

SinoTrack st-901m gps tracker

SinoTrack ST-901m GPS Tracker User Manual

Model: ST-901m

1. INTRODUCTION

The SinoTrack ST-901m is a compact and efficient real-time GPS tracking device designed for vehicles such as cars, motorcycles, and buses. It operates on existing GSM/GPRS networks and GPS satellites, enabling remote location and monitoring via SMS or GPRS. Its small size allows for discreet installation and easy concealment, making it an ideal solution for vehicle tracking and security.

2. IMPORTANT NOTICES AND COMPATIBILITY

- The device requires a **2G SIM card** for operation. It is not compatible with 3G or 4G SIM cards. Ensure your chosen SIM card supports 2G GSM functions.
- This product is **not available for use in Japan, Korea, or North Korea**. If your country does not support 2G SIM cards, this device cannot be used.
- Before using the online tracking platform, you must configure the **APN (Access Point Name)** of your country, along with the IP address and port of the platform server, by sending specific SMS commands to the device.
- If your SIM card has a **PIN code** enabled, you must disable it using a mobile phone before inserting it into the tracker. The tracker cannot read SIM cards with active PIN codes.
- For users in the USA, **SpeedTalk** is a recommended SIM card provider.

3. PACKAGE CONTENTS

Upon opening the package, please verify that all the following items are included:

- 1 x SinoTrack ST-901m GPS Tracker
- 1 x Connecting Wire
- 1 x Relay
- 1 x Relay Connector
- 1 x User Manual



Image: Contents of the SinoTrack ST-901m GPS Tracker package, showing the main tracker unit, connecting wires, a relay, and the user manual.

4. PRODUCT FEATURES

The SinoTrack ST-901m GPS Tracker offers a comprehensive set of features for effective vehicle monitoring:

- **Real-Time Tracking:** Locate and monitor targets in real-time via SMS or GPRS, accessible through web platforms or mobile applications (iOS and Android).
- **GSM Quad-Band Frequency:** Supports 850/900/1800/1900 MHz bands for global compatibility (where 2G is available).
- **ACC Detection for Ignition Status:** Detects when the vehicle's ignition is on or off.
- **Authorized Number Setting:** Allows specific phone numbers to receive alerts and send commands to the tracker.

- **Over Speed Alarm:** Notifies you if the vehicle exceeds a preset speed limit.
- **Data Saving Interval:** Saves tracking data at a 2-time interval, preserving information even when the tracker is stopped.
- **Built-in Battery:** Provides backup power, allowing the device to continue tracking even if the vehicle's main power is disconnected.
- **Remote Oil/Circuit Control:** Connect an external relay to remotely cut off the vehicle's oil or electrical circuit, providing an anti-theft measure.
- **History Memory:** Stores up to 2 years of tracking history, allowing you to view and playback daily routes and movements.
- **Geo-fence:** Set up virtual boundaries and receive alerts when the vehicle enters or exits these defined areas.
- **Shocking Alarm:** Alerts you to unusual vibrations or impacts.
- **Sleep Mode:** Optimizes power consumption when the vehicle is stationary.

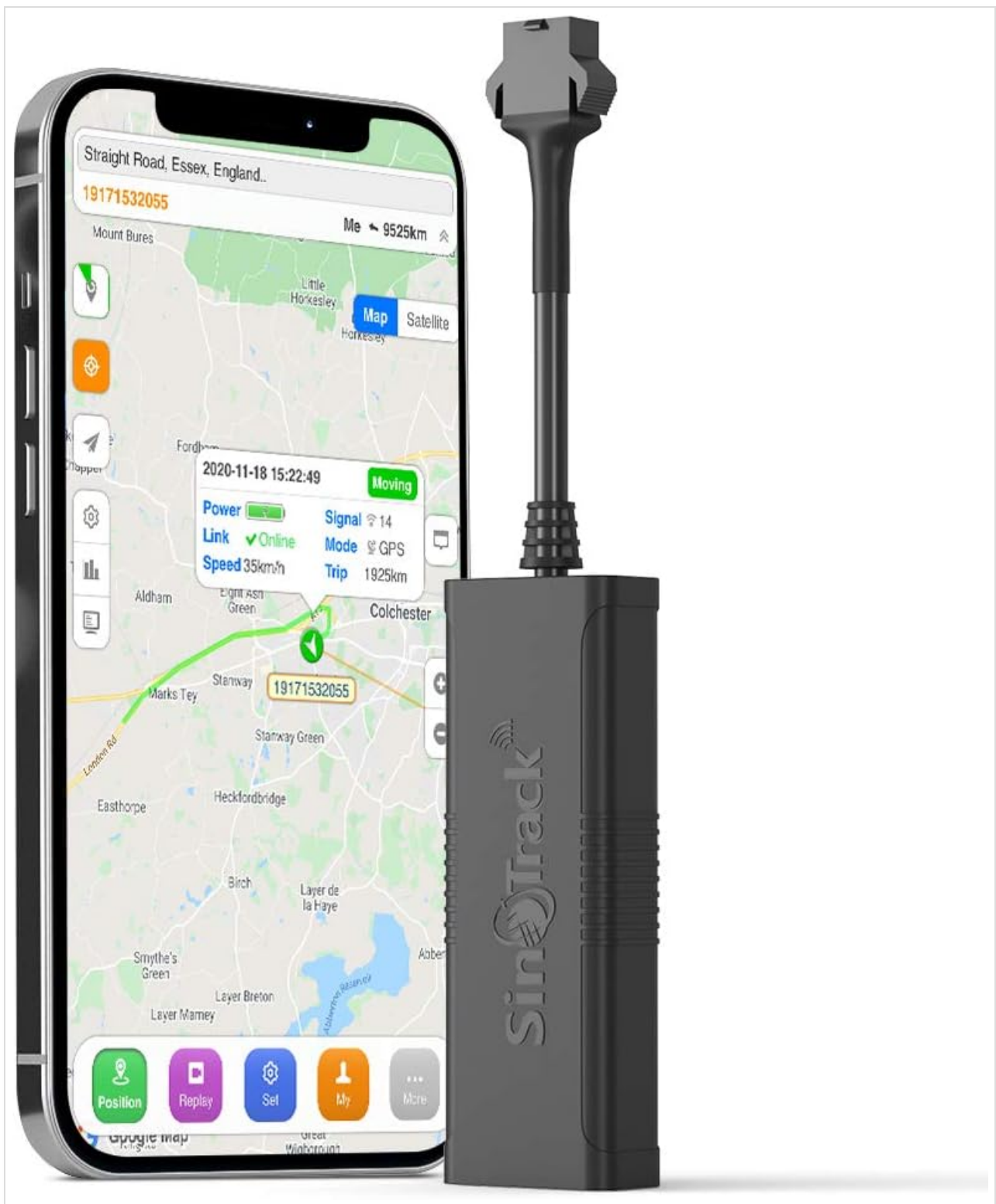


Image: The SinoTrack ST-901m GPS tracker shown alongside a smartphone displaying its real-time tracking capabilities on a map interface.

Item size:3.35*0.98*0.4 inch



Real-time
Tracking



History Route
Playback



Relay to
Remote Cut off



Geo-fence



Shocking
Alarm



Sleep
Mode



Built-in
Battery



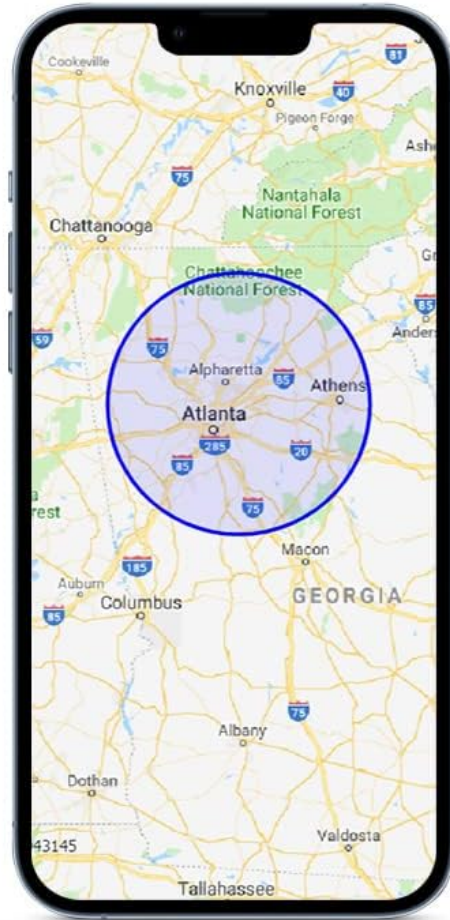
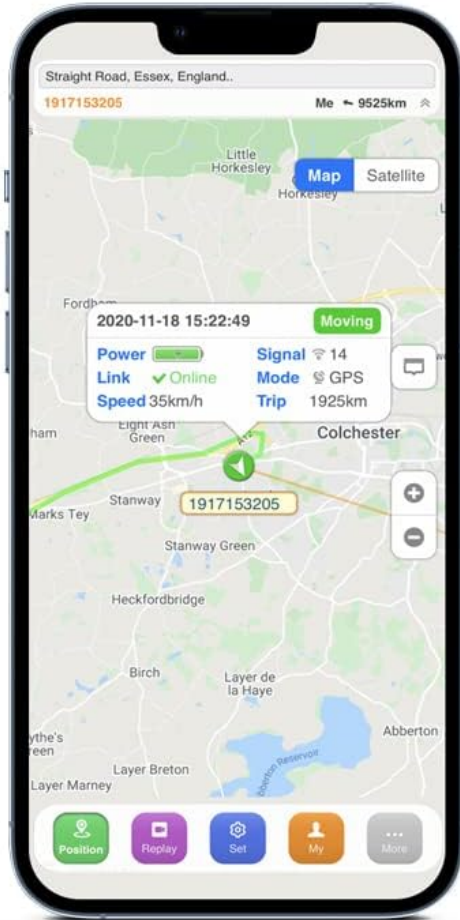
Overspeed
Alarm

Image: A visual representation of the SinoTrack ST-901m's compact dimensions (3.35 x 0.98 x 0.4 inches) and a set of icons illustrating its core functionalities, including real-time tracking, history playback, remote cut-off, geofencing, and various alarms.

Real-Time Tracking



Geofence



Support free App to use

Track in real time with our free APP available for iPhone and Android

Image: A comparison of two smartphone screens demonstrating the SinoTrack application's features: one showing live vehicle tracking on a detailed map, and the other illustrating the creation and visualization of a geofence boundary.

History Route Playback

View and playback your daily tracking history anytime and anywhere

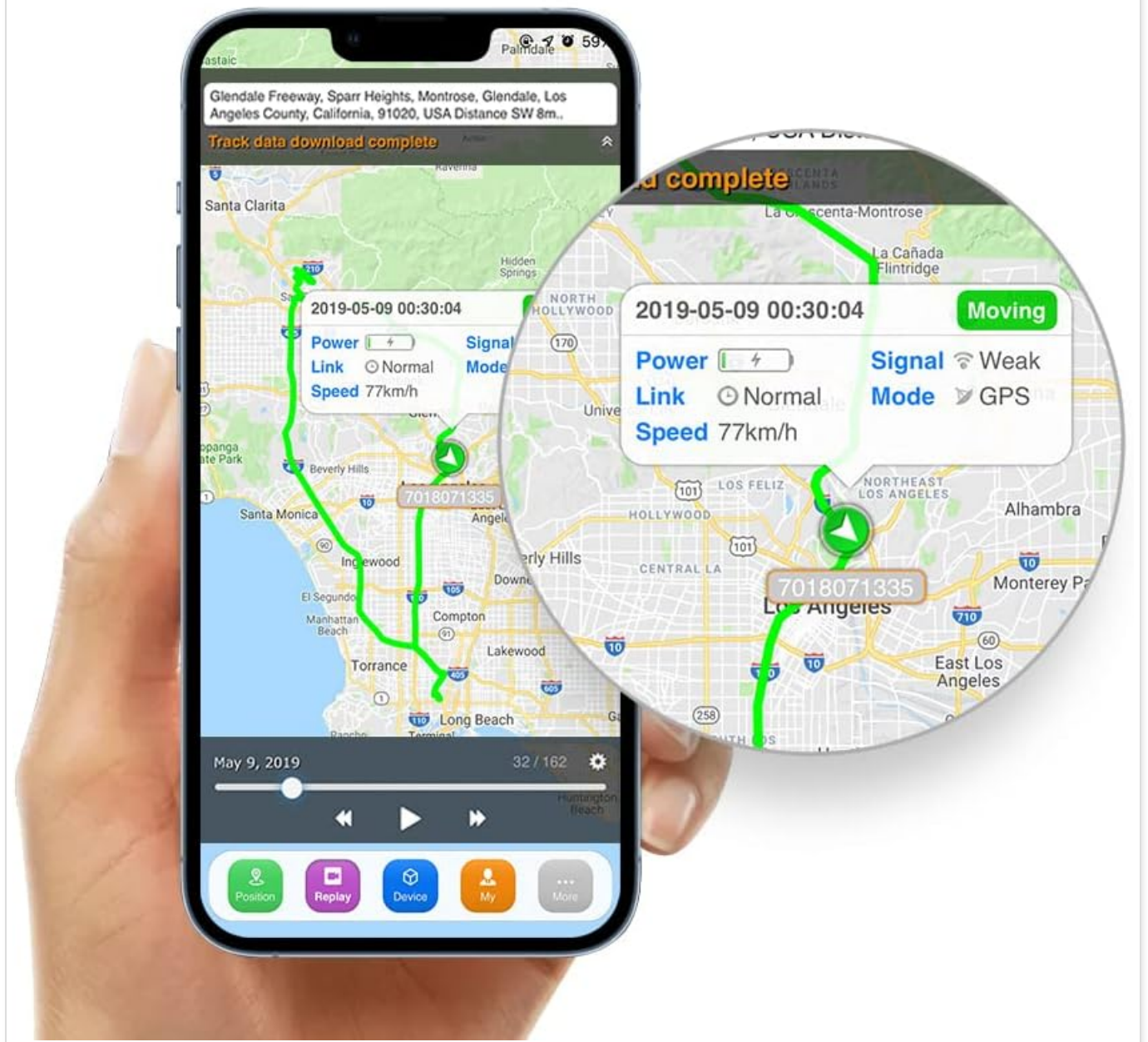


Image: A smartphone screen showcasing the history route playback function within the SinoTrack application, allowing users to review and analyze past travel paths of the tracked vehicle on a map.

Remotely Cut Off Fuel

When the car was stolen, can control your car remotely on your phone, cut the engine by sending SMS command, the vehicle will stop move until it received SMS command “9400000” , prevent theft of your car on the parking lot. (the car will stop within 10-20sec)



Image: A depiction of the remote fuel cut-off capability, where a user sends an SMS command from a smartphone to the SinoTrack device, illustrating how the vehicle's engine can be remotely disabled to prevent theft.

5. SPECIFICATIONS

Parameter	Value
Dimensions	85mm x 25.5mm x 10mm (3.35 x 1 x 0.39 inches)
Weight	50g (1.76 ounces)
Network	GSM / GPRS / GPS
GSM Band	850 / 900 / 1800 / 1900 MHz
GPS Chip	UBLOX
GSM Module	MTK60M

Parameter	Value
GPS Sensitivity	-162Db
GPS Accuracy	5m
Time to First Fix (TTFF)	Cold status: 45s, Warm status: 35s, Hot status: 1s
Work Voltage	9V - 60V
Storage Temperature	-40°C to +85°C
Operation Temperature	-20°C to +55°C
Humidity	5% - 95% non-condensing
Battery	1 Lithium Ion battery (included)
Manufacturer	SINOTRACK

6. SETUP AND INSTALLATION

6.1 SIM Card Preparation

1. Obtain a 2G GSM SIM card. Ensure it is active and has sufficient balance for SMS and GPRS data.
2. If the SIM card has a PIN code enabled, insert it into a mobile phone and disable the PIN code. The tracker cannot operate with a PIN-protected SIM card.
3. Carefully insert the prepared SIM card into the SIM card slot on the ST-901m tracker. Ensure it is inserted correctly according to the diagram on the device (if any).

6.2 Wiring and Connection

The ST-901m requires connection to your vehicle's power supply. The included connecting wire and relay are used for this purpose, especially for the remote oil/circuit control feature.

- **Red Wire:** Connect to the vehicle's positive power supply (+9V to +60V). This is typically the positive terminal of the car battery or a constant 12V/24V power source.
- **Black Wire:** Connect to the vehicle's negative power supply (ground). This is typically the negative terminal of the car battery or a chassis ground point.
- **Orange Wire (ACC):** Connect to the vehicle's ACC (Accessory) wire, which receives power only when the ignition is on. This allows the tracker to detect ignition status.
- **Relay Connection (Optional, for remote control):**
 - Identify the fuel pump circuit or ignition circuit of your vehicle.
 - Cut the positive wire of the chosen circuit.
 - Connect one end of the cut wire to terminal 87a (normally closed) or 87 (normally open, depending on relay type and desired behavior) of the relay.
 - Connect the other end of the cut wire to terminal 30 of the relay.
 - Connect the relay's coil terminals (85 and 86) to the corresponding wires from the tracker (usually yellow and green, or as per the relay connector). Ensure correct polarity if specified. This connection allows the tracker to activate/deactivate the relay.

It is highly recommended to have a professional automotive electrician perform the wiring and relay installation to ensure

6.3 Initial Configuration (SMS Commands)

After installation and power-up, the device needs to be configured via SMS commands sent from an authorized mobile number to the tracker's SIM card number.

- **Set APN:** Send SMS command: APN,your_APN_name (e.g., APN,internet). Consult your SIM card provider for the correct APN.
- **Set Server IP and Port:** Send SMS command: IP,server_IP_address,port_number (e.g., IP,45.112.204.245,8090). The server details are typically provided by SinoTrack for their tracking platform.
- **Set Time Zone:** Send SMS command: TIME_ZONE,your_time_zone_offset (e.g., TIME_ZONE,0 for UTC, TIME_ZONE,-5 for EST).
- **Set Authorized Number:** Send SMS command: CENTER,your_phone_number to set your phone as the primary authorized number. You can add more authorized numbers using specific commands (refer to the full user manual for details).

Upon successful configuration, the tracker will reply with "SET OK" or similar confirmation messages.

7. OPERATING THE DEVICE

7.1 Real-Time Tracking

Once configured, you can track your vehicle in real-time:

- **Via SMS:** Send a specific SMS command (e.g., URL# or WHERE#) to the tracker's SIM card number. The tracker will reply with a Google Maps link showing its current location.
- **Via Web Platform:** Access the SinoTrack official tracking platform (e.g., www.sinotracker.com) using your registered account. You will see the live location of your device on a map.
- **Via Mobile App:** Download the "SinoTrack Pro" app from your device's app store (available for iOS and Android). Log in with your account to view real-time tracking, set geofences, and manage alarms.

7.2 History Route Playback

The SinoTrack platform and app allow you to review past travel routes:

- On the web platform or mobile app, navigate to the "History" or "Playback" section.
- Select the desired date range (up to 2 years of history is stored).
- The system will display the vehicle's route on the map, often with speed and time information.

7.3 Alarms and Alerts

Configure various alarms to receive notifications for specific events:

- **Over Speed Alarm:** Set a maximum speed limit via SMS command (e.g., SPEED,120 for 120 km/h) or through the platform/app. You will receive an alert if this speed is exceeded.
- **Geo-fence Alarm:** Define virtual boundaries on the map using the web platform or app. When the vehicle enters or exits these areas, you will receive an alert.
- **Shocking Alarm:** If enabled, the device will send an alert if it detects significant vibration or impact, indicating potential tampering or an accident.
- **ACC Alarm:** Receive notifications when the vehicle's ignition is turned on or off.

7.4 Remote Control (Fuel/Circuit Cut-off)

If the relay is correctly installed, you can remotely disable the vehicle's fuel or electrical circuit:

- Send the specific SMS command (e.g.,9400000) from an authorized number to the tracker.
- The vehicle will typically stop within 10-20 seconds after receiving the command.
- To restore power, send the corresponding SMS command (e.g.,9400001).
- **Warning: Use this feature responsibly and only when necessary, such as in cases of theft. Improper use can lead to dangerous situations.**

8. MAINTENANCE

- Keep the device dry. Moisture can damage internal circuits.
- Avoid extreme temperatures. Operating or storing the device outside the specified temperature ranges (-20°C to +55°C operation, -40°C to +85°C storage) can shorten its lifespan.
- Do not disassemble or modify the device. This will void the warranty and may cause damage.
- Clean the device with a soft, dry cloth. Do not use harsh chemicals or cleaning solvents.
- Ensure the SIM card is securely seated and the device is properly powered for continuous operation.

9. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device not responding to SMS commands.	<ul style="list-style-type: none">◦ SIM card not inserted correctly.◦ SIM card has no balance or expired.◦ SIM card has PIN code enabled.◦ Device is not powered on.◦ Incorrect SMS command format.	<ul style="list-style-type: none">◦ Reinsert SIM card.◦ Recharge SIM card.◦ Disable PIN code on SIM card using a phone.◦ Check power connection.◦ Verify SMS command syntax.
Device shows offline on platform/app.	<ul style="list-style-type: none">◦ Incorrect APN, IP, or Port settings.◦ No GPRS data on SIM card.◦ Weak GSM signal.◦ Device is in sleep mode.	<ul style="list-style-type: none">◦ Re-send APN, IP, Port SMS commands.◦ Ensure SIM card has active data plan.◦ Move vehicle to an area with better signal.◦ Wake up device by calling it or sending an SMS.
Inaccurate location or no GPS signal.	<ul style="list-style-type: none">◦ Device is indoors or in an area with poor GPS reception (e.g., underground parking).◦ GPS antenna is obstructed.	<ul style="list-style-type: none">◦ Move vehicle to an open outdoor area.◦ Ensure the device has a clear view of the sky.

Problem	Possible Cause	Solution
Remote fuel cut-off not working.	<ul style="list-style-type: none"> Relay not wired correctly. Incorrect SMS command. Not sending from an authorized number. 	<ul style="list-style-type: none"> Verify relay wiring with a professional. Check the exact SMS command for cut-off. Ensure your number is set as an authorized number.




10. WARRANTY AND SUPPORT

SinoTrack offers a **30-day no-questions-asked return policy** for the ST-901m GPS Tracker. For any issues, questions, or technical assistance, please do not hesitate to contact SinoTrack customer service.

The SinoTrack tracking platform is supported for a lifetime. You can access the web platform by visiting www.sinotracker.com or download the "SinoTrack Pro" application from your mobile device's app store for real-time tracking and management.

© 2023 SinoTrack. All rights reserved.

Related Documents

<p>SinoTrack GPS TRACKER USER MANUAL</p>  <p>PREFACE</p> <p>Thank you for purchasing SinoTrack GPS Tracker. This manual shows how to operate the device accurately in detail, please read it carefully to avoid the trouble caused by using the device. Please be aware that the manual is for reference only. SinoTrack will not be responsible for any errors or omissions made in this manual.</p>	<p>SinoTrack GPS Tracker User Manual - Models ST-903 & ST-904</p> <p>Comprehensive user manual for SinoTrack GPS Trackers ST-903 and ST-904, covering setup, SMS tracking, alarm settings, online tracking, and troubleshooting for accurate real-time location monitoring.</p>
<p>SinoTrack GPS TRACKER ST-904/ST-904L 4G User Manual</p> 	<p>SinoTrack GPS Tracker ST-904/ST-904L 4G User Manual</p> <p>Comprehensive user manual for the SinoTrack ST-904 and ST-904L 4G GPS trackers, covering setup, operation, online tracking, SMS commands, and troubleshooting for accurate real-time location monitoring.</p>
<p>GPS Tracker ST-906GL User Manual</p> 	<p>SinoTrack ST-906GL GPS Tracker User Manual</p> <p>Comprehensive user manual for the SinoTrack ST-906GL GPS Tracker, covering quick start, website and mobile app tracking, installation, device functions, and other features.</p>

ST-901 4PIN (ST-901L 4G)
SinoTrack



[SinoTrack ST-901 4PIN GPS Tracker \(ST-901L 4G\) User Manual](#)

Comprehensive user manual for the SinoTrack ST-901 4PIN and ST-901L 4G GPS trackers. This guide covers quick setup, web and mobile tracking, SIM card installation, LED status indicators, wiring instructions, and a full list of SMS commands for configuring features like geo-fencing, speed alerts, battery warnings, ACC ignition alerts, remote engine cut-off, APN settings, IP/Port configuration, and time interval reporting. Learn how to effectively monitor and manage your vehicle with the SinoTrack GPS device.