



User's Manual

2G/3G/4G Switch Automatically / All Call, Group Call, Private Call Ptt Kibitz Function / Gps Function / Clear And Loud Voice



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 the dealer.

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 the dealer.

Main function

PTT One touch communication, strong

signal and long continuation talking

Unlimited talking distance, cover a whole country

Private call/Group call/ Member list/ Parent Group call

Battery power voice prompt

Talk priority setting

Loud voice, High fidelity output

Software remote updated

List quick search

PTT Kibitz function

Talk Permit Tone

9 Quick call keys

GPS function

SOS function(optional)



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Unpacking And Checking Equipment Preparation work

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Unpacking And Checking Equipment

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 the dealer.

Supplied Accessories









Antenna

Batterv

Belt clip with screw

Desk charger







Verification

Charger adaptor

User's manual

Note: The antenna frequency range please refers to the annular label at the bottom of antenna.

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 the original charger and adaptor.

The charger and adaptor has been designed to be used exclusively with the 4G LTE radio. It ensures safety and reliability when charging the battery.

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Installing And Uninstalling Of the Accessories Getting To Know The Radio

Installing And Uninstalling Of the Accessories

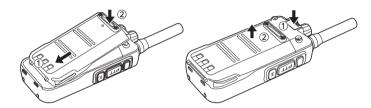
Installing the Lithium battery

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).



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.

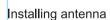
Please do not store the radio inside a vehicle or near heating equipment.

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

Charging the Lithium battery

After the AC adaptor is connected and the battery is placed in the charger, the indicator will show red which means the battery is charging. The green light will indicate the battery is fully charged. The light will turn off if the temperature is too high or low, the battery is damaged, the charger is

damaged or the connection is poor.



Hold the radio and antenna, turn the antenna clockwise until it is tightened.



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.



Installing SIM card

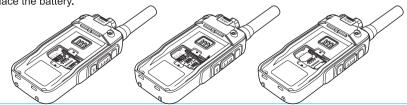
Please insert effective SIM card before use, make sure the SIM card can be effective in 4G/3G radio.

Revolve the volume button counter clockwise to switch OFF the radio.

Remove the battery by pulling down the latch, then pushing the battery backwards along the guides.

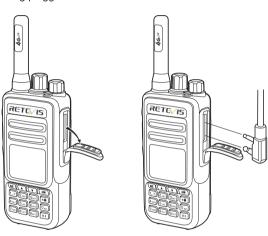
Lift SIM socket cover, place SIM card in the socket in the correct position.

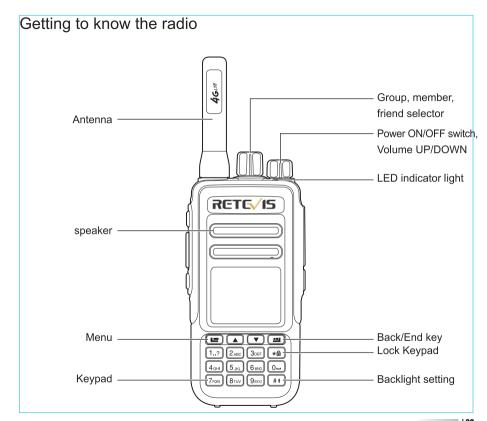
Replace the battery.

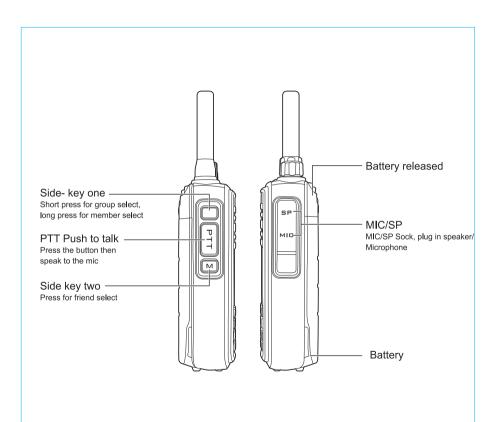


Installing headset

Open the cover on the side of the radio to show the headset sockets. Your headset will work immediately after being plugged in.







User's Manual

Introduction

Basic use

Menu Introduction

Simple troubleshooting

Introduction

Volume selector / ON/OFF switch

Clockwise for switch ON, counter clockwise for switch OFF
Clockwise for volume UP, counter clockwise for volume DOWN

Push To Talk (PTT) button

When the device is standing by(Blue light will flashing slowly), press PTT button to initiate a call (red light will go on)

During the call, the blue light will go on to show successful reception. If not in reception, hold PTT to apply for turn to talk(red light will go on)Release the PTT to end call and go back to standing by.

In channel selection, press PTT button to confirm the channel.

Group/ member selector

Revolve the selector to choose the member. Press PTT button to confirm the current channel with voice prompt.

Indicator light status

The blue light goes on after the device is switched on. The blue light flashes fast to indicate network searching. In standby mode, the blue light flashes every five seconds. The blue light remains on for reception, and the red light remains on for transmission.

Basic use

Switch ON

Revolve the volume button clockwise to switch ON the radio, there will then be a voice prompt. After the radio is successfully switched on, the green light goes on first then flashes to indicate network searching. After the network is connected, there will be a voice prompt.

Switch OFF

Revolve the volume button counter clockwise to switch OFF the radio, the light will turn off. Note: Do not frequently switch between ON and OFF, it may affect the switch function.

Volume adjustment

Revolve clockwise for volume UP and counter clockwise for volume DOWN.

Headset

Plug in headset, press the PTT button on headset (if there is one) to initiate a call, release the button to end the call.

Group/ Member selection

Revolve the selector to channel 1 when turning the radio on (default channel is 1). Revolve selector further to select other channels. If the channel is not available, there will be a voice prompt.

Menu Instruction

When insert SIM and set the correct setting on the Platform:http://www.smart-poc.cn, turn on the radio, it will login in the platform automatically, with the voice: welcome to use PTT system/, if the account is added in the platform successfully, the radio will have the Voice with the Group and User's name.

Note: if turn on the TTS Mute (Text to Speech) function, the radio will not have voice.

Select the Group call

There are 3 methods to start the group call:

- 1. Revolve the channel knob to enter the group call menu
- 2. short press the side-key one to enter the group call menu
- Press Menu key to enter the menu and revolve the channel knob, use ↑or ↓to choose the desired group

Select the single call

There are 2 method to start the single call:

- 1. Long press the side-key one, to enter the member menu, if there is has member online, you can choose the desired one, if the member list is empty, please add the member first.
- can choose the desired one, if the member list is empty, please add the member first 2. Also can set the friend in the shortcut key by long press the Number 0-9
- 3. Using the Menu key to enter the menu and revolve the channel knob to enter the member list, confirm to choose the desired member, if there is member online.
 Press the PTT key to start the single call, press back key to exit.

Select the friend

- 1. Add the friend: enter the friend list, revolve the channel knob or key to move to the desired friend, then confirm, add the friend.
- 2. Choose the friend, there are two methods:1. short press the side-key two to enter the friend list 2 using the shortcut key, long press the pre-programmed shortcut key to enter the friend list, revolve the channel knob or ↑↓key to choose the desired friend. Press PTT to start single call and back to exit.

Shortcut Key

Shortcut key setting

Shortcut key detail checking:

Enter the Set up Menu to check the shortcut key detail, can be cover, not delete.

GPS

Checking GPS information: enter the menu , Revolve the channel knob or the ↑↓key to GPS menu, confirm to check the latitude, longitude and satellite.

Note: GPS only working outside, if it is succeed open, the GPS icon will be white.

Setting

PTT Sound

OFF: When press PTT or release PTT, it will not have PTT sound

ON: when press PTT or release PTT, it will have PTT sound OFF 2: Backlight: to choose 15s 20s 30s on

About: Version detail

Network: Auto: Suggested to choose this one.

4G mode

3G mode: if the 4G signal is not stable, please change to 3G.

Test mode: For the B5 test only.

Version: POC version: Updated

MCU version: updated

Factory: PASSWORD: input 27770875 to start the factory setting.

TTS mute: Tex to Speech, if it is set to be OFF, the radio will have the sound to speech, if set to be ON, the radio will be silence.

Shortcut key: To check the shortcut key detail

Simple troubleshooting

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

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.

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Software Instruction Platform Instruction Smart PTT dispatch Management Platform

Software Instruction

IP address

American: 47.254.88.91,

1. Create account in programming software

(1) Press the side key 1 then turn on the radio, you will find the screen:

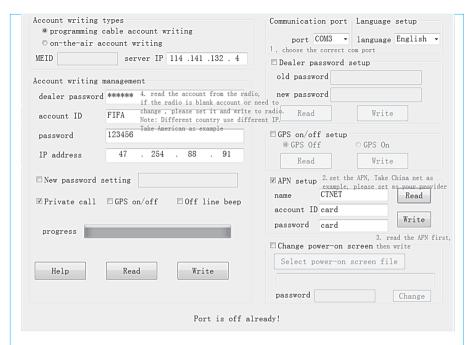
write code

NAME: Shane 01

HOST: 47. 254. 88. 91

STATE:

(2)Choose the port:



(3)After finished set up, press write. Then you can see the radio name in the radio's screen.

Platform Instruction

4G LTE smart PTT management platform

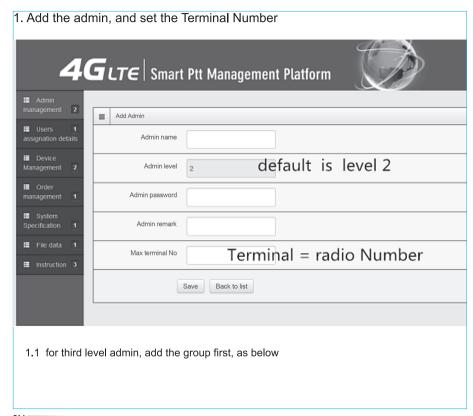
http://www.smart-poc.cn/tyt_en/tyt, Using the account and password to enter in, you will find the interface as below:

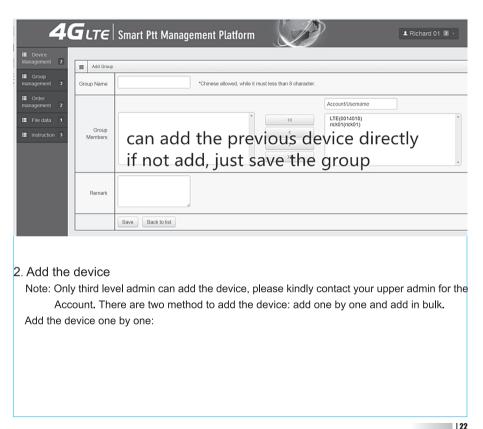
I: For second level admin, which can not add the device, can only creat the third admin or deal with the order issue

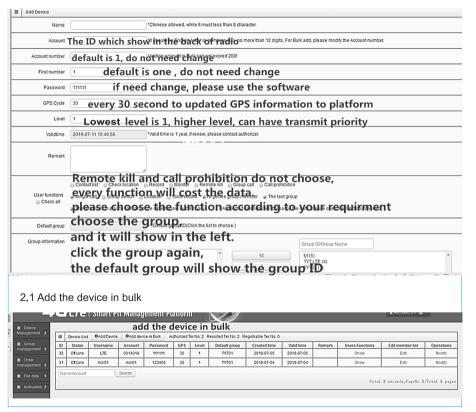


II: for third level admin,

6	61	Off Line	4GTest	2019FIFA	111111	30	1	2019	2018-07-17	2019-07-17	Show	Edit	Modify
6	50	Off Line	Betsy3	4GTest	111111	30	1	2019	2018-07-17	2019-07-17	Show	Edit	Modify
5	58	On line	Betsy 2	2018FIFA	123456	30	1	2019	2018-07-13	2019-07-13	Show	Edit	Modify
5	50	On line	Betsy	FIFA	123456	30	1	2019	2018-07-12	2019-07-12	Show	Edit	Modify
3	34	OffLine	456	0012491	111111	30	1	A01	2018-07-05	2019-07-05	Show	Edit	Modify
3	33	OffLine	123	0003383	111111	30	1	A01	2018-07-05	2019-07-05	Show	Edit	Modify
NameAccount Search Total 7 records, FageNo 1/Total 1 page													







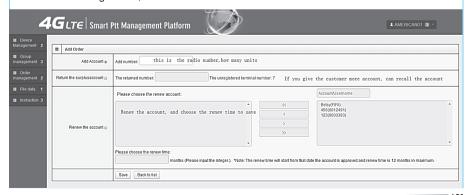


3. Add the order

When the account number is not enough:

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"



4. Main group and Sub - group



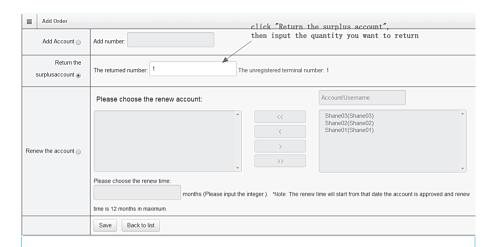
4.1 Nested groups definitions

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.

Return the surplus account

When the quantity for account has exceed the radios, you can return the accounts to the upper level administrator



5. Renew the account

When your account want to expand the valid time, you need renew the validity period by this order.

≡	Add Order	
	Add Account	Add number: you can search for the renewal
	Return the surplusaccount	The returned number: The unregistered terminal number: 1 The unregistered terminal number: 1
	ick "Renew t	Please choose the renew account: Shane02(Shane02) Account/Username Shane03(Shane03) Shane01(Shane03) Shane01(Shane03) Shane01(Shane01) 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

After that, click "Save", and you will find this order in the "Order list"

When the order type is "Return the surplus account, the previous administrator will approve this order automatic, so that the "order states" will shows "Admin approved", this order is deal with. When the order type is " Add account or renew the account", you need wait the previous administrator to approve your order.

≡	Order I	ist OAdd order					
Order No		Order type	Previous admin	Operation objects	Order states	Create time	Operations
5	5	Add account	Shane	Shane01	Waitting allocation admin to approve.	2018-07-13	Order-detail
4		Return the surplusaccount	Shane	Shane01	Admin approved.	2018-07-13	Order-detail

1.6 File data

You can change the password in this interface.

Edit Password		
Old Password	•••••	
New Password		
Confirm New Password		
	Save Back to list	

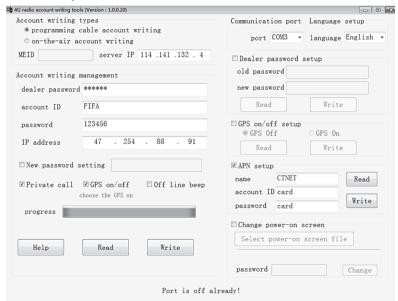
Notice: when you want to delete the device in the device list, you need, you need to ask the first-level administrator to delete.

Smart PTT dispatch Management Platform

Note: If the Dispatch management platform has registered, The radio will off-line, The same to the radio on and dispatch management off.

we suggested that the Dispatch management account is different with PTT platform

1. In the software, turn on the GPS function



1.1. The dispatcher should selects the function for "Check Location" in the platform, so that the dispatcher can get the other radios GPS information.

	⊘Contact list ✓Check location ⊘Record ✓Monitor
Users Functions Check all	$ {\bf {\mathscr G}} {\it Single call} \ \ {\bf {\mathscr G}} {\it Group switch} \ \ {\bf {\mathscr G}} {\it Location} \ \ {\bf {\mathscr G}} {\it Voice record} \ \ {\bf {\mathscr G}} {\it To get the group member} \ \ \ {\bf {\mathscr G}} {\it 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.

1.2. The radio should selects 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

Users Functions Check all	© 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.
Current group ID	*This project is added by clicking on the items in the selected group.

1.3. Set the IP address and GOOGLE/Baidu Map, and login in. 4G radio account writing tools (Version : 1.0.0.20) Account writing types User's name is same as the software programming cable account writing user's name FIFA O on-the-air account writing 4GTytpilot server IP 114 .141 .132 . 4 Smart PTT Dispatch Management Platfo Account writing management ✓ save password auto login dealer password ***** FIFA account ID Login Cancel Setup 123456 password suggested Resolution 1920 X 1080 47 . 254 . 88 . 91 IP address Read New password setting Private call GPS on/off Off line beep Set the IP same as the software Google man outside China progress Google map in China Baidu map M English Language: Help Read Write Chinese Modify Cancel Port is off all

2. Menu in the Dispatch management platform

2.1Group 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.

ľ	ID	Statue	Username	Account	Password	GPS	Level	Default group	Created time	Valid time	Remark	Users Functions	Edit member list	Operations
ŀ	-			Account	400450		4		1		Remark			-,
L	57	On line		C.1011000	1111111	30	1		2018-07-13	2019-07-13		Show	Edit	Modify

2.2 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.



2.3 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/



2.4 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



2.5 Location in the MAP

Function	Instruction
	⟨^^⟩
⊳	Track replay
<u></u>	Terminal Location
+	Map Zoom-in
-	Map Zoom-out

Note: The GPS function only work 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





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

Operation:

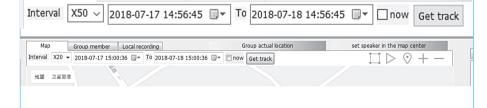
- Click one radio you want to speak to, then right click, you can find three options: Private call/ Get location/Get track
- 2) After you choose the get location, you can see the radio's trajectory on the map. You can also click the ▷ to get track

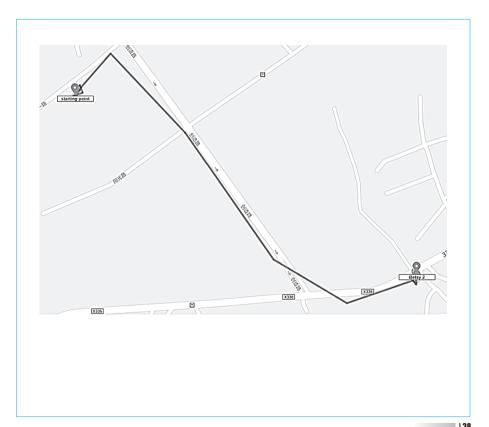
3. Interval: 5/10/20/50S

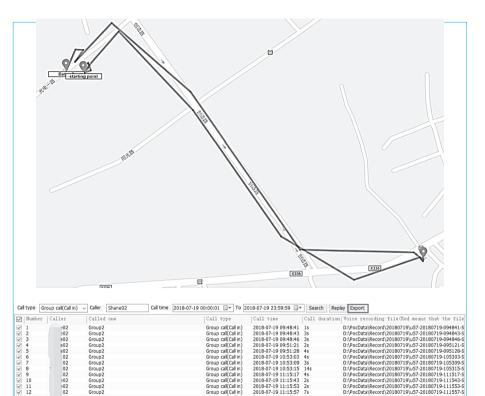
2018-07-19 14:56:44

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

4. 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







Group call(Call in)

Group call(Call in)

Group call(Call in)

2018-07-19 11:17:20 2s

2018-07-19 11:17:23 8s

Group call(Call in) 2018-07-19 15:53:11 2s

2018-07-19 11:18:21 17s

D:\PocData\Record\20180719\u57-20180719-111720-S

D:\PocData\Record\20180719\u57-20180719-111723-S

D:\PocData\Record\20180719\u57-20180719-111821-S

D:\PocData\Record\20180719\u57-20180719-155311-S

S	pec	ifi	ca	tic	n
\sim	900	4111	u		41

	Working voltage	3.7V		
	Operation system	Linux system		
	Language	Chinese/English		
LTE FDD frequency	B2	Tx frequency: 1850~1910MHz Rx frequency: 1930~1990MHz		
	B4	Tx frequency: 1710~1755MHz Rx frequency: 2110~2155MHz		
	B5	Tx frequency: 824~849MHz Rx frequency: 869~894MHz		
	B12	Tx frequency: 698~716MHz Rx frequency: 728~746MHz		
	B17	Tx frequency: 704~716MHz Rx frequency: 734~746MHz		
WCDMA fraguanay	B24	Tx frequency: 1850~1910MHz Rx frequency: 1930~1990MHz		
WCDMA frequency	B5	Tx frequency: 824~849MHz Rx frequency: 869~894MHz		
	Antenna	External main antenna GPS antenna built-in		
	Screen	1.77 SPI color screen, resolution: 128*160		
	CPU	ZTE ME3630 U1C		
	Battery capacity	≧4000mA		
	Rx sensibility	-106dbm		
	Max. Tx power	23dBm~25dBm@All up bits		
	Working temperature	-20+75° C		
	Storage temperature	-40+85° C		
	Audio output power	2W@10% distortion		
	Receiver Type	56-channel u-blox 7 engine GPS/QZSS L1 C/A,GLONASS L1 FDMA		
Performance parameter		SBAS:WAAS,EGNOS,MSAS		
	Maximum	up to 10Hz		
Update rate	Accurancy	GPS GLONASS		
	Positioning	2.5m CEP 4.0m		
Update rate	1 controlling			

☑ 14 ☑ 15 ☑ 16

☑ 13

Group2

Group2

Group2

Group2

202

.02

>02

Capture	Cold start	20S 30S	
	Weight	5S N.A.	
	Accurancy	1S 1S	
Sensitivity	Track	-161dBm -158dBm	
	Cold start	-148dBm -140dBm	
	Warm start	-148dBm -145dBm	
	Assisted GPS	AssistNow Online	AssistNow Offline
		AssistNow Autonomous	OMA SUPL & 3GPP
	Oscilator	built-in(MAX-7Q/7W),the	e ordinary crystal(MAX-7C)
	RTC crystal	built-in(MAX-7Q/7W)	Or more cost-effective solution
		Current solution	
	An-ti interference	Active CW detection and	removal
	Storage	ROM	
	Support	active antenna and passive antenna	
Voltage Level	Power consumption	16.5mA@3V(Continuous I	Mode)
		4.5mA@3V(Saving Mode,1Hz)	
	Power Supply	1.4V-3.6V	

Warranty card

Note: 1. This warranty card is only applicable to two-way radio of the above-listed model and serial number. 2. The warranty card is an important document for the	Customer's Tel: Model: Serial number:	Gender:
end-user to enjoy warranty service, please keep it well. 3. The warranty card shall be	Invoice No.:	Stamp:
filled and chopped by the dealer, or it is invalid.	Add and postal code of the dealer Contact Tel:	
	Handling people:	

Thank you for buying two-way radios, we	Maintenance record		
will do our best to provide you with a stable, clear and efficient wireless communication	Carry-in date		
services. In order for you to enjoy a better quality warranty service, please focus on the	Completion date		
following information:	Fault description		
The products warranty period begins from the purchasing date, if product failure under normal use within warranty period occurs, according to the contents of this warranty, (the radio is guaranteed for 12 months, accessories 6 months), please			
carry the warranty card originals and purchase invoice to designated authorized warranty repair station for warranty service.	Maintenance staff numbers		
The following situations occur during warranty period will be implemented in paid service: (1) Failure to produce the warranty card			
(2) The card has altered traces or inconsistent with the product (3) Defect or damage caused by abnormal or non-normal use (4) Defect or damage caused by misuse, accident, water or negligence	Maintenance personnel No.		
(5) Defect or damage caused by improper testing, operation, maintenance, installation, disassembly or adjustment	Signature		
(6) Defect or damage caused by unauthorized repair or disassembly (7) Defect or damage caused by force majeure	This warranty card to be kept by the user, no replenishment if lost		
(8) Wear and tear under normal use			

When you are in need of repair, please send the radio, warranty card and purchase invoice together by post or take directly to designated authorized service stations, shipping costs

should be borne by the user.