key choice the function.



Keep press 3 seconds the key to lo Press the **GROUP/OK** key to speak to all channel ,
open the key or Press the EXIT key to exit setting press the **OK** key to confirm the funct



Battery Information

Battery on First Use

Since batteries leave factory without a fully charging, please charge the new batteries before using. Under normal circumstances, the battery on first use needs 5 hours of charging. The first three times of fully charging and discharging provides batteries the best capacity. When you find out the battery is low, it is required to charge or replace it.

Compatible Battery Type

Please use the specific battery for the use of other batteries may cause explosion, resulting in bodily injury.

Safety Precautions

1. Do not dispose the batteries in the fire.
2. Do not dispose the batteries as household wastes, and it must be collected and treated properly.
3. Do not rip off the shell from the battery without permission.

Notes:

1. When charging, the temperature should be between 5℃ ~40 ℃,otherwise it may cause the leakage or even damage the battery.
2. Please shut down the transceiver with battery loaded before charging it. The use of the transceiver while charging is ongoing will affect the normal battery charging.
3. Do not put back and charge the battery that is already full, for it will significantly reduce the cycle life.
4. Since continuous charging will shorten the life of the battery, it is unwise to place the transceiver or battery on the charger, or take the charger as a placement seat for the transceiver.
5. Do not charge the battery when it is wet. You should dry it first in order to avoid any danger.
6. If the battery's usage time is very short even when it has been charged in completely correct way, it can be concluded that the battery life is due and should be replaced by a new one.

Extension of Battery life

1. The performance of the battery will be reduced when the temperature drops below 0℃. In cold weather, it is advised to spare another battery for emergency. Please do not dispose the cold batteries that can not work at low temperature but may be usable at room temperature.
2. It may affect the normal use or charge of the battery, if it is covered with dust. Please clean the battery with dry cloth before loading or charging it.

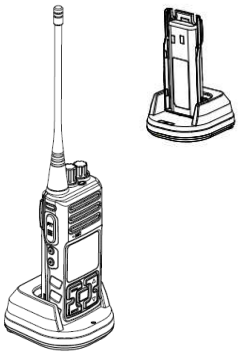
Knowledge about Battery Storage

1. Since the battery will self-discharge, please do charge it fully before putting it aside so as to prevent damages caused by over discharge.
2. Please take out the battery after storage for some time to fill it, in order to avoid the reduction of the battery capacity resulting from over discharge. It is proposed for lithium-ion / lithium-polymer batteries to be filled in every 6 months of storage.
3. Please pay attention to the humidity of the battery storage environment. Batteries are supposed to be stored in the environment of room temperature, cool and dry air, to reduce the self-discharge.

Charging Operation

Please use SAMCOM-specified charger to charge the battery; the indicator light of the charger shows the completion of charging operation.

Indicator Light	State
Red light	Be charging
Green light	Charging completed



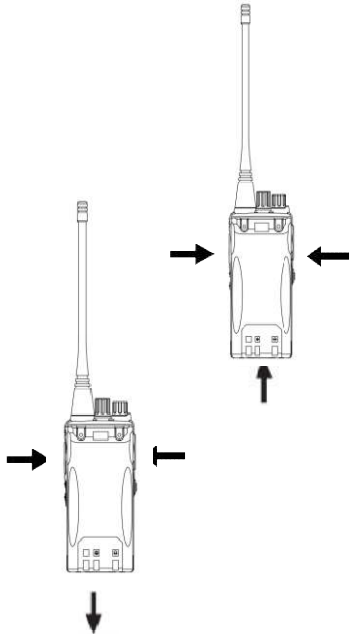
Please do the following steps to charge:

1. Insert the AC plug of the power adapter into the AC power outlet.
2. Insert the DC plug of the power adapter into the DC jack on the back of the charger,
3. Place the battery or the transceiver with battery on the charger.
4. Confirm that the battery contacts are well connected with the charger contacts, and the charge indicator light turns r represent the beginning of the charging operation.
5. After a period of time, when the indicator light turns green, it shows the completion of the charging operation.

Installation/Removal of the Battery

1. Installation of the Battery

Please make sure the transceiver is powered off, and then hold down the belt clip to open it ,
Hold down the two side keys and insert the two bumps on the top of the battery into
the aluminum grooves of the transceiver in the direction of the arrow, and to finish the installation,
press the bottom of the battery in the direction of the arrow until the “ka-ta” sound is heard.
Note: If the battery is not fixed well, please remove it and reinstall.



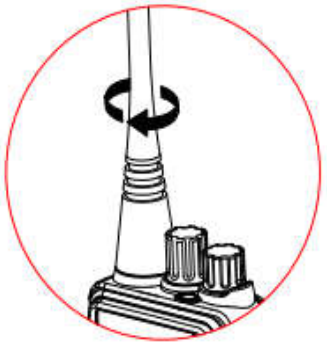
2. Removal of the battery

To remove the battery, please make sure the transceiver is powered off,
and then press and hold to open the belt clip so that the open the belt clip so that the
open the belt clip so that the
battery can get out when the
button has been turned upward.
Pull the battery out according to the
arrow after the battery hook is detached.

Installation /Removal of Antenna

1. Installation of the antenna

(1) Plug the screw-thread end of the antenna into the socket at the top of the transceiver.
(2) Rotate the antenna clockwise until tightening up , as shown.



2. Removal of the antenna

Rotate the antenna counterclockwise to remove it.

Installation /Removal of Belt clip

1.Installation of the belt clip

First remove the battery, and then place the clip on the rear top of the
machine, and fix it with two screws by a cross-screw.
Note**:** Do not install the belt clip unless the battery is off.

2. Removal of the belt clip
As for the removal of the belt clip, please refer to the installation steps and loose the screws in counterclockwise.

Installation/Removal of External Earphone or Microphone
1. Installation of the external earphone or microphone

(1) Unclose the earphone cap (without removing) in the direction of the arrow
(2) Insert the earphone or microphone

2. Removal of the external earphone or microphone
You can pull out the external earphone or microphone to remove it.
Note: *The use of an external earphone or microphone will affect the waterproof performance of the transceiver.*

Operation Guide

b.Meun Selecting List

Item	Display	Description	Setting content
1	GRP	Group channel setting	0-19
2	VOX	Voice Operation	OFF 1-9
3	SQL	Squelch Level Selection	1-9
4	BEP	Keypad Tone	ON/OFF
5	CMP	Voice Compression	ON/OFF
6	SCR	Scrambler Function	ON/OFF

1、GRP (Group Channel) Setting

After pressing MENU into function menu and **GRP** will be shown on display, press OK key then you can select 0-19 through by ▲or ▼, then press **OK** key again the new GRP channel is fix. press the **EXIT** key to give up setting

2、VOX Setting

After pressing MENU into function menu and choice **VOX,** press OK key then you can select 1-9 and off through by ▲ or ▼, then press **OK** key again, press the **EXIT** key to give up setting. Level 9 small voice can open transimt.

3、SQL (Squelch Level Selection) Setting

After pressing MENU into function menu and choice **SQL,** press OK key then you can select 1-9 through by ▲or ▼, then press **OK** key again, press the **EXIT** key to give up setting

4、BEP (Keypad Tone) Setting

After pressing MENU into function menu and choice **BEP,** press OK key then you can select on/off through by ▲or ▼, then press **OK** key again press the **EXIT** key to give up setting

5、CMP (Voice Compression Function) Setting

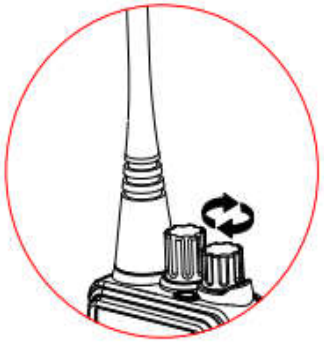
After pressing MENU into function menu and choice **CMP,** press OK key then you can select on/off through by ▲or ▼, then press **OK** key again press the **EXIT** key to give up setting

6. SCR (Scrambler Function) Setting

After pressing MENU into function menu and choice **SCR,** press OK key then you can select on/off through by ▲or ▼, then press OK key again press the EXIT key to give up setting

Power On/Off

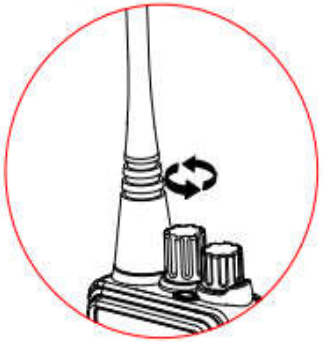
Rotate the PWR/VOL control knob clockwise until a “ka-ta” sound is heard to turn on the power. When you receive calls, the knob provides you the ability to change the volume for your listening habits. When shutting down the transceiver, you need to rotate it counterclockwise until a “ka-ta” sound is heard.



Volume Adjustment

PWR/VOL knob clockwise to increase the volume, or counterclockwise to decrease it.

Channel Adjustment
Channel knob clockwise to decrease the channel number, or counterclockwise to increase it.



Monitoring
To monitor, you need just hold down the MONI button and adjust the channel background noise to a comfortat rotating the PWR/VOL knob. It can directly monitor the channel you care without having to wait for your call, as long as the MONI button has been hold down.

Transmitting
First of all, hold down the MONI button and listen for a while to confirm the channel you wanted is not busy, and then speak normally to the microphone at the front of the transceiver, while holding down the PTT button. The transmission indicator turns red when the PTT button is pressed. If you speaks too loud or with your mouth getting too close with the microphone, it may distort the sound and reduce the signal clarity on the receiving side. Release the PTT button to listen to the partner's voices.

Receiving
Release PTT key, transceiver enter the receiving mode, the status indicator lights green. Please adjust the volume appropriately to achieve the best listening effect.

Scanning
This feature is designed to catch signals on all channels. Press the scan/call button (press and hold for less than 2 seconds), the LED indicator flashes green, it will scan all the channels in the scan queue one by one in order. When a channel receives a signal, the LED indicator will turn green for long. When the function is activated, the transceiver will check whether there are calls on the channels that are set to be scanned. If a channel is tested to have signals on it, it will switch to this channel in order to receive voices (which channels can be scanned is programmed and set by Users).

Low Battery Warning
Low battery warning happens at the time when the battery needs charging or replacement. If the battery is low, the transceiver indicator light turns red and blinks, and a beep sound can be heard every 5 seconds. At this time, please replace the battery.
Voice Operated Transmitting (VOX)

This feature is designed to trigger the transmitting of voice by voice itself. Users can choose to turn on or off the VOX feature, and set the sensitivity of VOX through Meun. With this feature, transmitting operation is launched by the voice you said without having to press the PTT button. The transmitting operation stops as soon as the end of the talk.

Voice compression and expansion

This feature ensures the user in a variety of noisy environments can get a clear call. Set by the Users in the channel through Meun

Scrambler

This feature is voice encryption, user no such feature can not receive the real voice, so makes your call be kept confidential. This feature may be set by Users in the channel through Meun

Troubleshooting Guide

Problems	Solutions
No Power	Battery may have been exhausted. Please update or recharging the battery. Battery may not be installed correctly. Please remove the battery and reload it.
Battery lasts no long after charging	Battery's lifetime is due. Please update the battery. Battery is not charged fully, so please ensure that the battery indicator is green when removing it.
It can not reach others of a group	Make sure you are using the same frequency and "sub-audio frequency /sub-audio digital settings" as other members of the group. Confirm whether you are in the valid range of transceiver since other members of the group may be too far away.
There are voices from other people rather than group members in the channel.	Please change the sub-audio frequency/sub-audio digital settings. At this time, be sure to change all the walkie-talkies of the group at the same time. (Need Users to recharge.)
When transmitting voices, only a small or even no sound can be heard on the other side	Confirm whether the rotary volume knob is to the appropriate volume. Send the machine to Users to check the microphone.
Consistent noises	Other members of the group may be too far away and can not receive the voices you send, please get close and try again.

Maintenance and Cleaning

1. Do not lift the transceiver directly by its antenna or external microphone.
2. Dust the transceiver with an anti-pilling cloth to prevent bad contact.
3. When the transceiver is off work, please cover the microphone cap.
4. The buttons, control knob and the casing of transceiver are easy to become dirty after long usage, you can use a neutral detergent (do not use strong corrosive chemicals) and wrung damp cloth to clean it.

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