

Test Model: FPen10A

# User Manual

## SAMCOM FPen10A

### Features

- With GROUP button
- Battery Capacity 3000mAh
- Voice Prompt
- 20 Memory Channel
- Vox Function (internal and external)
- Low Battery Alarm
- Noise Reduction Circuit
- Battery Save Function
- High/ Low Power Selectable
- Monitor Function
- Scan Function
- CTCSS/CDCSS



1) Keep Press Talk  
you can talk to all  
of person, even they  
are in different channel

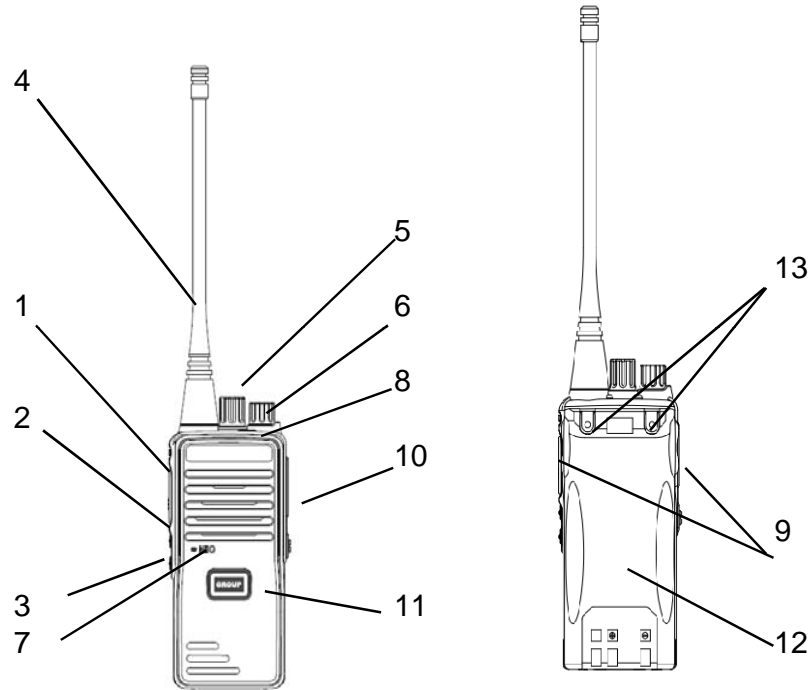
2) The color change to blue  
that is the voice is from  
someone press the GROUP  
button speaking.



Sancon Inc.

## Get Familiar with the transceiver

- (1) PTT Transmitting
- (2) MONI (monitor) button  
VOX Function (keep press)
- (3) Scan/call button  
High/Low Power (keep press)
- (4) Antenna
- (5) Channel selection knob
- (6) Power/volume switch
- (7) Microphone
- (8) Status indicator
- (9) Battery release button
- (10) Earphone cap
- (11) GROUP button
- (12) Battery
- (13) Belt screw



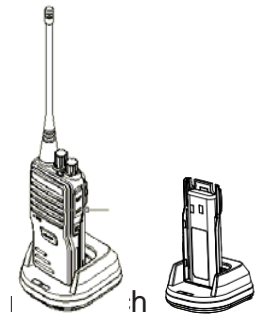
## Charging Operation

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 on to 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

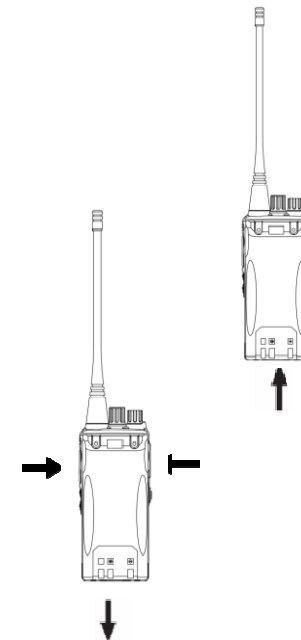
### 1. Installation of the Battery

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.



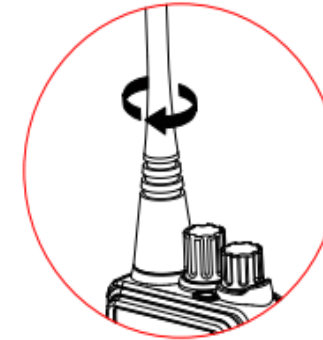
## **Installation /Removal of Antenna**

### **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

### Power On/Off

Rotate the Power knob clockwise until a “ka-ta” sound is heard to turn on the power. Counter clockwise to turn off.

### Volume Adjustment

Volume knob clockwise to increase the volume, or counter clockwise to decrease it.

### Channel Adjustment

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

### Monitoring

Press monitor button it can directly monitor the channel you are without having to wait for their call you. press monitor button once again it can directly return back to stand by status.

### Voice Operated Transmission ( VOX )

VOX is the optional microphone set. Hold press monitor button the voice tell you VOX function is ON or OFF, VOX ON is VOX circuit automatically switch on the transmission mode

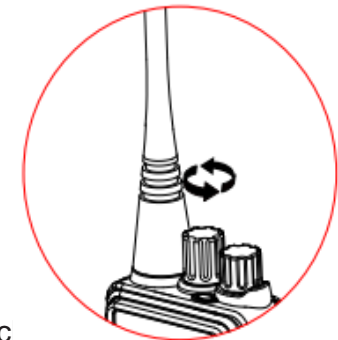
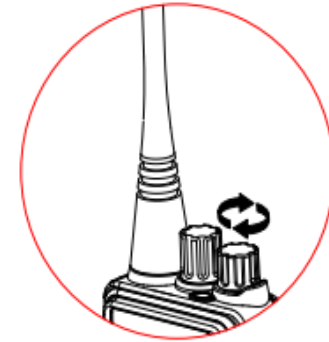
### Scanning

Press scan button 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 this channel in order to receive voices (which channels can be scanned is programmed and set by Users).

### High/ Low Power Selectable

Hold press scan button the voice tell you the radio is high power or Low power  
High power is 2 watt. Low power is 0.5 watt.



### **Transmitting**

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.

### **Low Battery Warning**

Low battery warning happens at the time when the battery needs charging or replacement.

### **Additional function**

#### **■ Time out timer ( TOT )**

TOT is the optional function set by programmer. If TOT is available, transmission time ( hold the PTT button ) will be limited on certain period of time.

TOT is useful for preventing from the thermal damage when Transceiver is under long time transmission.

#### **■ Scan**

Scan is the optional function set by programmer. If scan function is available, transceiver can stop the any of channel which are busy. This scan function can be set only for No.20 channel, so you can monitor maximum of 20 channel with scanning mode. When channel is stop at certain channel, you can press the PTT button to transmit. Also press and hold the Monitor button to stop scan operation.

#### **■ Battery Saving**

This is a standard function. To increase the battery life ( decrease battery consumption ) , Transceiver has battery saving mode. Battery saving mode will start after 10 seconds from the busy condition off.

#### **■ CTCSS / CDCSS**

CTCSS can be set by programmer.

If equipped with CTCSS or DCS, your group can not listen other group conversation. This function is useful to listen the voice within the group even other group are using same channel.

## ■ VOX (Voice Operated Transmission)

There are 9 levels sensitive for choice through by programmer.

### 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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### **FCC requirement**

This radio has been tested and complies with the FCC RF exposure limits for "General population". In addition, Your SANCON 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 100MHz to 6 GHz v01ro3, 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, 3KHz to 300GHz.
- American National Standards Institute (C95.1-1992), 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 general population use, always adhere to the following CAUTION guidelines:**

**CAUTION** ● **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

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 or " Group" button.



● **ALWAYS** use SANCON 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 SANCON 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.

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

Important: Do not hold down CALL for more than 10 seconds. The FCC does not allow you to send a continuous tone for more than 10 seconds at a time.

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 25 cm (10 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 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 except 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

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

NOTE: 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.

NOTE: This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter