

OBD Comfort Module (OCM)

manual



For Opel Astra H and Opel Zafira B

The Owner of OCM acknowledges that the OCM is designed only for Opel/Vauxhall Astra H or Opel Zafira B cars, it extends factory features with convenience options and functions. This modul does not have approval for electronic or electromagnetic compatibility with the car therefore according to regulations OCM must not be used in cars on public roads. That means the Owner installs and use OCM in(to) his/her car on his/her own risk and responsibility. The developers strive to make it a perfect product but issues in driver's experiment cannot be excluded as a result of using this module .

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Installation

The steps of installation:

In general it's strongly advised to remove the module in case of any service activities on the car, especially if the battery is removed!

Please make sure that ignition is turned off!

Opel Astra H:

- Remove the cover below the handbrake. (The cover is secured by two patents at the back side. Gently reach the edge of the cover and free them up. The cover can be removed.)
- Place the OCM box besides the OBD II connector in a convenient place
- Connect the 16 pin connector to the factory OBD II connector. Pay attention to the shape of the connector, it can be connected in one way.
- The cover can be placed back (start with the end to the gearshift then the side towards the back seats)

As an alternative, the modul can be placed anywhere in the car where GMLAN, +12V and GND is available. Please visit a professional in order to do this installment.



Installation

Opel Zafira B:

- At the center dash under the gearshift remove the cover, then you can find the OBD II service connector.
- The OCM box cannot fit between the OBD II connector and the cover. The easiest method is to remove the center console cover, free up the OBD II connector, connect OCM and place the whole thing in a free place in the center console box.

For alternative methods please visit a professional.

Initialization

There is no need for customization. The module will be activated when the ignition is turned on.



Basic functions

2.1. Display engine coolant, voltage, speed

The needed data is shown on the instrument cluster (a.k.a clocks), on the display of odometer.



Switching between the different modes is possible by turning the right knob (volume) UP then DOWN (the two operation must be between ~0.5 seconds). Certainly the knob keep amending the volume up and down on the head unit.

Four functions can be selected:

1. Display engine coolant degree

By selecting this option the engine coolant degree is always seen except an alarm condition is met (e.g. the voltage is too low or too high).

On the odometer Cxx* or Cxxx* is shown (it depends to if the coolant is below or above 100 degrees Celsius), also Fxx* is possible (under 0 degrees, e.g. in case of winter startup), and the place of x-es shows the temperature of the engine coolant in Celsius degrees.

2. Display battery voltage

The voltage of the battery or the voltage of the generator is continuously seen except the conditions of a different alarm are met (e.g. the engine is too hot).

On the odometer Axxx* is displayed where the first two digits shows the whole number, the third the fraction, e.g. A138 = 13.8V.

3. Display actual speed

It's possible to visualise the actual speed in digital format. The format is 000xxx, where x-es mark the actual speed in km/h. It is displayed always until the conditions of any alarm are met.

Note: If you see the speed function and switch mode, you see that „OFF” is displayed and after approx. 5 seconds the extended display turns off and the factory default is displayed (odometer and daily trip).

4. Factory default („OFF”)

This is the factory default, the odometer and daily trip counter is displayed. Another mode switch will turn on „Display engine coolant” again.

Summary



Switch modes:
VOLUME ↑ + ↓

Temperature → Voltage → Speed →
OFF

* Certain cars made in 2004 has an instrument cluster that is not able to display characters. It happens you see „12” instead of „C” or „10” instead of „A”

Alarms and warnings

2.2 Engine too hot alarm

If the temperature of the engine coolant exceeds the upper limit set, this alarm will be automatically triggered. In this case the odometer will show the engine coolant, independently from the selected mode, until the engine cools down below the upper limit (you cannot switch mode).

An auidial alarm (3 beeps in every 0.5 seconds) is also activated when the limit temperature is reached. This beeping can be acknowledged by any buttons on the steering wheel. After the acknowledge, the coolant degree is still displayed. If the engine cools down below the limit then reach it again, the auidial warning will be activated again.

The consequence of the above is that, in order to avoid false alarms, knowing the motor code and the opening temperature of the thermostat is paramount. In the software of OCM the limit is pre-set so in a car that has different engine than is pre-programmed may cause false alarms or what's worse, an overheated engine.

The display shows the „usual“ Cxxx value.

The pre-set limit value is 112 °C for the listed engine codes: Z14XEP (90 Le, 125 Nm), Z16XEP (105 Le, 150 Nm), Z16XE1 (105 Le, 150 Nm), Z16XER (116 Le, 155 Nm), Z18XE (125 Le, 170 Nm), Z18XER (140 Le, 175 Nm).

For the engine codes Z16LET (180 Le, 230 Nm), Z20LEL (170 Le, 240 Nm), Z20LER (200 Le, 262 Nm), Z20LEH (OPC, 241 Le, 320 Nm) the limit is 100 °C.

For engine codes Z13DTH (90 Le, 200 Nm) Z17DTL (80 Le, 170 Nm), Z17DTH (101 Le, 240 Nm), Z17DTJ (110 Le, 260 Nm), Z17DTR (125 Le, 280 Nm), Z19DTL (101 Le, 260 Nm), Z19DTJ (120 Le, 280 Nm), Z19DT (120 Le, 280 Nm), Z19DTH (150 Le, 320 Nm) the set limit is 105 °C.

2.3 Engine warming-up monitor

An optional feature is the engine warming monitor. This is based on an estimation on the coolant temperature as the oil temperature is not accessible by the module. When the coolant reaches 80 degrees (petrol engines) or 70 degrees (diesel engines), it waits for 6 minutes, then gives a notification by beep once and show the engine degree on the display for 5 seconds (overriding the actual value). The format is the „usual“ Cxxx. This can give an estimation that the oil temperature is good, although it's not a guarantee.

2.4 Too low or too high voltage monitor

If the engine runs and the battery voltage drops below 13.2V or go higher than 14.6V, the display automatically switch to the battery voltage screen (warning). In this case the mode switch does not work until the battery voltage gets to the normal state. After the voltage is within the limits, the module will show the originally set screen.

This alarm does not contain auidial warnings.

Convenience

2.5 Fast volume from steering wheel

An optional function is to „enhance“ the factory volume up and down function. Basically, every knob turning counts as double. In this way the volume of the radio can be turned faster.

2.6 Opening from remote

When the car is opened from remote, the OCM module counts the number of button presses and depending to it extends the factory functions.



- If the car is locked, double-open (meaning one press on /| and another not sooner than 0.5 secs but not later than 1 second) opens the hardtop without further button presses (only in case of Twintop). Another button press on remote or turning ignition on stops the moving roof (for security reasons). The doors can be opened meanwhile.

- The second press involves a welcome light and a short guide-to-car light. If factory comfort function (long press button on remote) is used, the welcome light still shown.

- On third and every further press the module provides longer (approx 20 seconds) guide-to-car light (useful if parking in a dark environment)

- Factory comfort functions (long pressed buttons) remain.

2.7 Closing from remote

- If the car is unlocked, double-close (press || then again not sooner than 0.5 secs and not longer than 1 second) hardtop closes (only Twintop). Any button press on remote stops the roof move.

- On first (single) press on the || button involves turning on the side indices for approx. 5 seconds (only in case of REC module).

- Second press on remote || button closes all windows at once (only cars equipped with REC controller, that has 2 or 4 electric window and the factory comfort function is learnt).

- Third and every further press provides guide-home light. The low beams and brake lights turn off for ~20 seconds, giving light in case of dark conditions.

Factory functions remain (lock doors, enable alarm, comfort functions).

2.8 OPC „needle sweep“

Similarly to OPC cars, when the ignition turned on, all icons in the instrument cluster is lit and the RPM, speed and fuel level needles „sweep“ from left to right and back.

2.9 Pedestrian warning in reverse

If the car is in reverse gear, the engine runs and the handbrake is off, the car blinks the central brake light in order to warn passers-by behind the car. If break pedal is pressed the blinking stops and together with the other break lamps it lits continuously, according to its original purpose.

This function is only available if the car is equipped with REC module.