

BAANOOL BN-403D

BAANOOL BN-403D 2G/4G/Bluetooth GPS Tracker User Manual

Model: BN-403D

1. INTRODUCTION

The BAANOOL BN-403D is a versatile 2G/4G/Bluetooth GPS Tracker designed for various vehicles, including cars, trucks, and motorcycles. This device provides real-time location tracking, remote control capabilities, and multiple alert functions to enhance vehicle security and management. It requires installation on the vehicle's onboard power supply and operates with a dedicated SIM card and the BAANOOL IOT application.

2. PRODUCT OVERVIEW

The BN-403D GPS tracker integrates advanced features for comprehensive vehicle monitoring. It supports 2G and 4G networks for reliable data transmission and Bluetooth for local configuration. Key functionalities include remote engine cut-off, built-in GPS and GSM antennas for accurate positioning, and an optional microphone for audio monitoring.



Image 2.1: The BAANOOL BN-403D GPS Tracker, showing the main unit, remote control, wiring harness, and SIM card.



Image 2.2: The BN-403D GPS Tracker alongside a smartphone displaying the BAANOOL IOT application interface, highlighting real-time tracking capabilities.

3. PACKAGE CONTENTS

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

- Giftbox
- Microphone (for monitoring)
- User Manual
- Remote controller
- Relay
- Screwer (for installation)
- Harness (wiring)
- GPS unit (BN-403D)
- SIM Card

- Battery (pre-installed or separate)



APPLICATIONS



Image 3.1: Visual representation of the items included in the BN-403D package, numbered for easy identification.

4. SPECIFICATIONS

The following table details the technical specifications of the BAANOOL BN-403D GPS Tracker:

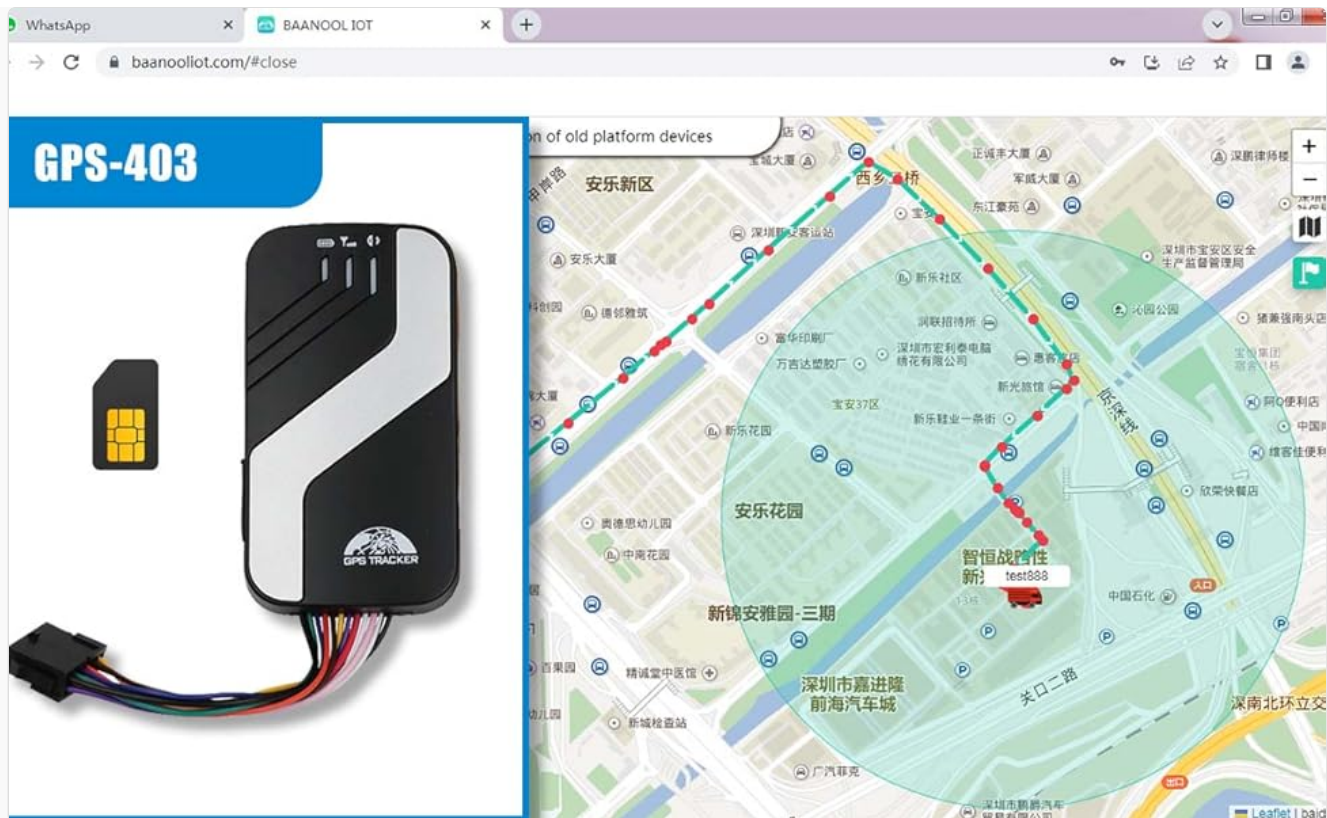


Image 4.1: Technical specifications for the GPS-403A/B model, which shares similar features with the BN-403D.

Feature	Specification
Model	BN-403D
Dimensions	5.67 x 3.94 x 2.76 inches (Package)
Item Weight	10.6 ounces
Network	2G/4G (GSM/GPRS/LTE)
Connectivity	Bluetooth, Wireless
GPS Sensitivity	-165dBm
GPS Accuracy	5m
Battery	1 Lithium Ion battery (included), Chargeable 3.7V 350mAh Li-ion
Operating Temperature	-20°C to +65°C
Humidity	5% - 95% non-condensing
Supported Application	Alarm (via BAANOOL IOT App)
Specific Uses	Vehicle Tracking

5. SIM CARD USAGE RULES

The included SIM card is essential for the tracker's functionality. Please adhere to the following rules for optimal performance:

1. The SIM card supports internet data only. It does not support calls, mobile Wi-Fi, or SMS services. Parameters

can be configured via Bluetooth using the BAANOOL IOT app.

2. The SIM card is specifically bound to your BAANOOL tracker. It will only function with the corresponding device. Do not insert this SIM card into other devices. However, the tracker can use different compatible SIM cards if needed.
3. When you purchase the tracker and data card for the first time, the first year's data charges are included (US\$0).
4. After the first year, renewal is required to continue using the SIM card. The renewal fee is US\$20 per year.
5. When using the tracker and SIM card, you can access them on the BAANOOL IOT server or other compatible servers.
6. Data services will automatically terminate if the SIM card is not renewed by its expiration date. It can be renewed and reactivated within 6 months after termination. If not activated for more than 6 months, the SIM card will become invalid.

SIM Card Usage Rules

1 The SIM card only supports Internet data and does not support calls, mobile Wi-Fi, and SMS services. You can configure the parameter by Bluetooth on our APP (BAANOOL IOT).

2 The SIM card is bound to our device one-to-one so it only supports the corresponding tracker. Please don't insert this card into other devices. However, the tracker can use different SIM cards.

3 When you purchase our tracker and data card for the first time, you do not need to pay for the first year's data charges. After one year, you need to renew to continue using our SIM card, and the fee is US\$20/year.

4 When you use our tracker and SIM card, you can use them on our server (BAANOOL IOT) or other servers.

5 The data will be automatically terminated if the SIM card is not renewed at the expiration date. It can be renewed and reactivated within 6 months after the data is terminated. The SIM card will be invalid if it is not activated for more than 6 months.

Data charges for the first year: US\$0

Data charges for renewal: US\$20/Year

Image 5.1: A summary of the SIM card usage rules and associated data charges.

6. SETUP AND INSTALLATION

The BAANOOL BN-403D GPS tracker requires professional installation. It must be connected to the vehicle's onboard power supply. If you are unfamiliar with vehicle electrical systems or installation procedures, it is strongly recommended to seek assistance from a qualified engineer or professional installer.

6.1. Pre-Installation Checklist

- Ensure the vehicle's power is off before beginning installation.
- Verify all package contents are present.
- Have necessary tools ready (e.g., wire strippers, crimpers, multimeter).

6.2. Installation Steps (Professional Assistance Recommended)

1. **Identify Power Source:** Locate a stable 12V-24V power source in your vehicle (e.g., car battery, ignition wire).
2. **Connect Wiring Harness:** Connect the tracker's wiring harness to the vehicle's power supply according to the wiring diagram provided in the full manual (not included here). Ensure correct polarity.
3. **Install SIM Card:** Insert the provided SIM card into the designated slot on the tracker.
4. **Secure the Tracker:** Mount the tracker in a discreet, secure location within the vehicle, ensuring it has a clear line of sight to the sky for optimal GPS signal reception. Avoid placing it near large metal objects that could interfere with signals.
5. **Connect Relay (if applicable):** If using the remote engine cut-off feature, connect the relay as per the wiring diagram.
6. **Power On and Test:** Reconnect vehicle power. The tracker should power on and indicate signal acquisition (refer to LED indicators on the device).



Image 6.1: The BN-403D GPS Tracker connected to a vehicle's power source, illustrating a typical installation scenario.

7. OPERATING INSTRUCTIONS

The BAANOOL BN-403D GPS Tracker is operated primarily through the BAANOOL IOT mobile application and web platform.

7.1. App Download and Account Setup

1. Download the **BAANOOL IOT** app from the Apple App Store or Google Play Store.
2. Register for a new account or log in if you already have one.
3. Add your BN-403D device to your account using its unique ID number (usually found on the device itself or its

packaging).

7.2. Real-Time Tracking

Once the device is installed and connected, and the app is configured, you can view your vehicle's real-time location on the map within the BAANOOL IOT app or web platform.

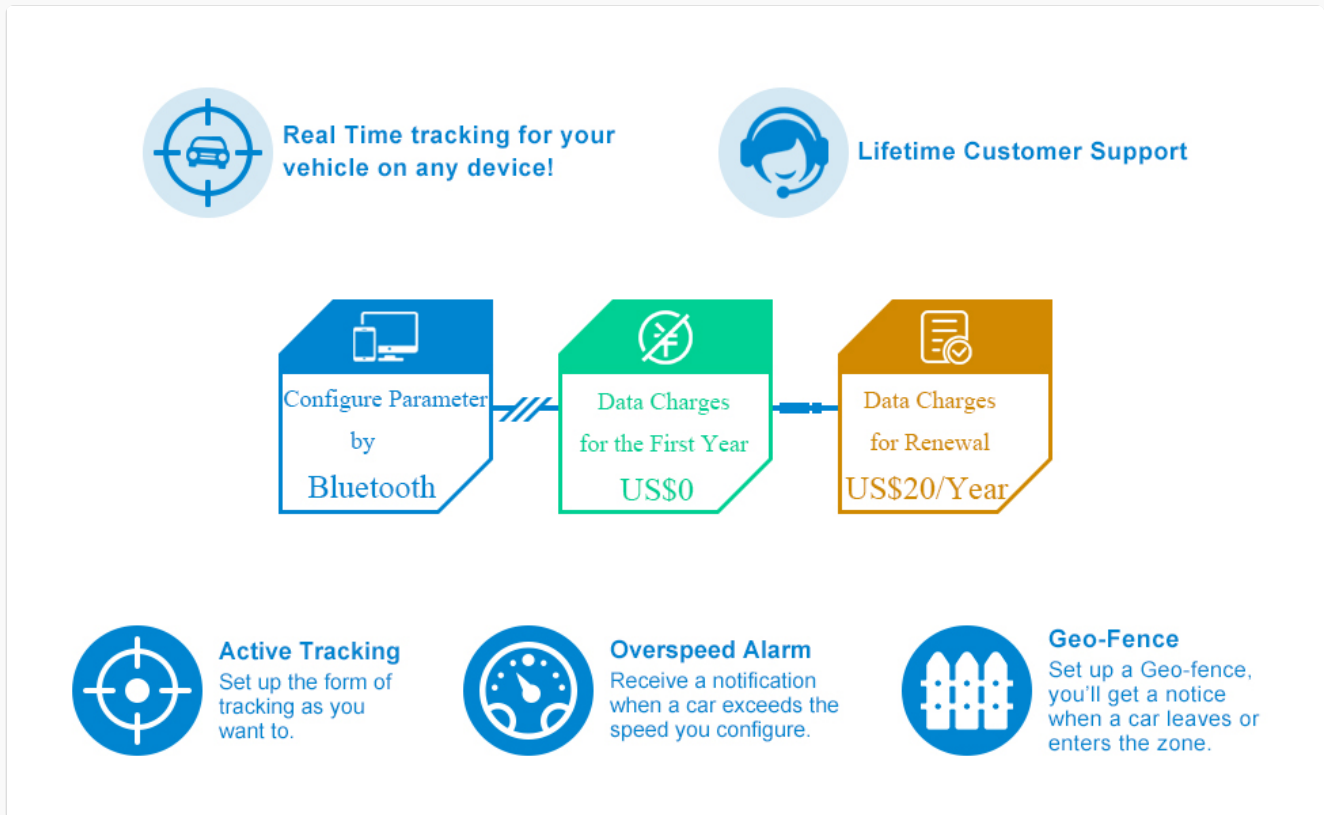


Image 7.1: The BAANOOL IOT app displaying real-time vehicle positioning on a map, along with various alert functions.

7.3. Historical Location Record

The app allows you to review the historical travel routes of your vehicle, providing insights into past movements and stops.



BAANOOL BN-403A/B 4G GPS tracker is designed for vehicles. Its multiple features can help you manage the fleet conveniently and prevent your car to get lost.

Note: Professional installation is required. If you don't know how to install it, please find an engineer's help.

APPLICATIONS



Car



Truck



Motorcycle



Bus

GPS Specification

Model	403A / B
DIM	96mm x 53mm x 18mm
Weight	70g
Network	GSM / GPRS / LTE
Band	4G (B1 / B2 / B3 / B4 / B5 / B7 / B8 / B28 / B40) 2G (850 / 900 / 1800 / 1900Mhz)
GPS sensitivity	- 165dBm
GPS accuracy	5m
Time To First Fix	Cold status 45s Warm status 35s Hot status 1s
Applicable car power	12V -- 24V
Battery	Chargeable 3.7V 350mAh Li-ion battery
Storage Temp	- 40°C to + 85°C
Operation Temp	- 20°C to + 65°C
Humidity	5% -- 95% non-condensing
Standard package	Giftbox / GPS unit / Harness / Relay / Microphone / Manual / Screwer / Remote controller (For B)



Cut off the Engine Remotely



2G/4G



Free APP & Web Platform



SOS Alarm



Historical location record



Listening



Waterproof



GEO-Fence



A Remote Control (For 403B)

Image 7.2: Illustration of real-time tracking and the ability to review historical data on the BAANOOL IOT platform.

7.4. Remote Control

The BN-403D supports remote control functions, such as remote engine cut-off, which can be activated via the BAANOOL IOT app. This feature provides an additional layer of security for your vehicle.

8. ALERT FUNCTIONS

The BAANOOL BN-403D offers a range of customizable alert functions to notify you of specific events related to your vehicle:

- **Overspeed Alarm:** Receive notifications if the vehicle exceeds a predefined speed limit.
- **Geo-Fence:** Set up virtual boundaries (geo-fences) on the map. You will be alerted if the vehicle enters or exits these designated areas.
- **Low Battery Alarm:** Notifies you when the tracker's internal battery is running low.
- **Power Disconnection Alarm:** Alerts you if the tracker's main power supply is disconnected.
- **Blind Area Alarm:** Informs you if the tracker enters an area with no GPS signal.
- **SOS Alarm:** If an SOS button is connected (model dependent), pressing it will send an emergency alert.
- **Movement Alarm:** Receive alerts if the vehicle moves unexpectedly while parked.



Image 8.1: Visual representation of active tracking, overspeed alarm, and geo-fence functionalities.

9. MAINTENANCE

To ensure the longevity and optimal performance of your BAANOOL BN-403D GPS Tracker, follow these general maintenance guidelines:

- **Keep Dry:** Avoid exposing the device to water or excessive moisture, despite its waterproof rating, to prevent internal damage.
- **Clean Gently:** Use a soft, dry cloth to clean the device. Do not use harsh chemicals or solvents.
- **Avoid Extreme Temperatures:** Do not expose the device to extreme heat or cold, as this can affect battery life and electronic components.
- **Secure Installation:** Periodically check that the device is securely mounted and all connections are firm.
- **Software Updates:** Keep the BAANOOL IOT app updated to the latest version to benefit from new features and bug fixes.

10. TROUBLESHOOTING

If you encounter issues with your BN-403D GPS Tracker, refer to the following common problems and solutions:

- **Device Not Powering On:**
 - Check the power connections to the vehicle's battery.
 - Ensure the vehicle's battery has sufficient charge.
 - Verify the tracker's internal battery is charged.
- **No GPS Signal / Inaccurate Location:**
 - Ensure the tracker has a clear view of the sky, away from metal obstructions.
 - Move the vehicle to an open area.

- Allow sufficient time for the device to acquire a GPS fix (cold start can take longer).

- **SIM Card Not Working / No Data:**


- Ensure the SIM card is correctly inserted.
- Verify the SIM card is activated and has an active data plan.
- Check if the SIM card's data charges have been renewed (refer to Section 5).
- Confirm the SIM card is bound to this specific device.
- Ensure the tracker is in an area with 2G/4G network coverage.

- **App Not Displaying Data:**

- Check your smartphone's internet connection.
- Ensure the tracker is powered on and has network connectivity.
- Log out and log back into the BAANOOL IOT app.
- Update the app to the latest version.

11. WARRANTY AND SUPPORT

BAANOOL provides lifetime customer support for the BN-403D GPS Tracker. For any technical issues, installation queries, or operational assistance, please contact BAANOOL customer service.



GPS-403A/B

BAANOOL BN-403A/B 4G GPS tracker is designed for vehicles. Its multiple features can help you manage the fleet conveniently and prevent your car to get lost.

Note: Professional installation is required. If you don't know how to install it, please find an engineer's help.

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Battery	Chargeable 3.7V 350mAh Li-ion battery
Storage Temp	-40°C to +85°C
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Standard package	Giftbox / GPS unit / Harness / Relay / Microphone / Manual / Screwer / Remote controller (For B)

APPLICATIONS

Car

Truck

Motorcycle

Bus

Cut off the Engine Remotely

4G 2G/4G

Free APP & Web Platform

SOS SOS Alarm

Historical location record

Listening

Waterproof







GEO-Fence

A Remote Control (For 403B)

Image 11.1: Information highlighting lifetime customer support for BAANOOL products.

Please refer to your purchase documentation for specific warranty terms and contact information.

Related Documents - BN-403D

<div><div>GPS TRACKER User Manual</div><div></div><div><p>In order to protect the environment and provide ready access to information about your product, we have created this document online.</p><p>Thank you for choosing our products.</p></div></div>	<p>GPS TRACKER 408 User Manual</p> <p>Comprehensive user manual for the GPS TRACKER model 408, detailing specifications, hardware description, installation, mobile app and web version usage, GPRS configuration, various tracking and alarm functions, status checks, troubleshooting, and important cautions.</p>
<div><div>Pet GPS Tracker User Manual</div><div></div><div></div></div>	<p>Pet GPS Tracker User Manual - GPS-201/BN-201</p> <p>User manual for the BAANOOL Pet GPS Tracker (Model GPS-201/BN-201) by SHENZHEN COBAN ELECTRONICS CO., LTD. Learn about hardware, specifications, SIM card insertion, status indicators, configuration, app usage, and features like tracking, listening, and geo-fencing.</p>
<div><div>GPS Tracker User Manual</div><div></div><div><p>Preface</p><p>This is an introductory manual for the GPS Tracker. The manual describes how to install the device, connect it to the network, and use the mobile app to track the device. It also provides information about the device's features and functions. The manual is intended for users who are new to the device and need to learn how to use it. The manual is written in a simple and easy-to-understand style. The manual is written in English and Chinese. The manual is written in a simple and easy-to-understand style. The manual is written in English and Chinese.</p></div></div>	<p>GPS Tracker User Manual - Model 403</p> <p>Comprehensive user manual for the BAANOOL IoT GPS Tracker (Model 403), detailing installation, setup, features, functions, and troubleshooting for vehicle tracking and security.</p>
<div><div>GPS Tracker User Manual</div><div></div><div><p>Preface</p><p>This is an introductory manual for the GPS Tracker. The manual describes how to install the device, connect it to the network, and use the mobile app to track the device. It also provides information about the device's features and functions. The manual is intended for users who are new to the device and need to learn how to use it. The manual is written in a simple and easy-to-understand style. The manual is written in English and Chinese. The manual is written in a simple and easy-to-understand style. The manual is written in English and Chinese.</p></div></div>	<p>GPS Tracker 303FG User Manual - BAANOOL IOT</p> <p>Comprehensive user manual for the BAANOOL IOT GPS Tracker model 303FG, detailing its specifications, hardware, installation, mobile app and web platform usage, SMS commands, various alarm functions, remote control operation, and troubleshooting tips.</p>
<div><div>GPS Tracker User Manual</div><div></div><div><p>Preface</p><p>This is an introductory manual for the GPS Tracker. The manual describes how to install the device, connect it to the network, and use the mobile app to track the device. It also provides information about the device's features and functions. The manual is intended for users who are new to the device and need to learn how to use it. The manual is written in a simple and easy-to-understand style. The manual is written in English and Chinese. The manual is written in a simple and easy-to-understand style. The manual is written in English and Chinese.</p></div></div>	<p>BAANOOL IOT 303FG GPS Tracker User Manual: Installation, Features, and Operation</p> <p>Comprehensive guide to the BAANOOL IOT 303FG GPS Tracker. Covers device specifications, hardware description, installation, status lights, mobile app and web platform usage, positioning strategies, various alarms, remote control, SMS commands, and troubleshooting.</p>
<div><div>GPS Tracker User Manual</div><div></div><div><p>Preface</p><p>This is an introductory manual for the GPS Tracker. The manual describes how to install the device, connect it to the network, and use the mobile app to track the device. It also provides information about the device's features and functions. The manual is intended for users who are new to the device and need to learn how to use it. The manual is written in a simple and easy-to-understand style. The manual is written in English and Chinese. The manual is written in a simple and easy-to-understand style. The manual is written in English and Chinese.</p></div></div>	<p>BAANOOL GPS Tracker Model 407 User Manual</p> <p>Comprehensive user manual for the BAANOOL GPS Tracker Model 407, covering specifications, installation, hardware description, mobile app usage, web version, positioning strategies, SMS functions, troubleshooting, and cautions.</p>

