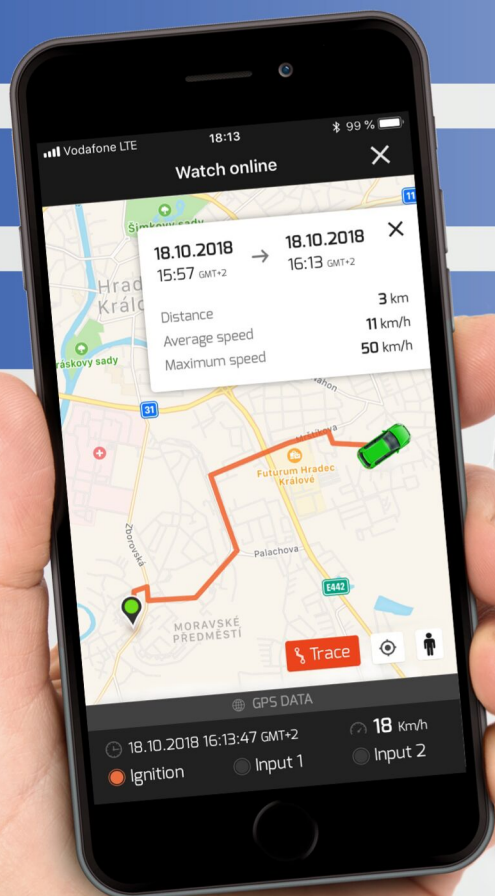


# USER MANUAL

## ETLOC-50 SECURITY



GPS SECURITY  
& Vehicle Tracking



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## Overview of the ETLOC-50 SECURITY vehicle unit

- a) Vehicle security
- b) Online vehicle monitoring (only available in data mode)
- c) Remote control (on/off) of appliances in the vehicle (e.g. external heater, siren, warning light etc.)
- d) Travel history (only available in data mode)
- e) Zone monitoring - Entry to zone, exit from zone and geofence (In data mode only)
- f) Monitor vehicle battery voltage
- g) Monitoring the maximum speed of the vehicle
- h) Safe shutdown of the vehicle engine
- i) Switching off the unit

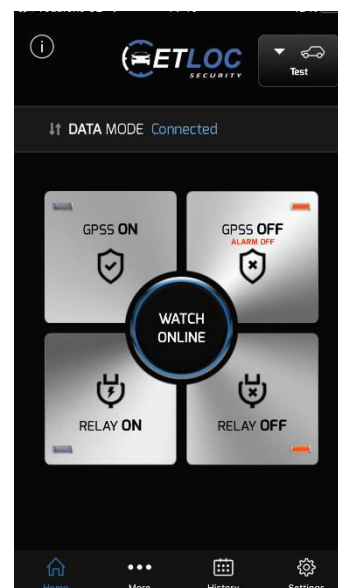
The individual functions are described in detail in the section **Functions of the Vehicle Unit**.

## Control and method of communication with the unit

The ETLOC-50 SECURITY vehicle unit is controlled by the **ETLOC Security mobile application**.

The user can decide whether the ETLOC Security mobile application will communicate with the vehicle unit using either **data** or **SMS commands**.

**A) Data mode** is more dynamic, allowing feedback between the mobile application and the vehicle unit. At the same time, it offers full use of all the vehicle unit features, including driving history and online vehicle monitoring. It is especially suitable for frequent communication with the vehicle unit.



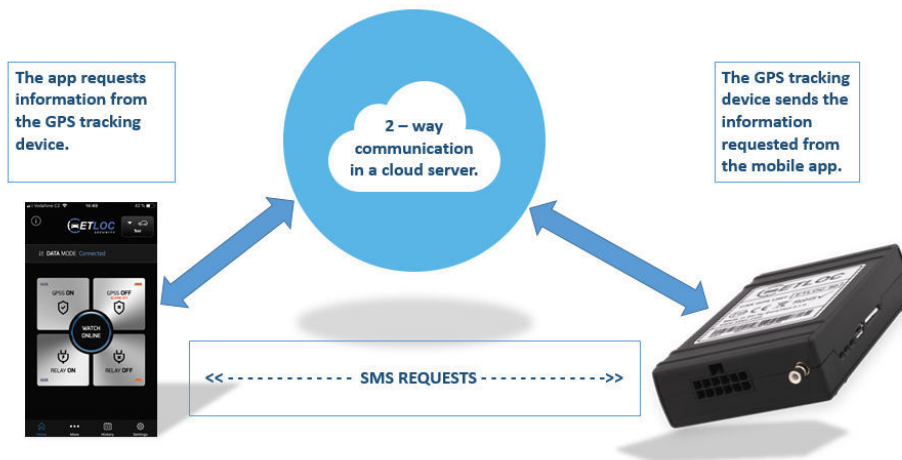
### HOW DOES IT WORK?

The vehicle unit uses a standard SIM card with a dynamic IP address (the IP address is automatically assigned to the vehicle unit by the mobile operator and may be different each time). For this reason, the vehicle unit uses a **communication server** to transmit the two-way communication between it and the mobile application.

The vehicle unit maintains a connection with the **communication server** and awaits the commencement of data communications from the mobile application. If data communication with the vehicle unit doesn't start within the set **connection time** (the connection time is set to 24 hours after entering a new vehicle in the app), the unit automatically disconnects from the **communication server**.

Reconnect the vehicle unit to the **communication server** via the mobile application (specifically, with the automatically generated SMS command **CONNECT**).

The user can select at **connection time** of between 1-5 days where the vehicle unit will remain connected to the communication server. Whenever there is new data communication between the vehicle unit and the mobile application, the **connection time** is reset and will run again from the start.



## PROTECTION OF PERSONAL DATA

All data related to each trip is stored in the memory of the vehicle unit or in the mobile application. Only the user has access to this data.

The **communication server** does not collect any data or personal information from the users. The main task of the **communication server** is to provide data communication between the vehicle unit and the user.

The producer declares that all personal data is considered to be strictly confidential and handled in accordance with European Parliament Regulation 2016/679 on Personal Data Protection (GDPR).

### SIM card requirements for data mode

- A standard prepaid or contract SIM card (dynamic IP address)
- Mobile data must be active. Find out your APN (username and password may also be required) from the mobile operator to ensure that you have Internet access.
- We recommend that you activate roaming when travelling abroad
- The PIN must be disabled on the SIM card

**B) SMS mode** - this is the classic direct communication method using SMS commands. This method is slow and without feedback between the mobile application and the vehicle unit. Using SMS commands does not allow you to take full advantage of all features in the vehicle unit. This method is particularly suitable for occasional communication with the vehicle unit.

### SIM card requirements for SMS mode

- A standard prepaid or contract SIM card
- We recommend that you activate roaming when travelling abroad
- The PIN must be disabled on the SIM card

# Installation of the ETLOC Security mobile application

## Setting up a new unit

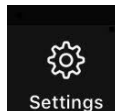
1) Install the **ETLOC Security** mobile application by scanning the QR code below:



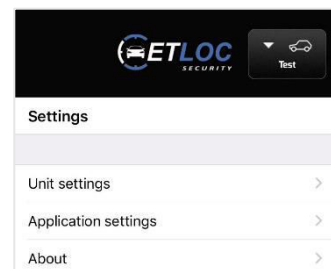
2) Open the **ETLOC Security** mobile app



3) Click on the **Settings** icon.

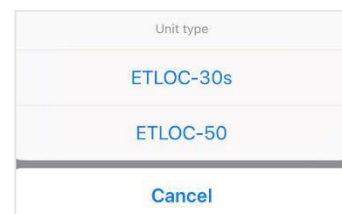


4) Choose **Unit settings** and then **Add new unit**.



5) From the dialogue box **Unit type** choose **ETLOC-50**.

*Note: For compatibility reasons, it is possible to add older ETLOC-30s units to the mobile app. These units are only supported in SMS mode.*



6) On the **Add new unit** screen, enter all parameters that apply to the new vehicle unit:

**Vehicle registration No.**

Enter the vehicle registration number or other identification of the vehicle.

**Unit telephone number**

Enter the telephone number (in international format) of the SIM card of the device installed in the vehicle.

**Unit PIN**

The pre-set PIN of the new vehicle unit is **4321**. If the PIN has already been changed, please enter your current PIN (this is not the SIM card PIN which must always be turned off).

**Method of communication**

Specifies that the application will communicate with the unit in **SMS mode** or **DATA mode**. If the service settings on the SIM card allow it, we recommend using data communication (you can find more information about the individual modes on page 2).

If you select **DATA mode**, you must fill in the required parameters for starting data communication in the open dialogue box.

**IMEI**

Unique vehicle unit identification. The IMEI can be found on the label of the vehicle unit or on the packaging.

**Server**


The IP address of the communication server which manages all communication (do not change the pre-set value 217.198.117.175).

**PORT**

Port communication server which manages communication (do not change the pre-set value 5555).

**APN, username and password**

The APN is the name of the gateway between the mobile network and the internet (this setting is dependent on the provider of the SIM card inserted into the vehicle unit).

**DATA mode** is activated by pressing  and sending the configuration SMS. Wait a few seconds and the vehicle unit and mobile application will be connected.

**Relay switch from main screen**

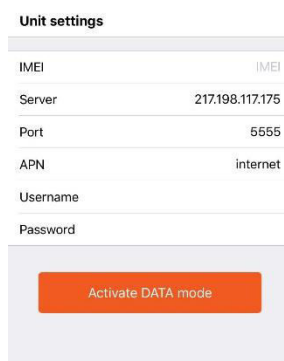
Sets the time that the unit relay is switched when operating from the main screen of the mobile app.

**Relay switch during alarm**

Sets the unit relay behaviour when the **input alarm and GPS alarm** is triggered.

**Authorised telephone number for alarm SMS**

Set up phone numbers for the unit to send an alarm SMS when the **Input alarm, Area alarm or System alarm** are triggered. At least one telephone number must be entered. For each phone number you



enter, you can individually select the type of alarm SMS. You can enter a maximum of 3 numbers.

**Call the first telephone number**

When this function is on, the unit will call the first phone number pre-set for the alarm type, as well as sending an alarm SMS (**only for GPS alarm and Input alarm**).

**Send GPS position as a link**

Specifies whether you receive the SMS with GPS position in text or in the form of a direct HTML link. If you control the unit with a smartphone, we recommend that you keep this switched on.

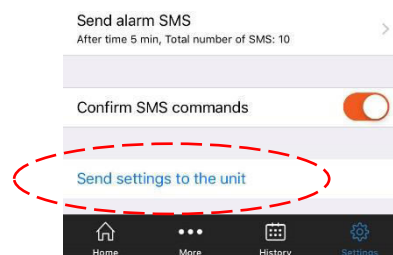
**Send alarm SMS**

Sets whether the GPS alarm is to be sent after a certain distance travelled or after a set time. It also sets the total number of SMS messages sent within one GPS alarm.

**Confirm SMS commands**

When enabled, the unit will acknowledge all received SMS commands by SMS.

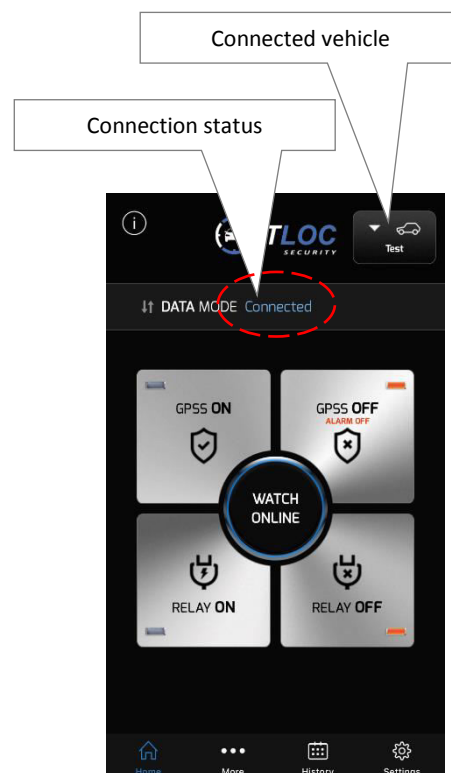
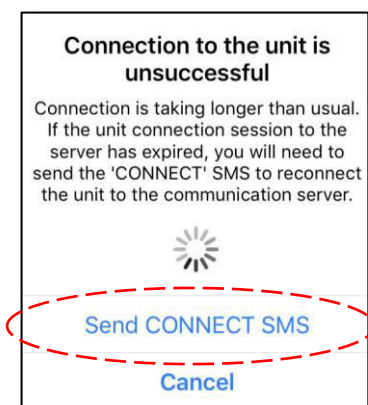
7) After entering the parameters, touch the **Send settings to the unit** link.



**CAUTION (DATA mode only)**

Every time you launch the Autopatrol mobile application, wait until the data communication between the vehicle unit and the mobile application is established (during this connection, the functions in the mobile application are unavailable). Establishing data communication is signalled by the green sign '**Connected**'.

If the mobile application fails to establish data communication with the vehicle unit, the information window informs that the vehicle unit has been disconnected from the **communication server**. This section includes the **Send CONNECT SMS** link, which, when pressed, will once again establish a connection session.





# Functions of the vehicle unit

## a) Vehicle security

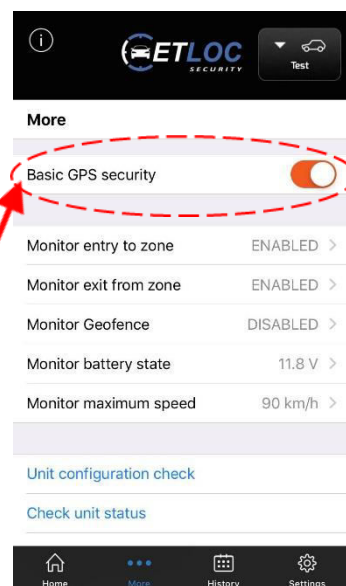
The ETLOC-50 SECURITY vehicle unit can be used to secure the vehicle either separately (GPS security mode and the enhanced GPS security level of GPSS) or in conjunction with an external car alarm (INPUT security mode).

In the event that vehicle security is disrupted, the alarm is triggered, informing the user and autonomously controlling the integrated relay in the vehicle unit.

### GPS security

The GPS alarm mode will activate an alarm if the vehicle is moved when the ignition is switched off (this security feature is effective predominantly when the vehicle is being towed). We recommend that GPS security is permanently switched on. There is no need to deactivate it when you start the vehicle, as the GPS alarm automatically deactivates whilst driving.

You can permanently switch off GPS security by clicking on **More** and then deselecting the **Basic GPS Security** option.

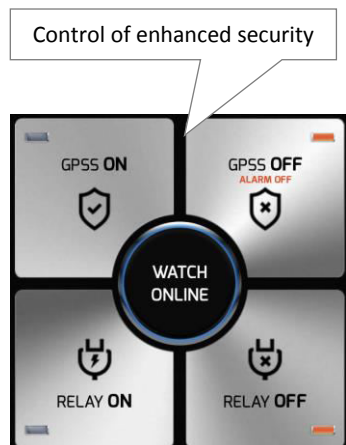


### Enhanced GPS security (GPSS)

This security mode is the same as the above-mentioned GPS security mode, but starting the vehicle (ignition state) is not taken into account. The alarm will be activated every time that the vehicle is in motion.

Enhanced GPS security mode is controlled via the mobile application. There is also an option to dial the phone number of the vehicle unit from an authorised phone number. If GPSS security is turned on, it will ring twice and then reject the call. If GPSS security is turned off, the call is instantly rejected.

Note: The LED indicators on the buttons indicate whether the enhanced GPS security is active or is switched off. The indicators may not always indicate the current protection status if you are using SMS communication mode, as this lacks the synchronisation between the mobile app and the vehicle unit.



### INPUT security

INPUT security mode is only operational if an external car alarm is connected to the vehicle, the output of which is connected to the vehicle unit or an SOS button is installed in the vehicle.

INPUT protection is always active. The alarm is triggered by activation of the car alarm (siren activation) or by pressing the SOS button.



## Alarm

Alarms can be announced as follows:

- a) Disruption of GPS security or enhanced GPS security - GPS alarm
- b) An external car alarm or SOS button - INPUT alarm

### GPS alarm

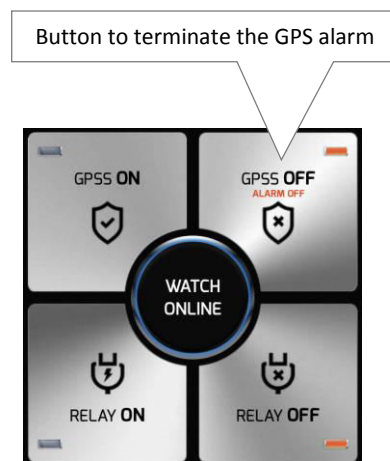
After the GPS alarm has been announced, SMS messages are sent to the authorised phone numbers (up to 3 authorised phone numbers), and then periodically after the pre-set period (this period can be set in minutes or kilometres). By default, 10 SMS are sent within a 5 minute duration during the GPS alarm.

Additionally, you can activate the function to call the first phone number from the authorised list. When this function is on, the unit will call the first phone number pre-set for the alarm type, as well as sending an alarm SMS

The GPS alarm can also autonomously control the integrated relay in the vehicle unit to actively respond to the situation, such as activating a siren or a warning light.

**Note:**

*Terminating the GPS alarm is done via the mobile application (ALARM OFF button) or by dialling the phone number of the vehicle unit from an authorised telephone number.*



The vehicle unit has an intelligent algorithm for announcing **GPS alarms**. However, in rare cases, a false **GPS alarm** may be issued which is no fault of the device nor is it an installation error. This situation can occur, for example, in garages and in the vicinity of high-rise buildings, where the vehicle unit can receive a weak or deflected GPS signal.

### INPUT alarm

After an **INPUT alarm** has been announced, only one SMS information message is sent to the authorised telephone number (up to 3 authorised telephone numbers can be entered). The content of this SMS can be edited by users in the settings of the mobile app.

Additionally, you can activate the function to call the first phone number from the authorised list. When this function is on, the unit will call the first phone number pre-set for the alarm type as well as sending an alarm SMS

The **INPUT alarm** can also autonomously control the integrated relay in the vehicle unit to actively respond to the situation, such as activating a siren or a warning light.

**Note:**

*If a GPS alarm has been announced, you will not be notified of an INPUT alarm.*

*In an information SMS, the time is displayed in GMT. If your mobile operator supports local time corrections, these corrections will also be included in the information SMS messages (e.g. 10:02:04GMT +02:00h).*

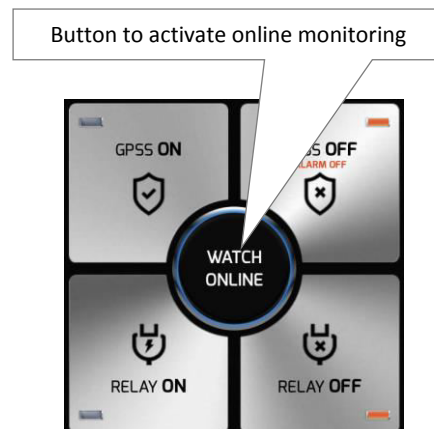
## b) Online vehicle monitoring

ONLINE vehicle monitoring is only available in DATA mode. The function is activated with the **WATCH ONLINE** button – when pressed, a window will open showing a map and the current vehicle position.

The current ignition status of the vehicle is indicated by the colour of the vehicle icon:

PURPLE ..... Ignition off

GREEN ..... Ignition on



*Note:*

*If the vehicle is moving, the vehicle icon will also move along the map (the vehicle icon will move at irregular intervals - it is controlled by an intelligent algorithm that takes into account, for instance, when the vehicle changes direction).*

Shows the current or last route driven on the map.



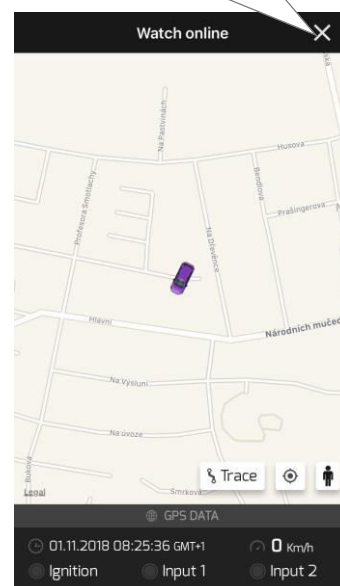
Fixes the vehicle in the centre of the screen (the base map moves)



Displays the user's location on the map background



Button to deactivate online monitoring



If you are using SMS communication, you can still use the **WATCH ONLINE** button. The button generates an SMS requesting the current position of the vehicle. The vehicle unit responds to this request by sending an SMS message containing the current vehicle position (in the form of a link to the map).

### c) Remote control of appliances in the vehicle

This function allows you to remotely control the (non-alarm) switching relay that is integrated into the vehicle unit. You can control, for instance, external heaters, warning lights, sirens and other circuits in the vehicle.

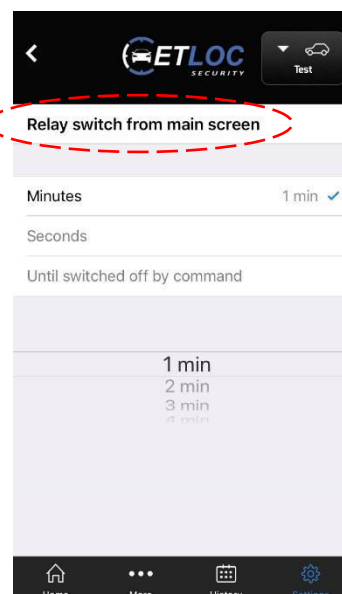
The relay can be switched on/off or on for a pre-set set time.



Remote control of appliances

**Note:**

You can set-up the relay activity during the addition of a new vehicle unit or, additionally, in the **unit settings** by clicking **Relay switch from main screen** (see the chapter on **Settings**).



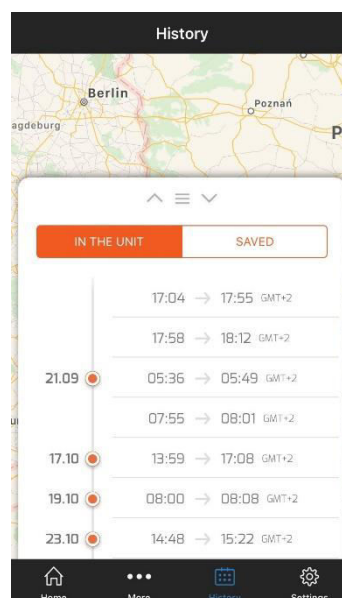
### d) Travel history

The **travel history** function is only available with data communication (DATA mode). Activate the function by pressing the **History** icon to open a calendar with your travel history.



**Note:**

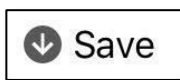
Individual journeys are regularly stored in the memory of the vehicle unit. When the memory is full, the oldest journeys are automatically replaced by the most recent ones. The user has the ability to download and save selected journeys from the memory of the vehicle unit to the memory of their mobile phone.



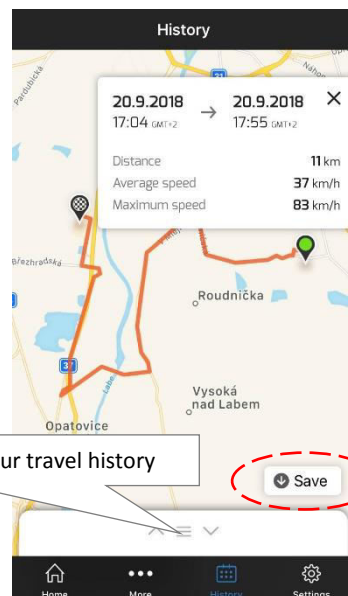
Click on a specific journey on the calendar of travel history to see the complete route and its parameters on the map (date, start and end time, driving distance, average and maximum speed).

By moving your fingers apart/together, you can zoom out/in on the map.

Use the **Save** button to save the displayed route to the memory of your mobile phone.



Click here to once again open your travel history



### e) Zone monitoring – entry to zone, exit from zone and geofence

**Monitor entry to zone**, **Monitor exit from zone** and **Monitor Geofence** are only available with data communication (DATA mode).

These three functions have a similar application. They allow you to set up a **monitored zone** via the Mobile App and, depending on the specific function, monitors whether the vehicle has entered or left the **monitored zone**.

In the event that the boundary of the **monitored zone** is breached, an **Area Alarm** is announced and an alarm SMS is sent to the pre-set, authorised telephone numbers.



#### Activate zone monitoring:

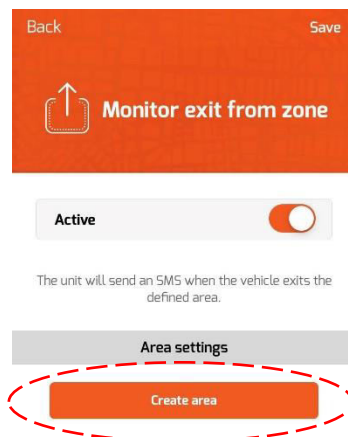
1) Click on the **More** icon



2) Select the desired **zone monitoring** function - this will open the settings for the specified function

3) Activate the function with the **Active** switch

4) Click the **Create Area** button - this opens the **Create area** map

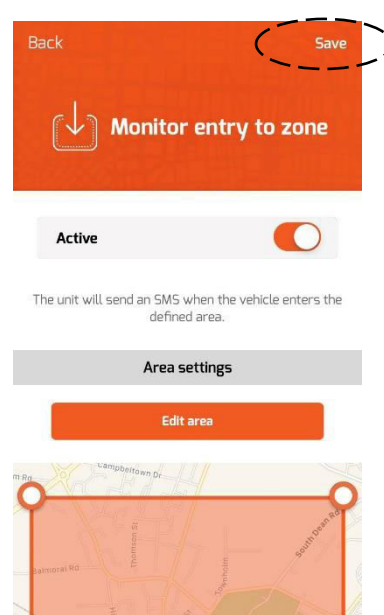
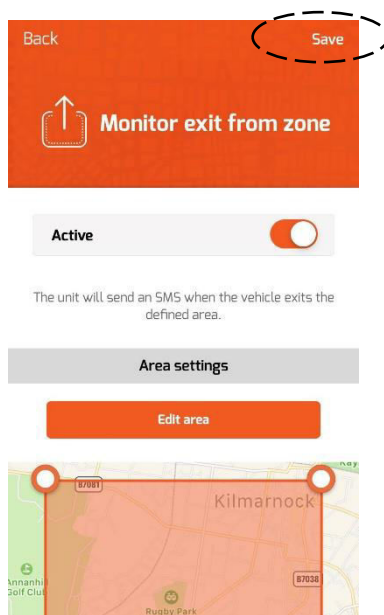
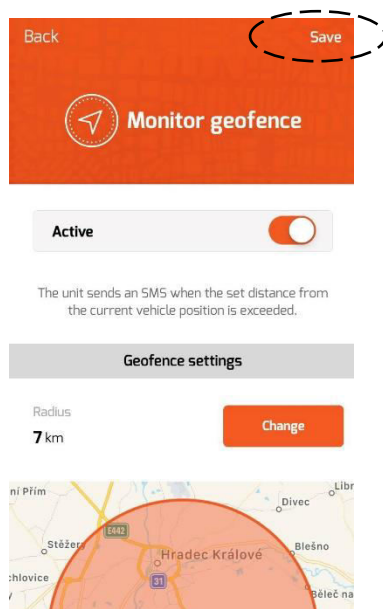
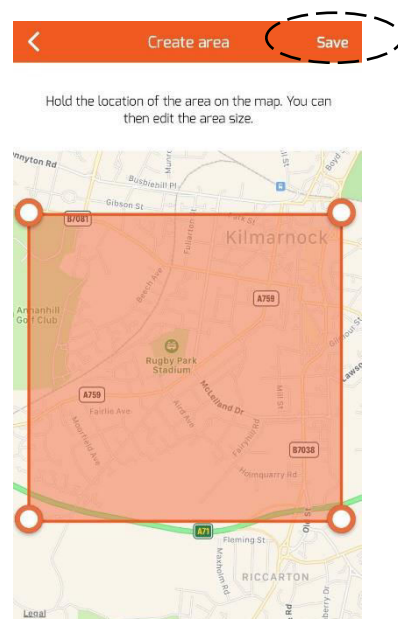


5) Holding your finger on a specific location on the map inserts the square area of the monitored zone. You can then edit the area size by dragging the round circles in the corner of the square. Click on **Save** to set the **monitored zone**.

6) Clicking on **Save** then activates the function.

**Note:**

The **Monitor Geofence** function sets the distance from the current vehicle position in km (from 3 to 250 km). If the vehicle leaves the geofence zone (drives outside the circled area), then an **Area alarm** is announced.



## f) Monitor vehicle battery voltage

This is a very practical function that monitors the voltage of the vehicle battery. This function can prevent unpleasant situations associated with starting the vehicle in the winter months, for instance. The vehicle owner is informed in a timely manner and has enough time to charge the battery.

The owner is also informed when the vehicle battery is disconnected, which may be related to the theft of the vehicle.

If the battery voltage falls below the pre-set parameter (or is disconnected), a **System alarm** is announced and an alarm SMS is sent to the pre-set, authorised telephone numbers.

**Activate Monitor battery state:**

1) Click on the **More** icon



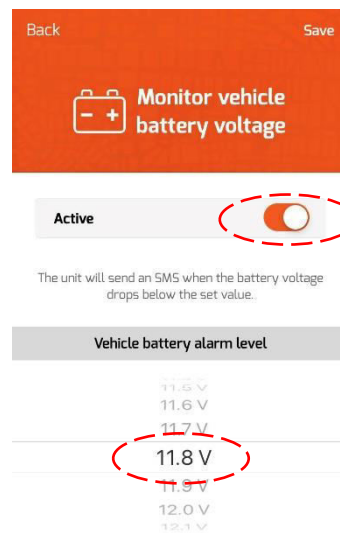
2) Choose the **Monitor battery state** function – this opens the settings screen.

3) Activate the function with the **Active** switch.

4) Click on **Save** to activate the function.

*Note:*

*The default pre-set voltage is 11.8V. The user can change this value from 10.0V to 25.5V.*



**g) Monitoring the maximum speed of the vehicle**

This function monitors if the vehicle exceeds a pre-set maximum speed.

If the monitored speed limit is exceeded, a **System alarm** is announced and an alarm SMS is sent to the pre-set authorised telephone numbers.

Further **System alarms** for exceeding the pre-set speed will only be announced 10 minutes after the previous alert.

**Activate maximum speed monitoring:**

1) Click on the **More** icon

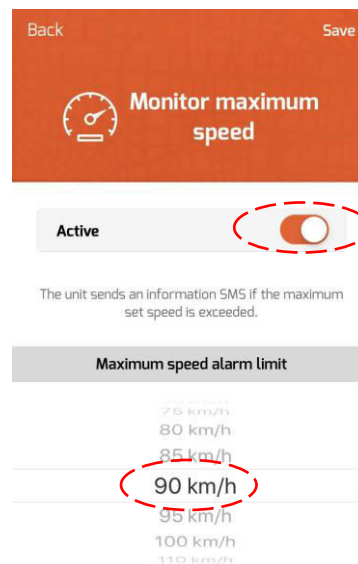


2) Choose the function **Monitor maximum speed** – this opens the settings screen.

3) Activate the function with the **Active** switch.

4) Set the monitored maximum speed from the range between 30km/h – 250km/h.

4) Click on **Save** to activate the function.





## h) Safe shutdown of the vehicle engine

The **STOP** function is specially designed to safely switch off the vehicle's engine (e.g. when stolen). The vehicle engine is switched off only when the vehicle stops, i.e. reduces its speed to 0 km/hr. (e.g. at a junction).

Initially, you need to activate the shutdown of the engine from the mobile application. When all conditions for safe shutdown of the vehicle engine are met, the process itself is performed by the vehicle unit. The most common method is to disconnect the fuel pump from the power supply.

### Activating the STOP function:

1) Click on the **More** icon



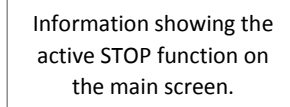
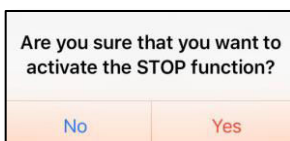
2) Choose the function **STOP – Safely switch off the engine**.

This opens the control screen.

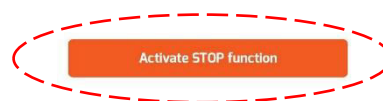
3) On the control screen, click on the **Activate STOP function** button.



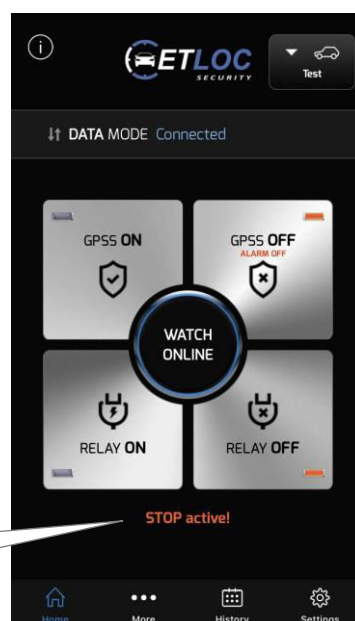
4) Confirm **STOP** function activation.



By activating the STOP function, the vehicle engine stops safely. This operation will only be performed on a vehicle which is not in motion. If the vehicle is in motion, the operation is performed immediately after it has stopped.

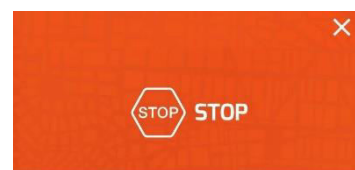


STOP inactive



### Deactivate STOP function:

Select **STOP – safely switch off the engine** and click on **Deactivate STOP function**.



By activating the STOP function, the vehicle engine stops safely. This operation will only be performed on a vehicle which is not in motion. If the vehicle is in motion, the operation is performed immediately after it has stopped.



STOP active

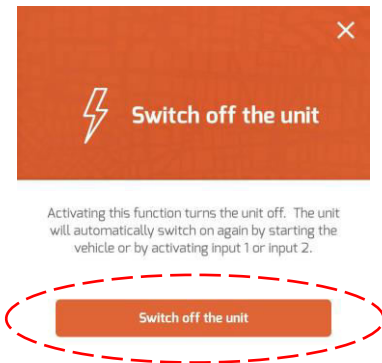


## i) Switching off the unit

By activating the function, the vehicle unit will be switched off (unit current consumption of 0 mA). This mode is suitable, for example, for long-term shutdown of the vehicle.

When the unit is disabled, it does not respond to any commands from the mobile application.

The vehicle unit automatically switches on by starting the vehicle engine or by activating one of the two alarm inputs.



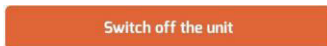
### Switching off the unit:

1) Click on the **More** icon

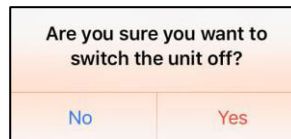


2) Choose the function **Switch off the unit**.

3) On the new screen click the **Switch off the unit** button.

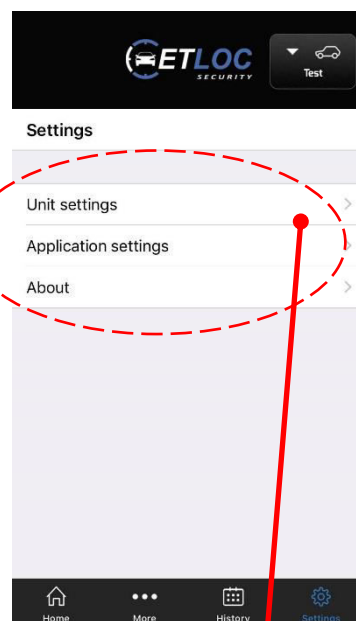


4) Confirm that you want to switch off the unit.



# Settings

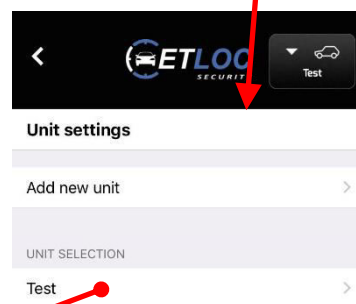
Click on the **Settings** icon



## a) Unit settings

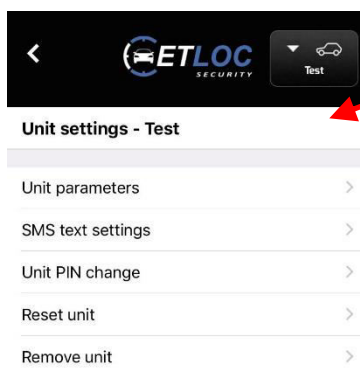
You can add another vehicle unit (new vehicle) through the **Add New Unit** link - see the chapter **Setting up a new unit**.

In the **UNIT SELECTION** section, you will find a list of units already added. Click on a specific vehicle name (or license plate) to open the **Unit Settings** screen. Here you can enter changes related to this vehicle unit.



### Unit parameters

Allows you to edit the parameters already set in the vehicle unit (e.g. Vehicle registration No., Unit tel. number, Communication type, etc.)



### SMS text settings

Allows you to edit the texts contained in information and alarm SMS messages.

### Unit PIN change

Allows you to change the access PIN number of the unit.

### Reset unit

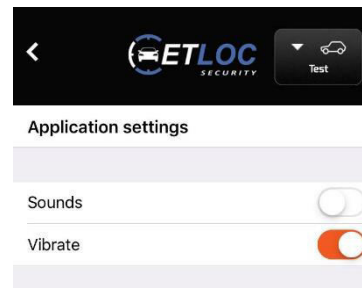
Resets all vehicle unit parameters to the factory default settings (except the PIN).

### Remove unit

Removes the vehicle unit, its history and settings from the mobile application.

## b) Application settings

**Application Settings** allows you to set sound and/or vibration for the control buttons on the main screen.



## c) About the application

Here you will find information about the manufacturer and the version number of the installed ETLOC Security mobile application.



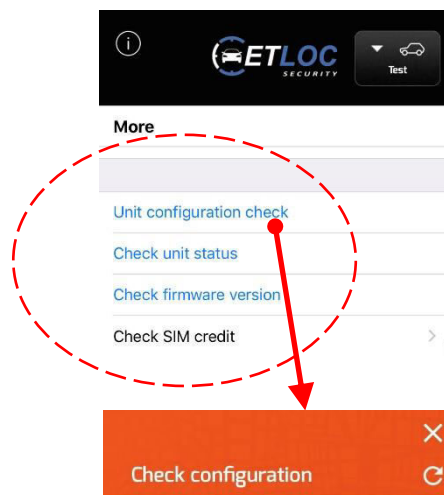
## Status information

Click on the **More** icon



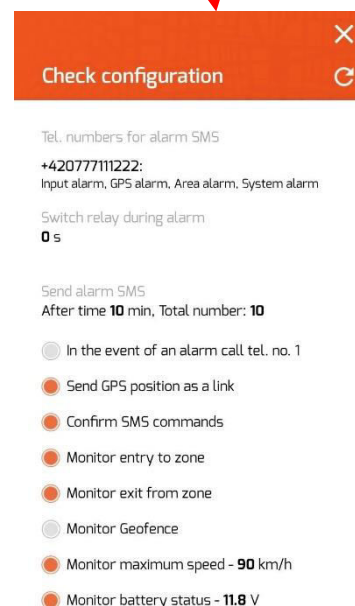
**Note:**

If you are using SMS communication, **Unit configuration check**, **Check unit status**, **Check FW version**, and **Check SMS credit** generate an SMS query. You must send the SMS query await an SMS response from the vehicle unit - the required information will be communicated in the received SMS.



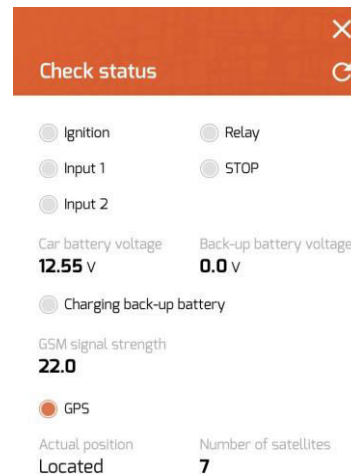
## a) Unit configuration check

Clicking on **Unit configuration check** will open a window showing the actual configuration of the unit.



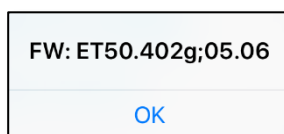
### b) Check unit status

Clicking in **Check unit status** will open a window showing the actual status of the unit (it shows the state of ignition, the STOP function status, back-up battery and strength of GSM signal, among other features).



### c) Check firmware version

Clicking on **Check firmware version** will open a window showing the current version of the firmware in the unit.



### d) Check SIM credit

If you are using a prepaid SIM card (with prepaid credit) in the vehicle unit, you can check the current credit status on the SIM card through this feature.

Click **Check SIM credit** to display the **Check amount of credit** window. Firstly, you need to fill in the **Operator command** - this is the code used by your mobile carrier for checking the credit amount on your SIM card (each mobile operator uses its own specific code).

Secondly, click on **Check credit** to send the request and then wait for the reply from your operator.

**Note:**

*You can get information regarding the command for checking credit from your SIM card provider.*

