

# PA31

## User Manual

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# 1 Introduction

PA31 is a rescue device with voice function. It works on LTE B2 / B4/B5/B12/B13 network with superior receiving sensitivity. Based on the embedded wireless tracking protocol, PA31 can communicate with the backend server through LTE network, and transfer emergency reports.

## 2 Product Overview

### 2.1 Appearance



Figure 1-1

### 2.2 Buttons Description

Button /12PIN Interface Description	
KEY/interface	Description
Energy query Key	Query How much energy left.
SOS Key	Press this key to dial a phone number through LTE network
Reset Key	Press this key to shut down the device in abnormal condition

## 2.3 LED Description



**To be added**



Figure 1-2

There are 2LED lights in PA31 device, the description as following.

Light	Event	State
Red LED	Power on	Steady light
	charging	Slow flash
	finished charging	Steady light
Blue LED	Power on	Steady light
	Network indicate	Slow flash

## 3 Getting Started

### 3.1 Parts List

Name	Picture	Remark
Rescue device		
charging Dock		charging for the device

### 3.2 Battery Charging

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

- ◆ The red LED of charging Dock will be steady light no matter rescue device is charging or not.
- ◆ Charging will last about 1.5 hours.

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

### 3.3 Charging Dock

Charging Dock is a base with an AC Adapter.

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



Figure 2-2

### 3.4 Power on/Power off



Figure 2-2

Power on:

- ◆ Press the SOS key at least 3 seconds and release it to power on rescue device.

Power off:

- ◆ Rescue device is auto power off and user can't turn off the machine by itself.

## 4 Frequency

LTE CATM:Band2、Band4、Band5、Band12、Band13

WIFI:2.4GHz

## 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 ATW.	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.
ATW can't fix GPS successfully.	The GPS signal is weak.	Please move ATW 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 the device 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.

#### **FCC RF Exposure Information and Statement**

##### **Certification information (SAR)**

This device is also designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA).

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types:

PA 31(FCC ID: ZKQ-CM911) has also been tested against this SAR limit.

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During the product certification period, according to this standard report test, the highest SAR value reported to the FCC when the device is in use is 1.082W/kg. This device was tested for typical body-worn operations with the edge of the device kept 5mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 5mm separation distance between the user's body and the edge of the device.

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