

SMS Command List

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SMS Command List

About the List

The SMS commands are an easy way to quickly interact with the tracking device. This document lists all SMS commands, that can be sent to the tracking devices, with applicable answers, that are sent back by the tracking device. The SMS commands are used for:

- To get specific information from the tracking device
- To reconfigure some parameters of the tracking device
- To modify how certain functionalities work

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Document Application

The SMS commands can be used with all 4th and 5th generation tracking devices.

Document Changelog

Version	Date	Modification
2.0	2021-01-18	Updated: User manual structure and design.
2.1	2021-01-26	Updated: SMS commands <i>lcvselect</i> and <i>setlcv</i> .
2.2	2021-06-22	Added: SMS command <i>tachostatus</i> . Updated: SMS command <i>setvalue</i> .
2.3	2021-08-12	Added: SMS commands <i>ahj-on/ahj-off</i> .
2.4	2021-11-05	Updated: SMS commands <i>setvalue</i> and <i>info</i> .
2.5	2021-11-26	Updated: SMS commands <i>authid</i> , <i>immobilizer</i> , <i>info</i> , <i>setlock</i> and <i>ssl status</i> .
2.6	2022-01-14	Added: SMS command <i>dmpfconnect</i> .
2.7	2022-02-18	Updated: SMS commands <i>immobilizer</i> , <i>setlock</i> and <i>ssl status</i> .

Notations

The following notations are used in this document to highlight important information:

Bold text

Used to indicate user interface elements or for emphasis.

Italic text

Used to indicate items that belong to a list and can be selected.

Note

 Used to indicate items that belong to a list and can be selected.

Caution

 Used to mark actions that require caution when handling the product.

Warning

 Used to mark actions that may cause irreversible damage if performed incorrectly.

Tip

 Suggestions on how to proceed.

Availability table

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	⊘	⊘	⊘

Used to mark which devices support a given functionality. 4th generation device names are written without the FM prefix.

Acronyms and Abbreviations

APN – Access Point Name

BT – Bluetooth

BTS – Base Transceiver Station

CAN – Controller Area Network

CRC – Cyclic Redundancy Check

DTC – Diagnostic Trouble Code

DIN – Digital Input

DOUT – Digital Output

FMS – Fleet Management System

FW – Firmware

GND – Ground

HW - Hardware

GNSS – Global Navigation Satellite System

GPS – Global Positioning System

GSM – Global System for Mobile Communications (2G)

LCV – Light Commercial Vehicle

MCU – Microcontroller Unit

OBD – On-Board Diagnostics

PLMN – Public Land Mobile Network

USB – Universal Serial Bus

UTC – Coordinated Universal Time

1.1 SMS Commands

The SMS command structure is the following: *<password> <command> <command text>*



The password, command and command text are separated by a space symbol. Command text parameters are separated by a comma.



The password can contain up to 16 symbols and cannot match any SMS commands names. The following symbols can be used:

- All digits (0-9)
- Letters A-Z (both lowercase and uppercase)
- Characters `_`, `@`, `#`, `/`, `%`, `-`

It is possible to include IDs in the SMS commands, so that the server knows to which SMS command the device responds. To do so, the **Use ID in SMS commands** functionality must be enabled in the configuration. If the functionality is enabled, the ID must be included in all SMS commands, otherwise the commands will not be processed.

The SMS command structure with the included ID: *<password> <command> <command text> ID<ID string>*

Where:

<ID string> – a 16-32 hexadecimal symbol tag.

Example: *password reset ID575D6468E934C867*

Response: *Resetting device ID575D6468E934C867*



The ID must be unique. If the device receives several SMS commands with the same ID, only the first one will be processed.



The SMS commands *gsminfo*, *getapn* and *accreset r* will not return an ID.

1.1.1 accinfo

accinfo

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to check if the accelerometer is calibrated for the Eco-Drive and impact detection functionalities.

Command Structure

SMS command structure: *<password> accinfo*

Response

Response structure: *AXL state:<state> XYZo:<XYZo> Xc:<Xc> Yc:<Yc> Zc:<Zc>*

Where *<state>* can have the following values:

- 2 – the accelerometer calibration has been initiated
- 3 - the gravitational vector has been determined
- 11 – the accelerometer is calibrated

XYZo, Xc, Yc, Zc – are the parameters used for accelerometer event calculations.

Response example: *AXL state:11 XYZo:120 -39 -945 Xc:131 -92 -94 -7 Yc:-138 97 -96 16 Zc:953 120 -39 -945*

1.1.2 accreset

accreset

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to reset the existing accelerometer (used for the Eco-Drive and impact detection functionalities) calibration and initiate a new automatic calibration process. For calibration to be successful, the **Data Source** of the **Eco-Drive** section in the advanced configurator should be set to *ACC*, *CAN+OBD* or *OBD+ACC*.

Command Structure

SMS command structure: *<password> accreset*

An additional parameter can be included in the SMS command to reset the calibration, initiate a new automatic calibration process and inform the user of the ongoing calibration status: *<password> accreset r*

Responses

If the *<password> accreset* structure was used and calibration is successful: *Acc reset OK*

If the *<password> accreset r* structure was used:

- If the conditions are correct to start calibration: *Acc calibration initiated. Drive normally to calibrate.*
- If the conditions are incorrect: *Configuration error.*
- If the gravitational vector has been determined and acceleration events will be gathered: *Up direction found. Drive normally to finish calibration.*
- The calibration process was finished successfully: *Calibration successful.*

1.1.3 ahj-on/ahj-off

ahj-on/ahj-off

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	⊘	⊘	⊘	⊘	⊘	⊘

The SMS command *ahj-on* is used to activate the Anti-hijack sequence and *ahj-off* is used to deactivate it in accordance with the Anti-hijack workflow. For a more detailed description of the workflow and mode functionality, refer to the [Digital Output User Manual](#).

Command Structure

ahj-on SMS command structure: *ahj-on* <A>, , <C>

Where:

<A>	Activation speed, km/h Range: 0–250
	Deactivation timeout, s Range: 1–65000
<C>	Reactivation timeout, s Range: 0–65000

ahj-on SMS command structure: *ahj-on* *

When "*" is provided instead of the mentioned parameters, the corresponding values will be set from the configuration.

ahj-off SMS command structure: *ahj-off* <A>,

Where:

<A>	Guaranteed unrestricted time period, s Range: 0 - 65000 s
	Unconditionally initiate after guaranteed unrestricted period expires. Values: 0 – no, 1 – yes

Responses

If the *ahj-on* command is accepted: *ahj-on* OK.

If the *ahj-off* command is accepted: *ahj-off* OK.

If the ahj-on command is declined (the mode is not configured, invalid values, invalid structure):

ahj-on ERROR.

If the ahj-off command is declined (the mode is not configured, invalid values, invalid structure):

ahj-off ERROR.

1.1.4 authid

authid

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓*	✓	✓	✓	✓	✓	✓	⊘	✓	⊘

* – not available for pre-revision Trace5 devices.

This SMS command is used to add/remove IDs to/from the expanded list. Up to 4 IDs can be modified at a time.

Command Structure

SMS command structure for adding the IDs: `<password> authid add <ID1>, <ID2>, <ID3>, <ID4>`

Where:

`<IDX>` – the ID in a hexadecimal format.

 The ID length must be exactly 8 B or 16 B, as empty bytes will not be filled with zeros.

SMS command structure for deleting the IDs: `<password> authid del <ID1>, <ID2>, <ID3>, <ID4>`

Where:

`<IDX>` – the ID in a hexadecimal format.

Responses

If IDs were added successfully: `add <ID1> OK <ID2> OK <ID3> OK <ID4> OK`.

If IDs were deleted successfully: `del <ID1> OK <ID2> OK <ID3> OK <ID4> OK`.

If the device does not have enough memory for all IDs: `Not enough memory`.

If the entered IDs are not 8 B/16 B long: `Incorrect length`.

If more than 4 IDs were entered: `Too many IDs`.

If the ID cannot be deleted because it was not found in the ID list: `Not found`.

If the command was entered incorrectly: `Incorrect syntax`.

If the expanded authorized IDs list is disabled: `Not configured`.

If the device is currently busy with another process: `Device busy`.

If the ID cannot be added because it was already found in the ID list: `Already exists`.

The same ID was entered in the `authid` command several times: `Repeating IDs`.

1.1.5 banned

banned

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get information about temporarily banned operators.

Command Structure

SMS command structure: *<password> banned*

Response

Response structure: *Already banned:<X>, Newly banned:<Y>, ops:<ZZZ>*

Where:

<X>	Number of times when the tracking device tried to ban operator which has already been in the banned list.
<Y>	Number of times when the tracking device added an operator in the banned list.
<ZZZ>	List of currently banned operators.

Response example: *Already:1, Newly banned:1, ops:24602.*

1.1.6 caninfo

caninfo

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	✓	✓	✓	⊘	⊘	⊘

This SMS command is used to get information about the settings of the CAN1 interface. These settings are used to see the exact CAN1 interface setup in configuration file (it does not necessarily reflect actual mode of operation).

Command Structure

SMS command structure: *<password> caninfo*

Response

Response structure: *CAN enable: X Manufacturer Y Type Z Active A*

Where:

X can have the following values:

- 0 – CAN is disabled;
- 1 – CAN is enabled, FMS standard mode;
- 2 – CAN is enabled, LCV mode;
- 3 – CAN is enabled, OBD mode;
- 4 – CAN is enabled, tachograph mode;

Y can have the following values:

- 1 – VAG
- 2 – Mercedes
- 3 – Citroen
- 4 – Ford
- 5 – Fiat
- 6 – Opel
- 7 – Renault
- 8 – Toyota

- 9 – FMS tractor
- 10 – Truck
- 11 – Hyundai
- 12 – Lexus
- 13 – Volvo
- 14 – BMW
- 15 – Nissan
- 16 – Honda
- 17 – Mitsubishi
- 18 – Subaru
- 19 – Chrysler
- 20 – Isuzu
- 21 – Ssanyong
- 22 – Mazda
- 23 – Komatsu
- 24 – Rangerover
- 25 – Claas
- 26 – SAAB
- 27 – Landrover
- 28 – Porsche
- 29 – Kia
- 30 – Jaguar
- 31 – Infiniti
- 32 – Linde
- 33 – Hitachi
- 34 – Suzuki
- 35 – Changan
- 36 – Brilliance
- 37 – Geely
- 38 – Chery
- 39 – FAW
- 40 – Lifan
- 41 – Mini
- 42 – Alfa Romeo
- 43 – Jeep
- 44 – Dacia
- 45 – Peugeot

- 46 – Dieci

Z – number value of the LCV group.

A can have the following values:

- 0 – silent mode;
- 1 – active mode;

Response example: *CAN enable: 2 Manufacturer 2 Type 1 Active 0.*

1.1.7 cansinfo

cansinfo

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	✓	✓	✓	⊘	⊘	⊘

This SMS command is used to get information about CAN1 and CAN2 interface settings of the tracking device. These settings are used to see the exact dual CAN interface setup in configuration file (it does not necessarily reflect actual mode of operation).

Command Structure

SMS command structure: *<password> cansinfo*

Response

Response structure: *CAN1 enable: X Manufacturer Y Type Z Active A; CAN2 enable: X Manufacturer Y Type Z Active A*

Where:

X can have the following values:

- 0 – CAN is disabled
- 1 – CAN is enabled, FMS standard mode
- 2 – CAN is enabled, LCV mode
- 3 – CAN is enabled, OBD mode
- 4 – CAN is enabled, tachograph mode

Y can have the following values:

- 1 – VAG
- 2 – Mercedes
- 3 – Citroen
- 4 – Ford
- 5 – Fiat
- 6 – Opel
- 7 – Renault

- 8 – Toyota
- 9 – FMS tractor
- 10 – Truck
- 11 – Hyundai
- 12 – Lexus
- 13 – Volvo
- 14 – BMW
- 15 – Nissan
- 16 – Honda
- 17 – Mitsubishi
- 18 – Subaru
- 19 – Chrysler
- 20 – Isuzu
- 21 – Ssanyong
- 22 – Mazda
- 23 – Komatsu
- 24 – Rangerover
- 25 – Claas
- 26 – SAAB
- 27 – Landrover
- 28 – Porsche
- 29 – Kia
- 30 – Jaguar
- 31 – Infiniti
- 32 – Linde
- 33 – Hitachi
- 34 – Suzuki
- 35 – Changan
- 36 – Brilliance
- 37 – Geely
- 38 – Chery
- 39 – FAW
- 40 – Lifan
- 41 – Mini
- 42 – Alfa Romeo
- 43 – Jeep
- 44 – Dacia

- 45 – Peugeot
- 46 – Dieci

Z – number value of the LCV group.

A can have the following values:

- 0 – silent mode;
- 1 – active mode;

Response example: *CAN1 enable: 2 Manufacturer 2 Type 1 Active 0; CAN2 enable: 2 Manufacturer 2 Type 1 Active 0.*

1.1.8 clear dtc

clear dtc

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	⊘	⊘	✓	⊘	⊘	⊘	⊘	⊘

This SMS command allows clearing J1939 and J1708 DTC codes from the memory of the tracking device.

Command Structure

SMS command structure: `<password> clear dtc`

Responses

If command was performed successfully: *DTC codes were cleared.*

If DTC reading is not configured: *DTC reading is not configured.*

1.1.9 clear obd

clear obd

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	⊘	✓	✓	⊘	⊘	⊘	✓

This SMS command is used to clear all OBD related data from the device memory (not configuration).

Command Structure

SMS command structure: `<password> clear obd`

Response

If command was performed successfully: *OBD parameters and DTC cleared.*

1.1.10 connect

connect

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to force the tracking device to connect to a server with the custom IP, port and protocol settings. The tracking device creates a dummy record just with the header part.

Command Structure

SMS command structure: *<password> connect <IP>,<Port>,<Protocol>*

Where:

<IP>	32-bit number, commonly known as an Internet Protocol address (xxx.xxx.xxx.xxx).
<Port>	16-bit number, commonly known as the port number (xxxxx).
<Protocol>	The principle of communication. There are two available protocols: TCP and UDP.

Command Example

SMS command example: *<password> connect 192.168.0.1,7011,TCP*

Responses

If the connection was successful: *connection data ok.*

If the operation is unsuccessful: *connection data incorrect.*

1.1.11 coords

coords

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get the current GPS status and coordinates.

Command Structure

SMS command structure: *<password> coords*

Response

Response structure: *<time>, lat. <latitude>, long. <longitude>, alt. <altitude>, sat. <satellites>, dir. <angle>, hdop <hdop>, state <X>*

Where:

<i><time></i>	Current GMT date & time.
<i><latitude></i>	Current latitude.
<i><altitude></i>	Current altitude (meters).
<i><satellites></i>	Currently visible satellites.
<i><angle></i>	Current angle
<i><hdop></i>	Current HDOP level.
<i><X></i>	Current GNSS state. The values can be the following: <ul style="list-style-type: none"> • 1 – off • 2 – on with no fix • 3 – on with fix • 4 – not responding • 5 – sleep • 6 – disabled

Response example: *2013-04-24 07:01, lat. 46.1443183, long. 11.881766, alt. 217.5, sat. 8, dir. 198.10, hdop 100, state 3.*

1.1.12 delrecords

delrecords

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to delete all records from internal flash memory of the tracking device.

Command Structure

SMS command structure: `<password> delrecords`

Response

Response example: *all records deleted.*

1.1.13 dfota

dfota

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	

This SMS command is used to update the modem firmware for 3G and LTE Cat M1 devices. The firmware file is in a diff format, so the device updates are only different between the new and current firmware. Therefore, the current and target modem firmware version have to be known before the update.

 The modem firmware file must be placed in a FTP or HTTP server before the update.

 The total SMS command length with the password, command name and link to the file cannot be longer than 160 symbols.

Command Structure

Command structure when updating via an FTP server:

SMS command structure:

```
<password> dfota ftp://<user_name>:<password>@<server_URL>:<port>/<file_path>
```

Where:

<user_name>	String type, the user name for authentication. The maximum size of the parameter is 50 visual symbols.
<password>	String type, the password for authentication. The maximum size of the parameter is 50 visual symbols.
< server_URL >	String type, the IP address or domain name of the FTP server. The maximum size of the parameter is 50 visual symbols.
<port>	Integer type, the port of the FTP server. The range is 1 – 65535. Typical value: 21.
<file_path>	String type, the file name in the FTP server. The maximum size of the parameter is 50 visual symbols.

Command Structure when updating via HTTP Server

SMS command structure:

```
<password> dfota http://<http_server_URL>:<http_port>/<http_file_path>
```

Where:

<http_server_URL >	String type, the IP address or domain name of the HTTP server.
<http_port>	Integer type, the port of the HTTP server. The range is 1 – 65535. Typical value: 80.
<http_file_path >	String type, the file name in HTTP server

Command Example

If the firmware is updated via an FTP server:

```
password dfota ftp://test:test@demo.com:21/update/delta.bin
```

If the firmware is updated via an HTTP server:

```
password dfota http://www.example.com:80/delta.bin
```

Responses

If the modem update was started successfully: *Modem FW update process started. Check modem FW version with "modrev" command later.*

If the modem firmware is updated successfully: *Modem FW update process successful. Current modem version: xx.*

If the modem firmware update is failed: *Modem FW update process FAILED. Error code: xx*

Where *xx* is the error code, which is specified in the modem documentation.

If the update was performed for a 2G modem: *ERROR: DFOTA FW update NOT supported on this modem.*

If the minimum link requirements are not met: *ERROR: link string too short.*

If something is wrong with the command syntax: *ERROR: wrong command syntax.*

If the update process was started previously: *ERROR: DFOTA FW update process already started.*

If the error cause is unknown: *ERROR: other reason.*

 These responses do not work with SMS via GPRS.

1.1.14 dmpfconnect

dmpfconnect

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓*	✓	✓	✓	⊘	⊘	⊘	⊘	⊘	⊘

* – not available for pre-revision Trace5 devices.

This SMS command is used to immediately connect the device to DMP without waiting for the configured connection frequency. See the [Device Management Platform \(DMP\) User Manual](#) for more information.

Command Structure

SMS command structure: *<password> dmpfconnect*

Response

If the command was performed successfully: *OK*.

Once the response is received, the device will attempt to immediately connect to DMP. If there are any update commands pending for that device – these commands will start executing after the device establishes a connection with DMP.

1.1.15 doutreset

doutreset

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	⊘

This SMS command allows to reset the state of activated DOUTs.

i

To use this SMS command, the **DOUT activation with conditions** functionality must be enabled.

Command Structure

SMS command structure: `<password> doutreset`

Responses

If the command was performed successfully: *DOUT activation mechanism was reset.*

If DOUTs are not active at the time: *DOUT activation mechanism is inactive.*

If the **DOUT activation with conditions** functionality is not configured: *DOUT activation is not configured.*

1.1.16 econnect

econnect

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to force the tracking device to connect to a server with custom APN, user, password, IP, port and protocol settings. The tracking device creates a dummy record just with the header part.

Command Structure

SMS command structure:

<password> econnect <apn>,<apnLogin>,<apnPassword>,<IP>,<Port>,<Protocol>

Where:

<i><apn></i>	The APN name. This parameter is mandatory for most SIM cards. Consult with your SIM card provider for more information.
<i><apnLogin></i>	User name for the APN settings.
<i><apnPassword></i>	Password for the APN settings.
<i><IP></i>	32-bit number, commonly known as an Internet Protocol address (xxx.xxx.xxx.xxx).
<i><Port></i>	16-bit number, commonly known as the port number (xxxxx).
<i><Protocol></i>	The principle of communication. There are two available protocols: TCP and UDP.

Command Example

SMS command example: *password econnect apn,apnlogin,apnpassword,192.168.0.1,7011,TCP*

Responses

If the connection was successful: *Emergency connection data ok.*

If the operation is unsuccessful: *Emergency connection data incorrect.*

1.1.17 enginevolt

enginevolt

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘	✓

This SMS command is used to automatically measure the engine power voltage upper level, when the engine is on, and the lower level, when the engine is off. With these voltage levels the device will automatically detect when the engine is on, and when it is off.

 Before sending this SMS command, the engine must be on.

Command Structure

SMS command structure: `<password> enginevolt`

Responses

If the message structure is wrong: *Unknown command.*

If the message structure is correct: *Turn off engine.*

If the engine detection is done: *Engine detection done.*

If the engine detection is unsuccessful: *Engine detection error.*

 Turn off the engine after receiving the *Turn off engine* answer..

1.1.18 forward

forward

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command allows to forward an SMS via the tracking device.

i	Total length of whole command with text may not exceed 160 symbols.
----------	---

Command Structure

SMS command structure: *<password> forward <phone_number> <text>*

<phone_number> must not contain *0* or *+* in the beginning of the number (Not *+370* or *00370*, but *370*).

<text> supports only GSM 03.38 characters.

Responses

If the SMS message is forwarded: *SMS-Forward OK*.

If the SMS message is forwarded: *SMS-Forward Fail*.

1.1.19 get3g

get3g

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	✓	✓	✓	✓	✓	⊘

This SMS command is used to get the information about whether the tracking device is connected to the 3G or GSM network or not.

Command Structure

SMS command structure: `<password> get3g`

Responses

Response format: `<mode status> 3G mode, connected to <network> (<X>-profile)`

Where `<mode status>` can the following values:

- automatic
- disabled
- enabled

`<network>` can the following values:

- 3G
- GSM

`<X>` can the following values:

- 1
- 2
- 3
- 4

If device has enabled 3G and status is OK. For all examples current profile is 3: *enabled 3G mode, connected to 3G (3-profile)*

If device has enabled 3G but it is not connected to the 3G network: *enabled 3G mode, connected to GSM (3-profile)*

If device has disabled 3G: *disabled 3G mode, connected to GSM (3-profile)*

If device has automatic selection 3G and it is working in 3G: *automatic 3G mode, connected to 3G (3-profile)*

If device has automatic selection 3G and it is working in GSM: *automatic 3G mode, connected to GSM (3-profile)*

If HW version does not support 3G: *Get3G: hw does not support 3G*

1.1.20 getapn

getapn

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get APN, username, password, IPs, ports and protocol settings from the tracking device.

Command Structure

SMS command structure: *<password> getapn*

Response

Response example: *APN: banga User: PSW: IP1: 92.62.134.38 Port1: 9021 IP2: 195.14.173.3 Port2: 9000 TCP/UDP: 0.*



0 stands for TCP, and *1* – for UDP.



If the response text is very long, it might not fit into a single message and be cropped.

1.1.21 getcfg

getcfg

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This command is only used to get the current status of the selected parameters.



The amount of maximum simultaneously received parameters in one SMS message is limited. Complete answer: 125 symbols. Incomplete answer: 105 symbols.

Command Structure

SMS command structure: `<password> getcfg <ParamID1>,<ParamID2>,<ParamID3>...`

Where:

`<ParamIDX>` — parameter ID.

SMS Command Example

`password getcfg 410` — gets information if the Eco-drive panel buzzer is enabled or disabled.

Responses

When the parameter ID is correct: `ID: XXX,value:XXX`.

Parameter configuration password and SMS password is not available with this SMS: `ERROR: parameter(s) read is forbidden`

If the parameter ID is invalid: `ID:XXX,value:requested ID not found`

Other possible responses when something is wrong:

- ERROR: request is empty
- ERROR: wrong request syntax
- ERROR: allowed numbers and commas only
- ERROR: requested parameter ID too big
- ERROR: requested parameter ID is low

If the SMS configuration is disabled in the configurator tool: *You do not have permission to change the settings.*



If the response does not fit in the SMS message, then in the end there will be a phrase: *other values not fit.*

1.1.22 getdinmode

getdinmode

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	⊘	✓	⊘

This SMS command allows to receive information on the configuration of the specified DIN. This applies only to configurable DINs.

Command Structure

SMS command structure: *<password> getdinmode <DIN#>*

Where *<DIN#>* – can have the following values:

- 1 – information for DIN1;
- 2 – information for DIN3;
- 3 – information for DIN4;

Command Example

SMS command example: *password getdinmode 3*

Responses

If DIN is in the positive mode: *DIN# - positive mode.*

If DIN is in the ground mode: *DIN# - ground mode.*

If DIN is not available for the tracking device: *Configurable DIN functionality is not available for your HW version.*

1.1.23 getio

getio

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	⊘

This SMS command is used to get the values/statuses of the inputs and outputs.

Command Structure

SMS command structure: *<password> getio*

Response

Response structure:

*DIN1=<X>,DIN2=<X>,DIN3=<X>,DIN4=<X>,DOUT1=<X>,DOUT2=<X>,DOUT3=<X>,DOUT4=<X>
>,&Ain1=<Y>,&Ain2=<Y>,&Ain3=<Y>,&Ain4=<Y>*

Where <X> can have the following values:

- 0 – low
- 1 – high

<Y> – analogue value in millivolts.

Response example:

DIN1=0,DIN2=1,DIN3=1,DIN4=1,DOUT1=0,DOUT2=0,DOUT3=0,DOUT4=0,Ain1=24210,Ain2=28600,Ain3=18600,Ain4=28600

1.1.24 getioparam

getioparam

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This command is only used to get the current status of the selected IO parameter.

SMS Command Structure

<password> getioparam <ParamID>, <profileNumber>

Where:

<i><ParamID></i>	Parameter ID.
<i><profileNumber></i>	Profile, where the parameter is enabled.

SMS Command Example

password getioparam 65,2 -

Responses

Response example, if the IO parameter was enabled:

id=65,profile=2,enable=1,level=0,delta=0,average=1000,eventon=2,include=0,priority=0,switch=0,edge=0

If the IO parameter was not enabled: *I/O ID XXX is NOT enabled.*

If the IO parameter ID is invalid: *ERROR I/O ID XXX does not exist.*

If the SMS configuration is disabled in the configurator tool: *You do not have permission to change the settings.*

Other possible responses, when something is wrong:

ERROR: I/O ID XXX read is forbidden;

ERROR: more than one I/O parameter with same ID was found;

ERROR: wrong request syntax.

1.1.25 getfwver

getfwver

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘	Only Eco4 S	⊘

This SMS command is used to check if the GNSS module firmware is updated.

Command Example

SMS command example: `<password> getfwver`

Responses

Response example if the GNSS module firmware has been updated to the latest version:

*AXN_5.1.6_3333_19010200,0002,MC60-GNSS,1.0*00.*

Response example if the GNSS module firmware is older: *AXN_5.10_3333_17062100,0002,MC60-*

*GNSS,1.0*20.*

If the update was performed on other devices: *Not applicable for this device.*

1.1.26 getlog/stoplog

getlog/stoplog

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The *getlog* command is used to initiate the logging process. The *stoplog* command is used to stop the log sending to a server. When device gets the *getlog* command, it should open a link with defined server and send log according to the defined mode. All other tracking device processes (e.g. records sending, peripheral device communication) will keep working. Only device restart can stop log data sending process.

The log will be sent as ASCII. Log starts from device type *HCV/LCV/PRO*, selected mode, defined time, bootloader version, firmware version, hardware version, GSM signal level and Voltage status: *0* – lower than 8 Volts (bad), *1* – higher than 8 Volts (OK) and device IMEI.

Example of the sent log: *FMTco4 HCV, 100.101.102.103:1111, mode=1, time=3min; version:472C,00.02.25.21,431,26,1; imei:868324027387005*

Command Structure

getlog SMS command structure: *<password> getlog <IP>,<Port>,<Mode>,<Time>*

Where:

<IP>	32-bit number, commonly known as an Internet Protocol address (xxx.xxx.xxx.xxx).
<Port>	16-bit number, commonly known as the port number (xxxxx).
<Mode>	Sends a full log to a server and has the value <i>1</i> .
<Time>	Time period for log sending. Defined in minutes. Range: 1-60 minutes.

stoplog SMS command structure: *<password> stoplog*

Command Example

getlog SMS command example: *password getlog 100.101.102.103,1111,1,15*

Responses

If *getlog* SMS format is correct: *getlog ok*

If *getlog* SMS format is incorrect: *getlog data incorrect*

If the logging proces is already running, the device will respond: *getlog already running*

When device gets the *stoplog* command and log sending is in progress, it should stop sending log to a server and reply: *stoplog ok*

If device gets the *stoplog* command and the log is not running: *getlog already stopped*



In some cases, remote debug might have to log the data about many different events and processes. This would force remote debug to generate large internal data streams and the device might not be able to send it all via GPRS. This might lead to data loss.

1.1.27 getnetw

getnetw

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	⊘	⊘	⊘	⊘	⊘	⊘

This SMS command is used to get the information about the cellular network type.

Command Structure

SMS command structure: *<password> getnetw*

Reponses

Response structure: *<network mode> connected to <network> <profile>*

Where *<network mode>* can be one of the following:

- *automatic mode* – indicates the automatic network mode
- *2G mode* – indicates the 2G network mode
- *3G mode* – indicates the 3G network mode
- *LTE mode* – indicates the LTE Cat M1 network mode

<network> can be the following:

- *2G* – indicates the 2G network
- *3G* – indicates the 3G network
- *LTE* – indicates the LTE Cat M1 network

<profile> - can be one of the following:

- *(1-profile)* – the network mode is set in Profile 1
- *(2-profile)* – the network mode is set in Profile 2
- *(3-profile)* – the network mode is set in Profile 3
- *(4-profile)* – the network mode is set in Profile 4

Response example if the device is set to automatic network selection and is connected to 2G in Profile 1:
automatic mode, connected to 2g (1-profile).

1.1.28 getsd

getsd

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	✓	✓	✓	⊘	⊘	⊘

This SMS command is used to get information about an SD card, inserted into the tracking device.

Command Structure

SMS command structure: `<password> getsd`

Responses

Response structure, if the SD card is inserted and used for records: *Using SD Card for Records. Size: <sector_count x sector_size> B, H: <SDrecordHead>, T: <SDrecordTail>.*

Response structure, if the SD card is inserted and used for log: *Using SD Card for Log and working OK. Size: <sector_count x sector_size> B, H: <SDrecordHead>, T: <SDrecordTail>.*

Response structure, if the SD card is inserted and used for log, but some errors occurred: *Using SD Card for Log but ERROR. Size: <sector_count x sector_size> B, H: <SDrecordHead>, T: <SDrecordTail>.*

Where:

<sector_count>	The number of sectors in the SD card.
<sector_size>	The size (in bytes) of one sector in the SD card.
<SDrecordHead>	SD card address of beginning of the first record.
<SDdrecordTail>	SD card address of the last record's end.

Response example: *Using SD Card. Size: 3911680 x 512 B, H: 6008, T: 5993*

1.1.29 gsminfo

gsminfo

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get GSM and GPRS information.

Command Structure

SMS command structure: `<password> gsminfo`

Response

Response structure: `ST:<st>; OP <op>,lvl <lvl>,LAC <lac>, CID: <cid>, <network>; M:<m>, R <r>, SP: <sp>; GPRS <gprs>:O <o>,C <c>, E <e>; LK: O<y>, E <x>, TMO <tmo>; RS: <rs>; P <p>`

Where:

<code><st></code>	Start time. Date & time (GMT) from the last tracking device reset/power ON.
GSM network	
<code><op></code>	GSM operator number.
<code><lvl></code>	GSM signal level.
<code><lac></code>	Location Area Code. 16 bit number thereby allowing 65536 location areas within one GSM PLMN.
<code><cid></code>	Cell ID. Generally unique number used to identify each BTS or sector of a BTS.
<code><network></code>	Current network mode. There are three possible values: GSM, 3G, and LTE.
Tracking device modem parameters (M)	
<code><i></code>	Initialization. The number of times when the tracking device has tried to initialize modem since the start time.
<code><r></code>	The number of resets of the modem since the start time.
<code><sp></code>	Status pin. The number of times when the modem was turned ON and turned OFF unsuccessfully.

<gprs>	General Packet Radio Service. Status of GPRS. There are two possible values: 0 – no GPRS 1 – attached to GPRS
<o>	The number of opened GPRS sessions.
<c>	The number of closed GPRS sessions.
<e>	The number of GPRS errors.
Link with server (LK)	
<y>	Current engine state. Possible values: 0 – OFF 1 – ON
<x>	The number of link errors.
<tmo>	The number of server response timeout.
<rs>	Device last reset source. Possible values: 04 – reset pin 08 – power on/down reset 10 – software reset 20 – independent watchdog 40 – window watchdog 80 – low power reset Combination of the mentioned values: e.g. 14 is 10 + 04.
<p>	GPRS protocol version. It can have the following values: 0 – standard protocol 1 – extended protocol

Response example: *ST:2013.04.20 23:26:33; OP 22210,MI 15,LAC 20030, CID: 28289, GSM; M:I 126, R 125, SP: 0; GPRS 0:O 64,C 0, E 248; LK:O 575, E 1, TMO 126; RS: 04; P 0*

1.1.30 imei

imei

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get the device IMEI number.

Command Structure

SMS command structure: *<password> imei*

Response

Response example: *IMEI: 863071016796615*

1.1.31 immobilizer

immobilizer

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓*	✓	✓	✓	✓	✓	✓	✓	✓	⊘

* – not available with initial firmware release for Trace5-2G, Trace5-LTE and Trace5-LTM (Rev.A).

This SMS command allows immobilizing the vehicle.

 To use this SMS command, the **Immobilizer** functionality must be configured.

Command Structure

SMS command structure: `<password> immobilizer <speed>`

Where:

`<speed>` – describes the vehicle speed at which the progressive DOUTs must be toggled. Only number from 1 to 250 can be sent.

SMS command structure to reset the functionality: `<password> resetimmob`

Responses

If command was performed successfully: *Immobilizer OK.*

If no custom DOUTs are configured: *immobilizer is not configured.*

If the `<speed>` parameter was inputted incorrectly: *Invalid speed.*

If the immobilizer is successfully reset: *immobilizer reset.*

1.1.32 info

info

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This customizable SMS command with configurable set of parameters can be used to get some specific information from the tracking device via SMS.

Command Structure

SMS command structure: `<password> info <param1>;<param2>;<param3>;[...];<paramN>`

Where `<paramN>` can be the following:

ain1	Is used to get the status/values of inputs/outputs. Values can be the following:
ain2	
ain3	
ain4	
din1	The analogue inputs are in millivolts. Note: The response will contain only the values of requested parameters.
din2	
din3	
din4	
dout1	
dout2	
dout3	
dout4	
alt	Current altitude.
apn	APN name.
apnp	APN password.
apnu	APN username.
bat	Returns battery voltage in millivolts.
bleapp	BLE App version.
blebl	BLE BL version.
blemac	BLE MAC address.
blesd	BLE SD version.
blest	BLE status.
blver	Bootloader version.
cid	GSM Cell ID.
coords	Current latitude and longitude separated by comma. Note: The device will respond with <i>GNSS data not available</i> if there will be no GNSS fix.
dir	Current angle

eng	Current engine state. Possible values: <ul style="list-style-type: none"> • 0 – OFF • 1 – ON
fpart	(For Trace5-2G and Trace5-LTM (Rev.A)) Currently used partition number
fwver	Firmware version.
get3g	Information about connection to the 3G or GSM network.
gmap	Hyperlink to Google maps with coordinates: latitude and longitude.
gprs	Status of GPRS. Possible values: <ul style="list-style-type: none"> • 0 – no GPRS • 1 – attached to GPRS
gprsc	The number of closed GPRS sessions.
gprse	The number of GPRS errors.
gprso	The number of opened GPRS sessions.
gps	Current GNSS state. Values: <ul style="list-style-type: none"> • 1 – off • 2 – on no fix • 3 – on got fix • 4 – not responding • 5 – sleep • 6 – disabled
gsmlvl	GSM signal level.
hdop	Current HDOP level.
hwid	HW identifier.
hwver	Hardware version.
imei	Device IMEI number.
io[xxxxx]	Specific IO current value. [xxxxx] – IO ID number. Note: Values can be retrieved only for configured IO parameters. Note: For multi-part IO elements, firstly the IO ID should be requested.
ip1	IP1 address and port number.
ip2	IP2 address and port number.
lac	Location Area Code.
lke	The number of link errors.
lko	The number of opened links.
lktmo	The number of server response timeout.
modi	The number of times when the tracking device has tried to initialize modem since the start time.
modr	The number of modem resets since the start time.
modrev	Used to get modem revision information.
modsp	The number of times when modem was turned ON and turned OFF unsuccessfully.
op	GSM operator number
p	GPRS protocol version. Possible values:

	<ul style="list-style-type: none"> • 0 – standard protocol; • 1 – extended protocol.
prot	Currently set protocol: <ul style="list-style-type: none"> • 0 – TCP • 1 - UDP.
pwr	Returns power supply voltage in millivolts.
rs	Device last reset source. Possible values: <ul style="list-style-type: none"> • 04 – reset pin • 08 - power on/down reset • 10 – software reset • 20 – independent watchdog • 40 – window watchdog • 80 – low power reset Combination of the mentioned values: e.g. 14 is 10 + 04.
sat	Currently visible satellites.
speed	Current speed, km/h.
st	Date & time (GMT) from the last the tracking device rest/power ON.
tacho	Current tachograph status information: <ul style="list-style-type: none"> • 0 – Not available • 1 – everything is O • 2 – tacho parameters not configured
time	GNSS date and time.

Command Examples

SMS command examples:

password info bat;<alt>IO29;IO123;coords

pass info time;imei;eng;IO29

pass info gmap;coords;IO123;pwr;st;time

pass info time;imei;eng;IO29;lktma

Responses

Response examples:

*4075;213.9;11659;0x4C5455313233343536373839303132333400000000000000;54.7412916,25.2
27750.*

2016-12-13 12:40:30;865789021340700;0;11691.

If the response is longer, then the device will send maximum 157 characters of response plus # symbol and two digits that shows, which tag was last in the reply counting from the beginning:

https://www.google.com/maps/?q=54.7413016,25.2227550;54.7413016,25.2227550;0x4C545531323334353637383930313233340000000000000000;11659;2016-12-13 11:20:02;#05.

If some requested IO is not enabled in configuration or some tag is unknown, then the device will respond with *NA*: *2016-12-13 12:41:57;865789021340700;0;NA;NA*

1.1.33 iqinfo

iqinfo

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
❌	❌	❌	✅	❌	❌	✅	❌	❌	❌

This SMS command is used to obtain the values of various iQFreeze parameters.

Command Structure

SMS command structure: `<password> iqinfo`

Response

The response includes the following parameters:

- Refrigerator serial number;
- Trailer serial number;
- Device serial number;
- Device FW version;
- Device BT name;
- Current time and date (UTC);
- Vehicle registration number.

If an error occurred, the tracking device will send the following response: *Communication error*

1.1.34 iqfset

iqfset

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	⊘	⊘	✓	⊘	⊘	✓	⊘	⊘	⊘

This SMS command is used to manage refrigerator set-point temperature values and configuration.

Command Structure

SMS command structure: *<password> iqfset <setpoint>, <cycle mode>*

Where:

<setpoint> has the value range from -99.9 to 99.9. A dot must be used as the delimiter symbol.

<cycle mode> can have the following values:

- 1 – the refrigerator is in the continuous mode;
- 2 – the refrigerator is in the start/stop mode.



Any of the parameters can be omitted, then only the provided parameters will be changed.

Response

If an incorrect symbol or value is included in the command, or no value is included: *Syntax error.*

1.1.35 lastchange

lastchange

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get information about when the last time device configuration or primary server IP was changed.

 The date and time of the configuration change will be updated during any type of configuration modification.

 When device is connecting to GPRS and tries to open a link (with different IP settings), the date and time of the IP change will be updated. When device reconnects to a server with the same IP but different port, date and time of the IP change will not be updated.

Command Structure

SMS command structure: *<password> lastchange*

Responses

If time is not synchronized, or changes occur during that time: *lastchange ip: no time available; cfg: no time available.*

If time is available: *lastchange ip: 2015-11-09, 09:02; cfg: 2015-11-09, 10:02.*

1.1.36 lcvselect

lcvselect

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	⊘	⊘	✓	⊘	⊘	⊘	⊘

This SMS command is used to automatically select a correct LCV group and LCV subgroup combination. The **LCV Autoselect** functionality reads and analyses the CANbus line data, then searches for a match within its LCV profile database and selects the best possible configuration.

The following parameters are considered as high importance, which has greater significance during the auto-selection process and can be included into the SMS command: *Fuel, Vehicle distance, RPM, Wheel based speed*. Additionally, you can add an optional parameter to enable all possible IOs for the selected LCV group on the active profile, after the process of LCV group selection is complete.

 For the 4th generation devices, tick the **Enable I/Os** checkbox in the advanced configurator before sending the SMS command.

 Enough free IO slots must be available (the needed number varies, depending on the vehicle).

Activation

The following criteria must be met:

1. The engine is turned on.
2. The vehicle is not moving.
3. One or both CAN interfaces are connected to the vehicle's CANbus lines.
4. One of the following must be configured:
 - On both CAN interfaces *LCV* mode is selected (LCV group with dual channel)
 - On one CAN interface *LCV* mode is selected and the other CAN interface is disabled.
 - On one CAN interface *LCV* mode is selected and the other CAN interface is set to *Tacho read, MobilEye* or *Trailers*.
 - Both CAN interfaces are disabled.

 The **LCV Autoselect** functionality works only with light vehicles. Also, the **Active** CAN mode is unavailable and as a result, *Toyota, Truck, Tractor, Claas* and *Komatsu* LCV groups are excluded from the selection process.

 The **LCV Autoselect** functionality does not guarantee that all supported CAN IO parameters for the selected LCV group and subgroup will be available for a specific vehicle.

Command Structure

SMS command structure: *<password> lcvselect <distance>,<RPM>,<enableIO>*

Where:

<i><distance></i>	Distance travelled by a vehicle, which is currently displayed by the vehicle's odometer. Note: Make sure to enter the same value, it has to be a number. Error cannot exceed ± 1 km. Maximum value, which could be sent via SMS is 21055406 km.
<i><RPM></i>	RPM value currently displayed in the vehicle's dashboard. Note: Make sure to enter the same value, it has to be a natural number. Error cannot exceed ± 100 rev/min. Maximum value, which could be sent via SMS is 8031 rev/min.
<i><enableIO></i>	The parameter, which automatically enables IOs for the automatically selected LCV group. If the parameter is not included or a <i>0</i> is written, then the function will not automatically enable the IO parameters. If <i>1</i> is written, IOs will be enabled if the conditions are met.

 The *enableIO* parameters can be enabled only in the active profiles. These parameters might interfere with the IO list configuration.

Command Examples

SMS command example: *password lcvselect 10200,900,1*

Other examples:

If you do not want to send distance and RPM values via SMS: *password lcvselect ,*

If you want to send only the RPM value: *password lcvselect ,RPM*

If you want to send only the vehicle distance value: *password lcvselect distance,*

If you do not want to send distance and RPM values via SMS, but enable automatic IO selection: *password lcvselect ,,1*

Responses

If the SMS structure is correct and the LCV autoselect process started successfully: *LCV auto selection is in progress.*

After successfully completing the selection process: *Configured group: Ford/Ford2.*

After the group is configured successfully: *Configured group: [Group]/[Subgroup],can1 ch:[number], can2 ch:[number],I/O elements enabled.*

If the LCV autoselect SMS structure is incorrect: *Unknown command.*

If the current tracking device configuration is incompatible with the LCV autoselect feature: *Wrong CAN configuration.*

If the **LCV Autoselect** functionality should be restarted: *LCV autoselection not started, try again.*

If currently a critical process is running in the tracking device: *Waiting for LCV autoselection start.*

If the distance and/or RPM values received via SMS are out of the accepted range: *Parameters are out of ranges.*

If no CAN data packets were received: *No CAN data were received.*

If the LCV autoselect task ended, but it failed to find matches in the database: *No valid matches were found.*

If a group is selected, but there are not enough free IO slots to enable all the autoselect IOs: *Configured group: <Group>/<Subgroup>,can1 ch:<number>, can2 ch:<number>,ERR: Not enough I/O slots.*

If the protocol v1.1 was not enabled prior to the SMS command: *Configured group: <Group>/<Subgroup>, Error: old I/O protocol is used.*

1.1.37 modrev

modrev

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get the modem revision information.

Command Structure

SMS command structure: `<password> modrev`

Responses

Response structure: *Modem revision: <info>*

Where *<info>* is the modem revision.

Response examples:

M95 modem: *Modem revision: M95FAR02A06*

UG96 modem: *Modem revision: UG96LNAR02A04E1G*

MC60 modem: *Modem revision: MC60CAR01A07*

BG95 modem: *Modem revision: BG95M3LAR02A03_01.014.01.014*

BG96 modem: *Modem revision: BG96MAR02A07M1G_01.018.01.018*

1.1.38 reconnect

reconnect

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	⊘	⊘	⊘

This SMS command is used to initiate the connection to a server once, using connection settings in the SMS command. The tracking device does not send any responses to this command.

Command Structure

SMS command structure:

<password> reconnect <APN>,<APNLogin>,<APNPassword>,<IP>,<Port>,<Protocol>

Where

<i><APN></i>	Access Point Name (APN) is the name of a gateway between a GPRS (or 3G, etc.) mobile network and another computer network, frequently the public Internet.
<i><APNLogin></i>	User name for the APN settings.
<i><APNPassword></i>	Password for the APN settings.
<i><IP></i>	32-bit number, commonly known as an Internet Protocol address (xxx.xxx.xxx.xxx).
<i><Port></i>	16-bit number, commonly known as the port number (xxxxx).
<i><Protocol></i>	The principle of communication. There are two available protocols: TCP and UDP.

SMS Command Example

SMS command example: *password reconnect APN,APNlogin,APNpassword,92.62.134.34,9015,TCP*

1.1.39 nreset

nreset

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	⊘	Only Eco4 T devices	✓

This SMS command is used to initiate the restart of the tracking device. The tracking device does not send any responses to this command.

Command Structure

SMS command structure: *<password> nreset*

1.1.40 optiver

optiver

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	✓	✓	✓	⊘	⊘	⊘

This SMS command is used to request the version of the OptiTemp device.

Command Structure

SMS command structure: *<password> optiver*

Responses

Response example: *Version: TMS X2 V2.100*

If the version could not be retrieved: *Device does not respond*

1.1.41 reset

reset

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to reset the tracking device.

i	After sending this SMS command, the device will reboot, but its configuration parameters will not be lost.
----------	--

Command Structure

SMS command structure: `<password> reset`

Response

Response example: *Resetting device.*

1.1.42 set3g

set3g

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	✓	✓	✓	✓	✓	⊘

This SMS command is used to set the tracking device to connect to the 3G or GSM network.

Command Structure

SMS command structure: *<password> set3g <X>*

Where *<X>* can have the following values:

- 0 – disabled
- 1 – enabled
- 2 – automatic

Command Example

SMS command example: *password set3g 1*

Responses

Response structure: *3G <modestatus> mode set <setstatus> (<Y>-profile)*

Where *<modestatus>* can be:

- automatic
- disabled
- enabled

<setstatus> can be:

- OK
- FAIL

<Y> can have the following values:

- 1
- 2
- 3

- 4

If device enabled the 3G network: *3G enabled mode set OK (1-profile).*

If device could not enable the 3G network: *3G enabled mode set FAIL (1-profile).*

If device disabled the 3G network: *3G disabled mode set OK (1-profile).*

If device could not disable the 3G network: *3G disabled mode set FAIL (1-profile).*

If device changed to the automatic connection to the 3G network: *3G automatic mode set OK (1-profile).*

If device could not change to the automatic connection to the 3G network: *3G automatic mode set FAIL (1-profile).*

If field enabled/disabled is out of range: *Set3G ERROR: Field is out of range.*

If the HW version does not support the 3G network: *Set3G: hw does not support 3G.*

1.1.43 setcfg

setcfg

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The *setcfg* command allows you to change all parameters, except timetable, passwords, **Enable SMS configuration** functionality and geozone points.



Prior to sending the SMS command, you must enable the **Enable SMS configuration** checkbox in the **Authorized numbers** section.

Command Structure

SMS command structure: *<password> setcfg <ParamID1> <Value1>, <ParamID2> <Value2>, <ParamID3> <Value3>...*

Where:

<i><ParamIDN></i>	Parameter ID.
<i><ValueN></i>	Parameter value.

Command Example

password setcfg 100 0— this SMS command will set the protocol to TCP.

password setcfg 111 123.000.111.222, 121 13242 —this SMS command will set IP2 to 123.000.111.222 and IP2 port number to 13242.

Responses

If parameters are set successfully: *Configuration parameter(s) was set!*

If the parameters were set incorrectly: *Configuration parameter(s) was NOT set! Parameter No. X is incorrect.*

Where *No. X* is the parameter ID.

If the setup is unsuccessful and the parameters are locked: *Configuration parameter(s) was NOT set! Parameter No. X is locked.*

Where *No. X* is the parameter ID.

If not every setting was provided in the SMS command: *Configuration parameter(s) was NOT set! IO slot No. 9 is not fully set.*

If the device is busy: *Configuration parameter(s) was NOT set! Device is busy try again later.*

If SMS configuration is disabled in the configurator or the configuration has a password: *You do not have permission to change the settings.*

1.1.44 setconnection

setconnection

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to permanently change the tracking device configuration settings: **APN**, **APN username**, **APN password**, **protocol**, **IP1**, **Port1**, **IP2**, and **Port2**

Command Structure

SMS command structure: *<password> setconnection*

<apn>, <apnlogin>, <apnpassword>, <Protocol>, <IP1>, <Port1>, <IP2>, <Port2>

Where

<i><APN></i>	Access Point Name (APN) is the name of a gateway between a GPRS (or 3G, etc.) mobile network and another computer network, frequently the public Internet.
<i><APNLogin></i>	User name for the APN settings.
<i><APNPassword></i>	Password for the APN settings.
<i><IP1> <IP2></i>	32-bit number, commonly known as an Internet Protocol address (xxx.xxx.xxx.xxx).
<i><Port1> <Port2></i>	16-bit number, commonly known as the port number (xxxxx).
<i><Protocol></i>	The principle of communication. There are two available protocols: TCP and UDP.

Command Example

SMS command example:

password setconnection apn,apnlogin,apnpass,TCP,111.111.111.111,1111,222.222.222.222,2222

If one of the parameters should be preserved, then the the parameter should be filled with **old**. For example, IP1 and port1 should be preserved (old value should remain):

*password setconnection apn,apnlogin,apnpass,TCP,*old*,*old*,222.222.222.222,2222*

If you do not require to change the IP2 and port2, then leave these parameters empty: *password setconnection apn,apnlogin,apnpass,TCP,111.111.111.111,1111*

Responses

If the configuration is ok: *Set connection data ok*

If the configuration has failed to set: *Set connection data incorrect*

1.1.45 setdinmode

setdinmode

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	⊘	✓	⊘

This SMS command allows to set the DIN mode (Positive mode or Negative mode) for configurable DINs.

Command Structure

SMS command structure: `<password> setdinmode <din#> <mode>`

Where `<din#>` – can have the following values:

- 1 – selects DIN1;
- 3 – selects DIN3;
- 4 – selects DIN4;

`<mode>` – can have the following values:

- 0 – positive trigger inputs (positive mode);
- 1 – ground trigger inputs (negative mode).

Command Example

SMS command example: `password setdinmode 3 1`

Responses

If DIN# was set to ground (negative) mode: `DIN mode set: DIN# - ground mode;`

If DIN# was set to positive mode: `DIN mode set: DIN# - positive mode;`

If the device does not support configuration of DINs or wrong DIN mode is specified, the following responses can be received:

- DIN mode set: configuration of DIN# is not supported;
- DIN mode set: incorrect DIN specified;
- DIN mode set: incorrect DIN mode specified;
- *Configurable DIN functionality is not available for your HW version.*

1.1.46 setio

setio

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	⊘

This SMS command is used to set the digital output levels.

i	<p>This SMS command will not work in a couple of conditions:</p> <ol style="list-style-type: none"> 1. If a DOUT is configured to <i>Blocking</i> and driver registration is enabled and the registration function is set to <i>Blocking</i>. 2. DOUT activation under conditions is enabled and DOUT is set as an output channel.
----------	---

Command Structure

SMS command structure for the 5th generation devices (except for Trace5): `<password> setio <X1>, <X2>, <X3>, <X4>`

SMS command structure for the 4th generation devices and Trace5 (except for FM-Plug4): `<password> setio <X1>, <X2>`

Where:

<X1>	State of DOUT1.
<X2>	State of DOUT2.
<X3>	State of DOUT3.
<X4>	State of DOUT4.

<X1>, <X2>, <X3>, <X4> can have the following values:

- 0 – low
- 1 – high
- 2 – do not change

Command Example

SMS command example for the 5th generation devices (except Trace5): `password setio 0,1,1,2.`

SMS command example for the 4th generation devices and Trace5 (except FM-Plug4): `password setio 0,1.`

Responses

If the configuration was set successfully: *SETIO configuration data ok.*

If the configuration SMS is incorrect: *SETIO configuration data incorrect.*

1.1.47 setioparam

setioparam

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

The *setioparam* command is only used for the IO parameters setup. You can use it, when it is not required to modify global parameters, such as APN settings, connection settings, etc.

Command Structure

SMS command structure: `<password> setioparam`

`id=<id>,profile=<profile>,enable=<enable>,level=<level>,delta=<delta>,average=<average>,eventon=<eventon>,include=<include>,priority=<priority>,switch=<switch>,edge=<edge>`

Where:

<code><id></code>	Parameter ID.
<code><profile></code>	Profile, where the parameter is enabled. The values can be the following: <ul style="list-style-type: none"> • 1 – Profile 1 • 2 – Profile 2 • 3 – Profile 3 • 4 – Profile 4
<code><enable></code>	Enables or disables the parameter. The values can be the following: <ul style="list-style-type: none"> • 0 – disabled • 1 – enabled
<code><level></code>	Sets a reference value.
<code><delta></code>	Sets a maximum possible value deviation from the reference value.
<code><average></code>	Period of averaging values in ms.
<code><eventon></code>	Defines the logic of when an IO parameter is generated. The values can be the following: <ul style="list-style-type: none"> • 0 – Hysteresis • 1 – Change • 2 – Monitoring
<code><include></code>	Includes the parameter value in records only when the Change or Hysteresis condition is met. The values can be the following:

	<ul style="list-style-type: none"> • 0 – not include data • 1 – include data
<priority>	<p>Determines the importance of IO parameters value changes. The values can be the following:</p> <ul style="list-style-type: none"> • 0 – Low • 1 – High
<switch>	<p>Switches to another profile, if the Change or Hysteresis condition is met. The values can be the following:</p> <ul style="list-style-type: none"> • 0 – no switch • 1 – Profile 1 • 2 – Profile 2 • 3 – Profile 3 • 4 – Profile 4
<edge>	<p>Only applicable for Hysteresis condition. Defines on which hysteresis edge IO parameter has to be generated. The values can be the following:</p> <ul style="list-style-type: none"> • 0 — On Both • 1 — On Rising • 2 — On Falling.

i	<p>The following parameters must be included in the SMS message:</p> <ol style="list-style-type: none"> 1. id 2. profile 3. enable
---	---

Command Example

password

id=29,profile=4,enable=1,level=12700,delta=1000,average=1000,eventon=0,include=1,priority=0,switch=0,edge=0 - this SMS command enables IO parameter ID 29 (Power supply voltage) in Profile 4 with reference level 12700 mV, delta 1000 mV, averaging 1000 ms. *Event on* is set to *Hysteresis*, the data will be included only on event and priority is low. There is no switch to another profile and *edge* is set *On Both*.

password setioparam id=30,profile=4,enable=1 – this SMS command is the shortest possible. It enables IO parameter ID 30 (Battery voltage) in Profile 4.

If the SMS command does not define new values for *delta*, *average*, *eventon*, *include*, *priority*, *switch*, *edge*, then old values for these parameters will remain. If the setup is completely new, then these values will be set to default:

Level	Delta	Average	Event On	Include	Priority	Switch	Edge
0	0	1000	2	0	0	0	0

Responses

If the IO parameter was set correctly: *setioparam OK slot: XX*.

Where *XX*– is the slot number, where the parameter is enabled.

If the IO ID is not entered: *setioparam ERROR, I/O ID field is mandatory*.

If the IO ID is too long: *setioparam ERROR, I/O ID field limits exceed*.

If a non-existing IO ID is entered: *setioparam ERROR, this I/O ID does not exist*.

If the IO profile is not entered: *setioparam ERROR, I/O profile field is mandatory*.

If the IO profile is too long: *setioparam ERROR, I/O profile field limits exceed*.

If the IO enable is not entered: *setioparam ERROR, I/O enable field is mandatory*.

If the IO enable is too long: *setioparam ERROR, I/O enable field limits exceed*.

If the SMS command is too long: *setioparam ERROR, I/O parameter limits exceed*.

If the SMS command is not written correctly: *setioparam ERROR, wrong request syntax*.

If all slots are full: *setioparam ERROR, no free slots for set the I/O*.

If the tracking device finds more than one IO parameter with the same ID: *setioparam ERROR, more than one I/O with the same ID*.

If a parameter was supposed to be disabled and it is not enabled: *setioparam ERROR, parameter is already disabled*.

If some other error occurs: *setioparam ERROR, other*.

If the SMS configuration is disabled in the configurator tool: *You do not have permission to change the settings*.

1.1.48 setiotime

setiotime

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	⊘

This SMS command allows the tracking device to switch DOUT for a temporary period. After this command is completed, the tracking device stores the DOUT status. If several commands are sent after each other, then an interruption will occur and the state will then be **undefined**.

	If you will send several commands in a row too fast, the DOUT will get stuck and the tracking device will need to be restarted. We highly recommend you to wait at least until a response is received for the first sent command, before sending the next.
---	--

	The minimum impulse resolution is 10 ms and the minimum duration is 10 ms. If the Eco-panel is connected, the minimum resolution and duration is 50 ms. Each single DOUT has 10 slots for impulses levels.
---	---

	If one of the DOUTs is configured as <i>LED</i> , <i>Buzzer</i> , <i>Blocking</i> , or <i>Jamming block</i> , this command cannot be used.
---	--

Command Structure

SMS command structure: `<password> setiotime <X1> <DOUT1_time1> <Y1> <DOUT1_time2>,<X2> <DOUT2_time1> <Y2> <DOUT2_time2>,<X3> <DOUT3_time1> <Y3> <DOUT3_time2>,<X4> <DOUT4_time1> <Y4> <DOUT4_time2>`

Where:

<XN>	DOUTN first logical state. The values can be the following: <ul style="list-style-type: none"> • 0 – GND • 1 – no GND
< DOUTN_time1 >	DOUTN first logical state length. The value can be up to 999 999 999 ms.
<YN>	DOUTN second logical state. The values can be the following: <ul style="list-style-type: none"> • 0 – GND • 1 – no GND

< DOUTN_time2>	DOUTN second logical state length. The value can be up to 999 999 999 ms.
----------------	---

SMS command structure, when there is a repetitive amount of sequences: *<password> setiotime <X1> <DOUT1_time1> <Y1> <DOUT1_time2> n=<Z>,<X2> <DOUT2_time1> <Y2> <DOUT2_time2> n=<Z>,<X3> <DOUT3_time1> <Y3> <DOUT3_time2> n=<Z>,<X4> <DOUT4_time1> <Y4> <DOUT4_time2> n=<Z>*

Where <Z> is an amount of repetitions.

Command Example

SMS command example: *password setiotime 1 500 0 500,0 200 1 300,0 500 1 600,1 700 0 800*

SMS command example with a repetitive amount of sequences: *password setiotime 1 500 0 500 n=10,0 200 1 300 n=20,0 500 1 600 n=30,1 700 0 800 n=40*

SMS command example to set DOUT1: *password setiotime 1 500 0 500*

SMS command example to set DOUT2: *password setiotime ,0 200 1 300*

SMS command example for set DOUT3: *password setiotime ,,1 500 0 500*

SMS command example for set DOUT4: *password setiotime ,,,1 500 0 500*

Responses

If everything is ok: *setiotime set OK.*

If configuration SMS is incorrect, the device will respond with: *setiotime syntax error in DOUTN settings: error text.*

Where *error text* can be the following:

other process controls output	Other functionality is configured on DOUT.
no comma symbol	There is no comma separator.
wrong format	Not enough symbols are received.
wrong level	The entered level is neither 0 or 1.
no space symbol	There is no space symbol after entered levels value.
wrong ms number	Wrong time number.
wrong repeat number	Wrong repeat count number.
exceeded max slot	DOUT slot number is exceeded.
pulse is shorter than 10ms	Pulse length less than 10 milliseconds was set.
other reason	Something else has happened.

1.1.49 setlcv

setlcv

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	⊘	✓	✓	⊘	⊘	⊘	⊘

This SMS command is used to set a specific LCV group, subgroup and additionally enable IOs which are assigned to this group.

i	All LCV Group names and subgroup numbers are identical to those in the configurator. The only exception is the <i>Caterpillar</i> subgroup, which does not have a number in the configurator. In this case the <i><Group_name></i> would be <i>tractor</i> and <i><Sub_Group_number></i> - 2.
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i	For the 4 th generation devices Protocol v1.1 must be enabled in the advanced configurator.
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i	There must be enough free IO slots to enable the parameters.
----------	--

i	The LCV group and IOs will be set only on the currently active profile.
----------	---

Command Structure

SMS command structure: *<password> setlcv*

<Group_Name>, *<Sub_Group_number>*, *<CAN_interface_number>*, *<Silent/Active>*,
<Channel_X>, *<Additional_CAN_interface>*

Where:

<i><Group_name></i>	LCV group name. This parameter is mandatory.
<i><Sub_Group_number></i>	LCV subgroup number. This parameter is mandatory. Note: Only the subgroup number is used.
<i><CAN_interface_number></i>	CAN interface on which the selected parameters will be configured: <ul style="list-style-type: none"> • CAN1 – 1 • CAN2 – 2
<i><Silent/Active></i>	Set the enabled CAN interface to either <i>Active</i> or <i>Silent</i> : <ul style="list-style-type: none"> • Silent – 0 • Active – 1 Default value: <i>Silent</i> .

<Channel_X>	<p>Set the Channel for the CAN interfaces. The Channel setting is used when two separate physical connections must be made to receive all parameters from a LCV group/subgroup:</p> <ul style="list-style-type: none"> • Channel1 – 1; • Channel2 – 2 <p>Default value: 1.</p>
<Additional_CAN_interface>	<p>Specify whether to enable the other CAN interface:</p> <ul style="list-style-type: none"> • Not activate – 0; • Activate – 1. <p>Default value: <i>Not active</i>.</p>

Command Examples

SMS command examples:

password setlcv vag,17,1,0,2,1 – VAG17 subgroup will be enabled on CAN1 interface, silent mode on CAN1 and CAN2, CAN1 will be enabled on Channel 2, CAN2 will also be enabled on Channel 1.

password setlcv VAG,17,2 – VAG17 subgroup will be enabled on CAN2 interface, all other parameters are set to default settings.

Responses

Response example if everything is ok: *Configured group: VAG17, I/O elements enabled.*

If the LCV subgroup was set, but there are not enough free IO slots to enable all the IO parameters for this subgroup: *Configured group: VAG17, Error: Not enough I/O slots.*

If the LCV subgroup was set, but **Protocol v1.1** is not enabled, so no parameters are enabled at all: *Configure group: VAG17, Error: old I/O protocol is used.*

If an incorrect group name, subgroup number, or value was provided for one of the parameters: *Error: unknown parameter.*

If the device is currently in the process of LCV auto select, during which the user cannot set a LCV group or enable IO parameters: *Error: LCV auto select still in progress.*

If an incompatible LCV mode is configured on a CAN interface: *Wrong CAN configuration.*

If the LCV group contains more than 80 IO parameters: *Configured group: Tractor2, Error: Not enough I/O slots.*

1.1.50 setlock

setlock

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓*	⊘	✓	⊘	⊘	✓	⊘	⊘	⊘	⊘

* – not available with initial firmware release for Trace5-2G, Trace5-LTE and Trace5-LTM (Rev.A).

This SMS command is used for locking the vehicle.

Command Structure

SMS command structure: *<password> setlock <lock> <ATH>*

Where *<lock>* can have the following values:

- *lock* – locks the vehicle if the doors are closed
- *unlock* – unlocks the vehicle
- *mlock* – locks the vehicle regardless of the door state
- *skip* – does not modify the current lock status

<ATH> can have the following values:

- *ath-on* – blocks the engine
- *ath-off* – unblocks the engine
- *ath-skip* – does not modify the current engine blocking status.

Command Examples

SMS command example if you want to block the engine: *password setlock skip ath-on*

SMS command example if you want to lock the vehicle if the doors are closed: *password setlock lock ath-skip*

Responses

Response structure if the command was successful: *setlock <lock>-OK <ATH>-OK*

Response structure if the command was unsuccessful: *setlock <lock>-FAIL:<parameters> <ATH>-FAIL*

Where *<parameters>* can have the following values:

- *IGN* – ignition
- *ODW* – open door/window error
- *DFD* – door front driver
- *DFP* – door front passenger
- *DRD* – door rear driver
- *DRP* – door rear passenger
- *DHT* – door hatch

<ATH>-FAIL may occur when:

- the ignition is on
- the ignition state is unknown

Response examples:

If the command was successful: *setlock LOCK-OK ATH-ON-OK*

If the command was successful: *setlock LOCK-FAIL:IGN,DFD,DFP,DRD,DRP,DHT ATH-ON-FAIL*

1.1.51 setnetw

setnetw

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	⊘	⊘	⊘	⊘	⊘	⊘

This SMS command is used to set the required cellular network type.

Command Structure

SMS command structure: `<password> setnetw <network>`

Where `<network>` can have the following values:

- `1` – automatic mode
- `2` – 2G mode (GSM)
- `3` – 3G mode (UMTS)
- `4` – LTE Cat M1 mode

Responses

Response structure: `setnetw <network mode> <status> mode <outcome> <profile>`

Where `<network mode>` can be one of the following:

- `automatic` – indicates the automatic network mode
- `2G` – indicates the 2G network mode
- `3G` – indicates the 3G network mode
- `LTE` – indicates the LTE Cat M1 network mode

`<status>` can be one of the following:

- `disabled` – indicates that the network is disabled
- `enabled` – indicates that the network is enabled.

`<outcome>` can be one of the following:

- `set OK` – indicates that the network mode is set successfully;
- `set FAIL` – indicates that the network mode is not set.

`<profile>` can be one of the following:

- `(1-profile)` – the network mode is set in Profile 1

- *(2-profile)* – the network mode is set in Profile 2
- *(3-profile)* – the network mode is set in Profile 3
- *(4-profile)* – the network mode is set in Profile 4

If the HW version does not support 3G/LTE: *setnetw: modem does not support 3g/lte*

If the *<network mode>* value is out of range: *setnetw error: field is out of range*

If 4G mode was enabled successfully in Profile 1: *lte mode set OK (1-profile)*

If the device does not support 3G mode: *setnetw: modem does not support 3g*

1.1.52 setvalue

setvalue

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	⊘	⊘	✓

This SMS command is used to set the specific IO values.

Parameter	Trace5***	5 th Generation Advanced Family Devices	4 th Generation Advanced Family Devices	Eco Family	Plug4
Virtual odometer (ID 65)	+	+	+	+	+
ECO Absolute idling time (ID 175)	+	+	+	+	+
CANBUS Distance (ID 114)		+	+		
DIN1 hours accumulated (ID 577)	+	+	+	+	
DIN2 hours accumulated (ID 578)	+**	+	+	+	
DIN3 hours accumulated (ID 579)	+**	+	+	+	
DIN4 hours accumulated (ID 580)	+**	+	+	+	

* – value will be overwritten by a valid message from CAN-Bus (if available in the specific vehicle).

** – not available for pre-revision Trace5 devices.

*** – (for Trace5-2G, Trace5-LTE and Trace5-LTM (Rev.A)) implemented partially, initially will only support Virtual odometer (ID:65).

Command Structure

SMS command structure: *<password> setvalue <ID> <value>*

Where:

<i><ID></i>	Enter the IO ID.
<i><value></i>	Enter the IO value.

Command Example

SMS command example: *password setvalue 65,0*

Response

Response example: *65,0.*

1.1.53 snapshot

snapshot

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	✓	✓	✓	✓	✓	⊘	⊘	⊘

This SMS command allows taking pictures on demand via connected peripherals with cameras.

Command Structure

SMS command structure: *<password> snapshot <peripheral number>*

Where *<peripheral number>* can have the following values:

- 0 – the command applies to all configured peripherals with cameras;
- 1 – the command applies to the RS232 camera configured on PortA;
- 2 – the command applies to the RS232 camera configured on PortB;
- 3 – the command applies to the fatigue sensor.

Responses

Response structure: *snapshot <peripheral number> <answer>, <other peripheral number> <answer>*

Where *<answer>* can be one of the following:

<i>ok</i>	Indicates that the peripheral took a picture successfully.
<i>busy</i>	Indicates that the peripheral is busy with a previously taken picture at the moment.
<i>n/a</i>	Indicates that the peripheral is either not configured on the given port, not connected or not responding.
<i>full</i>	Indicates that the memory of the SD card is full.
<i>fullsd</i>	Indicates that the memory of the SD card is full and the picture will be discarded, as there are no pictures to be overwritten.
<i>err</i>	Indicates that there was an error.

Response examples:

snapshot 1 ok

snapshot 1 ok, 2 n/a

1.1.54 ssl status

ssl status

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓*	✓	✓	✓	✓	✓	✓	⊘	⊘	⊘

* – not available with initial firmware release for Trace5-2G, Trace5-LTE and Trace5-LTM (Rev.A).

This SMS command allows receiving information about current SSL authentication status.

Command Structure

SMS command structure: *<password> ssl status*

Response

Response structure: *SSL status server1 <status>,server2 <status>*

<status> can have the following values:

- 0 – SSL authentication is disabled on this server;
- 1 – SSL authentication is enabled on this server.

If OCSP validation is enabled, *<status>* can have additional values:

- 2 – the certificate is valid;
- 3 – OCSP lookup failed;
- 4 – the certificate is revoked;
- 5 – OCSP server URL not found;
- 6 – unknown certificate;
- 7 – validation request timeout;
- 8 – modem firmware does not support OCSP validation.

1.1.55 switchip

switchip

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to change the current primary IP and port (IP1, Port1 or IP2, Port2).

i	This change is temporary and applies only until the device reset. After the reset, IP and port configuration will be restored to the previous state.
----------	--

Command Structure

SMS command structure: *<password> switchip <X>*

Where *<X>* the IP and port of the primary server.

Command Example

SMS command example: *password switchip 1*

Responses

If the connection is successful: *Setting primary IP OK*

If the operation was unsuccessful: *Setting primary IP FAIL*

1.1.56 tachometer

tachometer

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	⊘	⊘	✓	⊘	⊘	⊘	⊘	⊘

This SMS command is used to get tachograph status information.

Command Structure

SMS command structure: `<password> tachometer`

Response

Response structure: `TACHO status: <X>`

Where `<X>` can have the following values:

- `0` – not available;
- `1` – everything is ok;
- `2` – tachometer parameters are not configured;

Response example: `TACHO status:1`

1.1.57 tachostatus

tachostatus

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
⊘	✓	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘

This SMS command is used to get more detailed information about the tachograph status.

Command Structure

SMS command structure: `<password> tachostatus`

Reponses

- *Tacho status 1. Ready for remote tacho download.* – If a successful service response and successful routing control response are received
- *Tacho status 2. Tacho parameters are not configured.* – If the tachograph solution is not enabled in the device configuration
- *The device is busy with critical process. Please try again later.* – If the device is downloading a tachograph file at the moment when SMS command is received

Errors can be the following:

- *Tacho status 0. Error (10 00)* – When no response received to service enable request (response timeout). In this case, please check the physical connection.
- *Tacho status 0. Error (31 00)* – When no response received to routing control request (response timeout). In this case, please try again.
- *Tacho status 0. Error (10 12)* – When remote download is not activated in the tachograph. In this case, please contact a tachograph workshop for activation
- *Tacho status 0. Error (10 22)* – When remote download is not possible. In this case, please check the connection to the correct tachograph socket (C port)

If you get other error messages, please contact our technical support.

1.1.58 ussd

ussd

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	⊘

GSM network operators are providing various services via USSD communication. Support of the USSD commands allows users to send various USSD requests to the GSM operator over the tracking device and receive answers. In this case the device operates in the transparent channel principle.

Operation principles

- USSD command is received through the SMS and then passed to the modem;
- USSD command is not affected or ignored by ongoing firmware, configuration updates or tachograph and smart card reading.
- After getting the response, the device transmits the answer to the sender of the SMS;
- Timeout of 120 seconds is used when waiting for the response from the GSM operator.

Command Structure

SMS command structure: *<password> ussd *command#*

Where *command* is a set of digits and asterisk symbols (*). Command always begins with an asterisk symbol * and is terminated by #. Inside, the command can have several asterisk symbols.

Command Examples

Correct SMS command examples:

*password ussd *485#*

*password ussd *52*452*4#*

Incorrect command examples:

password ussd 52#

*password ussd *45*

*password ussd *5 65#*

Responses

If the operator responds to the ussd command within 120 seconds: *ussd response*

If * or # symbols are missing or command is blank in the request message: *ussd bad format*

If the response is not received from the operator within 120 seconds: *ussd timeout*

If there is an error with the GSM network operator: *ussd modem error*

1.1.59 version

version

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get current tracking device version.

Command Structure

SMS command example: `<password> version`

Response

Response structure: `<X>,<Y>,<Z>,<W>,<V>`

Where:

<1>	Bootloader version.
<2>	Firmware version.
<3>	Hardware version.
<4>	GSM signal level. The signal level ranges from 0 (no signal) to 31 (strong signal).
<5>	Voltage status: <ul style="list-style-type: none"> • 0 – lower than 8 Volts (bad); • 1 – higher than 8 Volts (OK). Exception for Eco4 S and Eco4 T: <ul style="list-style-type: none"> • 0 – lower than 6 Volts (bad); • 1 – higher than 6 Volts (OK).

Response example: `5402,00.02.15,1089,5,1`

1.1.60 webcoords

webcoords

5 th Generation Devices				4 th Generation Devices					
Trace5	HCV5	LCV5	Pro5	Tco4 HCV	Tco4 LCV	Pro4	Eco4	Eco4 S/T	Plug4
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

This SMS command is used to get hyperlink to Google maps with coordinates, current vehicle speed and ignition status.

Command Example

SMS command structure: *<password> webcoords*

Responses

Response structure: *<time>, <hyperlink>, <speed>, <ignition>*

Where:

<i><time></i>	GMT date & time of coordinates.
<i><hyperlink></i>	Hyperlink to Google maps with coordinates: latitude and longitude.
<i><speed></i>	Current vehicle speed, km/h.
<i><ignition></i>	Ignition status.

Response example if the GPS data is available: *2015-05-11 13:01,*

<https://www.google.com/maps/?q=54.7404933,25.2222366>, speed: 94, ignition: ON

If the GPS data is not available: GPS data not available: *Ignition: ON*

If the GPS data is not available but was available earlier, then the device can return the last known coordinates and the time shows when the coordinates were taken:

Response structure: *<time>, <hyperlink>, <speed>, <last ignition>, <current ignition>*

Where:

<i><time></i>	GMT date & time of coordinates.
<i><hyperlink></i>	Hyperlink to Google maps with coordinates: latitude and longitude.

<speed>	Current vehicle speed, km/h.
<last ignition>	The last recorded ignition status.
<current ignition>	The current ignition status.

Response example: *No GPS. Last entry: 2015-05-16 17:32,*

<https://www.google.com/maps/?q=54.7404933,25.2222366>, speed: 65, ignition: ON, current ignition: OFF

1.2 SMS during Critical Processes

SMS during Critical Processes

There are 4 critical processes:

- Firmware update
- Configuration update
- Tacho read
- Smart Card read

During these processes the following SMS commands will be ignored:

- reset
- connect
- econnect
- switchip
- setconnection
- delrecords
- setcfg
- getcfg
- setioparam
- getioparam
- clear obd
- tacho

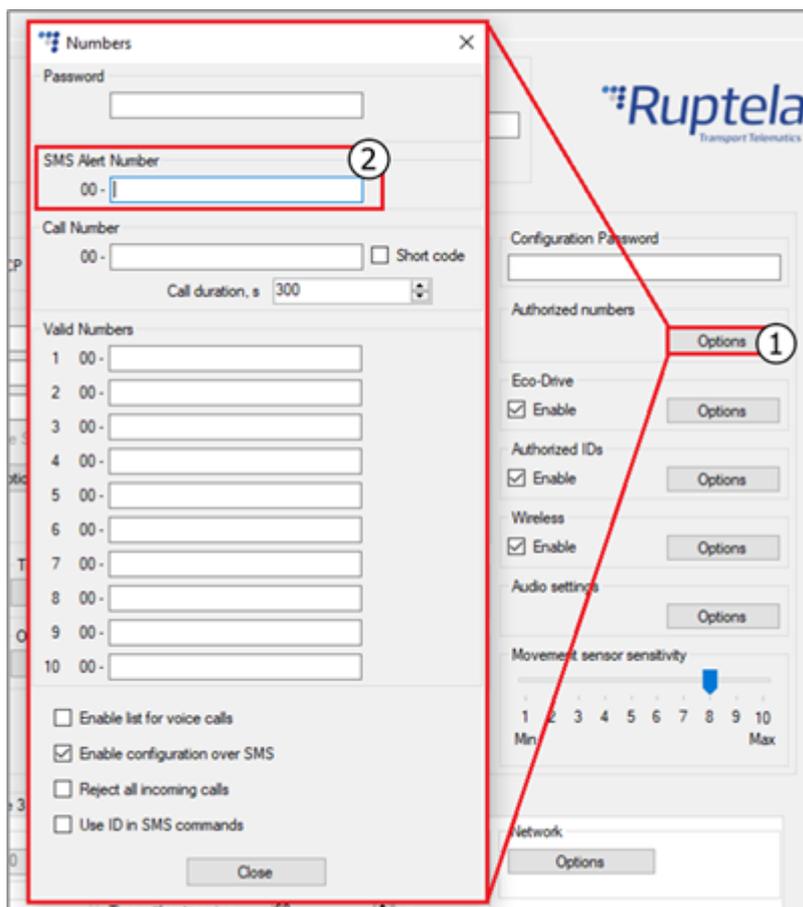
Response *example*: *The device is busy with critical process. Please try again later.*

1.3 Informational Messages and Alerts

If required, you can receive an SMS alert with date and time, which will notify if one of the configured events is triggered: *GPS speed, power supply voltage, autogeofence alert DIN1, DIN2, DIN3, DIN4 (ignition)*.

To receive such alerts, the **SMS Alert Number** functionality must be configured in the advanced configurator. Follow these steps:

1. Click **Options** button in the **Authorized numbers** section to open the **Numbers** window.
2. In the **SMS Alert Number** field enter the number, where the alerts will be sent.



i The + sign has to be replaced with 00.

3. Close the **Numbers** window and click the **Options** button in the **IO events** section.
4. Set one of the events:
 - All DINs – **Event on** is set to *Change*
 - Power supply voltage – **Event on** is set to *Hysteresis (On Both or On Falling)*
 - GPS speed – **Event on** is set to *Hysteresis (On Both or OnRising)*
 - Autogeofence alert – **Event on** is set to *Change*
5. Tick the **SMS Alert** checkbox.
6. If required, enter the custom message in the **Event on high** and **Event on low** fields.



If the device was out of the GSM coverage, it will accumulate events that will be sent as soon as the GSM connectivity is restored. The tracking device can store up to 16 events. If the 16 event threshold is reached, the device will start to overwrite oldest events. A report of all events will be sent in **ONE** message (as many, that can fit in 160 characters). Multiple events in one SMS message will be delimited by a semicolon symbol ;.

SMS alert message structure: *date1&time1-event1; date2&time2-event2; ...*

SMS alert examples:

2015.05.01 16:24:01-device disconnected

2015.06.02 22:05:16-ignition: ON; 2015.06.02 22:05:35-DIN1: OFF

2015.06.14 08:30:45-overspeed.