

4G full-network compatible built-in antenna GPS tracker

Product User Manual

Product model: J16A

Version number: V1.0



Legal Notice:

First of all, thank you for using this product. If you have agreed to the following terms, you will receive the support and services provided by us. If you have any questions about this, please feel free to contact us. If you cannot accept the following terms, please stop using this manual

The ownership of this manual belongs to the distributor. Any rights not expressly granted in this manual are reserved. Without the prior written permission of the distributor, no unit or individual may copy, transmit, distribute, use, or disclose the information about the products in this manual, as well as any images, tables, data, and other information contained in this manual

Reading this document without the prior written consent of the distributor does not grant the reader any rights to use any marks appearing in this document, whether implicitly, estoppel, or otherwise

The storage and use of this product should be conducted in accordance with the requirements of the product manual, relevant contracts, or relevant laws and regulations

The distributor reserves the right to modify and improve the products described in this manual without prior notice, and also reserves the right to revise or withdraw this manual at any time. If there are any unclear texts in this user manual, please promptly consult with the agent or seller

Special statement: This product is solely intended for anti-theft purposes of end vehicles and must not be used for illegal activities. Otherwise, all legal responsibilities arising from such use shall be borne by the user

catalogue

I. Product Features	
II. Product appearance and accessories	4
III. Product structure description	4
IV. Product Parameters	5
V. Basic functions of the product	6
VI. Analysis and troubleshooting of common problems	7
VII. Precautions	8
VIII. After-sales Service	9

1. Product Features

A built-in antenna with full network compatibility and high integration design

>Wide voltage range, real-time location tracking, and track playback

"Supports vibration alarm, overspeed alarm, and electronic fence entry/exit alarm."

Vehicle ignition and flameout detection

Simple installation, no need to press the power button, it starts working as soon as it is powered on

>Built-in backup battery, immediately alarms and reminds if illegally removed

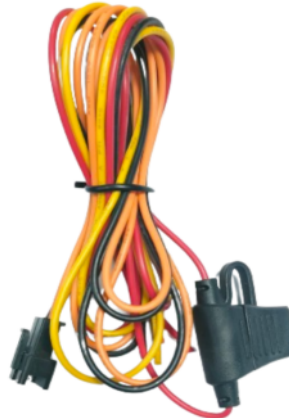
It can be connected to a relay to achieve remote fuel and power cut-off function

>Triple positioning

•••••

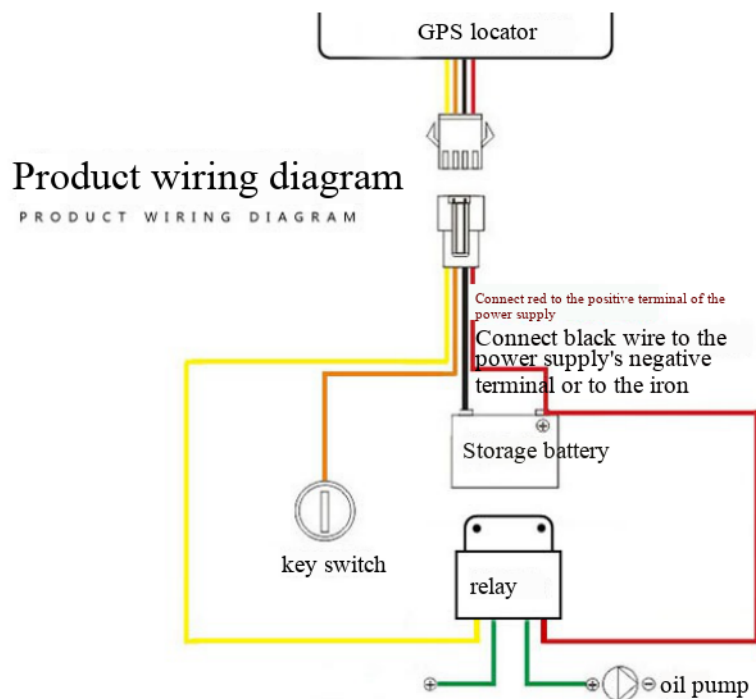


J16A-SA



power cord

III. Product Structure Description



IV. Product Parameters

Specification content	Specifications
size	80*39*17mm
weight	49.1g(including battery)
Working Voltage	9 - 90V
Built-in battery	100mAH (3.7V)
Operating Temperature	-20 ° C to+60 ° C
Storage temperature	-20 ° C to+70 ° C
sensor	Precision vibration sensor
frequency band	LTE-FDD:B1/B2/B3/B4/B5/B7/B8/B28/B6 6 GSM/GPRS/EDGE 850/900/1800/1900MHZ
Communication module brand/chip model	SIMCOM-A7670SA
Positioning module brand/chip model	A7670SA/and Unicore UC6228CI
root mean square error	S degree
Maximum output power	EGSM900:33dBm ± 2dB/5dBm ± 5dB DCS1800:30dBm ± 2dB/0dBm ± 5dB EGSM900 (8-PSK): 27dBm ± 3dB/5dBm ± 5dB DCS1800 (8-PSK): 26dBm ± 3dB/0dBm ± 5dB LTE-FDD B1/B2/B3/B4/B5/B7/B8/B28/B66: 23dBm ± 2dB/<-39dBm
Dynamic output range	-15~-108dbm
reception sensitivity	-107dbm
Maximum frequency error	± 0.1ppm

sensitivity	Cold start:-145dbm Hot start:-156dbm Warm start:-145dbm Navigation:-160dbm Tracking:-162dbm
First positioning time	Cold start:average 32 seconds
GSM antenna	built-in
GPS antenna	built-in
LED indicator light	Power supply,indicating status
transmission protocol	TCP
Power detection	Upload alarm information when the main power is disconnected
data reporting	Update GPS data in real-time and support customer customization
electronic fence	TBD
Driving behavior detection	When the vehicle's driving speed exceeds the set speed,upload an overspeed alarm
GPS data	Real-time location update
Vibration alarm	Vehicle vibration reporting in a defensive state

V. Basic functions of the product

content	function	Instructions
positioning function	4G Full Netcom	Support 4G network,1-second efficient transmission,faster and more accurate.
	Regular tracking	Return the positioning information such as longitude and latitude at the set interval.

	Overspeed alarm	When driving at an excessive speed,the GPS tracker will send an alert to your phone
	Vibration alarm	Equipped with a built-in vibration sensor, the device will immediately send an alarm notification in case of continuous vibration from the vehicle
	electronic fence	If the vehicle travels beyond the designated area,an alarm message will be sent to the platform
	historical trajectory	It can replay the driving track for 365 days,including the speed,direction,and dwell time at that time
	Displacement alarm	In case of illegal operation or theft,the vehicle can be remotely shut down through a computer or a mobile phone
	Fleet management	APP One mobile phone can manage multiple devices,or one device can be managed by multiple mobile phones

VI. Analysis and troubleshooting of common problems

The product displays a steady yellow and blue light, which indicates normal online positioning. If the lights flicker, please follow the steps below to analyze and troubleshoot the issue

Fault phenomenon	Fault Analysis	treatment method
Blue light flashing slowly	Check whether the terminal is being used in an area with poor GPS signal,such as near tall buildings or in underground parking lots	Drive the vehicle to a location with good signal and use the terminal
	Determine whether the front windshield of the vehicle has a metal heat-resistant film that affects signal reception	If there is a film,swap the device to another vehicle and test if the blue light stays on constantly. If testing on other vehicles without the film is successful, It is caused by the vehicle's tinting

	Check whether there is a jammer or signal blocker on the vehicle or in the surrounding area	If there is a jammer or interference source, remove it and try reinstalling
Blue light flashing	chip failure	return to factory for repair
Yellow light flashing quickly	Check if the SIM card is properly installed	Check if the SIM card is properly installed
	Check whether there is dirt or poor contact on the metal surface of the SIM card	Wipe the metal chip surface with a clean cloth or repeatedly insert and remove the card several times
Yellow light flashing slowly	Determine whether the vehicle is in a place without mobile network coverage, such as an underground parking lot	Please drive the vehicle to a place with good network signal and try reinstalling
	Check whether the server backend is functioning properly	Inquire whether the backend management platform server is operating normally
	Determine whether the SIM card status is normal	Check whether the SIM card status is normal through the SIM card inquiry platform
	Check whether there is a jammer or signal blocker on the vehicle or in the surrounding area	If there is a jammer or interference source, remove it and try again

VII. Precautions

1. Please take precautions against water for electronic products
2. Please insert the SIM card before installation and ensure that no password is set on the SIM card, otherwise the device will not work properly
3. The USB port on the terminal device is dedicated for factory testing and is not a charging port for the device. Please do not use it for charging or any other purposes

4. The installation location must be above a place that is not blocked by substances that absorb electromagnetic waves (such as metal or explosion-proof heat-insulating film)
 5. Do not expose the device to liquids or operate it with wet hands
 6. Do not throw the device into fire
 7. The device may not work when the temperature is below - or above +.
 8. When the vehicle is located in an underground parking lot, tunnel, or garage, it will affect the positioning signal and may encounter a communication network signal blind spot, resulting in the device being unable to monitor. Once the vehicle exits these areas, the device will automatically resume normal operation
 9. In case of any abnormalities, please do not attempt to repair it yourself. The manufacturer will not be held responsible for any damages caused by connecting non-original accessories or disconnecting the connections between various components
 10. This product is a driving safety assistance product, and any losses caused by malfunctions or loss of information are not related to our company
 11. This product has passed the international CE certification, but due to the complex electromagnetic environment inside vehicles, there is a possibility that this product may cause electromagnetic interference with the electrical equipment inside certain vehicle models
 12. Do not install or operate this product while the vehicle is in motion
 13. Please do not connect the uninterruptible power supply without authorization, otherwise it may cause malfunctions in the car or product.
Regarding installation matters
- If appropriate, please be sure to consult a professional
14. Please do not subject this product to strong impact or vibration, as it may cause damage to the product, resulting in malfunction or failure

Law usage

15. The normal operating temperature range for this product is from -20 degrees Celsius to 65 degrees Celsius. Operating outside this temperature range may result in product malfunction, fire, or explosion

VIII. After-sales Service

1. This product is eligible for a three-month replacement guarantee and one-year warranty service from the date of shipment. During the warranty period, if the equipment is damaged due to non-human factors or product quality issues, please contact the dealer for timely resolution
 2. Damage caused by customers' unauthorized disassembly or force majeure events (such as floods, vehicle accidents) will not be repaired
- After the warranty period expires, for any product damage or malfunction caused by use, a fee for the cost of repair materials will be charged
4. Provide customers with free consultation and technical services related to product purchase, usage, and APP installation

