How to configure OBD I/O elements via SMS

1.1 OBD parameters

1.1.1 OBD Interface (ID=2100)

Enable – value 1; disable – value 0.

Minimum value	Maximum value	Recommended value	Goes with (depends on) parameters	Value type
0	1	-		U8

1.1.2 OBD I/O Configuration

OBD I/O configuration is the same as general I/O (See I/O parameters). There are 20 slots, which can be dedicated for certain OBD parameters, recognized by PID.

Only 20 slots are available because not many vehicles support more than 20 OBD parameters.

Slot number	I/O element ID
1	2150 – 2155
2	2160 – 2165
3	2170 – 2175
4	2180 – 2185
5	2190 – 2195
6	2200 – 2205
7	2210 – 2215
8	2220 – 2225
9	2230 – 2235
10	2240 – 2245
11	2250 – 2255
12	2260 – 2265
13	2270 – 2275
14	2280 – 2285
15	2290 – 2295
16	2300 – 2305
17	2310 – 2315
18	2320 – 2325
19	2330 – 2335
20	2340 – 2345

Before the configuration of OBD parameter you must assign it for a certain slot.

Command specifies and enables OBD IO element.

SMS Format: setparam X Y

X – I/O element ID;

Y – PID number (DEC). PIDs list can be found here: https://en.wikipedia.org/wiki/OBD-II_PIDs#Mode_01

I/O property parameter (ID=2150) - Parameter defines I/O property value. Possible values: enabled (1), disabled (0).

I/O priority (ID2151) - Parameter defines I/O property type of priority: 0 is low, 1 – high, 2 – panic.

I/O High level (ID2152) - Parameter defines high value of triggered I/O property. This parameter is used to set thresholds for I/O properties to generate events.

I/O Low level (ID2153) - Parameter defines low value of triggered I/O property. This parameter is used to set thresholds for I/O properties to generate events.

I/O Logic operand (ID=2154) - Parameter defines when event is sent: 0 – on range exit; 1 – on range entrance; 2 – both; 3 – monitoring; 4 – hysteresis.

I/O averaging length (ID=2155) - Parameter defines I/O property sample length to average. If no averaging needed default value is 1.

1.2   *Full example of OBD parameter configuration:*

To configure Engine RPM PID 0C(Hex)=12(Dec) for 1 th slot, you must send SMS command:
[login] [pass] setparam 2150 12

Then other parameters can be configured similar to I/O parameters: 2151 – Priority; 2152 – High level; 2153 – Low level; 2154 – Event type, 2155 – averaging length.

Example:
[login] [pass] setparam 2151 1