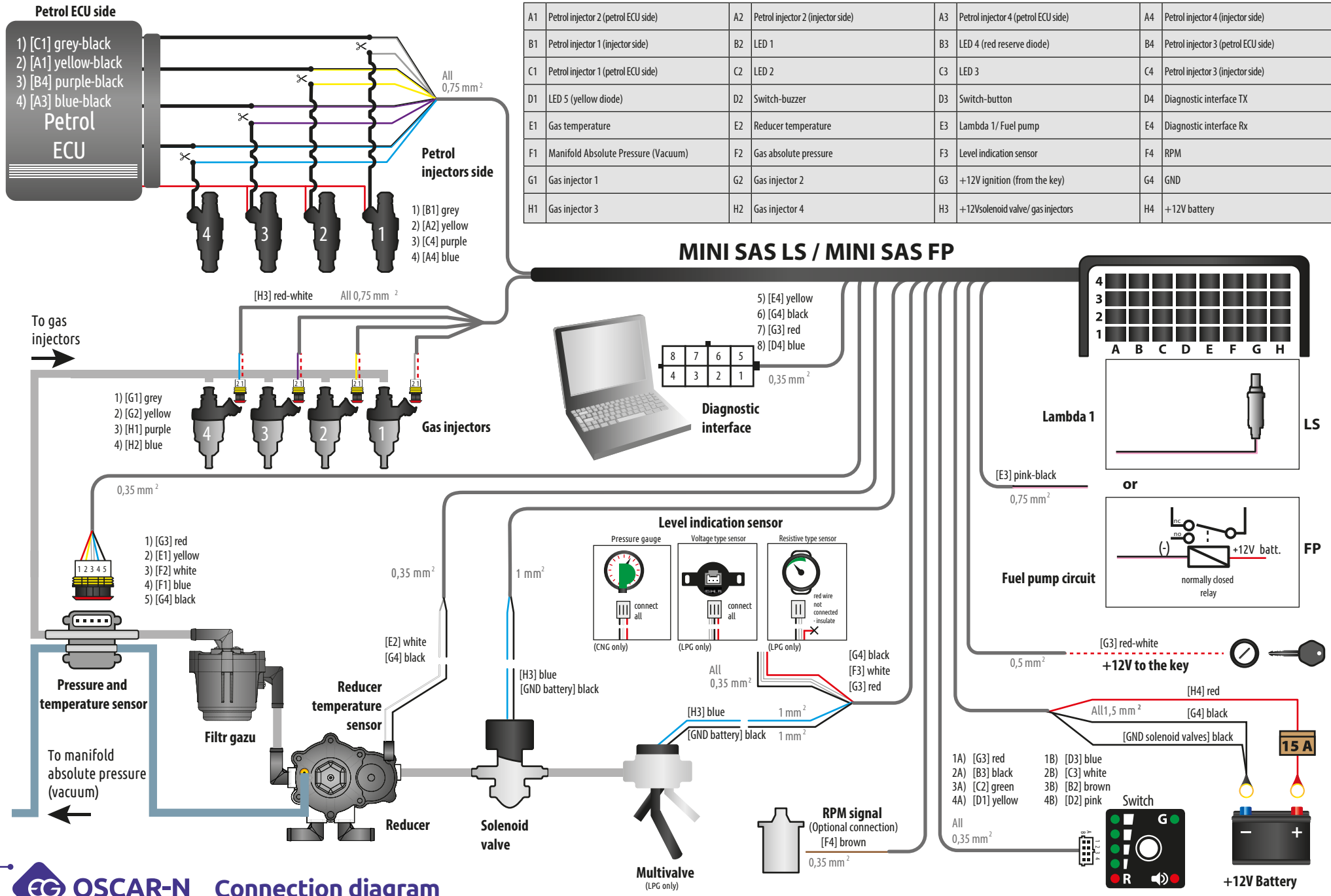
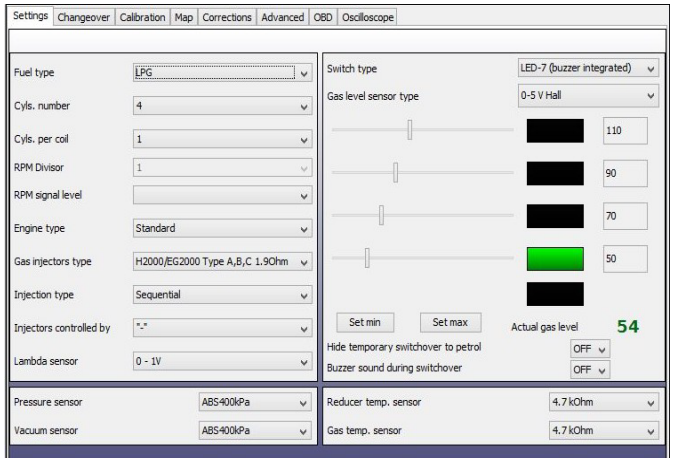


A1	Petrol injector 2 (petrol ECU side)	A2	Petrol injector 2 (injector side)	A3	Petrol injector 4 (petrol ECU side)	A4	Petrol injector 4 (injector side)
B1	Petrol injector 1 (injector side)	B2	LED 1	B3	LED 4 (red reserve diode)	B4	Petrol injector 3 (petrol ECU side)
C1	Petrol injector 1 (petrol ECU side)	C2	LED 2	C3	LED 3	C4	Petrol injector 3 (injector side)
D1	LED 5 (yellow diode)	D2	Switch-buzzer	D3	Switch-button	D4	Diagnostic interface TX
E1	Gas temperature	E2	Reducer temperature	E3	Lambda 1/ Fuel pump	E4	Diagnostic interface Rx
F1	Manifold Absolute Pressure (Vacuum)	F2	Gas absolute pressure	F3	Level indication sensor	F4	RPM
G1	Gas injector 1	G2	Gas injector 2	G3	+12V ignition (from the key)	G4	GND
H1	Gas injector 3	H2	Gas injector 4	H3	+12Vsolenoid valve/ gas injectors	H4	+12V battery

OSCAR-N MINI SAS **Connection diagram**

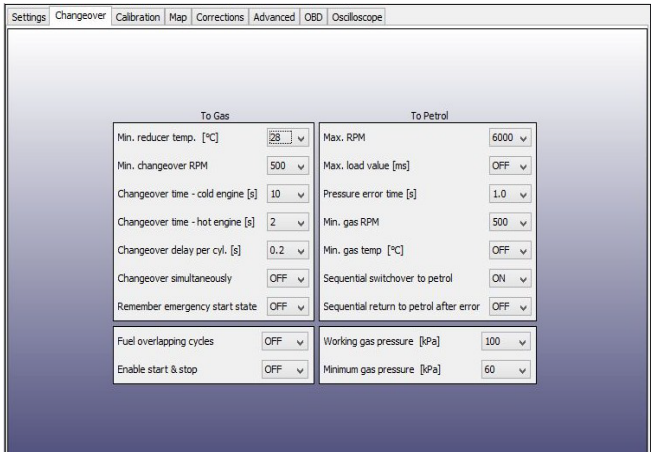
Quick Start Guide

1 - Settings Panel



1. Set proper value of **Cyls per Coil** – how many cylinders we have for 1 ignition coil (to get proper value of RPM).
2. Set proper value of **RPM signal level** (usually 12V if signal is taken from ignition coil).
3. Set **Engine type:** STANDARD (aspirated engine) or TURBO (turbocharged engine) to have proper vacuum range on the map.
4. Set proper **Gas injectors type** (especially in terms of injector resistance).
5. For cars with injectors controlled by full group strategy (all injectors controlled by single signal) change the **Petrol injection type** from Sequential to Full group.
6. Only for cars with petrol injectors controlled by positive pulse please change the value **Injection controlled by** to „+"
7. Set proper **Lambda sensor** type, if connected.
8. In case of using a **Pressure/Vacuum sensor, Reducer temperature sensor** or/and **Gas temperature sensor** different from standard ones (**ABS400kPa** and **4.7kOhm** type sensors, which are provided with the ECU set and set as default types) please change sensor type in a proper field.
9. Select proper switch type (LED-7 buzzer integreted or LED-5 separate buzer)
10. Select proper type of gas level indication sensor/pressure gauge installed (0-5V for Hall sensor).

2 - Changeover Panel



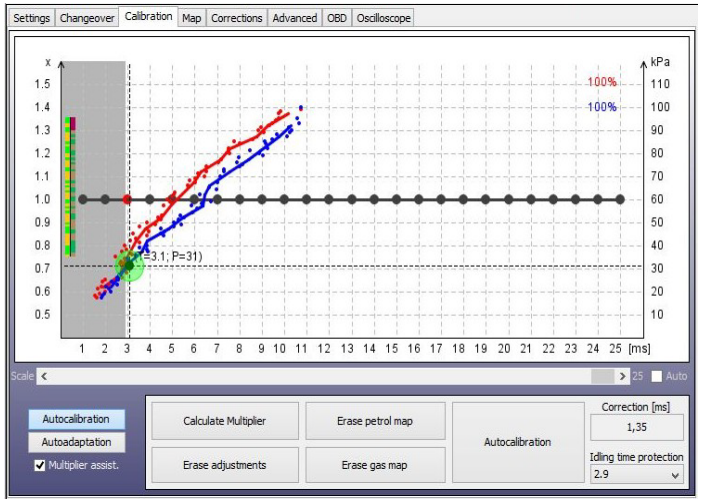
1. Set desired parameters for system change over **To Gas and To Petrol.**

Attention!

For full-group controlled cars please set **Changeover delay per cyl. [s]** to "0.0" s. and **Changeover simultaneously** to "ON" before running auto-calibration.

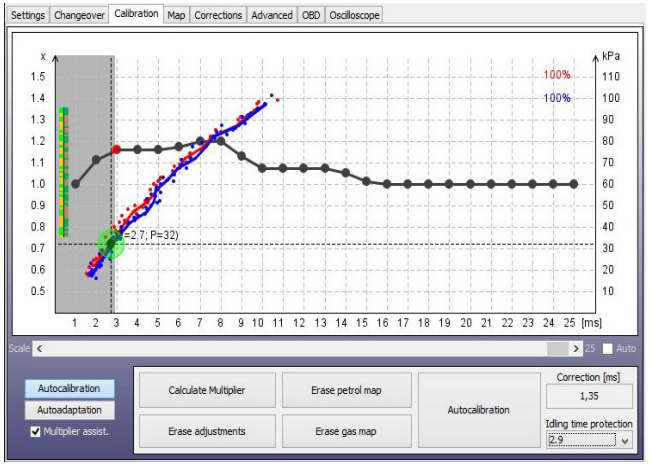
2. The **Working and Minimum gas pressure** values will be updated automatically after autocalibration. In case of manual change of reducers pressure these values must be updated every time.

3 - Calibration Panel (auto-calibration on idle)



1. Wait for the reducer to reach temperature of 50 C degree. The engine should be running on idle revs, on petrol. Air-conditioning must be turned off.
2. Press **Autocalibration** button and follow the instructions displayed during autocalibration process.
3. If Correction [ms] value after autocalibration will be within safe margins <**0.5 ms – 2.5 ms**> erase the petrol map and gas map. If not, please change the injectors type (or nozzle size) or change gas pressure value according to programs suggestion and go back to step 1.

4 – Calibration Panel (self-adaptation during the drive)



1. Go for a drive to collect petrol and gas maps in full range of loads (drive until 100% of both maps will be collected).
2. If petrol and gas maps are not close enough to each other, press **Calculate adjustments** button.
3. Press **Erase gas map** button and collect 100% of new gas map
4. If both maps still are not close enough, You can do manual correction by moving multiplier line points and then going back to step 1.
5. If maps are close enough to each other You may turn **Autoadaptation** feature ON to prevent them from growing apart.

If everything has been installed properly, 4 steps mentioned above should guarantee proper driving on both fuels. In more sophisticated cars there may be necessity of using features located in „Map", „Corrections", Advanced" and „OBD" bookmarks. To learn more details refer to the User's Manual located in "docs" folder attached to the software (Press "Help" bookmark to open that folder).