

LTE Tracker

Prime LS100 User Manual

Revision: 1.00

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1 Introduction

Prime LS100 is a powerful LTE Tracker which is designed as Emergency call equipment. It works on LTE B4/B13 with superior receiving sensitivity. Its location can be real time or schedule tracked by backend server or specified terminals. Based on the embedded wireless tracking protocol, Prime LS100 can communicate with the backend server through LTE network, and transfer reports of emergency. Service provider is easy to setup their tracking platform based on the functional wireless tracking protocol.

The WIFI function will be activated and report the MAC addresses once the device is in alerting state. The BLE function will be activated and scan the third-party BLE data or Beacon broadcast by custom setting or protocol.

RF 433MHz is used as a supervised short range RF communication link between the unit and the Base Station to determine if they are no longer in range with each other.

2 Product Overview

2.1 Appearance



Figure 1-1

2.2 Buttons Interface Description

| Button /USB Interface Description | |
|-----------------------------------|---|
| KEY/interface | Description |
| Reset Key | Power off the Prime LS100 |
| Adapter | Connected to a Power supply socket can power on Prime LS100 |
| Function Key | SOS mode |
| Feature Key | Play to do list audios. |
| TEST Key | Test mode |

2.3 LED Description





Figure 1-2

There are 3 LED lights in Prime LS100 device, the description as following.

| Light | Event | State |
|------------------|----------------------|--------------------|
| Function Key LED | Function Key pressed | Solid when pressed |
| Feature Key LED | Feature Key pressed | Solid when pressed |
| Test Key LED | Test Key pressed | Solid when pressed |
| Breath Light | Test Key long press | Breath effect |

3 Getting Started

3.1 Parts List

| Name | Picture | Remark |
|--------------------------|--|--------------------------------------|
| Prime LS100 Base Station |  A circular white base station with a blue 'ATC' logo at the top, a central 'EMERGENCY' button, and two smaller buttons labeled 'F' and 'T' on either side. | The LTE Base Station. |
| Prime LS100 adapter |  A white power adapter with two prongs at the top and a cable extending from the bottom. It has a label with technical specifications and safety icons. | It used to power on the Prime LS100. |

3.2 Built-in Battery

The following items are suggestion for built-in battery usage, please pay more attention.

- ◆ The device is Emergency call equipment, which is designed to be used by adapter always plugged.
- ◆ There is a 850mAh Lithium polymer battery integrated in device. The built-in battery will only be used when the adapter unplugged.

Note: If the Prime LS100 device is firstly used, please make sure the adapter of the device is plugged in the power supply socket.

3.3 Prime LS100 Adapter

Prime LS100 base station is connected with an AC Adapter.

The adapter is used for device power on, built-in battery charging, which should be plugged in power supply socket at any time (by end user).



Figure 2-1

3.4 Power on/Power off



Figure 2-2

Power on:

- ◆ Plug in the power adapter and power on.

Power off:

- ◆ Unplugged the power adapter and press the Reset button.

Note: the user can not power off Prime LS100 if the adapter is plugged.

4 Frequency

LTE: Band2/Band4/Band5/Band12/Band13

WiFi::2412MHz-2462MHz

BLE:2412MHz-2472MHz

433:433.92MHZ

5 Trouble shooting and Safety info

5.1 Trouble shooting

| Trouble | Possible Reason | Solution |
|---|--|---|
| Messages can't be reported to the backend server by Mobile network. | APN is wrong. Some APN can not visit the internet directly. | Ask the network operator for the right APN. |
| | The IP address or port of the backend server is wrong. | Make sure the IP address for the backend server is an identified address in the internet. |
| Unable to power off Prime LS100. | The function of power key was disabled by AT+GTFKS. | Enable the function of power key by AT+GTFKS. |
| Battery can not be charged | The battery has not been used for too long time and has been locked. | Using a external power source with 3.6V to 4.2V DC power supply to active the battery or apply for after sale help. |

5.2 Safety info

The following items are suggestion for safety use, please pay more attention.

- ◆ Please do not disassemble the device by yourself.
- ◆ Please do not put the device on the overheating or too humid place, avoid exposure to direct sunlight. Too high temperature will damage the device or even cause the battery explosion.
- ◆ Please do not use Prime LS100 on the airplane or near medical equipment.

FCC Caution.

§ 15.19 Labelling requirements.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

§ 15.21 Information to user.

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

§ 15.105 Information to the user.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to

provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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