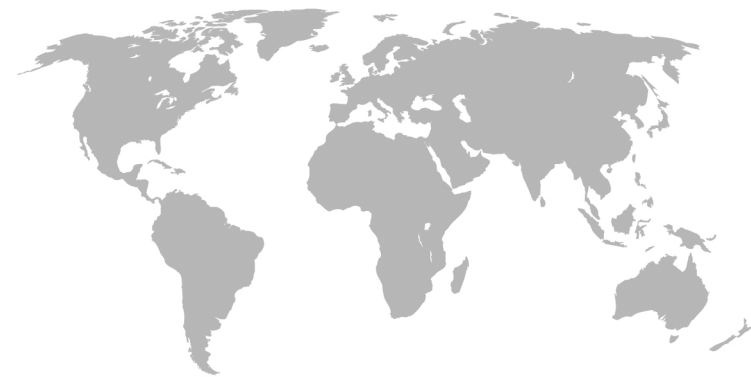




3G WCDMA / GSM



**NX-100** User Manual

## TO USER

Thank you for purchasing POC radios designed and produced by us. This product is developed elaborately as a regular POC radio according to EU standard and advanced international technology. The radio is endowed with ergonomic design and comprehensive function to deliver an advanced communication solution, which can definitively bring you a whole new operation and communication experience, improve your work efficiency and convenience, and provide a reliable safeguard for emergent communication.

Our serial products are tested strictly by rigorous testing procedures with advance international instruments and equipments.

Warm warning: To derive optimum performance from your radio, please read this manual and the supplied Safety Information Booklet carefully before use.

## Disclaimer

We strive to achieve accuracy and completeness of this manual, but no warranty of accuracy or reliability is given. All the specifications and designs are subject to change without notice due to continuous technology development. No part of this manual may be copied, modified, translated, or distributed in any manner without the express written permission of us.

## Safty:

- It's important that the operation is aware of and understand the general hazards to the operation of any transceiver.
- We can't guarantee the safety and operability of transceiver that using other accessories not sold by us.
- Disassembled and maintained by qualified technicians only.

## Warning:

### Turn off the transceiver in the following locations:

- In explosive atmospheres. (Inflammable gas, dust particles, metallic powders, grain powers, etc.
- While taking on fuel or parking at gasoline service stations.

## Precautions

Observe the following precautions to prevent fire, personal inquiry and transceiver damage.

- Do not modify or attempt to adjust this transceiver for any reason by non-technicians.
- Do not expose the transceiver of direct sunlight for long time, nor place it close to heating appliances.
- Do not place the transceiver in a dusty, humid or wet area, nor place on unstable surface.
- If an abnormal odor or smoke is detected coming from the transceiver, switch OFF the transceiver immediately and remove the battery pack from the transceiver. And contact your dealer in time.

## How to use this user manual

This manual introduces the basic operation of POC radio. However, your dealer or system administrator may already preset features of this radio based on your working type and requirement. Please consult with your dealer or system administrator about the details.

## You can check with your dealer or system administrator for the following:

- Is your radio with default settings or any preset channels that the distributor usually set?
- Which buttons are have been designed to operate other features?
- What optional accessories can be used with your radio?



## CONTENT(I)

### PREPARATION FOR OPERATING THE RADIO

Please assemble your radio by following steps

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Installing the antenna.....	5
Installing the belt clip.....	5
Installing the general interface cover (Dust cover).....	6
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## PREPARATION FOR OPERATING THE RADIO

### Charging the battery pack

Please use charger, adaptor and battery pack supplied only by us. The charger can indicate the charging status.

#### Charging diagram



#### Charging steps:

1. Plug the AC adaptor into an AC outlet, like arrow 1.
2. Plug the DC adapter cable into the adapter jack located on the back of the charger, like arrow 2.
3. Place the battery pack or the radio with a battery pack into the charger, like arrow 3.

4. The indicator lights up solid red and charging starts.
5. When charging is completed, the indicator lights up solid green. Then remove the battery pack or the radio from the charger.

**Note:** For optimum battery life and performance, charge the battery pack at least 12 hours before initial use.

#### Charging indicators

LED indicator	Charger status	Description
LED Flashes red and then OFF	Electrify but on standby mode	No-load
LED Lights Red	Charging	Insert battery successfully
LED Lights Green	Fully charged	Charging completed
Flashes Red	Failure	For maintenances

#### Note:

1. It is normal if the charger LED flashes red for a short time when the charger is just connected.
2. If a second battery is replaced to charge, please wait until the current battery is fully charged (lights green).

## PREPARATION FOR OPERATING THE RADIO

3. If the charger indicator flashes red during charging:  
(1) Please check if the battery pack is well connected with the charger.

(2) The battery pack is damaged or failed

(3) The surrounding temperature is too high or too low.

**Note:** Please read the "Battery Safety Information" before use the charger.

### Installing the battery pack

1. Align the battery pack to the battery slot like diagram 1, and then slide the battery pack to the battery slot till the battery lock to the right place.



2. To remove the battery, turn off the radio firstly. Secondly press the battery button on top left corner as diagram 2, and then slide the battery latch upwards

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to unlock the battery, like diagram 3.

### Installing the antenna

Turn off the radio, holding the base of antenna, and then screw it into the connector on the top of transceiver and turn clockwise until secure.



To remove the antenna, turn off the radio firstly, and rotate it anticlockwise.

**Note:** If antenna needs to be replaced, ensure that only our antenna is used. Ignoring this will damage your radio.

### Installing the belt clip

Align the belt clip to the two screw holes on the back of the radio, and then tighten the screws by using special screw driver.

## PREPARATION FOR OPERATING THE RADIO



To remove the belt clip, unscrew the screws.

### Install the general interface cover (dust cover) Insert /Pull out the audio accessories / programming cable

1. Open the connector cover like diagram 1;
2. Slightly press and insert the accessory to the radio connector like arrow 2;
3. To remove it, pull the accessory out like arrow 3;
4. Then cover the lid.



**Note:** after installation, if the accessory can't work properly, please check whether it matches or is installed improperly.

### Turning the radio ON

Turn on the Volume Control Knob clockwise until a click sound is heard. Then you hear a confirmation sound.



Note: There is no sound if the radio prompt tones or alert tone is disabled. If the radio is not power on, please check the battery firstly to make sure it is installed properly. If the radio is still not power on, please contact your dealer.

δ To turn off the radio, rotate anticlockwise the volume control, till a click sound is heard.

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## PREPARATION FOR OPERATING THE RADIO

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### Adjusting the volume

Rotate clockwise the volume control to increase the volume.



Rotate anticlockwise the volume control to decrease the volume.



## CONTENT ( II )

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## RADIO CONTROLS INTRODUCTION

### Radio controls



No.	Part Name	No.	Part Name	No.	Part Name
1	Antenna	8	LCD Display	15	Speaker
2	PTT button	9	MIC /SP connector	16	Down key
3	Group / Private call / ID selection key	10	Menu key	17	MIC
4	Voice playback / Battery status / ID selection key	11	Ok key	18	Battery unlock button
5	Group Selection knob	12	Up key	19	Belt Clip
6	Power Switch / Volume Control	13	Back key	20	Li-pol Battery
7	LED indicator	14	Key lock ON/OFF		

## Basic Operations & Instructions

### Antenna

The antenna is to ensure the stability and quality of the communication.

### PTT button

There are two basic functions of PTT button: Transmitting and Receiving.

- Press PTT button to transmit signals to group/IDs of other radios
- Release PTT button to receive signals from other radios
- If the RX Begin Tone is activated, the PTT Sidetone will be heard when releasing PTT button.
- If pressing the [PTT] button when the radio is receiving a signal, a harsh sidetone will be heard, indicating the radio system is in receiving, transmitting is not allowed till the receiving signal disappears.

### Group / Private Call / ID selection key

### Group / Private Call Switch

- In group call mode, long press this button for 3S to switch to private call mode, a voice prompts sounded.
- In private call mode, long press this button for 3S to switch to group call mode, a voice prompts sounded.

### Group Member ID Selection Key [-]

- In private call mode, short press this key to decrease [-] to select a desired ID number, and an audio pronunciation for selected ID number will be sounded. Then, press the PTT button to make a call. If the called party is currently offline, the system will be promoted by voice.

### Voice Playback / Battery Status / ID Selection key

#### Voice Playback

The radio will record 10 recent recordings for outgoing

## Basic Operations & Instructions

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and incoming calls. Use the recording function to play back your recent call activity.

- In standby mode, short press this key one time to play a recorded outgoing or incoming call, and press one time again to automatically play the next recorded voice, operate circularly to play all records.

### Battery Status

- In standby mode, long press this key for 3S, the radio system will automatically detect the current battery capacity and pronounce the remaining capacity. (% ratio)

### Group Member ID Selection Key [+]

- In private call mode, short press this key to increase [+] to select a desired ID number, and an audio pronunciation for selected ID number will be sounded. Then, press the PTT button to make a call. If the called party is currently offline, the system will be promoted by voice.

### Group Selection Knob

- When initiates or receives a call from other POC users, you can select a user group or ID by the group selection knob.

### Power Switch / Volume Control

- Rotate clockwise the Volume Control Knob to turn on the radio, and rotate anticlockwise it to turn off the radio.
- Rotate clockwise the volume control to increase the volume, and rotate anticlockwise it to decrease the volume.

### LED Status Indicator

#### LED lights red

- When powers on, the LED indicator lights up red indicates the radio system is logging in.

## Basic Operations & Instructions

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- When presses the PTT button, the LED indicator lights up solid red indicates the radio system is in the call. After releasing the PTT button, the LED indicator is off indicating the radio stops the call.

- When powers on, the red LED alternately flashing 1S indicates the radio system is failed to log in, any operation to the radio including initiate a call or receive a call is unavailable.

### Private Call LED Indicator (radio system is logged in successful)

- If the radio system is successfully logged in, the LED indicator flashing red about 8S indicates the radio system is in private-call mode and standby status, allowing making a call and receiving.

### LED lights blue

- When receives a call signal, the LED indicator lights up solid blue indicates the system is receiving. Once the call stops, the LED indicator is off and the

system stops receiving.

### Group Call LED indicator (radio system is logged in successful)

- If the radio system is successfully logged in, the LED indicator flashing blue about 8S indicates the radio system is in group-call mode and standby status, allowing making a call and receiving.

### Speaker

- In receiving mode, the speaker will play the currently received voice content or report currently operation status during operating.

### MIC (Microphone)

- When make or reply to a call, hold the radio to place it in a vertical position and keep the microphone (MIC) about 1 to 2 inches (2.5CM to 5.0CM) far away from your mouth, then press the [PTT] button and speak clearly into the microphone (MIC).

## Basic Operations & Instructions

### MIC / SP Accessory (Headset) Connector

- If you want to connect an external headset accessory, please insert the matched accessory to the connector. Do not insert forcibly to avoid damage to the parts.

### Friendly Reminder

- It takes about 80 seconds for first login, please wait patiently. It can be used till voice pronounce login successfully.
- After first login, if the radio is powered off without removing the battery pack, it takes about 15 seconds for next successful login with voice pronounce.

## Menu Settings & Operation

### Group selection & call

Procedure:

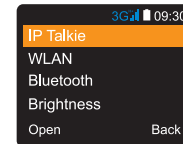
1. Power on the radio, a reminder 'Welcome to use IP talkie product, the system is starting' is heard.
2. After logged in successfully, the radio enters into the current Group/Channel interface.
3. Press [▲/▼] key to select the desired group/channel.
4. After selection, press PTT button to call current group/channel.
5. Release PTT button to receive or standby.
6. Press [BACK] key to exit Group/Channel interface and return to standby interface.

### Select Group member to make a private call

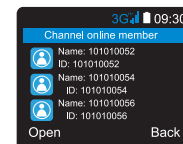
Procedure:

1. In Standby Mode interface, press [MENU] key to enter into menu settings.

2. Press [▲/▼] key to choose "IP talk" then press [OK] key to enter into Group/Channel interface.



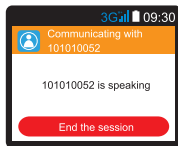
3. Press [MENU] key to Group/Channel Details.
4. Press [▲/▼] key to check or choose Online Contacts, then press [OK] key to enter into Channel Online Members list.



5. Press [▲/▼] key to choose the desired member and press PTT button to make a private call.
6. Release PTT button to receive.

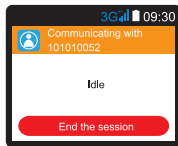
## Menu Settings & Operation

- If a signal is received, it displays as following:



OR

- Standby mode display for signal is as following:



7. In Standby mode, press [BACK] key, a reminder "ress one more time to finish the call" displayed.
8. Press [BACK] key again to exit Private call mode.

OR

The system will exit Private Call mode if no conversation for a long time.

9. Press [ ] key to browse or check other online members.

OR

Press [BACK] key to return to previous menu interface.

### WLAN Setting

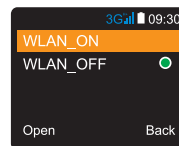
Procedure:

1. In Standby Mode, press [MENU] key to enter into Menu setting.
2. Press [▲/▼] key to choose "WLAN"

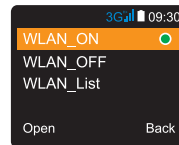


3. Press [OK] key to the setting.

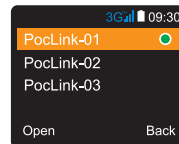
## Menu Settings & Operation



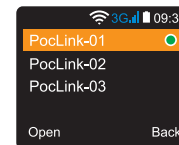
4. Press [▲/▼] key to choose "WLAN\_ON" then press [OK] key to confirm.



5. When "WLAN" is on, press [▲/▼] key to choose "WLAN\_List" press [OK] key to enter into "WLAN\_List" where displays Wi-Fi names.



- Press [▲/▼] key to the desired Wi-Fi name
- Press [OK] key to try to connect to the desired Wi-Fi. (Wi-Fi name and password need to be programmed to the radio thru Management Platform.)
- After Wi-Fi connecting successfully, the icon "📶" displays on upper right of the LCD.



6. Press [BACK] key to return to previous menu interface.

### Bluetooth Setting

Procedure:

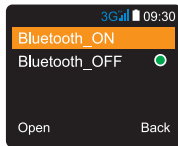
1. In Standby Mode interface, press [MENU] key to enter into Menu setting.

## Menu Settings & Operation

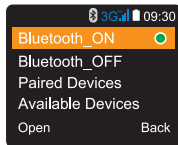
2. Press [▲/▼] key to choose "Bluetooth"



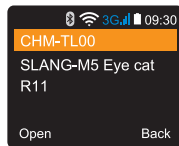
3. Press [OK] key to the setting.



4. Press [▲/▼] key to choose "Bluetooth\_ON" then press [OK] key to confirm. When "Bluetooth" is on, the icon "📶" displays on upper right of the LCD.



5. Press [▲/▼] key to choose "Paired Devices" then press [OK] key to enter into "Paired Devices list" where displays saved paired devices names.



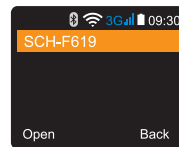
- Press [▲/▼] key to the desired Bluetooth device.
- Press [OK] key to try to connect to the desired Bluetooth device.

### OR

Press [BACK] key to return to previous Menu setting.

6. Press [▲/▼] key to "Available Devices" then press [OK] key to search available Bluetooth devices nearby, the searched Bluetooth device name will display on the screen once detected.

## Menu Settings & Operation

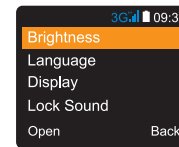


- Press [▲/▼] key to the desired Bluetooth device.
  - Press [OK] key to try to pair to the desired Bluetooth device.
  - The successfully paired Bluetooth device will save to "Paired Devices" list automatically.
  - Only paired successfully, and then is the Bluetooth device workable.
7. Press [BACK] key to return to previous Menu setting.

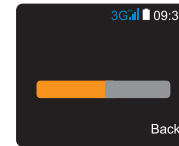
### Brightness Setting

#### Procedure:

1. In Standby Mode interface, press [MENU] key to enter into Menu setting.
2. Press [▲/▼] key to choose "Brightness".



3. Press [OK] key to brightness setting.



4. Press [▲/▼] key to adjust desired brightness.
5. Press [BACK] key to return to previous Menu setting.

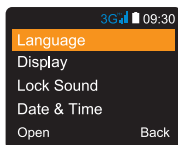
### Language Selection

#### Procedure:

1. In Standby Mode interface, press [MENU] key to enter into Menu setting.
2. Press [▲/▼] key to choose "Language".



## Menu Settings & Operation



3. Press [OK] key to language selection.



4. Press [▲/▼] key to choose English or Chinese.

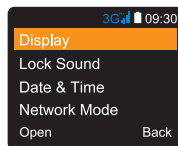
5. The radio returns to previous menu automatically after setting.

### Display Setting

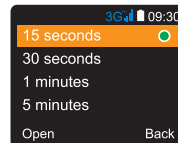
#### Procedure:

1. In Standby Mode interface, press [MENU] key to enter into Menu setting.

2. Press [▲/▼] key to choose "Display".



3. Press [OK] key to display setting. Settable time for display is: 15 Seconds, 30 Seconds, 1 Minute, 5 Minutes, 30 Minutes and Never. (In Auto Screen off mode, long press the [ ] key to unlock the screen, a beep sound will be heard indicating unlocking successfully.)



4. The radio returns to previous menu automatically after setting.

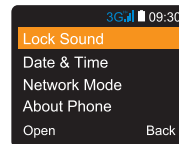
## Menu Settings & Operation

### Lock Sound Setting

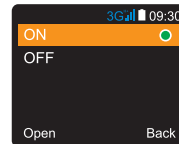
#### Procedure:

1. In Standby Mode interface, press [MENU] key to enter into Menu setting.

2. Press [▲/▼] key to choose "Lock Sound".



3. Press [OK] key to lock sound ON/OFF selection.



● When Lock Sound is on, long press [ ] key to unlock the screen, a beep sound will be heard.

● When Lock Sound is on, long press [ ] key to lock the screen, two beep sounds will be heard.

● If Lock Sound is off, no sound will be heard when lock or unlock the screen.

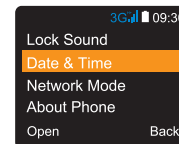
4. The screen returns to previous menu automatically after setting.

### Date & Time Setting

#### Procedure:

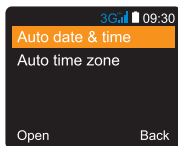
1. In Standby Mode interface, press [MENU] key to enter into Menu setting.

2. Press [▲/▼] key to choose "Date & Time".

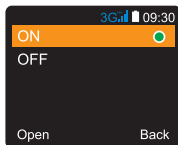


3. Press [OK] key to date and time setting.

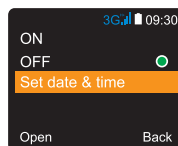
## Menu Settings & Operation



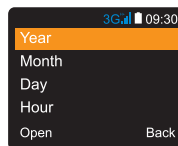
4. Press [▲/▼] key to choose "Auto Date & Time", then press [OK] key to turn on/off the setting.



- When "Auto Date & Time" is on, the radio will locate the current time zone, and connect to the clock server on the internet to adjust the date and time automatically.
- If "Auto Date & Time" is off, "Set date & time" displays, requiring setting the date and time manually.



● Press [▲/▼] key to choose "Set date & time", and press [OK] key to set. Enter into the Year / Month / Day / Hour / Minute to set the right date and time manually.

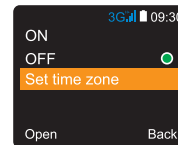


- After setting "Auto Date & Time", press [BACK] key to return to previous menu.
5. Press [▲/▼] key to choose "Auto Time Zone", and then press [OK] key to turn On/off it.
- When "Auto Time Zone" is on, the radio will locate

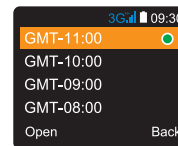
## Menu Settings & Operation

the current time zone automatically.

● If "Auto Time Zone" is off, "Set Time Zone" displays, requiring setting the time zone manually.



● Press [▲/▼] key to choose "Time Zone Setting", then press [OK] key to time zone selection. Choose the desired correct time zone.



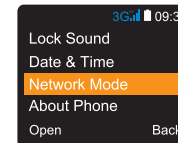
● After setting "Auto Time Zone", press [BACK] key to return to previous menu.

6. After setting Date & Time, press [BACK] key to return to previous menu.

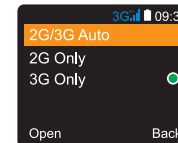
### Network Mode Selection

#### Procedure:

1. In Standby Mode interface, press [MENU] key to enter into Menu setting.
2. Press [▲/▼] key to choose "Network Mode".

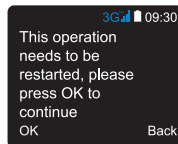


3. Press [OK] key to network mode selection.



## Menu Settings & Operation

4. Press [▲/▼] key to choose from "2G/3G Auto, 2G Only, 3G Only", then press [OK] key to confirm the setting. The LCD displays:

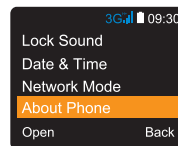


5. After pressing [OK] to continue the setting, the radio will power off automatically and re-start, the network type changing to the desired setting type.
6. After setting the network type, press [BACK] key to return to previous menu.

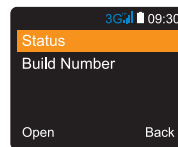
### About Phone

#### Procedure:

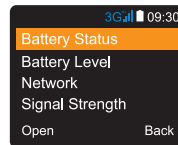
1. In Standby Mode interface, press [MENU] key to enter into Menu setting.
2. Press [▲/▼] key to choose "About Phone".



3. Press [OK] key to check the radio details.



4. Press [▲/▼] key to choose "Status", then press [OK] key to check the details.



- Press [▲/▼] key to choose the desired status information from following: Battery Status, Battery Level,

## Menu Settings & Operation

Network, Signal Strength, Network Type, IMEI, IP Address, WLAN-MAC Address and Bluetooth Address, and then press [OK] key to check the current status.

- After checking, press [BACK] key to return to previous menu.
5. Press [▲/▼] key to choose "Build Number", and then press [OK] key to check the current version No status.
6. After checking, press [BACK] key to return to previous menu.

## Main Specifications

Items	Specification / Support items
Network Type	GSM / WCDMA
WIFI (Optional)	Yes
Output Power	≥ 20dBm
Receive Sensibility	-110dBm
GPS (Optional)	Yes (1575MHz)
LBS (Optional)	Yes (Base Station)
Nominal Voltage	DC:3.7~4.2V
Battery Capacity (Polymer Li-ion Battery)	4000MAh
Working Time (5:5:90)	21 Hours
Measurement (L x W x H)mm	100 x 57 x 35mm

## General Troubleshooting Guide

Troubleshooting Description	Analysis of causes	Handling method
Fail to turn ON radio or login successfully	Battery is installed incorrectly	Re-install battery
	Battery capacity is low	Please change or charge the battery.
	Bad battery contacts or contacts in dirty.	Check and clear the battery contacts.
	Poor network signal	Change a place.
The sound get lower or unclear or disappear or interrupted during receiving signal	Battery capacity gets lower.	Please change or charge battery.
	Volume control is at low value.	Adjust the volume to be larger.
	Antenna gets loose or bad network signal.	Power off the radio and re-install the antenna, or change the antenna with right frequency. Change a place.
	Speaker is blocked or damaged.	Try to clear the outer speaker or contact your dealer.
Fail to talk with group members	Poor communication environment or strong electromagnetic interference, the location is blocked by high buildings, or located in the basement and other poor signal environments.	Change the communication environment, move to the open and flat field. Turn off the power and re-power on the radio to try again.
	The current working group or signaling ID is different with other group members.	Change group or reset signaling to be same as other group members.

## General Troubleshooting Guide

Troubleshooting Description	Analysis of causes	Handling method
GPS fail to positioning (Optional)	Radio without GPS feature; Or is working under poor working environment that fails to detect GPS signal.	To add GPS feature or move to an open space.

Note: If the above methods fail to solve your problem, or you confront other different troubleshooting, please contact your local dealer or appointed maintenance station for more supports.

## Maintenance and Clean

To make sure the radio's best performance and prolong its working life, please be acquainted with the following contents, so that you can do well maintenance and clean for the radio.

### Maintenance

- Please do not scratch or puncture the device with hard matter.
- Please do not place the device under the environment which can corrode electronic circuit or under sun direct radiation.
- Please do not carry the device by handing its antenna or headset.
- Please make sure the SP-MIC be covered well if it is not in use.

### Clean

- Please clean your device regularly by using dry laid

fabric or soft brush to wipe the dust on surface and charger contacts;

- The keypads, control knob and housing case of the device are easy to get dirty. Please use a nonwoven wipe to clean them. Do not use chemical preparations such as stain removes, alcohol, sprays or oil preparations, so as to avoid surface case damage. Make sure the radio is completely dry before use.

## Standard Accessories



AC Adaptor



Charger



Polymer Li-ion Battery



Antenna



Belt Clip



Tie

## Optional Accessories



Air conduit earphone



Earphone-1



Earphone-2



Programmable cable



Power supply for car charger



Speaker microphone