## **TO4S** LTE GNSS TRACKER

**User Manual** 



Please read the manuals carefully before you use it, so as to get the correct installation and quick online activation. If the appearance and color of the product are changed, the object will prevail.

## Introduction

#### Features

- 1 Inertial navigation
- ② Driving behavior analysis
- ③ Multi-GNSS
- 4 ACC detection
- (5) Location data re-upload (6) Smart power saving
- $\bigcirc$  Anomaly alert (vibration, over-speed, power-off, etc.)

#### **Operating Environment**

Operating voltage: 12-36VDC Internal backup battery: 3.7V/100mAH battery Operating current: 50mA @12V Standby current: 5mA @12V Operating temperature: -20°C to 60°C Storage temperature: -40°C to +85°C Positioning accuracy: <10m Location modes: GPS, BDS, AGPS, and LBS

#### **Frequency Bands**

Communication network	LTE Cat1 + GSM
LTE-FDD	B1/B2/B3/B4/B5/B7/B8/B28/B66
GSM	B2/B3/B5/B8

## Overview

Appearance



#### **Connotations of Indicators**

#### **GNSS indicator (Blue)**

Fast flashing	The device searching for satellite signal anomalies.	
Slow flashing	The device is searching for satellite signals.	
Keep on	The GNSS module is already fixed a position.	
Off	Device is in sleep mode or not operating	

#### Network indicator (Green)

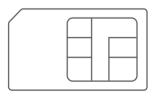
Fast flashing	The GMS anomalies
Slow flashing	The GMS is initializing
Keep on	The device works correctly
Off	Device is in sleep mode or not operating

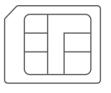
**Note:** By default, when the device is stationary for 3 minutes, the LED will automatically turn off and wake up after a vibration.

## Installation

#### **Inserting the SIM Card**

#### Step 1 Prepare a proper SIM card;







Standard 😣





**Step 2 Insert the SIM.** 



After the SIM card is inserted, the device powers on using the backup battery. If the device fails to power on due to low battery, you can connect the device to the OBD port of the vehicle to obtain power.

Note: The SIM card must be inserted correctly, has GPRS services activated, and is not in arrears. If the SIM is identified and requires a PIN, please disable the PIN request.

#### **Installing the Device**

# Connect the device to the OBD port when the vehicle is ignition off.

Observe the indicators against 2.2 to ensure that the device enters work mode correctly.



- A: Most car models of General Motors, Volkswagen, Ford, Toyota, Hyundai, Citroën, BMW, etc.
- B: Honda, Volkswagen Touran, Lexus, etc.
- C: Dongfeng Citroën, Dongfeng Peugeot, etc.
- D: Dongfeng Citroën, etc.
- E: Others

## Description

The following functions can be configured via the platform or app provided by your dealer. If the configuration via the platform or app fails, you can configure via SMS. You will receive reply messages indicating whether a function is configured successfully.

#### **Power Cut Alert**

If the device is unplugged from the vehicle or the power to the device is cut, the device will send an alert notification to the platform or app, or send an SMS carrying the alert reason and location to the SOS number.

#### Low External Power Alert

If the voltage of the external power is under the preset threshold, the device will send a low external power alert notification to the platform or app. Low Backup Battery Alert If the state of charge(SoC)of the backup battery of the device is lower than 10%,the device will send a low battery alert notification to the platform or app. Geofence Alert

You can draw a circular or rectangular area via the platform or app and set it as a geofence. If your vehicle is detected to enter or leave a preset geofence, the device with the related alert feature enabled will send an alert notification to the platform or app. The device will also give out an audio reminder indicating that your vehicle has entered or left the monitored range.

#### **Speed Alert**

After a speed threshold is set, the device will send an alert notification to the platform or app. If it detects that your vehicle keeps moving at speeds above the threshold for a preset duration.

#### Vibrating alert

When the device in manual defense mode has its defense on and has enabled with the vibrating alert feature, if the device detects the vehicle vibrates for 5 times in 10s (the trigger condition is configurable), it will send an alert notification to the platform or app. When the device in auto defense mode has its defense on and has enabled with the vibrating alert feature, if the device detects the vehicle vibrates for 5 times in 10s (the trigger condition is configurable) and the vehicle is not ACC on in 30s, it will send an alert notification to the platform or app. If the vehicle has its ACC on in 30s, no vibrating alert will be triggered.

#### **Defense On and Off Alerts**

If the device is in manual defense mode, you can enable or disable the defense with the following methods: Enable and disable defense via SMS Send the SMS "SF" via an SOS number to the device, the device will enable defense after receiving the command and reply with a message indicating the execution result. To disable the defense, send the SMS"CF" via any preset SOS number to the device, the device will disable the defense after receiving the command and reply with a message indicating the execution result. Enable and disable defense via the platform or app. Whether the command is executed successfully or not, the device will reply with a message indicating the result.

## Troubleshooting

When any of the following faults occurs, please troubleshoot it by the solution. If the fault persists, please contact your dealer or service provider.

Issue	Description	Solution	
Poor satellite	The device is blocked by metal	Remove the metal objects away	
signal	objects.	from the device.	
Power-on failure		Connect the device to an	
	The battery is low.	external p	
	The SIM card slot is damaged.	Contact your dealer for a	
	The Shvi card slot is damaged.	replacement.	
Failed to access the network	The SIM card is attached incorrectly.	Re-attach it.	
	The metal side of the SIM card	Wipe it with a clean cloth.	
	is stained.	Replace it.	
	The SIM card is damaged or	Truit in a complete area	
	invalid.	Try it in a service area.	
	The device is out of GSM	Try it in an area with strong	
	service areas.	signals.	
	The signal is poor.	Check if the device is securely	
		connected with the OBD port of	
		the vehicle.	
LED off		Check if the device is securely	
	The contact is poor.	connected with the OBD port of	
		the vehicle.	
Failed to query a location	Your SIM card has no GPRS	Please contact the network	
	services activated.	operator and activate GPRS	
		services.	
	The SIM is in arrears.	Recharge the SIM.	
		Check the device and make sure	
	The device does not respond to a	that the device can access the	
	command.	network and the SIM card has	
		text services activated.	