

# User Manual

**SAMCOM    FPBN10A**



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## 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.

\* The company reserves the right to change product design and specifications, and takes no responsibility for printing errors and omissions that may occur at the public division.

\* Since technologies are developing continuously, the corresponding changes of product design and specifications will go without notice.

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\* Our company reserves the right of final explanation to these commitments above.




Troubleshooting Guide

Problems	Solutions
No Power	<ul style="list-style-type: none"><li>● Battery may have been exhausted. Please update or recharging the battery.</li><li>● Battery may not be installed correctly. Please remove the battery and reload it.</li></ul>
Battery lasts no long after charging	<ul style="list-style-type: none"><li>● Battery's lifetime is due. Please update the battery.</li><li>● Battery is not charged fully, so please ensure that the battery indicator is green when removing it.</li></ul>
It can not reach others of a group	<ul style="list-style-type: none"><li>● Make sure you are using the same frequency and "sub-audio frequency/sub-audio digital settings" as other members of the group.</li><li>● Confirm whether you are in the valid range of transceiver since other members of the group may be too far away.</li></ul>
There are voices from other people rather than group members in the channel.	<ul style="list-style-type: none"><li>● 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 dealers to recharge.)</li></ul>
When transmitting voices, only a small or even no sound can be heard on the other side.	<ul style="list-style-type: none"><li>● Confirm whether the rotary volume knob is to the appropriate volume.</li><li>● Send the machine to dealers to check the microphone.</li></ul>
Consistent noises	<ul style="list-style-type: none"><li>● Other members of the group may be too far away and can not receive the voices you send, please get close and try again.</li></ul>

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 tranceiver vertically on the front, make sure the microphone (and other parts including the antenna) is no less than 1 to 2 inches (ie 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 SAMZUK 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 Samzuk. 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 Samzuk

QT & DQT tables

Frequency of 50 groups QT (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	

Code of 105 groups DQT									
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	

**Voice compression and expansion**

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

**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 dealers in the channel through programming software.

**DTMF encoding**

This transceiver has DTMF encoding function. It can be set by dealer throughn programming software.

**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.

**Busy Channel Lockout**

This feature can prevent interferences to other walkie-talkies in the same channel. If the channel has been occupied, the press of the PTT button will bring a continuous "beep" warning tone, while the transceiver will return to the receive mode immediately. To stop the warning tone, please release the PTT button. Dealers can set this function turn on or off by programming software.

**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. Dealers can choose to turn on or off the VOX feature, and set the sensitivity of VOX through programming. 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.

**Call function**

Hold down the scan/call button for 2 seconds, the transceiver will send out a specific sub-tone that your companion transceiver will ring prompted a call.

**Wireclone function**

Connect the copy line, hold down the scan / call button to power on the transceiver, when you see the status indicator turns orange, release the scanning / call button. Then press the PTT key to copy the data channel to another radio. During the replication, copy transceiver status indicator is flashing red and copied transceiver status indicator is flashing green. After replication complete, copy transceiver status indicator turns orange. If replication error occurs, the copy transceiver status indicator flashes orange.

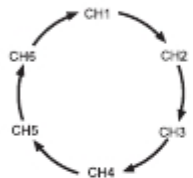
When the function is activated, the transceiver will check whether there are calls on the channels that are set to be scanned. If a channel is tested to have signals on it, it will switch to this channel in order to receive voices (which channels can be scanned is programmed and set by dealers).

**Priority Scan**

This feature allows you to scan frequently used channel. Dealers can set priority channels by programming software. If you want more information, please contact the dealer.

**Without Priority Channel**

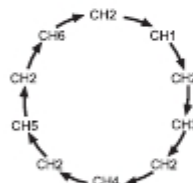
For example: When scanning six normal channels CH1, CH2, CH3, CH4, CH5, CH6, it will take the order as shown on the right figure.



Normal channel scan

**With Priority Channel**

For example: When scanning five normal channels CH1,CH3, CH4, CH5, CH6, in which the channel CH2 is set the priority, it will take the order as shown on the right.



Priority channel san

**Scan On/Off**

Hold down the scan/call button (for less than 2 seconds), the transceiver will get into the scan mode. It will quit the mode if press the button one more time.

**Reply Option**

This option means whether you need to adopt the current channel that is being scanned to reply.

When the reply option is choosed, it will use the channel at which the scanning stops to transmit your reply voices.

**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.

The use of QT/DQT signaling sounds like giving you a personal channel, but as a matter of fact, your voices can still be heard by others if their walkie-talkies adopt the same QT/DQT signaling as you, or all of your walkie-talkies are simply without QT/DQT signaling.

**Power-saving Mode**

The feature can reduce the power consumption when no signal is received or no operation, such as button pressing, switch rotating, is going on. The feature is activated by dealers.

In this mode, if there are 10 seconds without signal sending and receiving or button pressing, the transceiver will automatically go into sleep mode. if there are buttons being pressed or signals received, the transceiver will immediately be activated, and exit the power-saving mode.

**Power Adjustment**

It can be programmed through PC to adjust the power of the machine (done by dealers). Can also hold down the MONI key when power on to switch high low power. When you hear a tick sound it is high power, 2 tick sounds heard it is low power.

**Reverse Function**

It can be programmed by PC to set the reverse function(setting by dealers).Also could hold down the PTT button to switch on/off reverse function when power on.The reverse function will be on when you hear a tick sound,and it will be off when you hear two tick sounds .

**Timeout Ban**

Overtime ban is designed to prevent any caller occupy the channel for too long, as well as to avoid any damage resulting from prolonged transmissions. If a transmssion lasts for a time that is more than the dealer programmed, the walkie-talkie will stop and make a warning tone. To stop the warning tone, please release the PTT button.

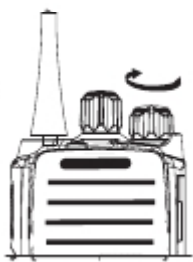
**Scanning**

This featue 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.



**Volume Adjustment**

As this type of transceiver has an auto-squelch function, you will hear nothing when the power is turned on and no call is received. You can hold down the MONI button, and then turn the PWR/VOL knob clockwise to increase the volume, or counterclockwise to decrease it.



**Monitoring**

To monitor, you need just hold down the MONI button and adjust the channel background noise to a comfortable level by 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 holded 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.

**QT/DQT**

QT/DQT signaling is mainly used to avoid receiving irrelated signals on the same channel. If QT/DQT signaling is set, it can only receive the calls of those who share the same channel and have the same QT/DQT signaling, but if QT/DQT signaling is not set, you will receive all the calls on the channel. Dealers can preset QT/DQT signaling for a channel.



caution

**Notes**

**Antenna**

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.

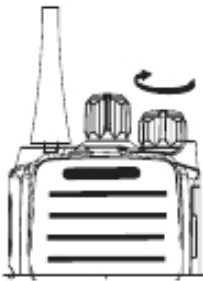
Basic Function

Operation Guide  
Buttons, Control Knobs, Switches and Indicators

■ PWR/VOL (power / volume) control knob	It is used to turn on or off the power supply, and to turn up and down the volume.
■ Transmitting indicator	When the PTT button is pressed, the indicator turns red, which shows the walkie-talkie is in transmitting mode.
■ Busy indicator	It will turn green when the transceiver is in monitoring mode and squelch is open.
■ PTT (push-to-talk) button	It switches the machine between transmitting and receiving states.
■ MONI (monitoring) button	In receiving state, holding down this button allows you to monitor the channel. When the button is pressed, the busy indicator will turn green.
■ Scan/Call button	It is used to start / exit scanning or start calling.
■ Channel selection knob	It is used to select the channel you want to use.

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.

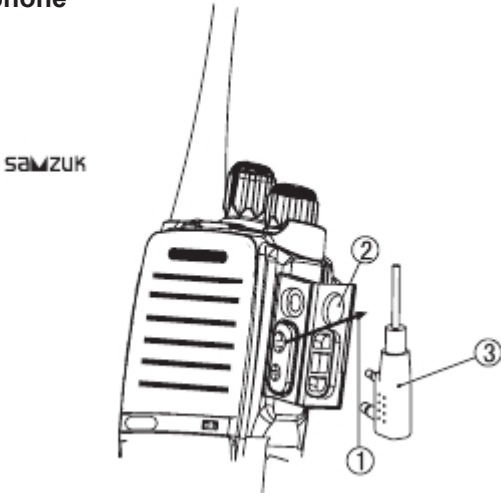


2. Removal of the belt clip

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

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 ①.  
(2) Insert the earphone or microphone ③ as shown above.

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.

Specifications and Parameters

General Specifications

Channel capacity	16 groups of memory channels
CTCSS	50 QT
CDCSS	105 DQT
Frequency stability	±2.5PPM
Antenna Impedance(Ω)	50Ω
Operating Temperature	-20 ~ +50
Power supply(V)	7.4V DC
Battery type	Li-Polymer1300 mAh

Features

- Voice cmpander/scrambler
- Power saving /Low Battery Alert
- Channel Scan/ Priority Scan
- Selectable Power H/L
- Busy channel lockout
- Time out timer
- VOX: Sensitive and delay settings
- Squelch tail elimination

Products Inspection

Welcome to use FPBN10A transceiver, and before using, we recommend you:  
Please open the giftbox carefully to confirm whether the items as following table are all included; if you find any things lost or damaged, please contact immediately with the dealer.

Standard Accessories

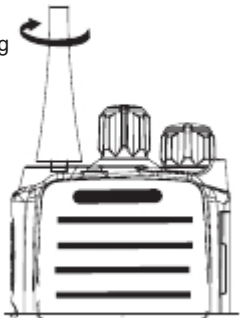
Items	Numbers
Transceiver	1
Antenna	1
Li-polymer battery	1
Battery charger	1
Adapter	1
Belt clip	1
Screws for belt clip	2
Hand Strape	1
User manual	1

**Note:** Please refer to the color-ring label at the bottom of the antenna for the antenna frequency band. If the label does not indicate frequency band, you can turn to the label on the body of the transceiver.

Installation /Removal of Antenna

1. Installation of the antenna

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



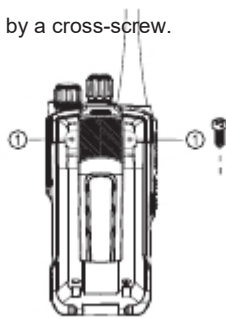
2. Removal of the antenna

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 ① by a cross-screw.



**Note:** Do not install the belt clip unless the battery is off.

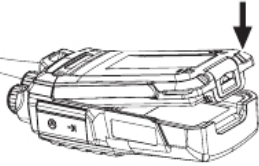
- 3. Place the battery or the transceiver with battery on the charger.
- 4. Confirm that the battery contacts are well connected with the charger contacts, and the charge indicator light turns red, which represent the beginning of the charging operation.
- 5. After a period of time, when the indicator light turns green, it shows the completion of the charging operation.

Disassembly and Reassembly

Installation/Removal of the Battery

1. Installation of the Battery

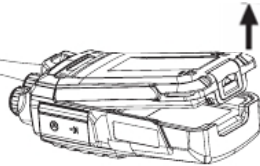
Please make sure the transceiver is powered off, and then hold down the belt clip ① to open it, and insert the two bumps on the top of the battery into the aluminum grooves of the transceiver in the direction of the arrow ②, and to finish the installation, press the bottom of the battery in the direction of the arrow ③ until the “ka-ta” sound is heard.



**Note:** If the battery is not fixed well, please remove it and reinstall.

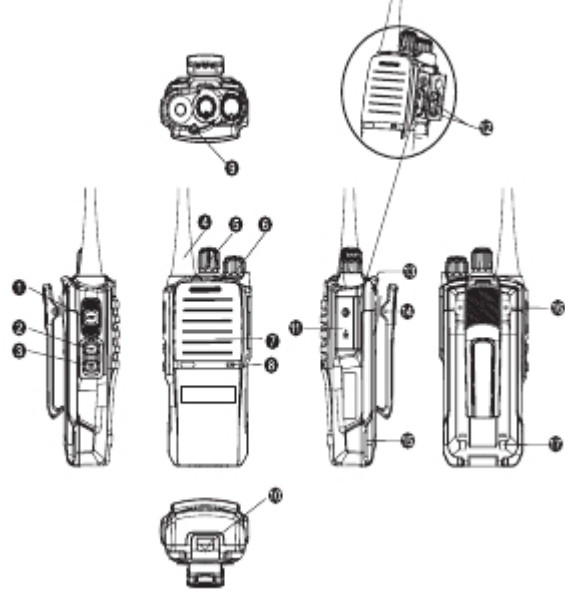
2. Removal of the battery

To remove the battery, please make sure the transceiver is powered off, and then press and hold ① to open the belt clip so that the battery can get out when the button ③ has been turned upward. Pull the battery out according to the arrow ② after the battery hook is detached.



**Note:** When pulling out, the tilt angle of the battery with the transceiver can not be too large, so as to avoid heavy wear and tear between the bump at the top of the battery and the groove at the top of the main body.

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) Earphone input         |
| (13) Lifting rope hole     | (14) Belt clip              |
| (15) Battery               | (16) Belt screw             |
| (17) Charging contacts     |                             |

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.

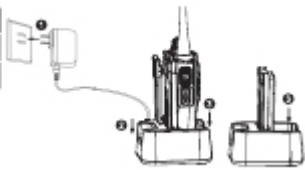
Knowledge about Battery Storage

- 1. Since the battery will self-discharge, please do charge it fully before putting it aside so as to prevent damages caused by overdischarge.
- 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 overdischarge. 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 SAMZUK-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, and the indicator will flash for a short time.

## SAFETY TRAINING INFORMATION



Your SAMCOM 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, **Warning** 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 Quansheng 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:

KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04, 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 Potential y Hazardous Electromagnetic Fields— RF and Microwave.

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



**CAUTION guidelines:**

- **DO NOT** operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed FCC RF exposure limits. A proper antenna is the antenna supplied with

this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio.

- **DO NOT** transmit for more than 50% of total radio use time (“50% duty cycle”).

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** use SAMCOM authorized accessories (antennas, batteries, belt clips, speaker/mics, etc). Use of unauthorized accessories can cause the FCC RF exposure compliance requirements to be exceeded. Body-worn operations are restricted to belt-clips, holsters or similar accessories that have no metallic component in the assembly and that provide at least 1.5 cm separation between the device, including its antenna, and the user's body. To provide the recipients of your transmission the best sound quality, hold the antenna at least 5 cm (2 inches) from 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 within the FCC RF exposure limits of this radio.

### **Electromagnetic Interference/Compatibility**

During transmissions, your Amcrest radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

This device complies with Part 90 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 received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This EUT has one voice channel per 12.5 kHz of channel bandwidth and can be capable of supporting a minimum data rate of 4800 bits per second per 6.25 kHz of channel bandwidth