LTE Tracker

Bolt 4GA User Manual

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Contents

1 Introduction

Bolt 4GA is a powerful GPS locator which is designed for vehicle and assets tracking. It works on LTE CATM1 B2/B4/B12 with superior receiving sensitivity. Its location can be real time or schedule tracked by back-end server or specified terminals. Based on the embedded wireless tracking protocol, Bolt 4GA can communicate with the back-end server through LTE   network, and transfer reports of emergency, Geo-fencing, device status and scheduled GPS position etc… Service provider is easy to setup their tracking platform based on the functional wireless tracking protocol.

2 Product Overview

2.1 Appearance

Figure 1-1

2.2 Buttons/USB Interface Description

Button /12PIN Interface Description	
KEY/interface	Description
Power Key	No Power Key, the Bolt 4GA can only be powered on by charger plug in.
USB interface	Connected to a charger can power on Bolt 4GA Back-end server developer or administrator can use the debug cable to configure Bolt 4GA (by engineer not by end user).
Reset Key	Click the key will turn off internal VBAT when OS is abnormal, and then plug in a charger to restart Bolt 4GA.

2.3 LED Description

Figure 1-2

There are four LED lights in Prime Bolt 4GA device, the description as following.

Light	Event	State
LED	Power on	Slow flash (blue)
Power LED	Power on and normal	Dark
	Fully charged	Slow flash (green)
	In charging	Slow flash (red)
	The charger plug in to power on the device	Solid (White)

3 Getting Started

3.1 Parts List

Name	Picture	Remark

Bolt 4GA Locater		The LTE/GPS locator.
Bolt 4GA charger		It used to be charging for the Bolt 4GA.

3.2 Battery Charging

The following items are suggestion for battery charge, please pay more attention.

◆ During the charging process, the Power LED light will slow flash. When the battery is fully charged, the Power LED light will be Ever-dark.

◆ You can charge the battery using charging dock which connects Bolt 4GA device with the Adapter.

◆ Charging will last about 5 hours.

Note: If the Bolt 4GA device is firstly used, please make sure the battery is fully charged, which will make the life of battery much longer.

3.3 Bolt 4GA Charger

Bolt 4GA is charging with an AC Adapter.

The charger is used for device charging , which can be used for charging at the any time (by end user).

Figure 2-1

3.4 Power on/Power off

Figure 2-2

Power on:

◆   The Bolt 4GA can only be powered on by a charger plug in..

Power off:

◆   Press the Reset key , the device will turn off immediately.

Once turned on, the charger can be unplugged. The follow-up is to rely on the battery to maintain work.

4 Frequency

LTE: Band2、Band4、Band12

GPS:1575.42MHz

WIFI:2.4GHz

433.5MHz

4.1 WIFI

The WIFI function of device only used for WIFI MAC address searching and report.

4.2 433

433 function is used to assist positioning system

4.3 users are using the 433 method:

Insert a 4G SIM into the product, send an order to open (close) 433 to the phone card inside the product through another mobile phone, then open 433, and detect 433 signals by an instrument that can detect 433 frequency.

Open command 433:AT+GTRFD=AIR11,1,2,433.00,,,,,,,,,001D$

Close command 433:AT+GTRFD=AIR11,0,2,433.00,,,,,,,,,001D$

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 Bolt 4GA.	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.
Bolt 4GA can't fix GPS successfully.	The GPS signal is weak.	Please move Prime Bolt 4GA to a place with open sky.
		It is better to let the top surface face to the sky. (The same surface with indication LED)

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 Bolt 4GA 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 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.

§ 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 withmini mum 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.