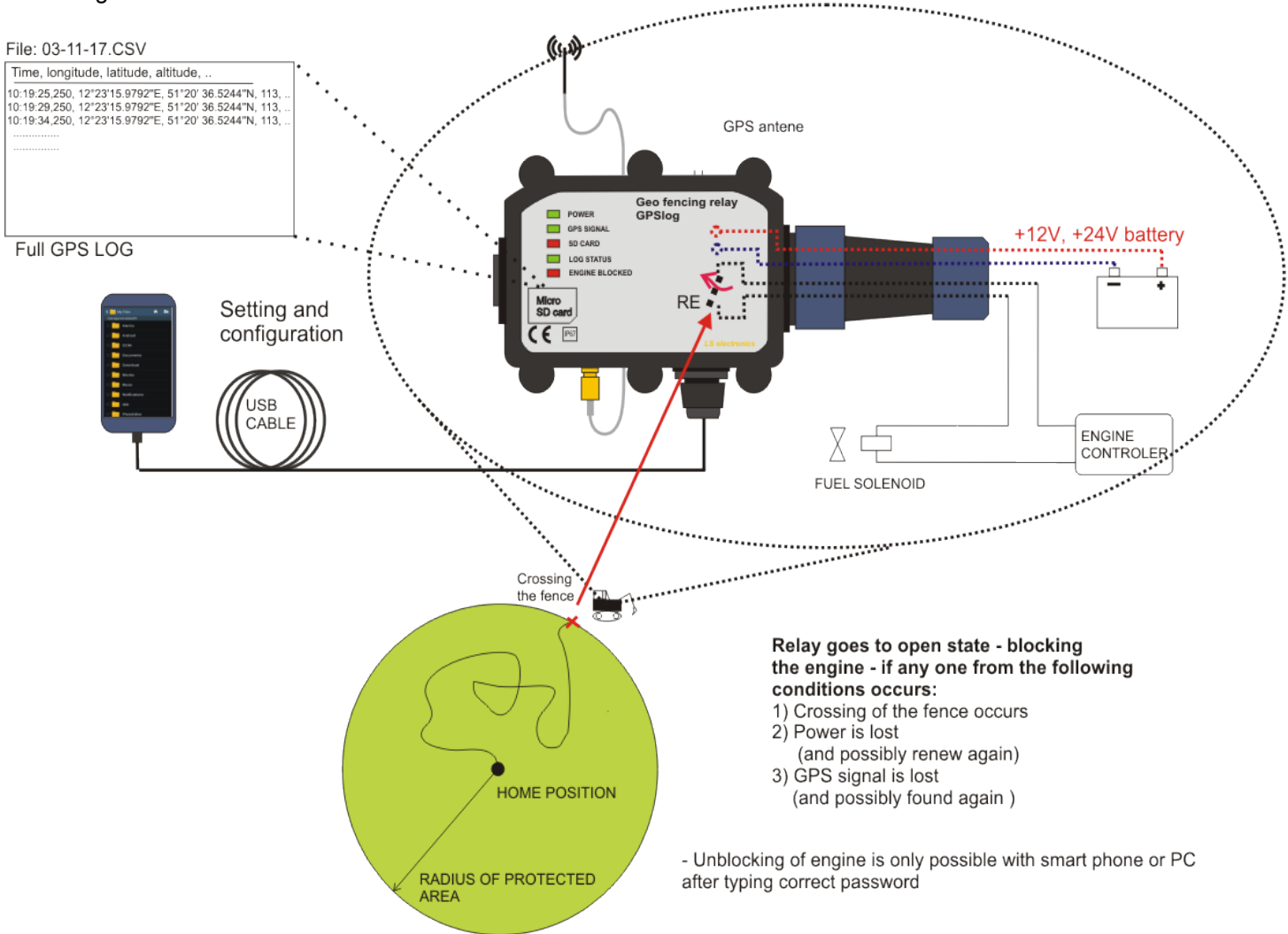


Geo fencing relay – GPSLog WP



Geo fencing relay – GPSLog

The Geo fencing relay – GPSLog is industrial FAT32 GPS data logger with smart relay providing geo fencing feature of blocking and unblocking the engine for various equipment. Developed to be compatible with VW 80 000 standard represents very robust solution especially suitable for using in industrial sectors.



Features:

- Smart relay behavior causing to unblock and block the engine depending of the equipment location
- Whole life history of your application movement through logged gps coordinates easily importable to google maps
- FAT32 SD card format provides folders, files data structure immediately visible in any PC OS (Windows, Linux, ..) or mobile phone (Android, iOS) with common micro USB cabel
- No other HW tool for device setting, after connection with cabel the device acts as the external hard drive (mass storage device), configuration file is edited on the disk
- Robust automotive design - developed to be compatible with VW 80 000, VW 801 01 standards, IP67 waterproof enclosure
- New FW automatic re-flashing function

Applications:

- protecting of gen-sets, pumps, machinery on construction sites, etc. ..
- marine applications

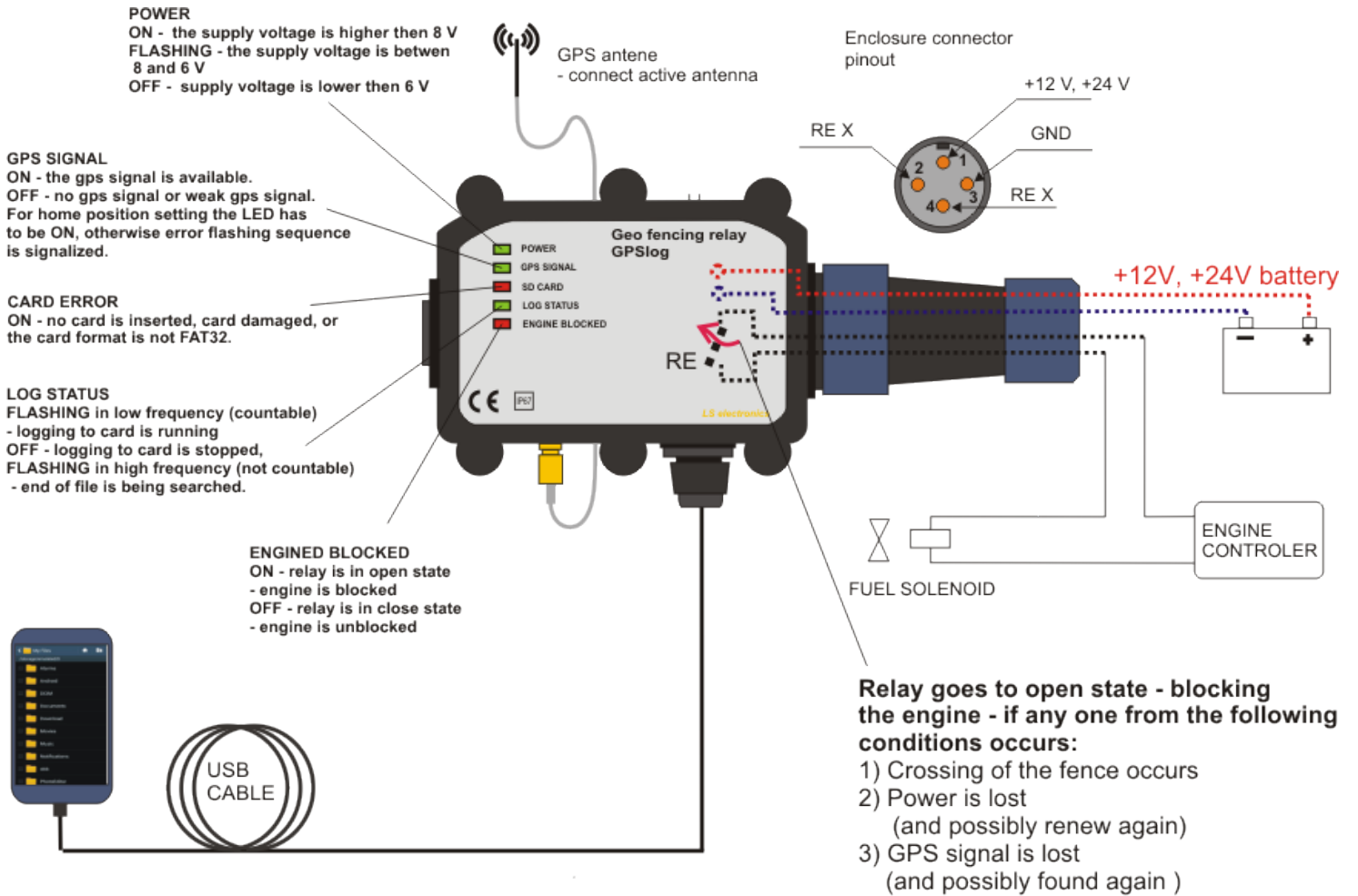
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Document revisions:

Revision	Date	Comment
1	18/2/18	First release

Product description – wiring diagram:



Setting of the device:

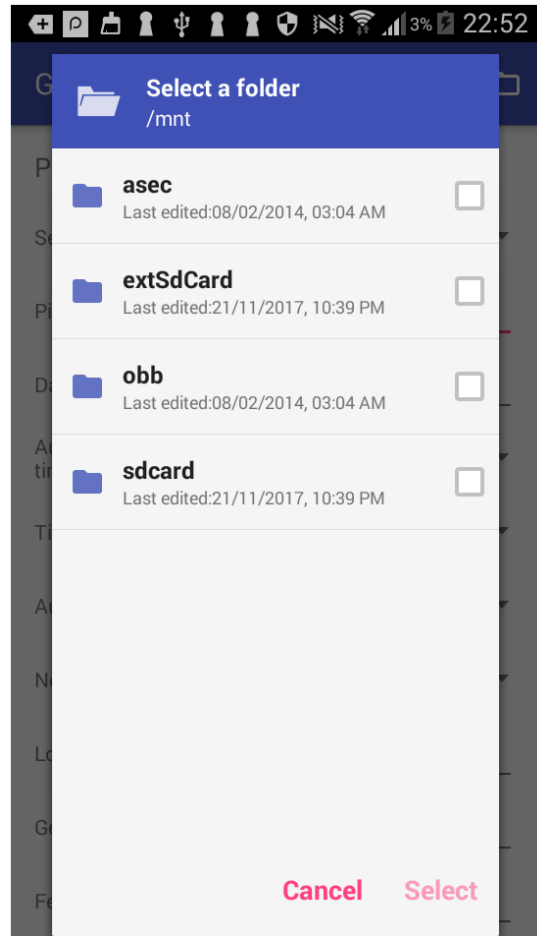
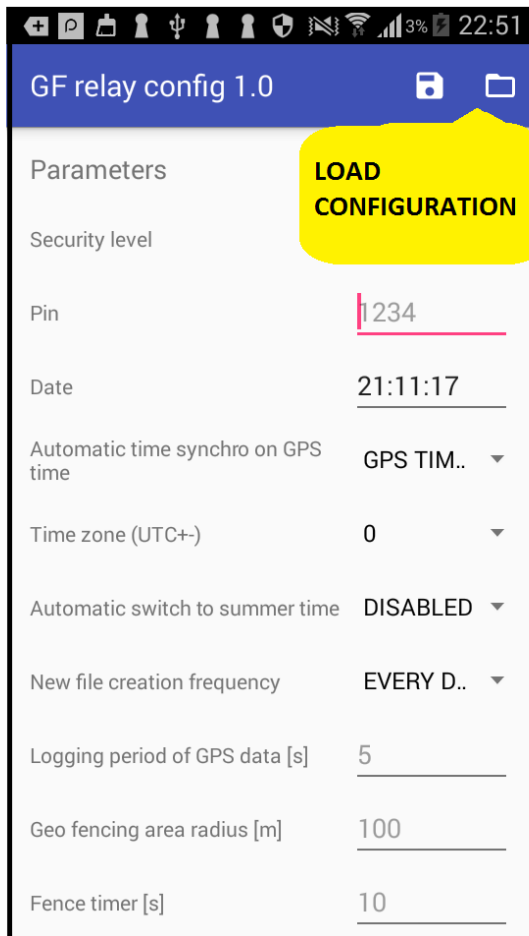
No external transducer is necessary for device configuration. User edits configuration file directly on the SD card with the free LogConfig PC SW or mLogConfig (for the smart phones).

Editing configuration file with Log Config or GF relay config SW:

Download the GF relay smart phone SW from our website, section DOWNLOADS.

List of adjustable parameters in configuration file:

1. Connect micro USB cable with GF relay GPSLog.
2. On your smart phone choose LOAD CONFIGURATION and browse for the file CONFIG.BIN on the SD card:

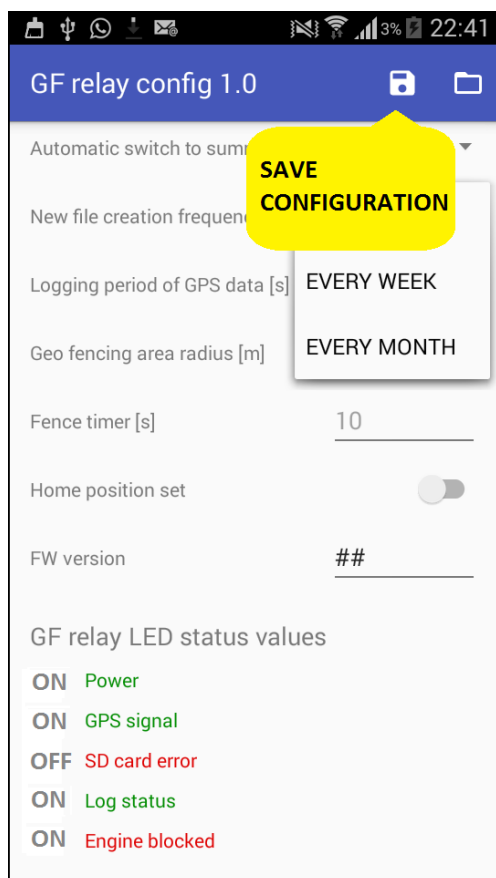


3. Adjust the value – meaning of each parameter see in the following table:

Parameters:	Description
Security level:	<ul style="list-style-type: none"> high - phone or PC must be used to unblock the engine low - relay can be closed by pen (default value)
Pin:	4 digits number for unblocking the engine (only used if high security level is set)
Date:	Date in DD:MM:YR format
Automatic time synchronization on GPS time:	System time is synchronized once per day according to GPS time (only when GPS time is available).

	<ul style="list-style-type: none"> • enabled (default value) • disabled
Time zone:	Time zone for system time. User should set it based on the current location. <ul style="list-style-type: none"> • GMT +- 12 (default value = GMT + 1)
Automatic switch to summer time:	<ul style="list-style-type: none"> • enabled • disabled (default value)
New file creation frequency:	<ul style="list-style-type: none"> • new file each day (default value) • new file each week • new file each month
Logging period of GPS data:	Logging period to gps files. <ul style="list-style-type: none"> • 1 – 360 s (default value = 5 s) • 0 – logging disabled
Geo fencing area radius:	Radius of protected area. <ul style="list-style-type: none"> • 0 – 10 000 m (default value = 100 m) • 0 – geo fencing disabled
Fence timer:	Minimum time before alarm announcing when alarm situation occurs. <ul style="list-style-type: none"> • 0 – 360 s (default value = 10 s)
Home position set:	<ul style="list-style-type: none"> • enabled • disabled

4. After adjusting the parameters choose save configuration. After disconnecting the cable the changes take effect automatically.



Geo fencing:

Setting the geo-fencing parametrs:

Setting is done through configuration file, see adjustable parameters on page 6.

Default parameters of geo fencing:

- geo fencing radius: 100 m
- delay of alarm situation: 10 s

GPS logger:

The device is assembled with high sensitivity U-blox GPS chip, which provides excellent signal strength. Best performance can be achieved with usage of active antenna.

Recommended antennas:

Data logged:

- date
- time (HH:MM:SS.SSS)
- longitude (DMS)
- latitude (DMS)
- altitude [m]
- course
- speed [km/h]
- satellites used
- distance from home position [m]

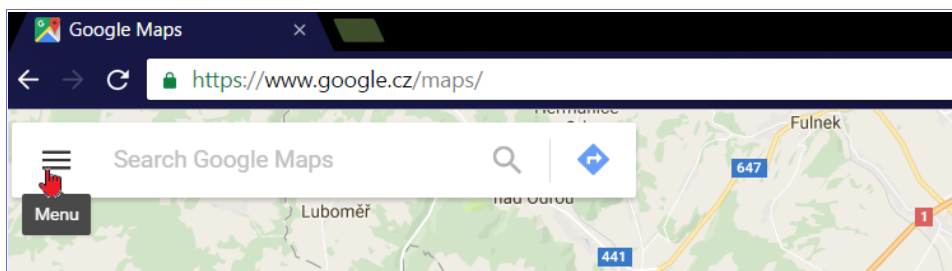
GPS data history log:

The logger is creating complete history of movement for the user application. Data in DMS format are logged in GPS folder to *.CSV files and can be imported directly to maps.google.com – providing complete history of the application movement.

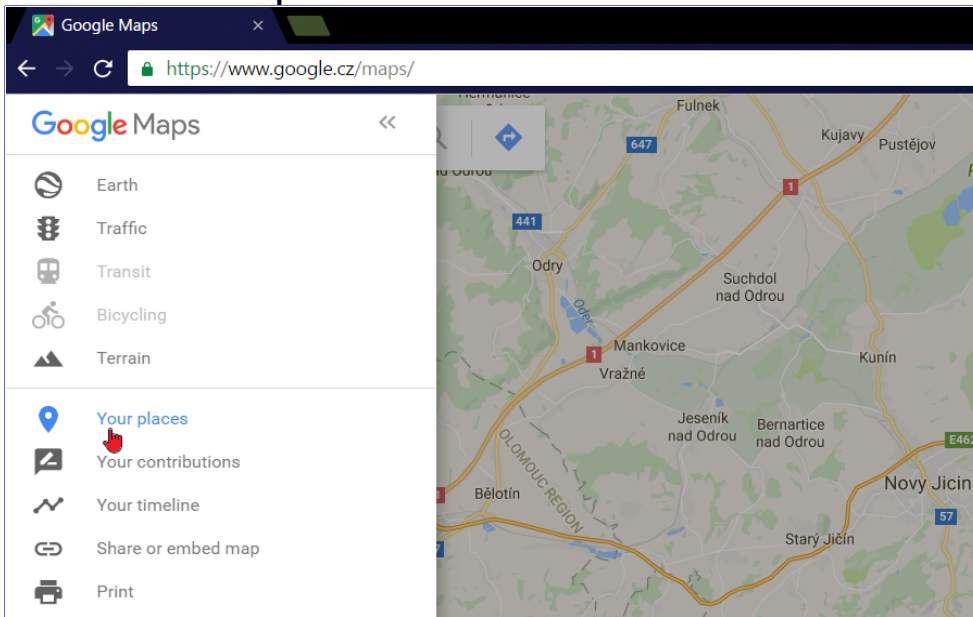
Offline gps tracking in the maps.google.com:

You must create (unless you have one) google.com account for possibility of using following google maps functions:

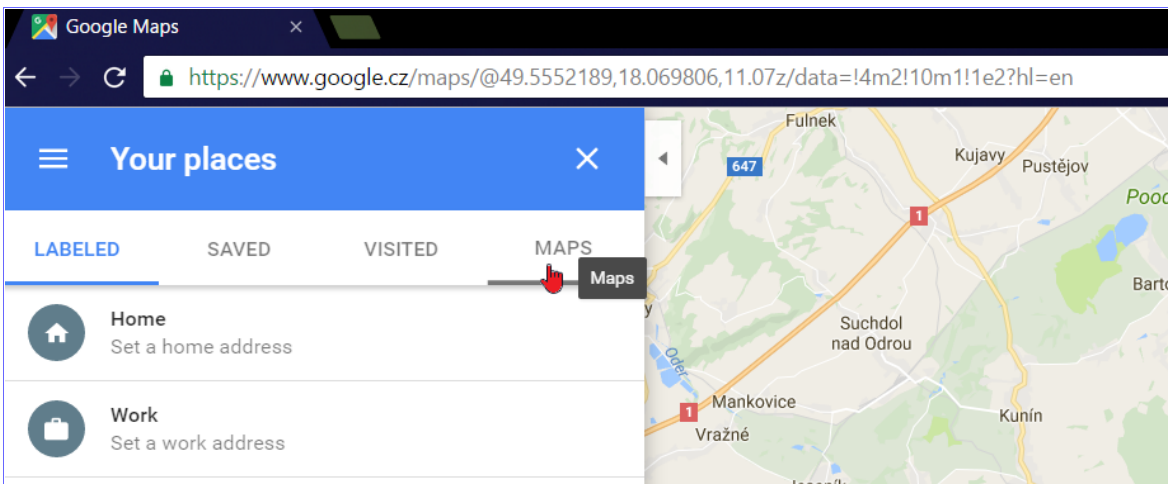
1. Open maps.google.com and choose Menu:



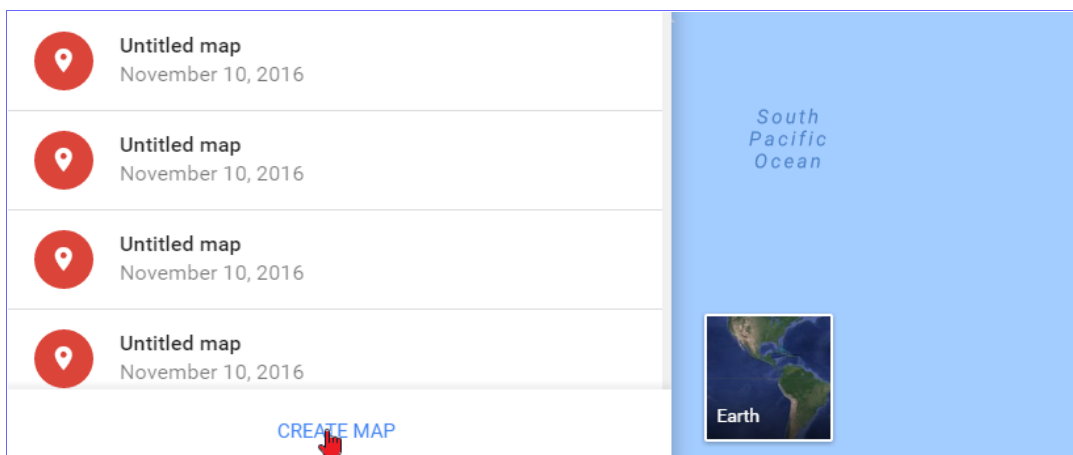
2. Then choose Your places:



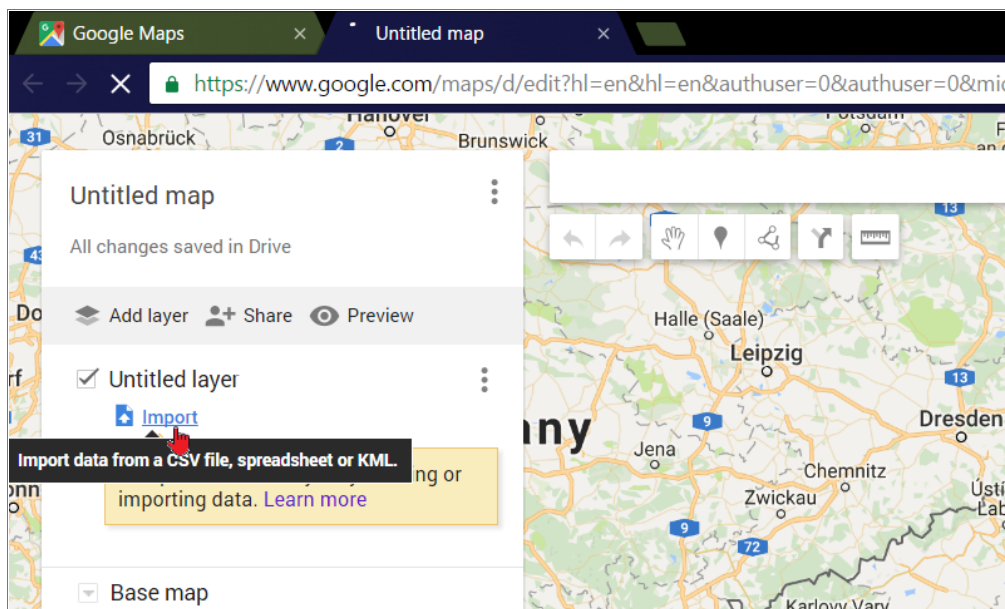
3. Choose Maps:



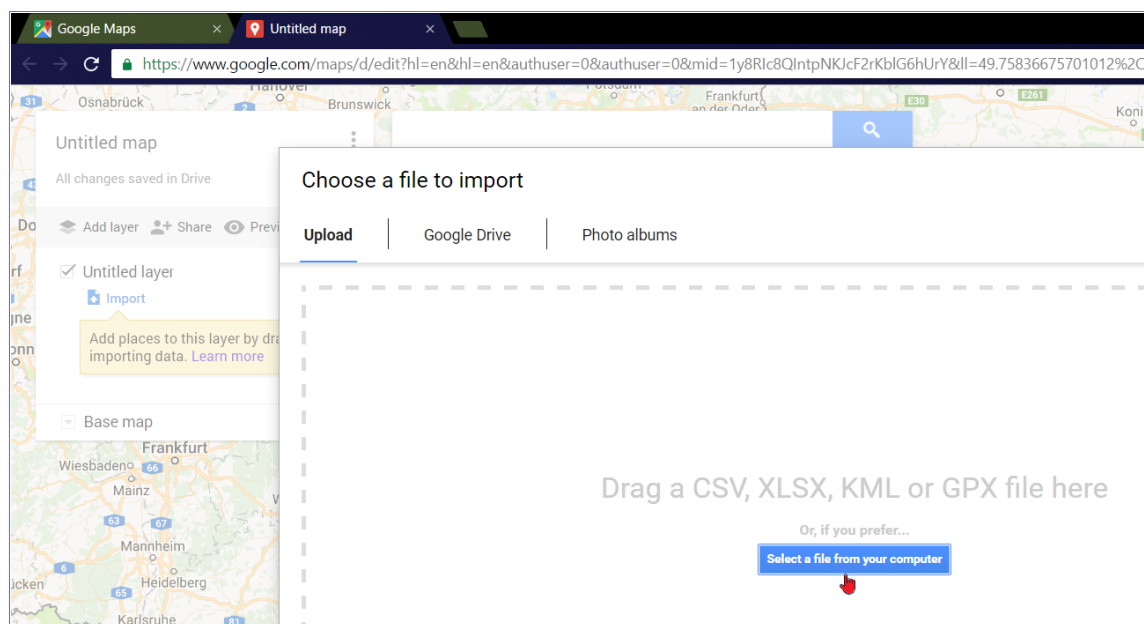
4. Create new map:



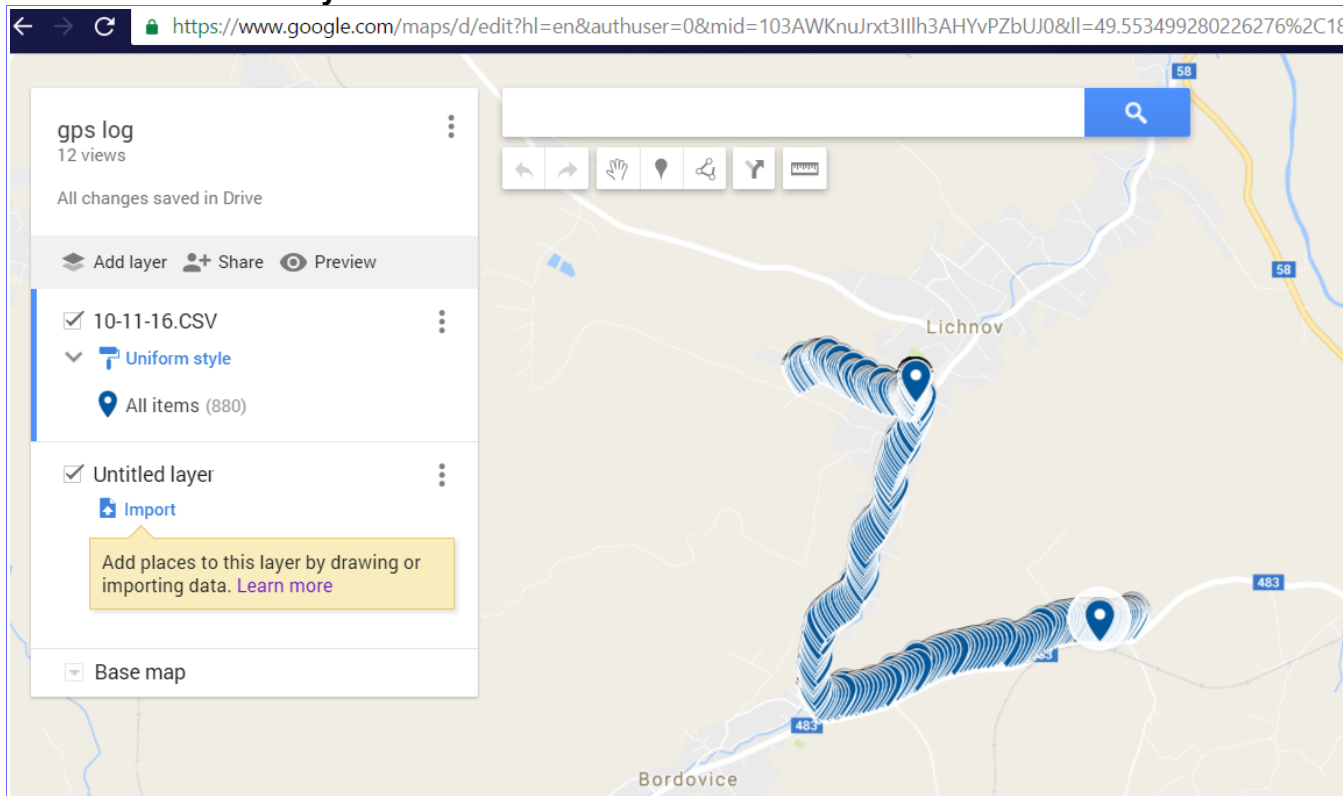
5. Import data from CSV file:



6. Drag and drop or choose the *.CSV file from the card:



7. Trace the history of movement:



New FW automatic re-flashing:

Once the device FW find on the root directory of the SD card new version of FW, with correct file name, it automatically re-flash itself. Flashing of the new FW version is indicated of synchronized flashing of all LEDs with ½ second time interval. It takes approximately 25 seconds.

Blind stickers:

Different versions available – enabling to cover real functionality of the product.

Technical data:

Nominal power supply: 12, 24 VDC

Power supply range: 6 – 36 VDC (voltage under 8 V is indicated by flashing of power LED)

Power consumption: 350 mA for 12 VDC, 250 mA for 24 VDC

Temperature range: - 40 – 85 °C

Maximal relay current: 10 A

Dimensions: 81 x 62,5 mm

Weight: 660 g

Protection level: IP65