LTE Tracker

AIRE100V User Manual

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Contents

1 Introduction

AIRE100V 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, AIRE100V 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 433.92MHz 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 AIRE100V
Adapter	Connected to a Power supply socket can power on AIRE100V
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 AIRE100V 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
AIRE100V Base Station		The LTE Base Station.
AIRE100V adapter		It used to power on the AIRE100V.

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 AIRE100V device is firstly used, please make sure the adapter of the device is plugged in the power supply socket.

3.3 AIRE100V Adapter

AIRE100V 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 AIRE100V if the adapter is plugged.

4 Frequency

LTE: Band4, Band13

WIFI: 2412-2462MHz

BLE: 2402-2480MHz

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 AIRE100V .	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 AIRE100V on the airplane or near medical equipment.

FCC Caution.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may ause undesired operation.

§ 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.

ISED RSS Warning:

This device complies with Innovation, Science and Economic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

ISED RF exposure statement:

This equipment complies with ISED 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. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Le rayonnement de la classe b repecte ISED fixaient un environnement non contrôlés.Installation et mise en œuvre de ce matériel devrait avec échangeur distance minimale entre 20 cm ton corps.Lanceurs ou ne peuvent pas coexister cette antenne ou capteurs avec d’autres.