

## Pro User Manual

FCC ID:2ATB2-PRO

Due to software updates, your experience of the software interface (including but not limited to software features, user interfaces, and interaction experiences) may differ from the interface presented in this manual. The software interface is subject to change as we continuously work on providing you with the best experience!

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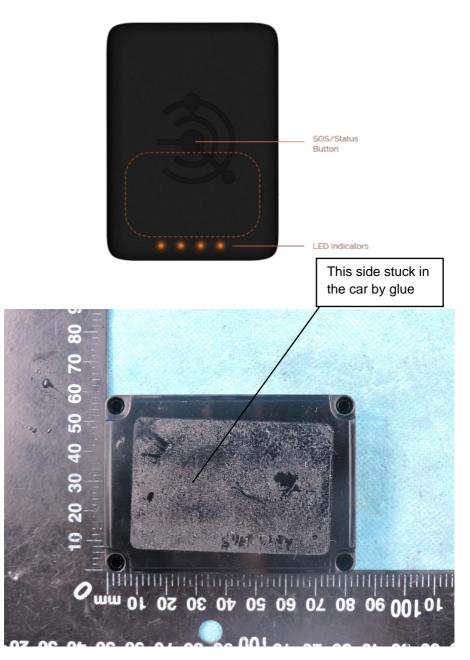
Installation instructions

This on-car device, And is installed in the car.

Note This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

GPS positioning system is also called GPRS, car 3G satellite positioning monitoring system installation instructions. Simply speaking, the GPS positioning system relies on a mobile phone card built in your car terminal, and transmits the signal to the background through the mobile phone signal to achieve positioning. The GPS terminal is this background. Can help you achieve one-click navigation, background services, and other human services. GPS positioning system has been applied to more and more industries with the development of society.

#### Front View [Pro]



Lightbug User Manual

#### Setting up your tracker

This section will highlight how to activate your tracker.

#### Charging your tracker before initial use:

You will need to charge your tracker as follows before initial use:

The LightBug **Pro** needs to be charged **overnight** 

#### Charging your LightBug Pro:

The LightBug Pro can be charged via any standard Qi Wireless Charging Pad.

Charging times vary depending on the wireless charger that is being used so it is advisable to keep your LightBug Pro charging overnight before initial use.

The LED indicators on the LightBug Pro will turn off when it is fully charged.

#### Location of wireless charging coil on the LightBug Pro:

The LightBug Pro has a charging coil which is located just above the logo as shown in the diagram below:

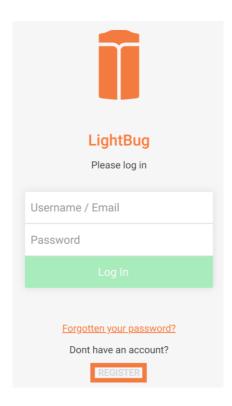


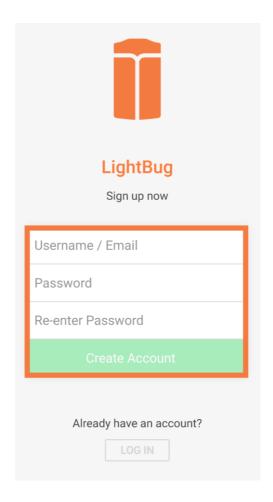
#### Activating your tracker

To activate your tracker you will need to download the LightBug App on your smartphone or visit our web portal: app.thelightbug.com

#### Creating an account:

Once you have downloaded the LightBug App or visited our web portal, you will need to register an account if you do not already have one.





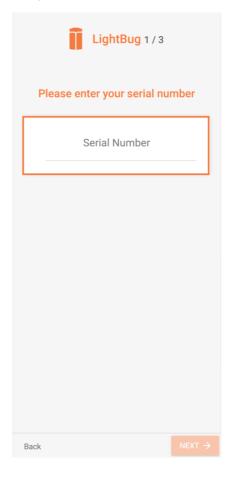
#### Linking your first tracker to your account:

After creating a new account the LightBug App or the web portal will guide you through 3 steps in order to link your tracker to your account.

#### Step 1: Entering Serial Numbers

Enter your tracker Serial Number. The serial number is located on the front side of the LightBug Pro tracker. As for the LightBug Zero, the serial number is located on the back.

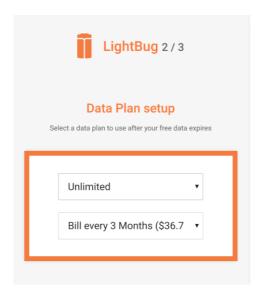
**Hint**: The LightBug App will allow you to scan the barcodes using your smartphone's camera.



#### Step 2: Setting up your Data Plan

Choose a plan and the billing period.

**Hint**: You can change your plan and billing period later on.

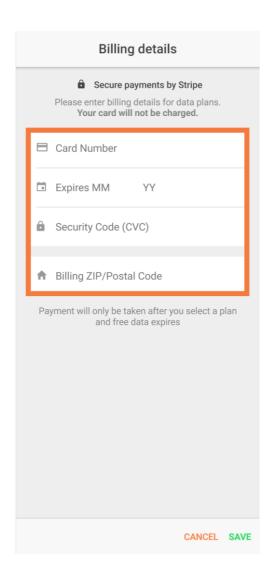


#### Step 3: Adding billing information

Add your billing information so that your tracker will remain active after your free trial period.

**Caution**: Your LightBug tracker will not activate if you do not add your billing information.

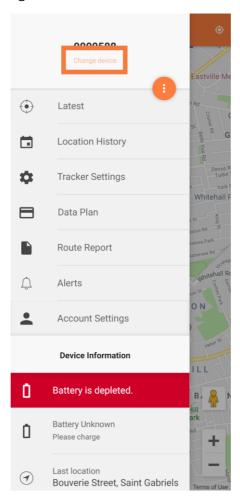
You will not be charged until your free trial period is over.



#### Adding more trackers to your account:

If you would like to add more trackers to the same account you will need to be logged in from the desired account and then follow these 2 steps:

Click on change device:



# + Add a new device Latest Location History Tracker Settings Data Plan Route Report Alerts Account Settings Device Information Battery is depleted.

Scroll down till you see "Add a new device"

Then follow the steps highlighted earlier in this section.

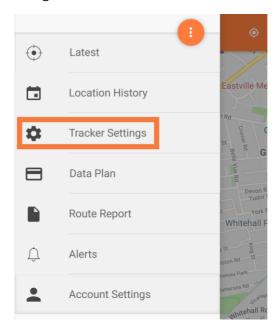
Bouverie Street, Saint Gabriels

Battery Unknown Please charge

Last location

# Configuring your LightBug Tracker using the setup wizard:

You can always change the setting on your tracker via the Tracker Settings tab:



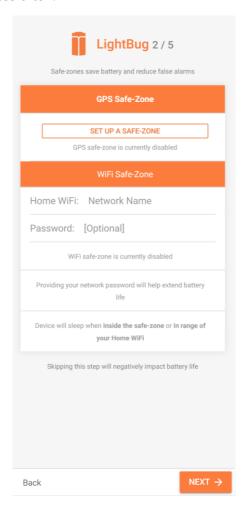
#### Step 1: Naming your tracker

Give your tracker a name so you can quickly identify it if you have more than one tracker on the same account.



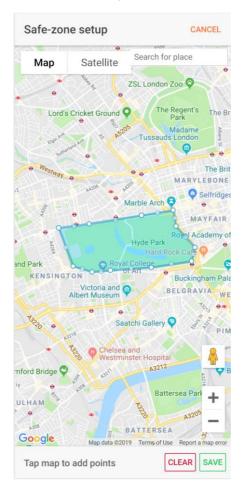
#### Step 2: Setting up GPS and WiFi Safe-Zones

These settings will help you save battery life in areas where tracking is not required and where the tracker can report its location less often.



#### Setting up GPS Safe-Zone:

Selecting "Set up a Safe-Zone" will open a map where you can create a geographical safe zone for the tracker. Simply tap or click on the map and start creating your custom polygon that covers the area you want.

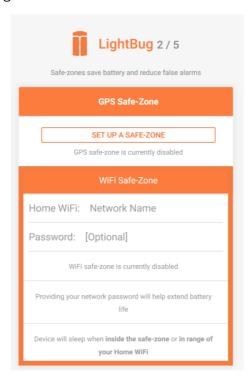


Note: When setting up this type of safe-zone, it is advisable to make it at least 50m by 50m to account for GPS inaccuracies.

**Caution**: When the tracker is inside this safe zone, it will only report according to its sleep interval settings (more information in the following steps)

#### Setting up WiFi Safe-Zone:

Setting up your WiFi Safe-Zone will allow the tracker battery to last longer.

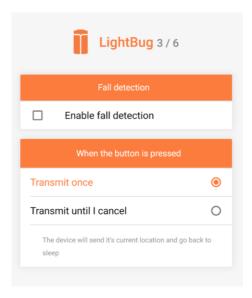


**Caution**: When the tracker is inside this safe zone, it will only report according to its sleep interval settings (more information in the following steps)

#### Step 3: Setting up fall detection and button press

This step allows you to set up fall detection and how the tracker behaves when the button is pressed.

The fall detection feature alerts you when the tracker has been dropped or the person wearing it has fallen.

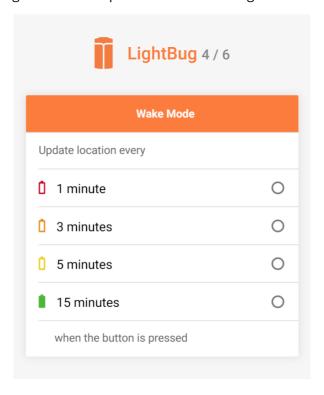


**Note**: Enabling the fall detection feature will automatically create an alert. If you wish you turn off the alert please refer to the Alerts Section.

#### Step 4: Setting up wake mode update interval

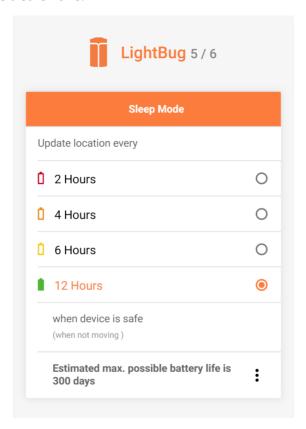
This step allows you to configure how often you want the tracker to update its location when it is moving outside the safe zones.

Hint: Motion sensitivity can be adjusted in the advanced settings section as explained in the following section.



#### Step 5: Setting up sleep mode update interval

This step allows you to configure how often you want the tracker to update its location when not moving or when inside a safe-zone.

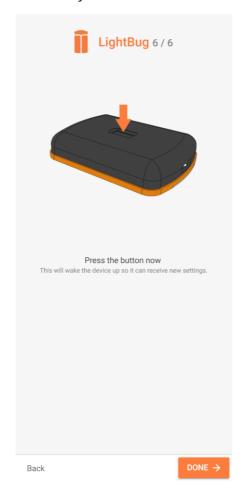


Hint: Longer intervals between location updates will increase battery life so it is advisable to set this to 12 hours.

**Caution**: If your tracker moves outside the safe-zone it will wake up straight away, regardless of this setting.

#### Step 6: Applying the settings

By pressing the button on the tracker the new settings will be applied immediately.



Note: You can skip this step if you do not have your tracker at hand, this will mean the tracker will update its settings the next time it is scheduled to send a location update.

# Configuring your LightBug Tracker using manual configurations:

This section outlines the more advanced settings available to advanced users who want to tweak their tracker to better suit their needs.

To unlock these settings you will have to select "Manual Configuration" in your Tracker Settings Tab.



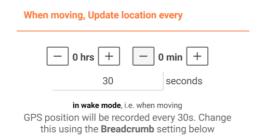
Many of these settings are the same as the ones available via the Setup Wizard, so this section will only cover the settings that are a little different.

### Setting up custom wake and sleep mode intervals

You can adjust wake and sleep mode intervals via these settings if you are not happy with the preset settings in the setup wizard:

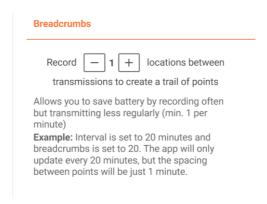


**Hint**: You are able to set the wake mode interval to seconds if you select "0 hrs" and "0 min", this will unlock a box that will allow you to input a custom number in seconds.



#### Setting up Breadcrumbs

Breadcrumbs is a great power saving feature that allows your LightBug tracker to record location updates between transmissions, giving you more details with every location update while saving your battery.



#### Example on how it works:

Say you only want your LightBug tracker to send location updates every 30 minutes but you would like to see more location updates between these 30 minute transmissions. So you set up the Breadcrumbs value to 10, meaning the tracker will record 10 location updates between each transmission (one location is saved every 3 minutes) and send these saved locations all together in one go at the 30 minute mark.

#### Other advanced settings

To unlock this you have to scroll all the way down in your Manual Configuration until you see "Advanced Settings". Click/Tap on the message and you will see more settings show up.



**Caution**: This is for advanced users only, so please do not change any settings that you are not sure of. You can contact us at any time if you need further explanation on these settings or if you need our advice on optimal configurations.

#### Movement Settings:

This enables you to change how sensitive your LightBug tracker is to motion and how long it has to remain stationary in order to count as a stop.

Movement Settings
0
Movement Threshold (1/5) - higher values mean the device needs to move more before waking up.
Wait at least — 90s + after movement stops before sending a location and returning to sleep mode
If you are mainly interested in where device has stopped (and not how it got there), you can set a short timeout with a longer transmit interval

#### Adjusting Motion Sensitivity

You can adjust how sensitive your tracker is to motion and vibrations via the slider shown below.

# Movement Settings

Movement Threshold (1/5) - higher values mean the device needs to move more before waking up.

Moving the slider all the way to the left (1/5) means the slightest tap will wake up the tracker and trigger wake mode if your tracker is outside the safe zones.

Moving the slider all the way to the right (5/5) means the tracker will need more of a shake to trigger wake mode if your tracker is outside the safe zone.

#### Adjusting Wake Mode Timeout

You can also adjust how long the tracker should remain still before it transmits a location update and enables sleep mode.

stops before sending a location and returning to sleep mode

If you are mainly interested in where device has stopped (and not how it got there), you can set a short timeout with a longer transmit interval.

#### **GPS Settings**

This allows you to program how long the tracker should wait on a GPS signal before resorting to other location technologies and how long it should wait on a more accurate GPS signal once it has a GPS fix.



The first field allows you to select how long the tracker should wait for a GPS signal before giving up and using WPS or GSM triangulation.

The second field allows you to select how long the GPS should run for after getting a GPS fix in order to improve accuracy.

#### Misc. Behavior Settings

There are further settings that you can enable. Again we advise you not to change any of these unless you are certain you know what you are doing.

Misc. Beh	navior Settings	
	Leave the GSM on when awake	
	Leave the GSM on when asleep	
	Leave the GPS on when awake	
	Disable WiFi accuracy assist	
	Always send same location in sleep	
	Disable Bluetooth	
	Disable WiFi	
SAVE		

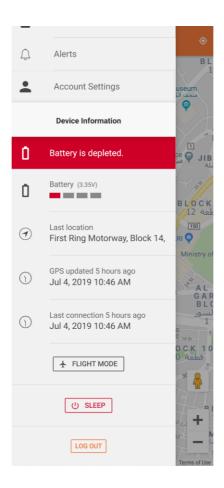
# Using the LightBug App and Web Portal

The LightBug App is available for both Android and iOS devices. You can also access your account from any browser (including smartphone browsers) by visiting app.thelightbug.com

Note: The web portal works and functions exactly as the LightBug App but you will only receive notifications to your phone if you have the App installed.

#### The Side Menu

The side menu has all your tabs along with some information about your tracker:



#### Battery status:

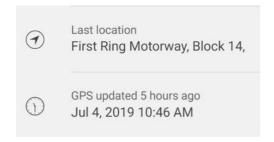
Battery status is shown by these 4 bars. By default an alert will be triggered when the battery level is below 25%.



Caution: Battery level is sent along with every location update meaning if your last location update was 2 days ago, the battery status you are seeing is what it was 2 days ago!

#### Last location:

Here you can see the last location update details along with the time stamp:



#### Other buttons:

Flight mode button allows you to put the tracker into airplane mode so that it is safe to board a plane.

This will open a popup where you can set an automatic timer after which the tracker will automatically wake up and resume operations.



Hint: You can wake your tracker up prematurely by pressing the button on the tracker.

Sleep button will put the tracker to sleep for up to 24 hours.

Pressing the sleep button will open up a warning menu like the one below:

#### Are you sure?

This will lock the device in sleep mode for up to 24h. Use this command to **temporarily disable location updates** when moving.

To wake the device up, physically **press the button** on the front of your unit.

You **will not** be able to wake it on from the app

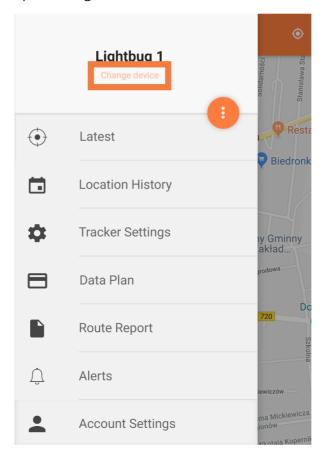
CANCEL SLEEP

LOG OUT

This will allow you to logout of your account.

## Selecting a Tracker

In the LightBug App you will need to open the side menu and then tap on change device:

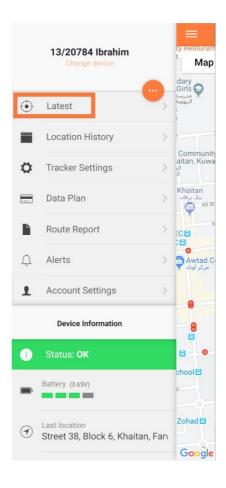


A list will appear with all your trackers and you can tap on the one you would like to choose.

In the Web Portal the side menu will be opened by default.

## Latest Tab

The Latest location history tab show you the last 10 location updates along with the last know location of the tracker:





The popup message will display further information about the tracker such as:

- Date & Time of the last location update
- Street address of your tracker
- If the tracker is moving it will display the speed in KM (or Miles depending on your settings), otherwise it will display "stationary"

#### What the buttons do:

This button, located on the top right, will pan the view of the map to center your tracker's last known location

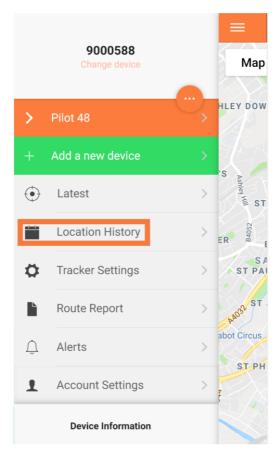
This button, located at the bottom, will show you the tracker status. Clicking/tapping on this icon will display more information on when the next update can be expected.

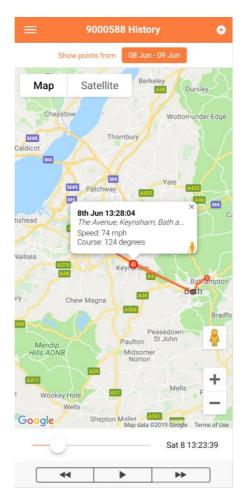
Caution: Tracker status might be showing as "asleep" even though it is in wake mode. This is because the tracker goes into sleep mode between transmissions to save battery.

## Location History Tab

This will display the location history of the selected tracker for the selected time period.

Hint: We do not have a limit on stored data so you are able to go back in time and view location history from day 1 of your purchase!





What the buttons do:



This button, located on the top right, will pan the view of the map to center your tracker's location history.



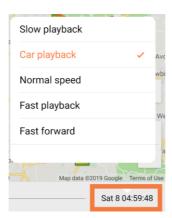
This enables you to set a start and end date for the location history you would like to see.



Moving this slider allows you to look at a specific time within the selected dates.



This allows you to auto play the location history.

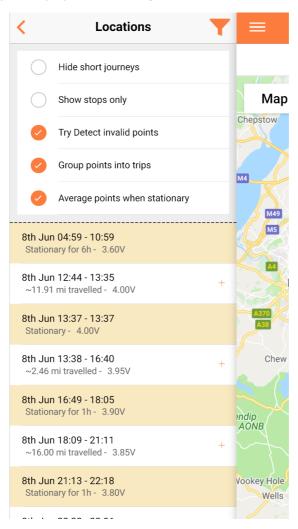


Tapping/clicking on the time and date here will allow you to adjust the playback speed.

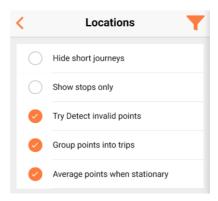
**Hint**: When using the LightBug App, for better slider sensitivity it is advisable to see one day at a time or holding your phone in landscape mode.

## Trips Tab & Filters

This will be displayed by default on the Web Portal. LightBug App users have to click the tab button again when in location history to display the following:



Here you can see your location history grouped into trips along with the stops.



The Filter button on the top right will give you more control over how your history is displayed along with what information is displayed.

8th Jun 22:22 - 22:36
~0.22 mi travelled - 3.80V

Tapping on a trip will expand the view to show you the trip points for more details.

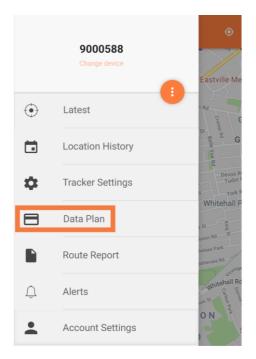
9th Jun 00:30 - 14:39
Stationary for 14h - 3.70V

Stops are highlighted,
tapping on a stop will pan the map view to show you where
the stop occurred.

#### Data Plan Tab

The Data Plan Tab allows you to manage your tracker subscription and billing information.

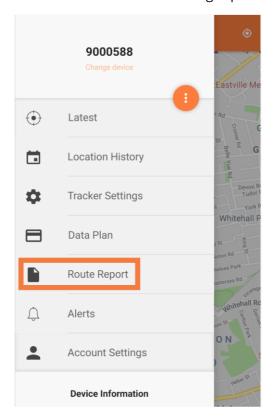
Hint: Making changes in this tab only affects the selected tracker. If you need to manage the subscription for another tracker be sure to select that tracker before you make the changes!



**Caution**: Trackers with no billing information will not be active.

## Rout Report Tab

This tab shows a text report of your tracker's location along with the distance travelled and the average speed.



You are able to select the dates for your report at the top as shown on the next page

# **■** Report for 9000588

Show report from

06 JUN - 08 JUN

#### 15:36:58 08 Jun

#### London Road Junction

Bailbrook, Bath, Bath and North East Somerset, South West England, England, BA1 7HZ, United Kingdom

0.139 mi

1.2 mph

#### 15:43:01 08 Jun

#### A4, Bathampton

Bath, Bath and North East Somerset, South West England, England, BA2 6SL, United Kingdom

0.093 mi

1.2 mph

#### 15:48:20 - 16:26:40 08 Jun

#### Bath Archers

London Road West, Bailbrook, Bath, Bath and North East Somerset, South West England, England, BA1 7DD, United Kingdom

0.325 mi

0.3 mph

#### 16:32:09 - 18:00:50 08 Jun

#### Bathampton Manor

Mill Lane, Bathampton, Bath and North East Somerset, South West England, England, BA2 6TS, United Kingdom

0.149 mi

0.3 mph

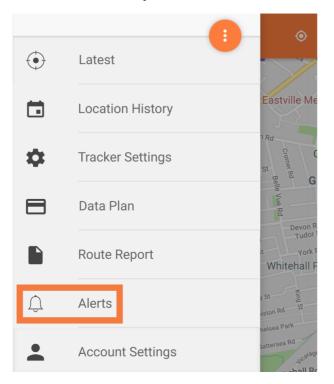
#### 18:05:17 - 18:22:23 08 Jun

#### Bath Archers

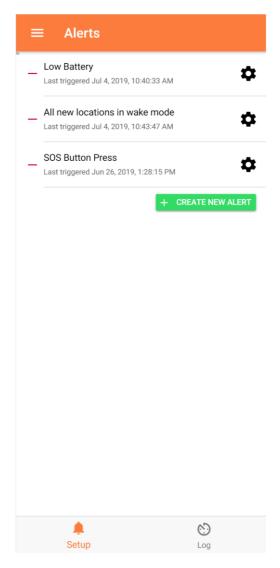
London Road West, Bailbrook, Bath, Bath and North East Somerset, South West England, England, BA1 7DD, United Kingdom Your trip report should look like the following with the distance travelled at the bottom left of each section and the average speed on the bottom right.

#### Alerts Tab

The Alerts Tab allows you manage your alerts and notifications. Here you can create alerts, edit existing alerts and customize how/when you would like to be notified.



After opening your Alerts Tab, you will see a full list of your alerts as shown on the next page



#### What the buttons do:



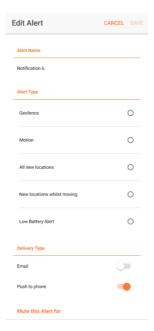
This will show you the log of your recent alerts.

- This will allow you to edit an existing notification.
- This icon, located on the left of each alert will allow you to delete a an alert

Caution: Some Alerts cannot be deleted and will be automatically generated. To disable these you will need to edit the alert and disable all the delivery methods. (More details in the following sections)

### Creating new alerts:

Once inside your alerts tab you can create a new alert by selecting "CREATE NEW ALERT" button.



Below is a description on what each section does:

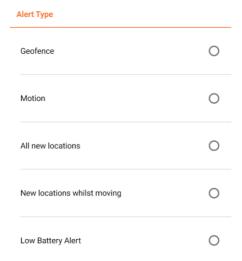
### 1) Naming your alert

Naming your alert will allow you to quickly identify it later. The name set will also be displayed on every notification you get relating to that alert.



### 2) Setting the alert type

There are quite a few alert types to choose from:



Geofence alerts will trigger when your tracker sends a location update outside the set Safe Zone.

Motion alerts will trigger whenever the tracker moves or detects motion. Motion sensitivity can be adjusted, more information available in the advanced settings section.

All new location alerts will trigger whenever there is a new location update sent by the tracker regardless of motion.

New locations whilst moving alerts will trigger when new locations updates are sent by the tracker but only when there is motion or movement.

Low battery alert will trigger when the battery level reaches 25%.

#### 3) Setting the delivery methods

Here you can set how you are notified.



Enabling Email alerts will allow you to set which email you would like to receive the alerts on.

Enabling Push to phone will send alerts in the form of notification to your smartphone.

Caution: Push to phone alerts do not work for the web portal, you will need to download the LightBug App on your smartphone in order for this to work.

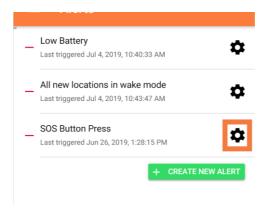
#### 4) Setting how often you are notified

Here you can mute a triggered alert for some time before the same alert is triggered again.



## **Editing Existing alerts:**

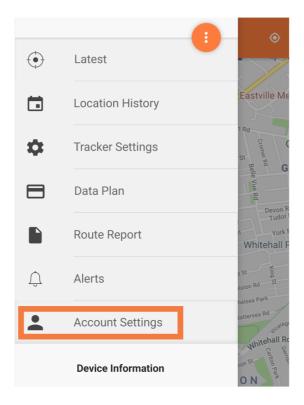
Once you are in the alerts tab, you can edit your alerts by pressing on the cog icon:



Then follow the instructions outlined in the previous section.

## **Account Settings Tab**

This tab allows you to set account preferences, delete your data or change your password.



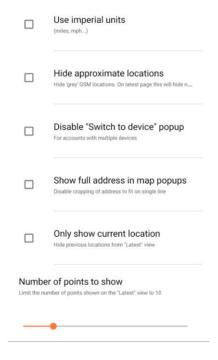
## Deleting your tracking history:

After ensuring you have selected the correct tracker, you can delete all your tracking history from this button:



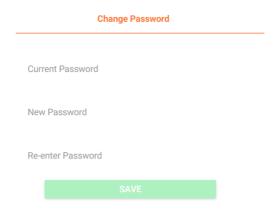
#### Account Preferences:

Here you can control how things are displayed on your App and inside specific tabs.



## Changing account password:

You can change your password in the account settings tab by scrolling all the way down to this section:



**Caution**: If you forgot your password or you are having any difficulty with this, just send us an email and we will do the needful.

# LED Indicators and Button presses

This section will outline what the different types of button presses are and how you can find out the battery status and the signal strength through the LEDs rather than the App.

# Battery and signal strength - Short button press

A quick press of the button on your tracker (less than one second) will show you the device status over 3 stages:

#### Stage 1:

Battery status will appear in stage one where the LED lights will turn on from left to right to indicate the current battery status.

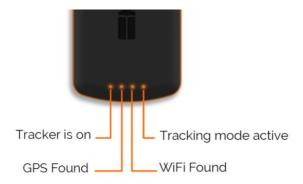


#### Stage 2:

Signal strength will appear in stage two where LED lights will turn on from right to left to indicate the 2G/4G signal strength.



Stage 3:
Additional information will appear in stage three where the LED lights will turn on to show the following:



# SOS / Force update - 1 to 3 second button press

Pressing the button for 1 to 3 seconds will force the tracker to connect, update settings and download any firmware updates.

This will also trigger an SOS alert if configured to do so via the LightBug App.



This mode will turn on the LEDs in a sequence from left to right.

## Device Reset – 10 second button press

If for any reason your tracker is not responding or is behaving oddly, you can reset your tracker by pressing and holding the button for 10 seconds.

Hint: Performing this reset will not affect your settings.

# **FCC Warning**

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.

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

**Note:** 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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.