## Warning

- Flammable environment (gas, dust and fog, etc.)
- Please turn off the radio before getting close to the blasting zone or detonato handset.

## General information before use

## Please observe the following instructions to prevent fire, injury or damage to the handset.

- The recommended use pattern is 1 min of emission and 4 mins of receives. Constant emission over long time will cause over heat on the back side. Do not let the back touch any plastic surface when put it down.
- Prohibit to modify this product in any case.
- Please do not expose the handset to long-time direct sunlight, neither to close any heat source.
- Please do not expose the handset to dust, damp and spill. and over object that is unstable.
- If abnormal odor or smoke noted from the handset, please shut down immediately, remove the battery unit, and contact our local authorized service provider.

«Only approved antennas should be used with this device.

## Contents

Unpacking and checking equipment	
Accessories	01
Preparation work	
Using the Lithium Battery	03
Feature of the Lithium Battery	03
Charging for the Lithium Battery	03
Installing accessories	
Installing/Removing Battery·····	04
Installing antenna	05
Installing the belt clip	05
Installing sling	06
Installing headset	06
Overview ·····	07
Basic Function	08
Volume selector/ON and OFF switch	
PTT	0.0
Group Selection	
Group Selection	08 08
Group Selection Current Group Selection Current Battery Consumption LED Indicators Status	8080 8080 80
Group Selection Current Group Selection Current Battery Consumption	8080 8080 80
Group Selection Current Group Selection Current Battery Consumption LED Indicators Status	808 808 808 808
Group Selection Current Group Selection Current Battery Consumption LED Indicators Status Program	80 80 80 80 80 90
Group Selection Current Group Selection Current Battery Consumption LED Indicators Status Program Functions Introduction Battery Pack Installation and USIM card Basic use	8080 80 80 80 90 90 90
Group Selection Current Group Selection Current Battery Consumption LED Indicators Status Program Functions Introduction Battery Pack Installation and USIM card Basic use Private Call	808 80 80 80 90 90 90 90
Group Selection Current Group Selection Current Battery Consumption LED Indicators Status Program Functions Introduction Battery Pack Installation and USIM card Basic use	808 80 80 80 90 90 90 90
Group Selection Current Group Selection Current Battery Consumption EED Indicators Status Program Functions Introduction Battery Pack Installation and USIM card Basic use Private Call Group Switch Debug	08 08 08 08 08 08 08 09 09 09 09 09 09 09
Group Selection Current Group Selection Current Battery Consumption LED Indicators Status Frogram Functions Introduction Battery Pack Installation and USIM card Basic use Private Call Group Switch Debug System Parameter	08 08 08 08 08 08 09 09 09 09 09 09 09 09 09 09 09 09 09
Group Selection Current Group Selection Current Battery Consumption EED Indicators Status Program Functions Introduction Battery Pack Installation and USIM card Basic use Private Call Group Switch Debug	08 08 08 08 08 08 09 09 09 09 09 09 09 09 09 09 10 11

## Unpacking and checking equipment

Note: Following instructions is only suitable for authorized retailers and service providers.

Carefully unpack the radio. We recommend you check the items listed in the following table before discarding the package. If any item is missing, please contact local dealer immediately.

## Accessories:

Items	Number
Handset	1
Lithium battery	1
Charger	1
Power adaptor	1
Antenna	1
Sling	1
Belt clip	1
User manual	1

## **Preparation work**

## Warning

## X Do not overcharge with the battery

Please stop to charging if it is uncompleted in normal time. The battery may flame, smoke or crack due to abnormal charging process.

# ※ Do not put battery into the microwave or high pressure container

The battery my flame, smoke or crack.

#### **%** Do not expose broken battery to any flame.

If the battery is seen broken (or with abnormal odor), please remove it from flammable condition immediately. The fluid in battery is really flammable, which may cause flame or smoke.

## X Do not use abnormal battery

If the battery is abnormal in odor, color, shape or any other form, please remove it from charger or radio and do not use it anymore.

#### **※** Please use exclusive adapter

The adapter in accessories is designed exclusively for the bought radio. It ensures the safety and reliability of battery charging.

## Using the Lithium Battery

#### Charge before use

To reduce electrical emission in battery, please remove the battery from device if not in use within a long time. Please keep the battery in cool and dry places.

#### When keeping battery for a long time:

- 1. Remove battery from device;
- 2. If possible, please fully charge the battery before store:

3. Store the battery in places that are cool and dry (with the temperature lower than 25 Celsius):

#### Feature of the Lithium Battery

- ※ After repeated charging process, the capacity will decrease.
- % The battery degenerates gradually even without being used.
- More time will be required when Lithium battery is being charged in cool condition.
- ※ Charging and storage of Lithium battery in relatively warm condition will jeopardize its service life. Please do not keep them inside the vehicle or near heating equipment.
- ※ If the duration of battery shortens significantly, please replace the battery immediately to prevent fluid leak.

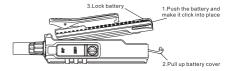
## **Charging Lithium battery**

After the AC adapter is connected and the battery is well placed, the indicator will show red which means the charging is in progress. Green will indicate that the battery is fully charged. The indicator will go off if the temperature is not proper, or the battery is damaged or the connection is poor.

- % Do not short circuit the battery terminal, or put the battery in fire.
- ※ Do not attempt to remove the shell of battery.
- ※ Do not install battery in any dangerous condition, since the possible flame may cause explosion.

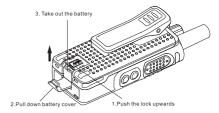
## Installing accessories

Insert the battery properly and press down on the other end of the battery. Then Pull up the battery cover with a "click".



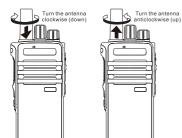
#### **Removing battery**

To remove battery, turn off the radio and push upward the lock catch of battery. Then push the battery as arrow pointed and take off the battery.



## Installing antenna

Screw the antenna into the connector on the top of radio and turn the antenna clockwise to fasten it. Turn the antenna anticlockwise to remove it.



## Install the belt clip

Push the belt clip along the "T" slot to the bottom.

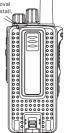
Push the belt clip along the "T" slot to the bottom



### Installing sling

Take the tail of sling across the oval hole on the back of handset to install.

Take the tail of sling across the oval hole on the back of handset to install.

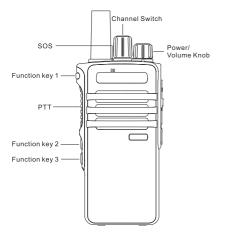


## Installing headset

Open the cover from the top of device to show the headset sockets. Headset will work immediately after being plugged in.



## Overview



## **Basic Function**

## Power on/off

Turn Volume/Power knob clockwise to power on. Turn Volume/Power knob anticlockwise to power off.

Volume control

Turn Volume/Power knob to adjust volume after power-on.

Group Selection

Rotate group switch key to select group.

Group Call

Press PTT with red indicator on and start talk. Keep 3-4cm away from Microphone while talking. Release PTT key with green indicator on to receive message.

## Private Call

Long press Function key 2 to start Private calls . Then press function Key 2 or 3 to select the member. Private call starts by pressing PTT. Once done, press PTT talk. End private call by pressing the key again.

#### Record play back

Short press function key 2 to play back the record of current group. Press function key 2/3 to select record. 10 records play-back are available for each group.

## • SOS

Long press SOS to start SOS. No key works during SOS. SOS lasts for 30 sec. totally. Once SOS starts, there is SOS voice prompt which lasts for 6 sec. Then auto group call starts.

Factory Reset

Long press function key 2 and SOS to power on. Then all the APK parameters have been cleaned up.

Voice prompt on version No.

Long press function key 1 and function key 2 for voice prompt on version No.

Voice prompt on remaining time of APK account

 $\ensuremath{\mathsf{Press}}$  function key 1 for voice prompt on remaining time of APK account.

LED Indicators Status

Green indicator blinks fast to search network when power on. It blinks slowly-blink every 5 second, after successful network access. For private calls, green indicator blinks once every second for caller.

## • Program

Earphone jack can serve for programming. All information (IP, account name, pass ward and etc) can be set with programming cable.

## **Functions Introduction**

#### 1.Attach battery and insert USIM card

Pls insert valid USIM card (User identification) in network radio before using. All network linking information has been recorded in USIM card which could be used in any CDMA mobile.

- (1) Turn the volume/power knob to power off.
- (2) Take away the battery as indicated above.
- (3) Inser USIM card by pushing away the upper cover of USIM card holder properly.
- (4) Put back the battery with battery cover.

Tips: PIs power off before take out of battery. Don't take away the battery when power on as it may possibly cause data loss and even eternal damage.

## 2.Basic use

Power on: Turn the power /volume knob to power on when power off. During power-off, there is voice prompt. After power on, green indicator is on and then blinks. It is searching network. There is voice prompt after successful internet access.

**Power off:** Turn the power /volume knob to power off when power off. During power-on. Indicator will be off.

Volume adjust: Increase volume by turning clockwise. And vice versa.

Headset: Press PTT key on headset to call and release to cancel call.

There is voice prompt fo lower battery when it is lower than 3.3V.

#### 3.Private call

Start private call by long pressing function key 2. Repress function key 2/3 to select member and talk by pressing PTT key. (Voice prompt for current group member name and its status of on-line/ offline. It will be failed if off-line) Temporary group will be auto created.

#### 4.Group Switch

Before switching ON, user needs to revolve the selector to Channel 1 (The default session is Channel 1, revolve to select other sessions. If the session is not available, there will be voice prompt : No Channel).

## Debug

If your handset shows following problem in use, please check the instruction below, and if the issue still persists, please contact local authorized service.

#### 1.Poor reception:

**Possible reasons:** Signal over your current location is weak (such as basement or next to a blocking building), or the network is busy (such as during rush hours).

Solutions: a. Please move to somewhere with improved signal. b. Please avoid using at that moment or wait for while before another attempt.

#### 2.Echo or noise:

Possible reason: The quality of network service provider is flawed.

Solution: Restart the radio will let it automatically search for available network with better quality.

#### 3.Less duration:

Possible reasons: The duration depends a lot on the settings by network service provider. Using and charging the handset under condition with high temperature will also jeopardize the battery duration. Searching for network constantly in weak-network area will also lower the duration.

**Solution:** If you are at place with weak signal, please temporarily switch OFF the handset.

## 4.Unable to connect to network:

Possible reasons: USIM card not effective, poor signal, out of network service area.

Solutions: Replace another USIM card, move to somewhere open and flat, if you are in the building , move near to the window.

## System Parameter

Operating system	Linux				
Receive sensitivity	-106dBm			-106dBm	
Working temperature	-10°C~+55°C				
Storage temperature	-40°C~+85°C				
Voltage	3.7V				
	NorthAmerican	LTE FDD: B2/B4/B5/B12/B17			
		WCDMA: B2/B5			
	Euro	LTE FDD: B1/B3/B5/B8			
Network support		LTE TDD: B38/B39/B40/B41			
		TD-SCDMA: B34/B39			
		WCDMA: B1/B5/B8			
		CDMA EVDO/1X: BCO			
		GSM: B3/B8			
Transmit power	23dBm~30dBm@-104dBm				
Sound output power	2W@10%distortion				

## Specification

Size	125*64*35mm
Weight	310g

## Indicator light interpretation

Device Status	Indicator Status	Frequency
ON/Setting	Green on	
Searching for network	Green flashes fast	Indicator is on for 0.5s and off for 0.5s
Standing by	Green flashes slow	Flash every 5 secs
Initiating call	Red on	
Receiving call	Green on	
Single call	Green on	Flash every 1 secs

## FCC RF Exposure Information and Statement

This device meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. The SAR limit of USA (FCC) is 1.6 W/kg averaged. Device types: Intelligent Two Way Radio (FCC ID: 2AIV6-T522) has also been tested against this SAR limit. SAR information on this and other pad can be viewed on - line at http://www.fcc.gov/oet/ea/fccid/. Please use the device FCC ID number for search. This device was tested simulation typical 0mm to body and 25 mm front of face. To maintain compliance with FCC RF exposure requirements, use accessories should maintain a separation distance between the user's bodies mentioned above.

#### FCC Warning

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 accept any interference received, including interference that may cause undesired operation.

NOTE 1: 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 2: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.