

## FM11YX with Green driving functionality

These instructions are used to help a customer understand how Green Driving feature works, and how to configure it in FM11YX device.

### Functionality description.

This functionality is based on GPS position. Helps to prevent and inspect driver about harsh driving. Scenario continuously monitors: accelerating force, braking force and cornering angles. Warns driver if needed. DOUT1 is controlled by scenario for user needs, for example buzzer or LED.

To save GPRS traffic Green driving event will be generated (included into sent records) only when FM11YX measured values are higher than those set in configuration, without additional I/O settings.

To prevent generating false events, harsh acceleration and harsh braking is monitored only when following conditions are fulfilled:

- Ignition is ON (Configured Ignition Source – Power Voltage, Digital Input 1 or Movement);
- Vehicle speed is equal or higher than 10km/h.

Harsh cornering is monitored only when following conditions are fulfilled:

- Ignition is ON (Configured Ignition Source – Power Voltage, Digital Input 1 or Movement);
- Vehicle speed is equal or higher than 30km/h.

### Green driving scenario configuration.

Enable Green driving scenario and set the harsh driving parameters (Example in Figure 1).

#### SMS commands to set Green driving parameters:

Enable scenario: " setparam 1600 1"  
 Disable scenario: " setparam 1600 0"

" setparam 1602 0.25", (value 25=g\*100 -> 0.25 g)

" setparam 1603 0.35", (value 35=g\*100 -> 0.35 g)

" setparam 1604 0.30", (degrees, value in radians)

**Figure 1.** Green driving scenario configuration

## Green driving SMS event configuration.

When Green driving event is triggered, FM11YX sends a configured SMS message to a defined phone number.

Green driving I/O element SMS event configuration (ID=137):

SMS Format: setparam X Y,W,Z

X – ID

Y – Enable/Disable (1/0)

W – Telephone number INDEX (ID 150 – INDEX 0; ID151 – INDEX 1, ...)

Z – SMS Text

Green driving SMS event configuration is shown below(Figure 2).

The screenshot shows the 'SMS data sending Settings' and 'SMS Events' configuration pages. On the left is a navigation menu with 'SMS' selected. The main area is divided into two sections: 'Authorized phone numbers' and 'SMS Events'.

**Authorized phone numbers:**

ID	Phone Number
01	
02	
03	
04	
05	
06	
07	
08	
09	
10	

**SMS Events PreDefined Numbers:**

ID	Phone Number
01	37063231323
02	
03	
04	
05	
06	
07	
08	
09	
10	

**SMS Events:**

Description	Enable	SMS Number	SMS Text
LVCAN Program Number	<input type="checkbox"/>	37063231323	LVCAN Program Number
Green Driving	<input checked="" type="checkbox"/>	37063231323	Green Driving
OverSpeeding	<input type="checkbox"/>	37063231323	OverSpeeding
Authorized Driving	<input type="checkbox"/>	37063231323	Authorized Driving
Immobilizer	<input type="checkbox"/>	37063231323	Immobilizer

**Annotations:**

- A blue box highlights the 'Authorized phone numbers' table.
- A blue box highlights the 'SMS Events PreDefined Numbers' table.
- A blue box highlights the 'Green Driving' row in the 'SMS Events' table.
- Text '1. Set your phone number. Example: " setparam 150 3706232323"' points to the 'Authorized phone numbers' table.
- Text '2. Enable SMS event, set SMS number, type SMS text.' points to the 'Green Driving' row in the 'SMS Events' table.

**Example:**  
" setparam 137 1,0,Green driving"

**Figure 2.** Green driving SMS event configuration