

Micro Battery Powered Asset Tracker

User's Guide



What's In The Box



Nano GPS Tracker



Charger Cable

Optional Accessories



Weatherproof Magnetic GPS Box

*Reduces the risk of physical damage to
your device*

Micro Battery Powered Asset Tracker

1. Power Button
2. Charging Port
3. Panic Button
4. GPS LED
5. CDMA LED
6. BatteryLED



LED

GPS LED: Blue Light

1. Remains off when the tracker is idle.
2. When the tracker has sensed motion, the GPS LED will steadily blink, indicating that it has received GPS signal.

Power LED: Orange Light

1. The orange light will blink to indicate that the tracker is charging. After the battery is full, the battery light will stay lit.
2. When the battery is low, the Power LED will blink orange at a steady pace indicating that the battery will need to be charged soon.

Note: If the device has not been charged for a long period of time, the orange light may take a few hours to light up and start blinking. If you have not charged the device for a long time and the light does not light up when the device is plugged in, please allow at least 6 hours of charging before powering on the device.

CDMA Signal LED: Green Light

1. This LED blinks to indicate that the device has successfully connected to the CDMA network.
2. If there is no CDMA networks connected, the light will remain off.

Note: When the device is sitting idle, only the green light will blink if it has connected to the cellular network.

Getting Started

You should have received an email containing your default login information; this will be used to configure your device and view tracking information (which will be covered later in this user's guide). If you do not receive your login information, please contact our Support Team at 877-477-9119 or by email at Support@LightningGPS.com

Charging The Device

The first step in using your Micro Battery Powered Asset Tracker is to charge it. To charge, plug the AC adapter into a wall outlet and connect the charger to the charging port. Charge the device for at least 8 hours before first use. When fully charged, the orange light will glow solid (and then stop glowing after a prolonged period of remaining plugged in after it's fully charged). When the device is done charging, disconnect it from the charger and press the power button to turn the device on. Make sure all the rubber port covers are securely in place before first use.

Initial Connection to Satellite Network

Place the tracker on a vehicle dashboard and take it on a test drive of 30 minutes to make its initial connection to the Lightning GPS tracking server. It is important the tracker has a clear view of the sky. Since the device is motion-activated, it is not sufficient to leave it outside or on a window sill for it to register. It must be moving in order to register and report its location.

Powering the Unit On/Off

To power on the unit, hold down the power button for around 3 seconds. You'll see a light reaction. To power off the device, the power button needs to be pressed twice rapidly and held down on the 2nd press, until the red indicator light turns on.

Note: It can take up to a minute for the device to power down after the red indicator light turns on.

Placing Your Device

The device will always give the most accurate location data when it has a clear view of the sky. It is capable of transmitting and receiving through materials like glass, plastic, and cloth, but it is not able to transmit through metals. Keep this in mind when placing the device. Avoid placing the device in the trunk of a vehicle. It may or may not report from a glove compartment or underneath a seat. This interference can vary from vehicle to vehicle, however, as all automobiles are constructed differently.

If you want to track covertly, the Weatherproof Magnetic GPS Box may be the best solution for you. When placing the device beneath a vehicle, be sure that the side with the LEDs is facing down, toward the ground, and that it is as near the edge of the vehicle as possible.

Tracking Your Device

Using the Tracking Cloud Software

1. Login

Key in your username and password on the login page, and press 'Enter.' The list of supported browsers are as follows:

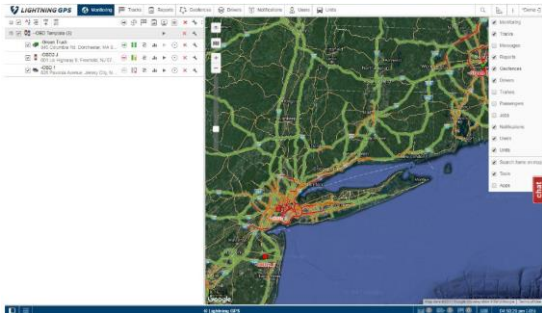
- Google Chrome 55+
- Mozilla Firefox 51+
- Opera 36+
- Internet Explorer 11 (EDGE)



2. Interface

You have entered the main interface of the tracking system. On the left, there is the work area. Here you work with panels like Monitoring, Tracks, Geofences, Jobs, Notifications and so on. These panels are selected in the Main menu above the work area. On the right is usually the map.

The Lightning GPS interface is developed to be user friendly, allowing users to choose which panels of main menu you need to work with. The options are: Monitoring, Messages, Reports, Geofences, Notifications, and Units. (The main menu customizer helps in this task.)



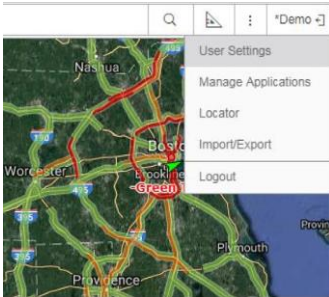
Dragging the map with the left mouse button and zooming it with the mouse scroll, move to the location (city or town) which will be your primary city in the tracking process.

3. User Settings

In order to choose user parameters, click on the username in the right corner of the top panel and press the 'User settings' button in the dropdown menu.

Next, follow the steps:

- Indicate your time zone.
- Select the type of daylight savings time used in your region.



Make sure you have selected the above mentioned settings properly, because they could influence the accuracy of data presented in reports, messages, and elsewhere throughout the system.

Indicate the 'City' setting in the same dialog. It is necessary for the map to be scaled on the chosen city for the following entries to the tracking system.



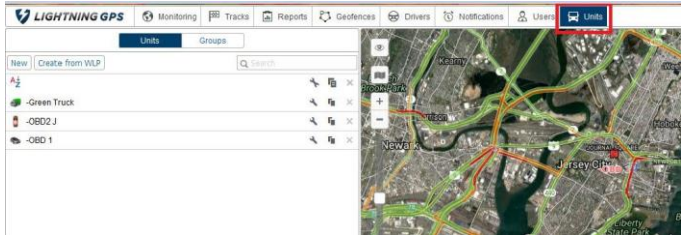
The image shows a 'User Settings' dialog box with a dark blue title bar and a light gray background. On the left, there is a sidebar with three categories: 'General Settings', 'Maps', and 'Account'. The 'General Settings' category is selected. The main area of the dialog contains various settings, each with a label and a control element. The settings are: Language (English), Time zone (UTC-05:00 Eastern time (US)), Daylight saving time (United States, Canada: N), Persian calendar (checkbox), Date format (MM-dd-yyyy), Time format (hh:mm:ss tt), First day of week (Monday), Measurement system (U.S.), City (New York, NY, USA), E-mail (your-email@your-domain.cc), Mobile access (checkbox), Play sound for events (checkbox), and Automatically display popup events (checkbox). There is a 'Change Password' button next to the E-mail field. At the bottom right, there are 'Cancel' and 'OK' buttons.

Category	Setting	Value
General Settings	Language	English
	Time zone	UTC-05:00 Eastern time (US)
	Daylight saving time	United States, Canada: N
	Persian calendar	<input type="checkbox"/>
	Date format	MM-dd-yyyy
	Time format	hh:mm:ss tt
	First day of week	Monday
	Measurement system	U.S.
	City	New York, NY, USA
	E-mail	your-email@your-domain.cc
Account	Mobile access	<input type="checkbox"/>
	Play sound for events	<input type="checkbox"/>
	Automatically display popup events	<input type="checkbox"/>

Preparatory work is finished and it's time to customize.

4. Editing your Unit

Before editing a unit, make sure the device is displaying on the monitoring tab. Open the 'Units' tab in the work area and click the wrench icon next to the unit you wish to edit.



The dialog with multiple unit settings will be displayed. Give a name to the unit, and, if applicable, add in the current mileage. If you are unable to change one of the displayed fields, that field is for the configuration and should not be changed.

Unit Properties – -OBD2 J

General

Access

Icon

Advanced

Sensors

Custom Fields

Unit Groups

Commands

Profile

Service Intervals

* Name:

-OBD2 J

from 4 to 50 characters

Creator:

Account:

Mileage counter:

Mileage sensor

Current value:

23637

mi

☒ Auto

Engine hours counter:

Engine ignition sensor

Current value:

0

h

☐ Auto

GPRS traffic counter:

Reset Counter

Current value:

0

KB

☐ Auto

The 'Icon' tab of the dialog provides an opportunity to choose the most appropriate image for displaying the unit on the map.

New Unit



General

Access

Icon

Advanced

Sensors

Custom Fields

Unit Groups

Commands

Eco Driving

Profile

Trip Detection

Fuel Consumption

Service Intervals

Icon Library

☒ Rotate icon



Cancel

OK

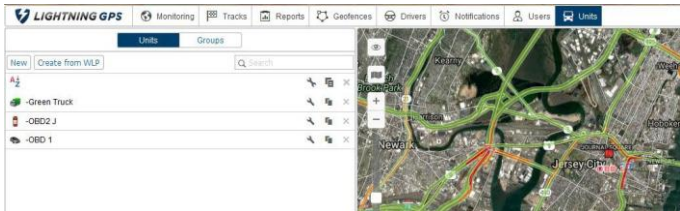
On the 'Advanced' tab specify Speed limit, mph. This setting is used to generate reports on speeding.



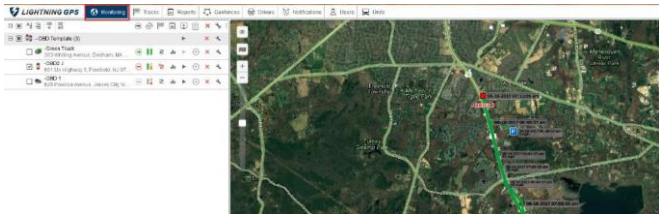
The screenshot shows a 'New Unit' dialog box with a close button (X) in the top right corner. The 'Advanced' tab is selected and highlighted. Below the tabs, there are four input fields for parameters used in reports:

Parameters used in reports	
Urban speed limit, km/h:	<input type="text" value="60"/>
Maximum interval between messages, seconds: ?	<input type="text" value="300"/>
Daily engine hours rate, hours:	<input type="text" value="7"/>
Mileage coefficient:	<input type="text" value="1"/>

At the end, press the "OK" button. The newly created unit will appear in the list. Click on a unit name to locate it on the map.



It will also appear in the monitoring panel.



5. Unit Check

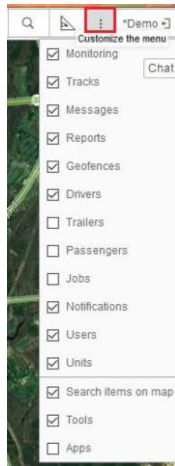
Unit Information Tip

Hover the mouse pointer over the unit in the 'Monitoring' panel or on the map to see the latest data in a tooltip: last message time, location (address or coordinates), speed, etc.



Messages Tab

To export tracking data, use the 'Messages' tab. To switch to the 'Messages' tab, click on the messages panel at the top. It may be hidden to show a simpler interface. To show the message tab, click on the 3 dots on the upper right.



Then in the work area, select an interval to get messages for, and press 'Execute.' Results appear on the right and the statistics are directly below. At the bottom we see the option to export messages. Here we can export our tracking for a specific unit.

LIGHTNING GPS | Monitoring | Tools | Messages | Reports | Calendars | Drivers | Vehicles | Users | Units

Unit: Green Truck

Today: Yesterday | Today | Search

Interval: Specified interval

From: August 05 2017 12:00 am

To: August 08 2017 03:59 pm

Message type: Data messages

Show: Raw data

Statistics:

- Total messages: 2110
- Total time: 11:46:43
- Distance: 373.15 mi
- Average speed: 42.83 mph
- Maximum speed: 56.98 mph

Map: [Map showing vehicle path in blue]

Messages:

ID	Time	Speed, mph	Coordinates	Altitude, ft	Location
1	08-18-2017 12:50:56 am 4		42.243821738, -71.1680378813 (4)	275	Kashan Avenue, Dedham, MA 02026, USA
2	08-18-2017 12:50:56 am 7		42.24471942 98, -71.1634895748 (5)	0	Winnow St, Dedham, MA 02026, USA
3	08-18-2017 12:50:56 am 4		42.2456060976, -71.1634895748 (9)	0	162 Shilling Avenue, Dedham, MA 02026, USA
4	08-18-2017 12:51:56 am 5		42.2465060976, -71.1634895748 (9)	0	244 Shilling Avenue, Dedham, MA 02026, USA
5	08-18-2017 12:51:56 am 4		42.2473960976, -71.1634895748 (9)	0	303 Shilling Avenue, Dedham, MA 02026, USA
6	08-18-2017 12:51:56 am 7		42.2482860976, -71.1634895748 (9)	0	138 River St, Dedham, MA 02026, USA
7	08-18-2017 12:52:56 am 4		42.2491760976, -71.1634895748 (9)	0	Beck St, Dedham, MA 02026, USA
8	08-18-2017 12:52:56 am 19		42.2500660976, -71.1634895748 (9)	0	Sonapee St, Hyde Park, MA 02135, USA
9	08-18-2017 12:52:56 am 4		42.2509560976, -71.1634895748 (9)	0	Millon St, Hyde Park, MA 02135, USA
10	08-18-2017 12:53:56 am 2		42.2518460976, -71.1634895748 (9)	0	Millon St, Hyde Park, MA 02135, USA
11	08-18-2017 12:53:56 am 1		42.2527360976, -71.1634895748 (9)	0	Hyde Park Avenue, Hyde Park, MA 02135, USA
12	08-18-2017 12:53:56 am 3		42.2536260976, -71.1634895748 (9)	0	187 Wagon Wheel Valley Road, Hyde Park, MA 02135, USA
13	08-18-2017 12:54:56 am 14		42.2545160976, -71.1634895748 (9)	0	Wagon Wheel Valley Road, Hyde Park, MA 02135, USA
14	08-18-2017 12:54:56 am 6		42.2554060976, -71.1634895748 (9)	272	71 Millon St, Hyde Park, MA 02135, USA

Export and Import Messages

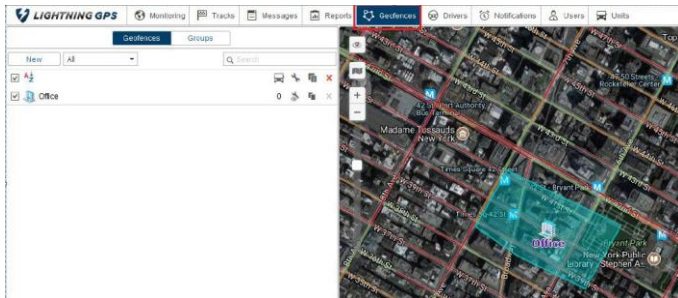
50 | Page | 542 | Displaying 1 to 58 from 2110 messages

08-19-2017 12:11:49 pm: New message from anti/Queen/Track was received at 08-19-2017 12:11:49 pm, via
 08-19-2017 12:11:49 pm: New message from anti/Queen/Track was received at 08-19-2017 12:11:49 pm, via
 08-19-2017 12:11:49 pm: New message from anti/Queen/Track was received at 08-19-2017 12:11:49 pm, via
 08-19-2017 12:11:49 pm: New message from anti/Queen/Track was received at 08-19-2017 12:11:49 pm, via

Time	Speed, mph	Coordinate	Altitude, ft	Location
1 08-19-2017 12:09:16 am 4		42 2430 121738 -71.1680370013 (5)	270	Eastern Avenue, Dedham, MA 02026, USA
2 08-19-2017 12:09:16 am 4		42 2447184218 -71.163489748 (5)		W Avenue 31, Dedham, MA 02026, USA
3 08-19-2017 12:09:16 am 4		42 2438480970 -71.1610448007 (19)		163 Whiting Avenue, Dedham, MA 02026, USA
4 08-19-2017 12:09:16 am 5		42 2451900508 -71.1578512723 (19)		244 Whiting Avenue, Dedham, MA 02026, USA
5 08-19-2017 12:01:30 am 4		42 2437860231 -71.1534048912 (19)		303 Whiting Avenue, Dedham, MA 02026, USA
6 08-19-2017 12:01:26 am 7		42 2417330296 -71.1501481811 (20)		136 Rye 31, Dedham, MA 02026, USA
7 08-19-2017 12:02:16 am 4		42 2424119881 -71.1474382761 (20)		Rye Rd, Dedham, MA 02026, USA
8 08-19-2017 12:02:26 am 10		42 2380475001 -71.1513336109 (20)		Sprague St, Hyde Park, MA 02136, USA
9 08-19-2017 12:02:26 am 4		42 2380789887 -71.1371824113 (19)		Milton St, Hyde Park, MA 02135, USA
10 08-19-2017 12:03:16 am 4		42 2380548024 -71.1327483042 (19)		Milton St, Hyde Park, MA 02135, USA
11 08-19-2017 12:03:36 am 1		42 2380789887 -71.1327483042 (19)		Hyde Park Avenue, Hyde Park, MA 02135, USA
12 08-19-2017 12:03:26 am 2		42 2371959572 -71.1318192508 (19)		197 Needham Valley Place, Hyde Park, MA 02135, USA
13 08-19-2017 12:04:16 am 14		42 2344253044 -71.1223340137 (19)		Needham Valley Place, Milton, MA 02185, USA
14 08-19-2017 12:04:36 am 5		42 234884177 -71.1164746834 (19)	372	76 Milton St, Milton, MA 02185, USA

6. Creating Geofences

Geofences should be created in places of interest, or where notifications are needed. For this, go to the 'Geofences' tab and press the 'New' button.



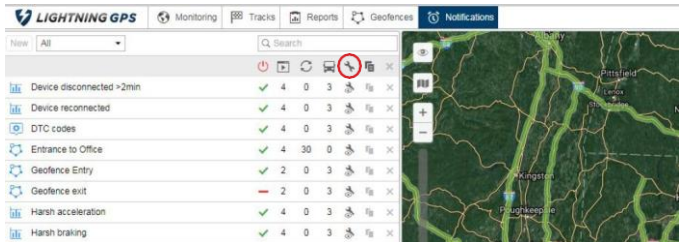
The simplest and quickest geofence type to create is a circle with specified radius. Enter name for the geofence and select the type 'Circle.' Then double-click on the map in the place you wish to place the geofence. Alter the radius if necessary and press 'Save.'



Users can create as many geofences as necessary. If you need a geofence of a more sophisticated form, choose type Polygon or Line. However, in this case a greater number of points is required to connect the geofence borders.

7. Notifications

Now we can create a notification about a unit entering a geofence. Go to the Notifications panel and select a notification from the list. You should see 'entry' and 'exit' for geofence, as well as other notification types.



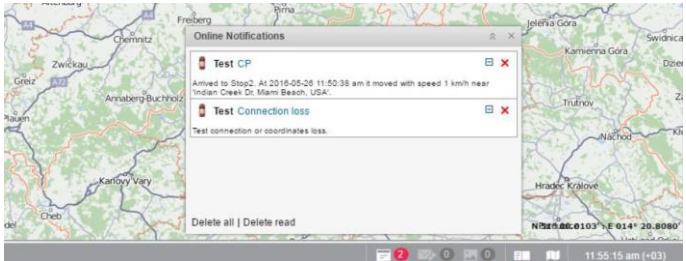
The screenshot shows the LIGHTNING GPS software interface. The top navigation bar includes tabs for Monitoring, Tracks, Reports, Geofences, and Notifications. The Notifications panel is active, displaying a list of notifications. The 'Geofence Entry' and 'Geofence exit' notifications are highlighted. A red circle highlights the wrench icon in the top right corner of the notification list.

Notification Type	Status	Count	Time	Icon	Action
Device disconnected >2min	✓	4	0	3	⚙️
Device reconnected	✓	4	0	3	⚙️
DTC codes	✓	4	0	3	⚙️
Entrance to Office	✓	4	30	0	⚙️
Geofence Entry	✓	2	0	3	⚙️
Geofence exit	✗	2	0	3	⚙️
Harsh acceleration	✓	4	0	3	⚙️
Harsh braking	✓	4	0	3	⚙️

Moving through the dialog with the help of the 'Next' button, set the following parameters for the notification:

First, click the wrench(⚙️).

When the notification triggers, it will appear in the top right corner of the program.



8. Reports

To switch to the report tab, click on the corresponding panel in the menu above the work area.

We have created report templates to make finding the data you need easy. The most useful of these is the activity report as it will have much of the data available in this report in one of the many tables it contains. There are other report types that have been customized to suit your needs so you don't have to search to find important information.

To obtain a report, set parameters in the work area: select report template, unit, and reported interval, and press 'Execute.'

LIGHTNING GPS Monitoring Tracks **Reports** Geofences Notifications Units

Template: 0. Activity reportnew

Object: -Green Truck

Today Yesterday Week Month

Interval: Specified interval

From: August 21 2017 12:00 am

To: August 21 2017 11:59 pm

Clear Execute

Report Templates

New All Search

- Fleet Speeding
- Fleet Trips and Parkings by days
- 0. Activity reportnew

Map showing vehicle track (green line) and locations (Kingston, Poughkeepsie, Newburgh, Danbury, Pittsfield, Lenox, Stockbridge).

The generated report will appear on the right. On the left, you see tabs to navigate between report sections (tables and charts). The report can be exported to various formats or printed (for this, use the commands 'Export to File' and 'Print').



Map data © 2017 Google, Imagery © 2017 Google, Terms of Use | Report a map error

« < 1 of 1 > » Items from 1 to 33 of 33 50 ▾

	No	Beginning	End	Initial location	Final location
🔍	1	2017-08-21 00:00:06	2017-08-21 00:25:36	75 Milton St, Milton, MA 02186, USA	Washington St, Jamaica Pla
🔍	2	2017-08-21 00:25:56	2017-08-21 00:57:06	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	3	2017-08-21 00:57:26	2017-08-21 01:28:36	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	4	2017-08-21 01:28:56	2017-08-21 02:00:06	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	5	2017-08-21 02:00:26	2017-08-21 02:31:36	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	6	2017-08-21 02:31:56	2017-08-21 03:03:06	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	7	2017-08-21 03:03:26	2017-08-21 03:34:36	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	8	2017-08-21 03:34:56	2017-08-21 04:06:06	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	9	2017-08-21 04:06:26	2017-08-21 04:37:36	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	10	2017-08-21 04:37:56	2017-08-21 05:09:06	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
🔍	11	2017-08-21 05:09:26	2017-08-21 05:40:36	5135 Washington St, West Roxbury, MA 02132, USA	Washington St, Jamaica Pla
---		2017-08-21 00:00:06	2017-08-21 16:45:26	75 Milton St, Milton, MA 02186, USA	138 River St, Dedham, MA 020

