

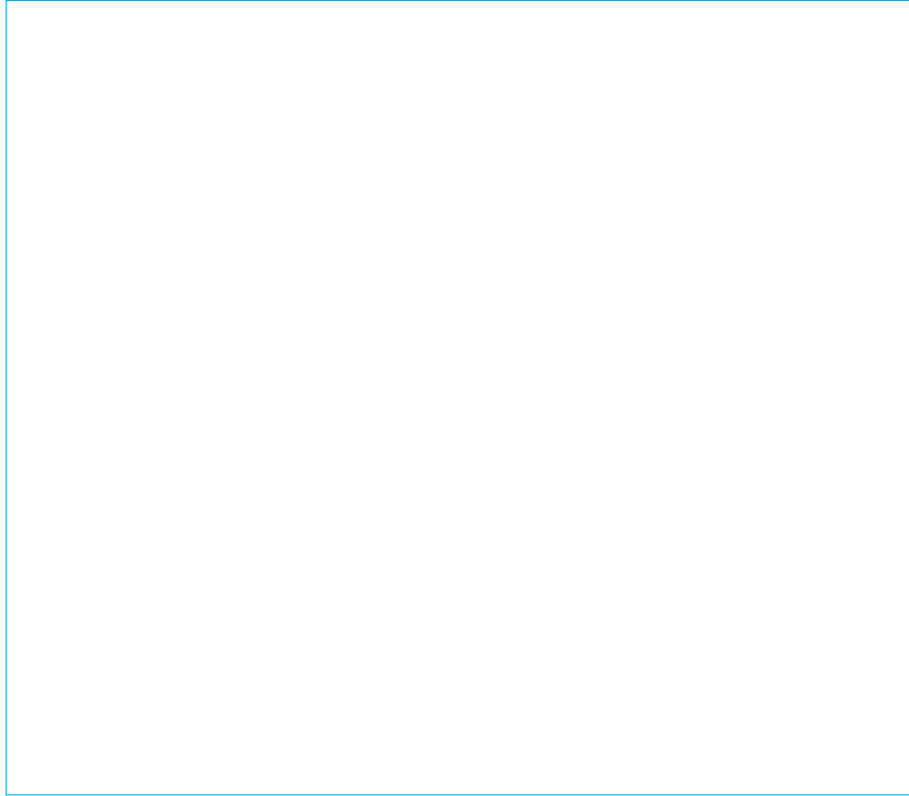


RECYCLABLE PACKAGING

# 4G LTE

*Network Digital Trunking Radio*

## USER'S MANUAL



Thank you for purchasing the 4G LTE Radio.

Our radios have been designed with quality, reliability and efficiency in mind.

We hope that you are happy with your purchase, if you do have any queries or issues please do not hesitate to contact us.

Please read this user manual before using your radio.

## Warning

Turn radio off completely when in a flammable environment (gas, dust, fog) e.g. gas station.

### General information before use

Please observe the following instructions to prevent, fire, injury and damage to the radio.

The recommended use pattern is one minute of transmission and 4 minutes of reception.

Constant transmission over long periods of time will cause over heating on the back of the radio.

If this occurs, do not place the back of the radio on a plastic surface.

The radio must be remade under no circumstances.

Please do not expose the radio to direct sunlight or any other heat source for long periods of time.

Please do not expose the radio to dust, damp, spillages or objects that are unstable.

If abnormal odour or smoke is noted of the radio, please turn off the radio immediately, remove the battery unit and contact us.

## Main function

Unlimited talking distance, cover a whole country

Single call / group call / friend call

Low battery prompt

Long time standby

High Audio / clear voice

Programming on the air

Upgrade on the air

SOS

Time Zone switch

GPS location

Talk priority setting

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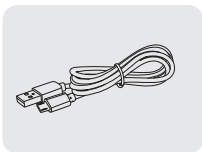
## Open the box and check the device

Please remove the radio carefully from the box. We suggest you check the accessories thoroughly according to our list before discarding the packaging. If any part is missing or damaged when you receive it, please contact us.

Packing list as below:



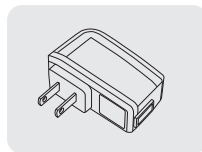
Radio body\*1



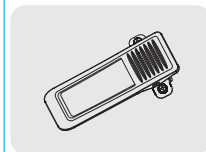
USB Cable\*1



battery\*1



Adapter\*1



Belt clip and Screw\*1



User Manual\*1

## Preparation work

### Warning:

- Do not over charge the battery.  
If the battery charge is not completed in normal time, please stop charging. The battery may flame, smoke or crack due to an abnormal charging process.
- Do not put the battery in a microwave or high pressure container.  
The battery may flame, smoke or crack.
- Do not expose a broken battery to a flame.  
If the battery is broken or has an abnormal odour, please remove the battery from the radio and keep it away from any flammable environments. The battery fluid is extremely flammable.
- Do not use abnormal batteries  
If the battery is abnormal in odour, colour, shape or in any other form, please remove it from the charger or radio and do not use.
- Please only use charger and adaptor  
The charger and adaptor have been designed to be used exclusively with the Radio. It ensures safety and reliability when charging the battery.

## Installing/Uninstalling accessories

### Battery

Charge before use.

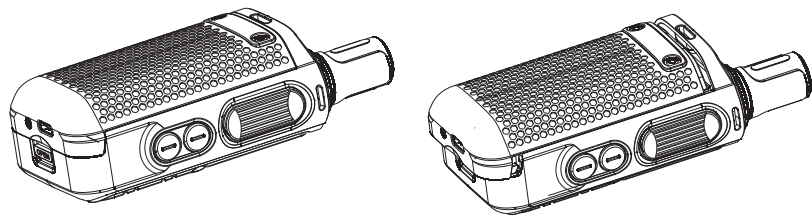
To reduce electrical emission in the battery, please remove the battery from the radio when not in use and store the battery in a cool dry place. When storing the battery for long periods of time:

Remove battery from the radio.

If possible, fully charge the battery before storage.

Store the battery in a cool dry place (temperature less than 25 Celsius).

### Installing the Lithium battery



### Attributes of Lithium battery

After repeated charging process, the battery capacity will decrease.

The battery degenerates gradually even without being used.

More time is required if charging the battery in cool conditions.

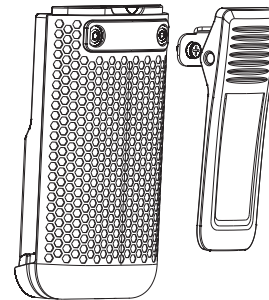
Charging and storage of the battery in relatively warm conditions will jeopardize its service life.

Please do not store the radio inside a vehicle or near heating equipment.

If the duration of the battery shortens significantly, please replace the battery immediately to prevent any fluid leaks.

### Installing belt clip

If required, screw the belt clip onto the back of the radios using the two screw holes shown on the image below.



### Uninstalling belt clip

Remove the two screws to disassemble belt clip

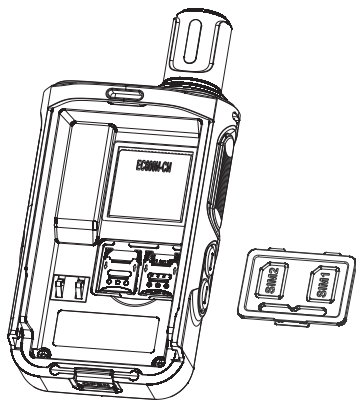
## Installing SIM card

Please insert effective SIM card before use, make sure the SIM card can be effective in 4G/3G radio.

Remove the battery Cover.

Lift SIM socket cover, place SIM card in the socket in the correct position.

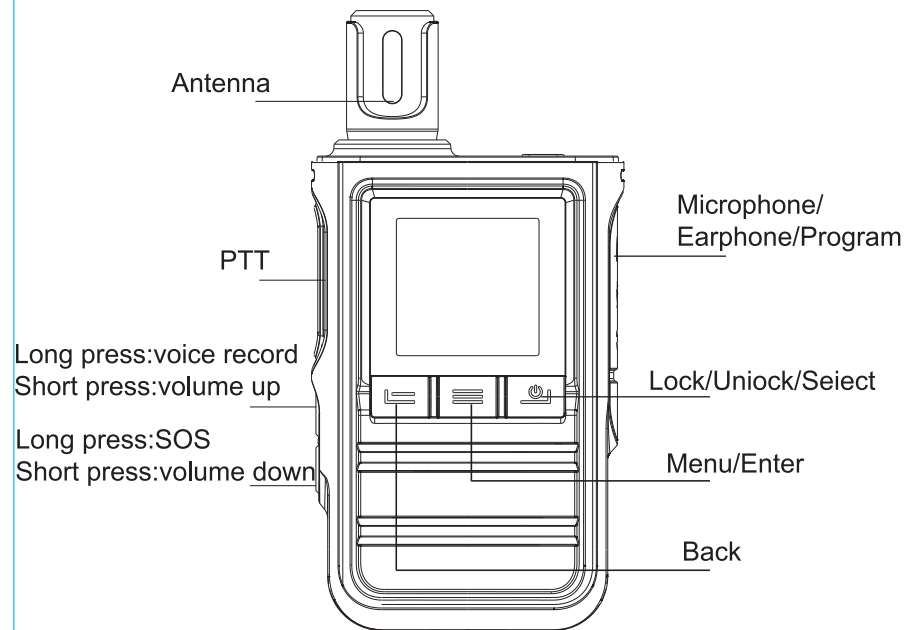
Replace the battery.



Tips:

Please turn off the radio before lifting battery out of the battery compartment to avoid data losing.

## Getting to know the radio



## Introduction

### Switch on / off radio

Long press the button in red 2s turn On / Off the radio.

Note: if the keyboard is locked, please unlock the radio before turning it off.

### Adjust Volume

Press side key 1 for volume up, and side key 2 for volume down.

Long press the green button to mute radio.

### Push To Talk (PTT) button

When you Press the PTT key, the display will show : I speaking 120 seconds

The indicator will keep in red at the same time.

When receive Group member call, the display will show: Calling ID / Name and the indicator will keep in green.

### Group Select ( Group call )

You can change the current group in this function:

Enter menu-Group selection, press the side key 2 to choose your group, press the mid-button to confirm and enter your group.

### Member Select ( Single call )

You can select the members which are online to make temporary call:

Enter menu-member selection, and then select the member which is online by the Up and Down selection key

Press mid-button to confirm Member and start to call.

### Lock/Unlock Keyboard

Long press the red key to lock or unlock the keyboard.

## Playback (Voice Records)

Press Menu key and select the Setting. Then Press the No.6 Record: Switch on the Record . Voice Records will save recently 1 Calling record.

## Location Information

Using the radio outside and waiting for around 1 minutes .

Switch on location information : radio will show current Latitude and longitude and Satellite

## Menu

Unlock the keyboard, and choose following functions by Up and down select key

Group select

Member select

Friend Select

Location information (GPS )

Local Setting

## Simple troubleshooting

If your radio shows and of the following problems, please check the instructions below and if the problem still persists then contact us

Poor reception: Possible reasons are signal in your current location is weak or the line is busy. If this happens, please move somewhere with improved signal or wait a while before attempting again.

Echo or noise: A possible reason is that the quality of the network provider is flawed. Please restart the radio, this will let it automatically search for an available network with better quality.

Less battery duration: Possible reasons are using and charging the battery in high temperature conditions or searching for a network constantly in a weak network area. If you are in an area with a weak signal, please temporarily switch OFF the radio.

Unable to connect to a network: Possible reasons are that the SIM card is not effective, poor signal or being out of the network service area. Please try either replacing the SIM card or move to a position that is more open, i.e. if you are in a building, move nearer the window.

## Software Instruction

IP Server address:

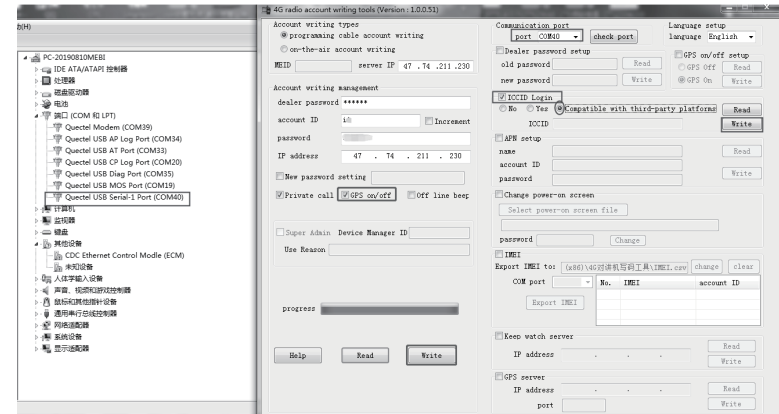
American : 47.254.88.91 /Singapore :47.74.211.230

### 1.Create account in programming software

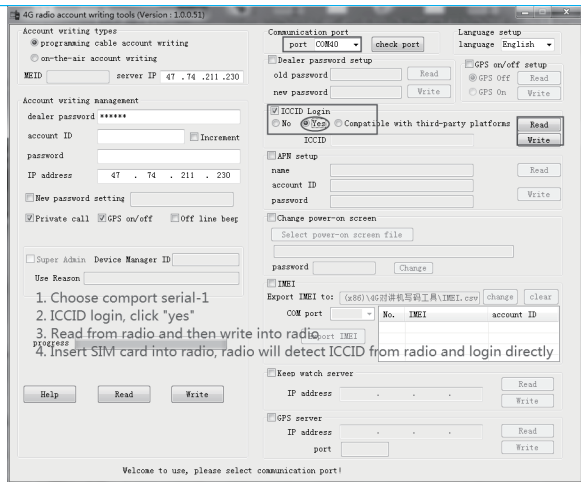
#### 1.Programming account by Cable

Turn on the radio Normally. Connect the programming cable with computer for programming USB cable also the same programming cable:

Read account first. When finished all the account information then write as follow:



1. choose com. port serial-1 port
2. input your account & password, write into radio
3. click ICCID login-Compatible with third party platform, and write into radio



## 2.Programming Account on the air

Turn on radio and press menu key, select the setting No 5. Firmware Update

Choose OTA Upgrade, and checking the MEID code: such as: 7EEA8BA

Then Open the software

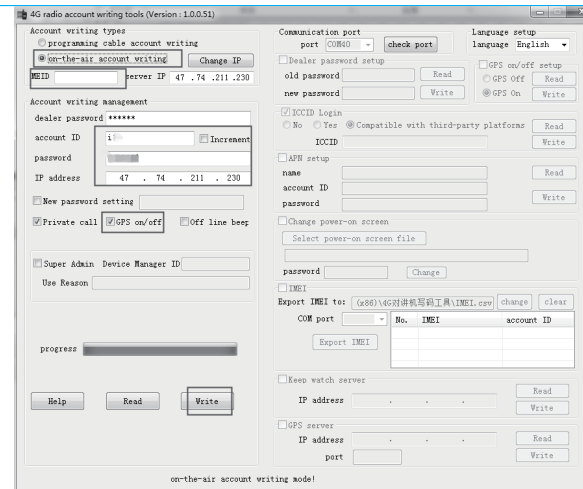
Click the On-the- air account writing

Input the MEID code such as: 7EEA8BA. Read the data first.

Finally input the account and password which one you have setting it on the platform website

Also you need change the IP address what server you use

Write the data and turn on radio again



Turn on the radio Normally. Connect the programming cable with computer for programming USB cable also the same programming cable:

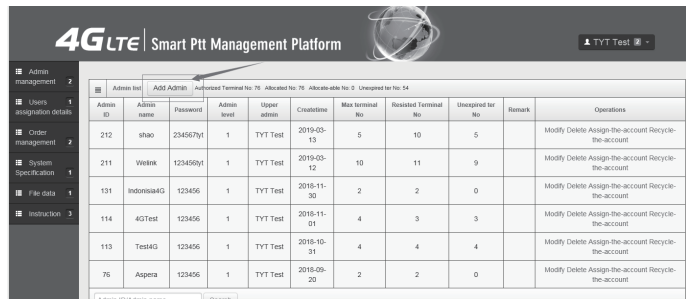
Read account first. When finished all the account information then write as follow:

## Platform Instruction

### 4G LTE smart PTT management platform

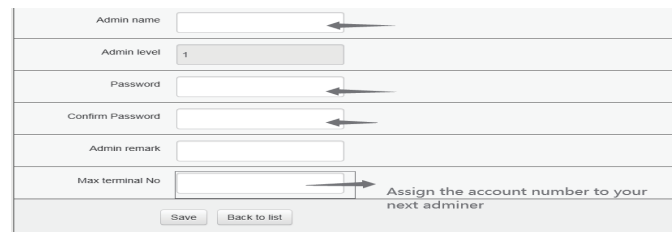
Click: Platform website. Using the account and password to log in, you will find the interface as below:

I: For second level admin, which cannot add the device, can only create the third admin or deal with the order issue



Admin ID	Admin name	Password	Admin level	Upper admin	Creation time	Max terminal No.	Reserved Terminal No.	Unassigned for No.	Remark	Operations
212	shao	2345678yt	1	TYT Test	2019-05-13	5	10	5		Modify Delete Assign-the-account Recycle-the-account
211	Wetok	123456yt	1	TYT Test	2019-05-12	10	11	9		Modify Delete Assign-the-account Recycle-the-account
131	IndonesiaG	123456	1	TYT Test	2018-11-30	2	2	0		Modify Delete Assign-the-account Recycle-the-account
114	4GTest	123456	1	TYT Test	2018-11-01	4	3	3		Modify Delete Assign-the-account Recycle-the-account
113	Test4G	123456	1	TYT Test	2018-10-31	4	4	4		Modify Delete Assign-the-account Recycle-the-account
76	Aspera	123456	1	TYT Test	2018-09-20	2	2	0		Modify Delete Assign-the-account Recycle-the-account

### 1.Add the admin, and set the Terminal Number



Admin name

Admin level

Password

Confirm Password

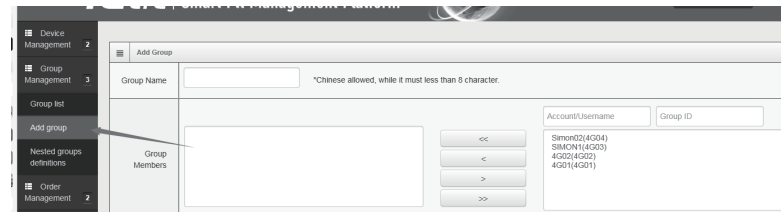
Admin remark

Max terminal No

Assign the account number to your next adminer

### 2.Log in Third Admin and Create the account and Group

Frist add a group



**Add Group**

Group Name  \*Chinese allowed, while it must less than 8 character.

Account/Username  Group ID

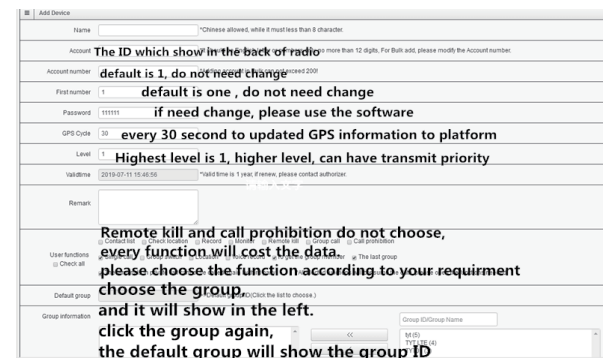
Group Members

<< < > >>

Then: Add the device

Note: Only third level admin can add the device, please kindly contact your upper admin for the Account. There are two methods to add the device: add one by one and add in bulk.

Add the device one by one:



**Add Device**

Name  \*Chinese allowed, while it must less than 8 character.

Account  **The ID which show in the back of radio, more than 12 digits. For Bulk add, please modify the Account number.**

Account number  **default is 1, do not need change**

First number  **default is one, do not need change**

Password  **if need change, please use the software**

GPS Cycle  **every 30 second to updated GPS information to platform**

Level  **Highest level is 1, higher level, can have transmit priority**

Validtime  \*Valid time is 1 year, if renew, please contact authorizer.

Remark

User functions ☐ Check all **Remote kill and call prohibition do not choose, every function will cost the data. please choose the function according to your requirement**

Default group  **choose the group, and it will show in the left.**

Group information  **click the group again, the default group will show the group ID**

Group ID/Group Name

Or If you want Add the device in bulk  
As follow :

Finally input the excel documents on website

E11					
A	B	C	D	E	F
Name	Password (Special characters other than the underline "_" can not be included)	Account (Only letter and numbers)	Default Group ID	The Group ID the member in (Use "1" to black multiple Group ID)	User functions (* multiple functions to fill in the corresponding number, separated by a vertical line") [Contact list:1], [Check location:2], [Record:3], [Monitor:4], [Remote kill:5], [Group Call:6], [Call prohibition:7], [Single call:8], [Group switch:9], [Location:10], [Voice record:11], [To get the group member:12], [The last group:13], [The terminals in private call cannot be called again by third party:14]
M-1	111111 MPK01	1004		1004 1 2 3 4 6 8 9 10 11 12 13 14	
M-2	111111 MPK02	1004		1004 1 2 3 4 6 8 9 10 11 12 13 14	
M-3	111111 MPK03	1004		1004 1 2 3 4 6 8 9 10 11 12 13 14	
M-4	111111 MPK04	1004		1004 1 2 3 4 6 8 9 10 11 12 13 14	

4GLTE | Smart Ptt Management Platform

Device Management2

Group Management3

Order Management2

Admin management2

Secondary Management2

File Data1

Instruction3

Add Device

Name4G

\*Chinese allowed, not more than 16 character.

User typeICCID

①

ICCID numberICCID

②

\*SIM card number, unique identification number of IC card, length cannot be longer than 20

Account number1

③

To register by SIM card ICCID:  
1. choose ICCID Adding account in Bulk can not exceed 2001  
2. Input your ICCID number

First number1

④

To register in bulk:  
3. say total number you want to register  
4. that number is for the latest digit of ICCID number

GPS Cycle30

Level1

\*Add note > PTT Priorities level 1 - 10. High number is high priorities (Default 1).

Validtime2024-03-27 10:55:22

\*Valid time is 1 year, if renew, please contact authorizer.

Remark

Noted: when you want to login the device by ICCID, please do not forget to choose login by ICCID on the programming software

User functions

☒ Contact list

☒ Check location

☒ Record

☒ Monitor

☐ Remote kill

☒ Group call

☐ Call prohibition

☐ Single call

☐ Group switch

☒ Location

☒ Voice record

☒ To get the group member

☒ The last group

☒ The terminals in private call cannot be called again by third party

\*All elected functions will consume the data, please open the functions needed.

3.Order Management

Add Account

Add number:

Return the surplusaccount

The returned number:

The unassigned account number: 0

Renew the account

Please choose the renew account:

Account/Username

Group ID

Simont02(4G04) (2019-5-06) (2021-5-06)  
SIMONT1(4G03) (2019-5-06) (2021-5-06)  
4G02(4G02) (2019-10-31) (2021-11-01)  
4G01(4G01) (2018-10-31) (2021-11-01)

Please choose the renew time:

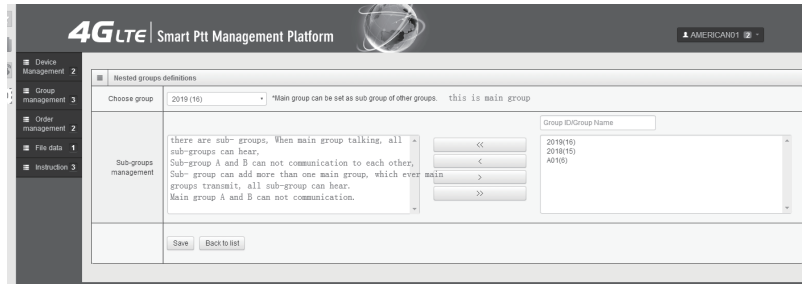
months (Please input the integer ). \*Note: The renew time will start from that date the account is approved and renew time is 12 months in maximum.

Save Back to list

1.add order :  
If the account quantity not enough support your radios quantity. You can add order then ask your upper level administrator to assign the account.  
Click “ Order management”, then click “Add order”  
2.Return order : return the useless accounts  
3.Renew the account.  
Normally the radio usage is 12 months. Once the usage Invalid, you need submit the Renew account number and Usage to your upper admin.



#### 4.Main group and Sub- group



#### Nested groups definitions

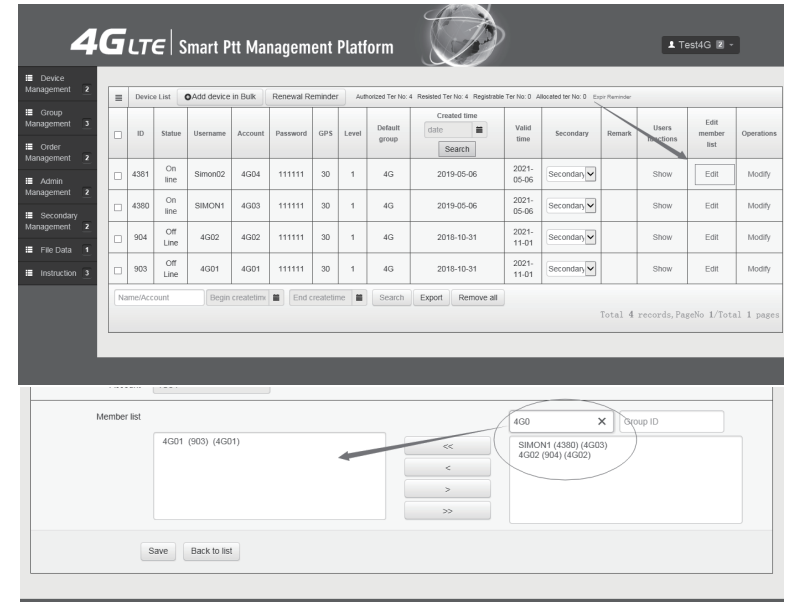
Every group can be merged into a new group; it can also be merged into a new group separately; or be combined with other subgroups. However, new groups that are combined by sub-groups cannot be merged.

The new group that merged by subgroups has all members of the subgroup

#### Friend Select

You can select the friends which are online to achieve temporary call

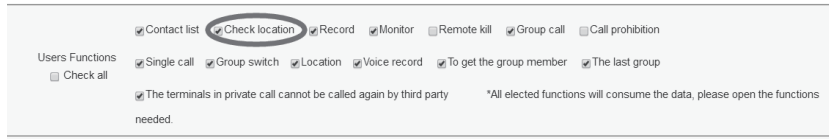
First we should add the friends ( searching or edit ) on the platform website :



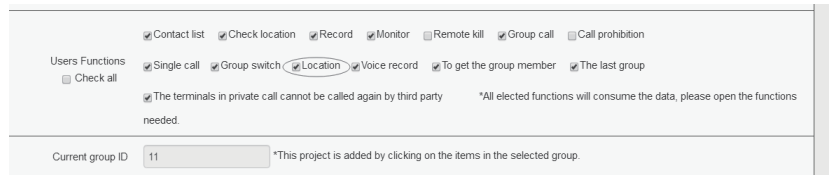
Short press Up select key or press Menu key and select the Friend Select . Select the friends and press Menu key for Temporary call, press Exit key to hang up calling.

## Dispatch management platform Instruction

1.The dispatcher should select the function for “Check Location” in the platform, so that the dispatcher can get the other radios GPS information.



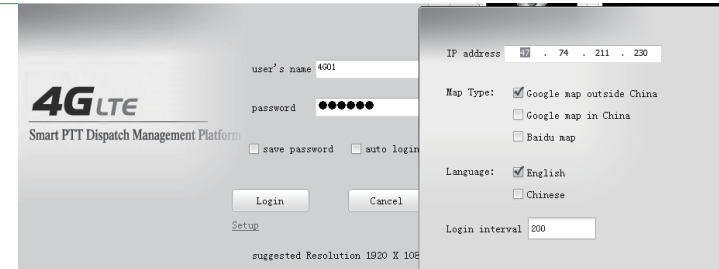
2.The radio should select the function for “Location” in the platform, and the radio should be outdoors to get the location. Also the programming software should be open the GPS



3.Set the IP address and Google Map, and login in.

Use the account and password to log in.

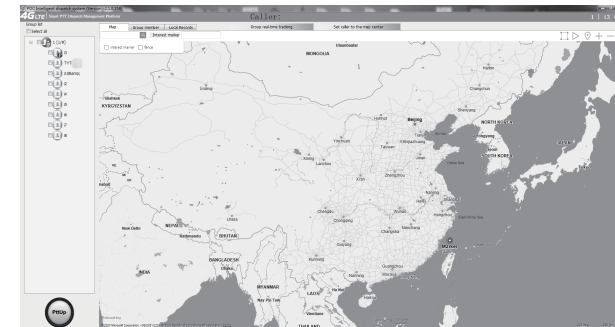
△ : Caution : Once you log in the dispatch. Radio account must log out  
Dispatch and radio Cannot be using same time



## 3.Menu in the Dispatch management platform

### 1.Group list

Group list is in the left of the Dispatch platform, which can show the group available and the member, click the group can show all the member and statue. Right click, can start the Private call/ Get location/ Get track.

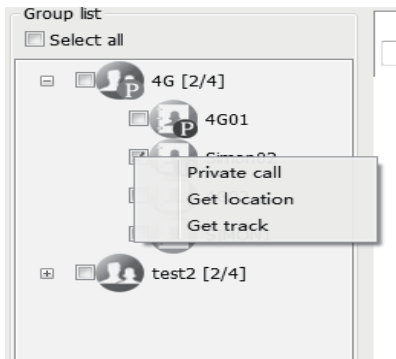


Note: The "P" means that the radio is in this group. When the radio is in the group same as dispatcher, it can receive a group call from dispatcher and transmit a group call to dispatcher.  
 Notice: the dispatcher will login the default group, if you want to login other group, you need modify the default group.

ID	Status	Username	Account	Password	GPS	Level	Default group	Created time	Valid time	Remark	Users Functions	Edit member list	Operations
57	On line				30	1		2018-07-13	2019-07-13		Show	Edit	Modify

## 2. Temporary Group call

This is in the right side of the Menu, which can show the all users which the dispatcher choose, can start the temporary call.



## 3. Group call

To start the group call

In the group call, choose the desired group and click twice to enter the group.

Long press the  to start the group call

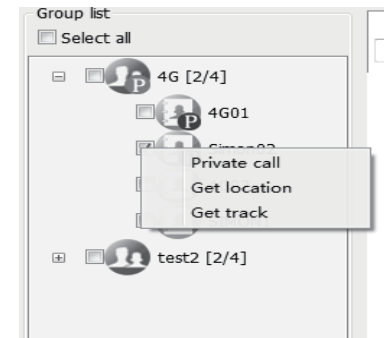
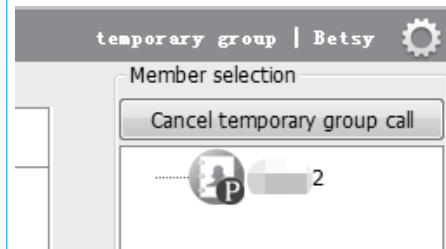
After you choose the private call, Press "PttDown" and you can transmit the radio, and release the "PttDown" to wait for replying. The radio can press "PTT" to reply.

Notice: the continuous transmission maximum time is 50S, when you over 50S, it will exits transmit automatic.

To start the Temporary call

In the Group list, choose the desired member, right click the member, choose the Private call/  
 Click to cancel temporary group call

If it is no one start talking within 10s, The temporary will exit automatically/




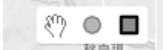




## 4. To start the private call

Private call, when the dispatcher choose this function, it can transmit anyone in private call.

Operation:

click one radio you want to speak to, then right click, you can find three options: Private call/Get location/Get track

## 5. Location in the MAP

Function	Instruction
	 Terminal Box selected, use the Rectangular Box or round box to choose the desired area
	Track replay
	Terminal Location
	Map Zoom-in
	Map Zoom-out

Note: The GPS function only works outside, in the common case, it will open within 1 minutes, the weather will affected.

If the GPS is succeed get the location, the GPS icon will be black, if not it will be red Icon/

## 6. Get track:

You can check the radio's activity trajectory within a period of time.

Operation:

1.click one radio you want to speak to, then right click, you can find three options: Private call/Get location/Get track

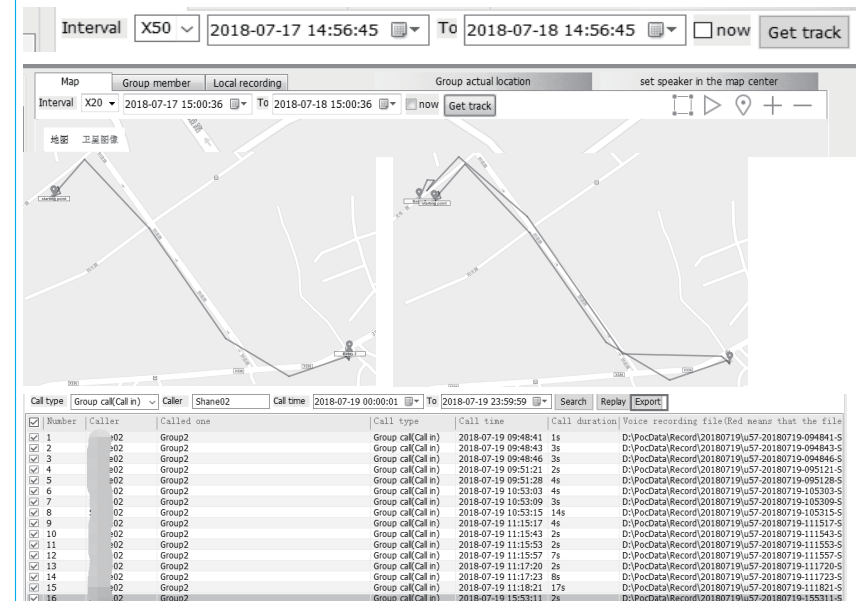
2.After you choose the get location, you can see the radio's trajectory on the map.

3.You can also click the  to get track

4.Interval: 5/10/20/50S,

It means the radio will uploads the GPS information in the chosen time.

5.The activity trajectory records will be saved one month, and every time you can track the activity trajectory within 24 hours, for example, when the start time is 2018-7-18 14:56:45, the end time should be within 2018-07-18 14:56:46 to 2018-07-19 14:56:44



Number	Caller	Called one	Call type	Call time	Call duration	Voice recording file
1	02	Group2	Group call(Call in)	2018-07-19 09:48:41	1s	D:\PocData\Record\20180719\57-20180719-094841-S
2	02	Group2	Group call(Call in)	2018-07-19 09:48:43	3s	D:\PocData\Record\20180719\57-20180719-094843-S
3	02	Group2	Group call(Call in)	2018-07-19 09:48:46	3s	D:\PocData\Record\20180719\57-20180719-094846-S
4	02	Group2	Group call(Call in)	2018-07-19 09:51:21	2s	D:\PocData\Record\20180719\57-20180719-095121-S
5	02	Group2	Group call(Call in)	2018-07-19 09:51:28	4s	D:\PocData\Record\20180719\57-20180719-095128-S
6	02	Group2	Group call(Call in)	2018-07-19 10:53:03	4s	D:\PocData\Record\20180719\57-20180719-105303-S
7	02	Group2	Group call(Call in)	2018-07-19 10:53:09	3s	D:\PocData\Record\20180719\57-20180719-105309-S
8	02	Group2	Group call(Call in)	2018-07-19 10:53:15	14s	D:\PocData\Record\20180719\57-20180719-105315-S
9	02	Group2	Group call(Call in)	2018-07-19 11:15:17	4s	D:\PocData\Record\20180719\57-20180719-111517-S
10	02	Group2	Group call(Call in)	2018-07-19 11:15:43	2s	D:\PocData\Record\20180719\57-20180719-111543-S
11	02	Group2	Group call(Call in)	2018-07-19 11:15:53	2s	D:\PocData\Record\20180719\57-20180719-111553-S
12	02	Group2	Group call(Call in)	2018-07-19 11:15:57	7s	D:\PocData\Record\20180719\57-20180719-111557-S
13	02	Group2	Group call(Call in)	2018-07-19 11:17:20	2s	D:\PocData\Record\20180719\57-20180719-111720-S
14	02	Group2	Group call(Call in)	2018-07-19 11:17:23	8s	D:\PocData\Record\20180719\57-20180719-111723-S
15	02	Group2	Group call(Call in)	2018-07-19 11:18:21	17s	D:\PocData\Record\20180719\57-20180719-111821-S
16	02	Group2	Group call(Call in)	2018-07-19 15:53:11	2s	D:\PocData\Record\20180719\57-20180719-155311-S

## System Specification

Operating System	Linux
Language	English
Antenna	Built-in GPS antenna
Dimension	116*54.6*35.1mm
Weight	123g
Rx Sensibility	-106dbm
Battery Capacity	2500mAh
Max Tx Power	23dBm-25dBm@all up bits
Working Temperature	-20---+60°C
Storage Temperature	-20---+60°C
Mic/Speaker Port	K connector
Charging Port	TYPE-C

### Asian version

TE FDD B1	TX :1920~1980MHz	RX :2110~2170MHz
TE FDD B3	TX :1710~1785MHz	RX :1805~1880MHz
TE FDD B5	TX :824~849MHz	RX :869~894MHz
TE FDD B8	TX :880~915MHz	RX :925~960MHz
TE TDD B38	TX :2570~2620MHz	RX :2570~2620MHz
TE TDD B39	TX :1880~1920MHz	RX :1880~1920MHz
TE TDD B40	TX :2300~2400MHz	RX :2300~2400MHz
TE TDD B41	TX :2555~2655MHz	RX :2555~2655MHz

## Guarantee

Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Purchasing Date: \_\_\_\_\_

Dealer: \_\_\_\_\_ Telephone: \_\_\_\_\_

User's Name: \_\_\_\_\_ Telephone: \_\_\_\_\_

Address: \_\_\_\_\_ Post Code: \_\_\_\_\_

### Remarks:

- 1 This guarantee card to be kept by the user, no replenishment if lost.
- 2 This guarantee card to be filled & chopped by the dealer, or it is invalid.
- 3 Don't alter the guarantee card, please confirm the serial number on the guarantee card is same as that on the machine.
- 4 One-year guarantee, charger, battery, ear-phone, antenna and cable are not under guarantee.
- 5 The user can get repairing service from the following ways:
  - Go to the shop where you buy the machine.
  - Our local repairing agents.
  - Send back to our company.

Please cut along with this line

