

Nameless Unified Tracking

SEEK GPS - USER GUIDE



SEEK GPS



USER GUIDE

SEEK GPS TRACKING SYSTEM

Product Overview

Thank you for purchasing NutTAG Seek GPS. This device is an advanced 3G personal tracker that is water resistant with an IP rating of IPX5. It is an innovative tiny personal remote positioning device with built-in U-blox GPS and GSM/GPRS technology. It's for monitoring and protecting people and property. It can be used in all walks of life from travelling lone workers and mobile nursing staff to children and the elderly, dementia, vehicles, bikes and pets etc.



CONTENTS

- Getting to know your Device
 - Device Charging
 - Turn on and off
 - What do the Lights Mean?
- Quick Start Guide
 - Device Charging
- Device Operation
- Operating Modes
 - Live Tracking
 - Movement Tracking
 - Response Mode
 - Deep Sleep
- Reporting Interval
- Tracking Modes
- Features & Alerts
 - Alert methods
 - Alert Types
 - Advanced Alert Types



- Device History

- Device Details

Tutorials

- Online Video Tutorials (User Guide)
 <u>https://nuttag.com.au/user-guide</u>
- APP

- PORTAL

- Advanced Settings (Portal Only)
- Hardware Specifications
- FAQ's
- After Sales Support
- Glossary / Definitions



GETTING TO KNOW YOUR DEVICE:





Device Charging

For the first time use, please fully charge the battery for around 2~3 hours Using the USB charger or using the docking station to charge;

- Place the device in the docking station, the device should click into place when correctly seated.
- Connect the Micro USB side of the cable to the docking station port and connect the other end of the cable to the designated AC power source (USB/AC adaptor).
- When charging, the RED LED (on the docking station) will be blinking. After fully charging, the RED LED will become solid.

Turn on and off

To Turn On the SEEK GPS: Press the side power button for 1 second, all the LEDs will flash rapidly. The device can be also turned on automatically by charging via USB or put it into the docking station.

* To get an initial location, use outdoors or near a window so the device may fix onto the satellites.

To **Turn Off** the SEEK GPS: Press and hold the side button and SOS button together for 1 second until the LEDs turn off.



Power Status LED

LED	Blue ON(solid)	Blue Blinking Quickly	Blue Off or blinking slowly
State	The device is charging	Battery power is lower than 15%	Device has been fully charged or not charging

GSM LED--GREEN

LED	Light shows a single flash rapidly every 3 seconds	Light shows a double flash rapidly every 3 seconds	Light shows a slow flash every 3 seconds	Light Solid (not flashing)
State	The device is connected to the GSM network	The device is registered to the GPRS network	The device is connecting to the GSM network	No SIM Card is detected

GPS LED--BLUE

LED	Light shows a single flash rapidly every 3 seconds	Light shows a double flash rapidly every 3 seconds	Blue Off(when device not charging)
State	The device has a GPS positioning fix	The device has no GPS fix	The GPS chip is sleeping



QUICK START:

Step 1. Download the Apps

Search "NutTAG GPS" in your app store or scan below QR codes



App icon



QR code link to iOS App



QR code link to Android App

Step 2. Create an account Sign Up and create an account

Step 3. Follow onboarding to add your GPS device

You will need to enter your NutTAG ID Number to activate your device, this number can be found in your quick setup guide. Ensure you place your GPS device is **on charge and turn on**. You can check to see if your SEEK device is turned on by the lights on the side.

Step 4. Get first location fix

To help get your first location update, make sure that the device is on and the lights on the side are flashing.

Hold SEEK/SOS button on the front for three seconds preferably outside.

If you are still unable to connect please contact us via LiveChat or email support@nuttag.com.au



Device Operation:

Operating Modes

The operating mode determines the way that your SEEK GPS works, the features you can utilise and heavily impacts your battery life. Select how often location updates are received and reported back to your Apps (Mobile and web). The number of intervals sent will directly affect the battery life. Please consult the details of each mode to determine the most suitable option for you.

Live Tracking

Live Tracking Mode is the most power-intensive operating mode for this device. There are no power saving measures. Your GPS will attempt to obtain and update its position constantly according to the reporting interval set. *Expected Battery Life: 6-20 hours*

Movement Tracking

Movement Tracking Mode will only update its location when your GPS device is moving. The GPS chip will hibernate while the device is stationary. This allows for an extended battery life, dependent upon the amount of time the device is not moving. GPS will attempt to obtain and update position after movement according to the reporting interval. *Expected Battery Life: 1-3 days*



Response Mode

Response Mode will only give you a location update upon your request. This is recommended for most use cases, as it is highly power efficient. In this mode, location can be updated by a simple click in the App or Web Portal. This mode is *not suitable for use with geofences* as the location of the device is not constant checked. Battery Life: 1-4 days

Deep Sleep

Deep Sleep Mode turns both the SIM modem and GPS chip off while the device is stationary. This allows the longest battery life, however settings cannot be changed and device *will appear 'offline'* while not moving. The position will attempt to update while moving according to the reporting interval. Geofence will also only trigger if the device is moving. *Battery Life: 5-28 days*

Reporting Interval:

The reporting interval, (location update frequency) determines how often the device will attempt to update its location. Smaller intervals consume more battery. Reducing the frequency will shorten your battery life.

3 minutes - for intense tracking.10 minutes - for standard use.30 minutes - battery saver, where frequent updates are not required, but geofences are.

Custom intervals also available.



Track Modes:

Track Modes help the app select tracker settings optimised for your specific use. When changing modes, you can import the recommended settings profile.

Elderly

These settings are ideal for caring for aged persons, helping you keep an eye out for them. Providing peace of mind for the carer as well as the elder.

This settings profile features SOS alerts and fall detection, as well as regular location reports to allow the use of geofences.

Overspeed set to: **50km/h** Operating mode: **Movement tracking mode** Location reporting frequency: **5 minutes** Fall detection: **On**

Kids

These settings are ideal for devices carried by children.

This settings profile features location reports only when requested ensuring that you are achieving maximum battery life.

Overspeed set to: **50km/h** Operating mode: **Response tracking mode**



Location reporting frequency: - Fall detection: **Off**

Vehicles

These settings are ideal for devices used to monitor vehicles.

This settings profile features consistent location reports ensuring that you achieve maximum accuracy. Overspeed alerts and geofences help you keep you in the know.

Overspeed set to: **110km/h** Operating mode: **Movement tracking mode** Location reporting frequency: **5 minutes** Fall detection: **Off**

Pets

These settings are ideal for devices used to protect pets.

This settings profile features location reports only when requested ensuring that you are achieving maximum battery life.

Overspeed set to: **Off** Operating mode: **Response tracking mode** Location reporting frequency: -Fall detection: **Off**



Travel

These settings are ideal for devices used while travelling.

This settings profile features location reports only when requested ensuring that you are achieving maximum battery life.

Overspeed set to: **Off** Operating mode: **Response tracking mode** Location reporting frequency: -Fall detection: **Off**

Other

These settings are ideal for devices used for a variety of purposes.

This settings profile features Location reports only when requested ensuring that you are achieving maximum battery life.

Overspeed set to: **80km/h** Operating mode: **Response tracking mode** Location reporting frequency: -Fall detection: **Off**



Features & Alerts:

Alert methods:

You can receive your alarms in a multitude of ways; in-app push notification, emails and even SMS.

App Push Notifications - Receive alerts via the Mobile App.
 Email - Receive alerts via email. You can set up to 4 addresses to receive emails.
 SMS - Receive alerts via SMS. You can set up to 4 numbers to receive SMS alerts. *SMS Credits required to send alerts

Alert Types:

These alert types can be adjusted from within the app itself.

SOS

SOS Alerts are triggered by holding the SEEK button on the front of the tag for 3 seconds.

Low Battery

Low Battery Alerts are sent when the device reaches 15%

Charge On/Off

Receive alerts when your device goes on and off charge, as well as when the battery reaches full charge.



Online/Offline

Receive alerts when your device is turned On or Off.

Advanced Alert Types:

Configure advanced features and alert types from within the web portal, my.nuttag.com.au

Fall Detection

The device will monitor movement and impact to provide a warning in case of a suspected fall or collision. This is default set to a medium level of sensitivity, if you require a more sensitive alert to trigger please let us know and we can adjust it for you.

Listen-in

While active, calls to the device will not activate the speaker, allowing an audio check-in without disturbing the device user. Note that this will disable two-way communication.

Overspeed Alarm

Receive alerts if the device detects a speed higher than your specified limit (0 - 250 km/h)

No Motion Alarm

Receive alerts if the device sits stationary for your specified time period.



History:

Enter the start time and end time to view locations the tracker travelled through that period. Shown on the map and given in a table. You can scrub through the map data using the slider. You can also download the history via the Web portal. Please see link below for video tutorial:

> <u>https://nuttag.com.au/blogs/user-guide/seek-gps-find-location-history</u>

Device Details:

Tracker Name

The name which you selected for your tracker.

Tracker Image

The image which is used when displaying your tracker. Contained in map pins and on profile screens.

NutTAG ID

Unique code identifying your tracker within our system. You will be requested to provide this number of any support.

Phone Number

The phone number for the tracker.

Service Provider



Mobile network operator / SIM which your tracker uses.

Share Tracker

Account - User which Can Edit - Toggle whether this shared user should be able to change settings on your device. Status - Active / Pending Remove - Click to remove the device from a shared account.

Tracker Subscription Expiry

Date through which the current device subscription remains active

Alert Time Zone

Time zone to use for alerts sent

Tracker Colour

Select colour of the pin shown on maps in the App or Portal for this tracker.



Tutorials:

Visit the online User Guide to view all Video Tutorials and Step by Step Guides

> https://nuttag.com.au/user-guide

Getting Set Up - (SEEK GPS Instructions)

> https://nuttag.com.au/blogs/user-guide/seek-gps-setup

Getting Set Up - (Portal)

- 1. Downloading the App
- 2. Creating an account
- 3. Adding a device
- 4. Changing your password

Getting Set Up - (iOS)

- 1. Downloading the App
- 2. Creating an account
- 3. Adding a device
- 4. Changing your password

Getting Set Up - (Android)

- 1. Downloading the App
- 2. Creating an account



- 3. Adding a device
- 4. Changing your password

APP

PORTAL Advanced Settings (Portal Only)



Hardware Specifications

Content	Specs.	
Mainframe Dimension (HxWxD)	61mm x 43mm x 16mm	
Net Weight	40g	
3G WCDMA Frequencies	UMTS / HSPA 900 / 2100 MHz	
	UMTS / HSPA 850 / 1900 Mhz	
GPS chip	U-blox 7 (Support AGPS)	
GPS sensitivity	Cold start: -148dBm Hot start: -162dBm	
GPS accuracy	<2.5m	
Time to First Fix	Cold start 32s, Warm start 11s, Hot start 1s	
Charging Voltage	5V DC	
Battery	Chargeable 3.7V 800mAh	
Standby Current	≤2mAh	
Storage Temperature	-40°C to +85°C	
Operation Temperature	-20°C to +80°C	
Humidity	5%-95% non-condensing	

Please adhere to the following guidelines to extend the unit life:

1. Do not use or store the unit in dusty places.

2. Do not put the unit in overheated or over cooled places.

3. To clean the unit, use a dry cloth. Do not clean using chemicals or detergent.

4. Do not disassemble or refit the unit.



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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.



FAQ's Device Operation:

What comes in the box?

The SEEK box contains: 1x SEEK GPS Tracker (including SIM) 1x Charging Cradle 1x Power Adapter 1x Micro USB Cable 1x Welcome card with Nut Number

How can I charge the Tracker?

You can charge SEEK using either the cradle or direct plug into the side. The device will vibrate once to confirm charge flow.

Rebooting your Tracker

Your device can be rebooted remotely or by turning off and on again - to do so, hold both buttons for 1 second, then press side button once.

How does the SOS alarm work?

SOS Alerts are triggered by holding the SEEK button for 3 seconds. Your SEEK GPS must be on and have network coverage.



What is the SIM coverage?

This depends on the Service Provider selected. Refer to below links for coverage maps of each: Telstra - <u>https://mobilemaps.net.au/maps/mcm/3G.html</u> Vodafone - <u>https://www.vodafone.com.au/network/coverage-checker</u> (Search "Nokia 3310 3G")

What do the lights mean?

The LEDs on the side of the device indicate SIM Modem and GPS Chip status. Please refer to table in User Guide for further details.

What accessories are available?

We have a pouch bag for pets and belts, a lanyard for wearing around the neck, and a car charger for installation inside vehicles.

What kinds of alerts can the tracker provide?

SOS, Low Battery, On Charge, Off Charge, Full Battery, No Motion, Online, Offline, Fall Detection, Over Speed, Geofence - for an explanation of each of these, please refer to User Guide.

How can I receive alerts?

All alerts can be delivered via push notification, email and SMS. Up to 4 emails and 4 mobile numbers can be set per device. Note that SMS credits are required to receive SMS alerts.



After Sale Support:

For support you can contact us via;

- Online FAQ's and user guides www.nuttag.com.au/user-guide
- Live Chat at <u>www.nuttag.com.au</u> 10am-5pm EST Monday to Friday
- Support Hotline 1300 66 22 80 10am-5pm EST Monday to Friday
- Email support@nuttag.com.au all emails will be responded to within 24-48hrs

Glossary / Definitions:

Technology:

GNSS

GNSS stands for Global Navigation Satellite System. It is a method of calculating location, velocity and precise timing anywhere on earth based on the signals visible from a satellite constellation, using a combination of trilateration and TDOA (Time Difference of Arrival) algorithms. In order to obtain a location, a GPS device must be receiving signal from at least 3 satellites.

GPS

GPS stands for Global Positioning System - a GNSS operated by the US Air Force, launched in the 1978. There are 33 satellites in orbit at an altitude of 20,180m



AGPS

AGPS stands for Assisted GPS - a method of utilising internet resources to decrease the TTFF (Time to First Fix).

GPS Almanac

The Almanac contains Information on satellite trajectory and timings, must be downloaded by the GPS device for use in location calculations. This information is valid for up to 180 days.

Ephemeris Data

Details on each satellite's detailed orbital information. Transmitted every 30 seconds, and valid for up to four hours. Required for each satellite used in a location calculation.

GPS Chip

The GPS chip is the component which receives and processes the satellite signals.

Time To First Fix

The TTFF is the time taken for a GPS device to acquire satellite signals and calculate a position. It is faster outdoors where there are less sources of interference for the satellite signals.

There are three scenarios - Cold / Factory (first use or after long distance travel / Long period without use); Warm / Normal; and Hot / Standby.

Cold start

Device has no estimates of satellite positions and must start by acquiring a satellite signal. Once found, device can then receive the almanac from this satellite; the almanac is transmitted repeatedly over 12.5 minutes. Once obtained, position calculations can begin based on visible satellites. A Cold Start can take up to 15 minutes.



Warm start

Device has estimates of current time within 20 seconds, current position within 100km and its velocity within 25 m/s, and valid almanac data. The device must obtain ephemeris data for each satellite used in a calculation. A Warm Start can take between 35 seconds and 3 minutes.

Hot start

Device has valid time, position, almanac and ephemeris data. This enables a rapid acquisition of satellite signals. Hot Starts are the fastest and can take between 1 and 20 seconds.

Location Accuracy

Consumer GPS devices have an accuracy of up to 5m, meaning that the calculated position will typically be within 5m of the precise location.

External factors such as weather and obstructions - including heavy roofing, tall buildings, and carparks - can impact the accuracy due to interference with satellite signals.

SIM Modem

In order for the GPS device to communicate its position back to an app it needs to connect to the internet via a cellular service. A SIM modem is used to facilitate this connection.

IMEI

The IMEI (International Mobile Equipment Identity) is a 16 digit number used to uniquely identify a SIM Modem.



GSM

Global System for Mobile communications - this is a type of SIM connection used to provide access to SMS and calling ability. It is used as a fall back when 3G is not available.

GPRS

General Packet Radio Service - this is the SIM connection which provides access to 3G internet.

SIM Modem Frequency

Each SIM Modem is able to communicate on specific Frequencies, determining which SIM cards are compatible. In Australia 850 / 1900 MHz is used for Telstra, and 900/2100 MHz is used for Vodafone.

Device:

Power Button

Located on the side of the device, press this button to turn device on. To turn off, hold both power and SOS button for 1 second. The device will vibrate when turned on / off.

SOS Button

Located on the front of the device, hold this button for 3 seconds to trigger an SOS alarm. Device will vibrate to confirm SOS. This button is also used to answer / end calls for two way communication.

Indicator Lights

Located on the side of the device, there are two indicator LEDs. The Green light indicates SIM Modem status. The Blue light indicates GPS Chip status.



Green LED

Single long flash every 3 seconds - searching for nearby cell towers. Single rapid flash every 3 seconds - Active GSM connection. Double rapid flash every 3 seconds - Active GPRS connection. Constantly on - SIM error.

Blue LED

Single long flash every 3 seconds - acquiring satellite signals. Single rapid flash every 3 seconds - active satellite signals and position recently calculated. Constantly on - currently on charge.

Microphone

Located on the front of the device, the microphone facilitates two way communication.

Speaker

Located on the rear of the device, the speaker facilitates two way communication and the listen-in functionality.

Charging Cradle

The cradle allows a quick and simple method of charging, thanks to the auto-locating notch effortlessly aligning the charging contacts. The device will vibrate once and a red LED on the front of the cradle will remain illuminated when placed on charge.

Charging Plug



Located on the side of the device, this micro USB plug can be used to charge the device. Lift the silicon cover from the bottom tab to access the plug. The device will vibrate once when placed on charge.

Accessories:

Lanyard

The Lanyard is an attachment allowing the device to be worn around the neck. Attach the lanyard by clipping it to the loop on the top of the device.

Pouch Bag

The Pouch Bag is a pocket designed to hold the device, allowing it to be attached to a belt or pet collar.

Car Charger

The Car Charger is an adapter (OBDII to micro USB) to supply the device with power inside a vehicle.

Software:

Mobile App

iOS and Android applications for viewing and using your tracker. Search NutTAG GPS in app stores.

Web Portal

Browser-based portal for viewing and using your tracker as well as configuring advanced settings. my.nuttag.com.au

Basic Terminology:



Device - Online

A device is online if it has an active connection to the NutTAG GPS server.

Device - Offline

A device is offline if it does not have an active connection to the NutTAG GPS server.

Location Update

Each time the tracker calculates a position is a location update, the frequency of updates depends on the selected Operating Mode and Reporting Interval.

SIM Coverage

You can find coverage maps for each provider below: Telstra - <u>https://mobilemaps.net.au/maps/mcm/3G.html</u> Vodafone - <u>https://www.vodafone.com.au/network/coverage-checker</u> (Search "Nokia 3310 3G") International Roaming



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