USER MANUAL



W KEYPAD SENT Module

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>>> CONTENT OF DELIVERY <<<

- a) Tuning Module W KEYPAD SENT
- b) Cable harness
- c) Bridging plug
- d) Cable ties
- e) User manual
- f) Warranty





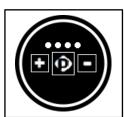
>>> PRODUCT FEATURES <<<

Dear Customer, our product has the following features:



Made in Germany

We invest in the future and development. Every day we work to improve the quality of our products, which proves our DEKRA Certification ISO9001.



Keypad

Keypad with several performance levels allows you to have customized driving setup you want; Economy, Sport, Power, OFF.



Plug & Drive

Easy and quick Plug & Drive Tuning Module installation with original automotive FCI cables BOSCH, DENSO, SIEMENS, DELPHI, without additional technical knowledge.



Driving With Pleasure

With Tuning Module you'll get more power and more dynamics which means more fun and pleasure!



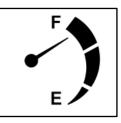
Higher Torque

The increase of torque up to 30% with a better acceleration of the vehicle.



More Power

The increase of power up to 30% with a better acceleration of the vehicle.



Fuel Saving

You can reduce fuel consumption on some vehicles up to 10% depending on the module and its configuration.



>>> GENERAL INSTALLATION NOTES <<<

Only by exact following the notes you will be able to install the Tuning Module correctly on your vehicle and enjoy the full advantages of our system.

Please read the notes throughout and be sure that you understood each step before actual installation takes place.

Please follow the next steps:



1) Open the engine compartment hood. Turn off the engine and remove the ignition key. Lock all the doors and do not try to open them during installation.



2) Wait for 5 minutes for all electrical devices to stop working.



3) Install the equipment in engine compartment under dry conditions. In case of engine washing please remove the whole equipment before washing.



4) High temperature from heat sources can significantly reduce the life span of electronic components. Therefore, never install the module near engine parts which produces heat, or at any other heat sources in engine compartment.



5) In order to keep the Tuning system functional please do not try to make any changes on Tuning Box or cable harness. Also please use the delivered cable ties to appropriate fix the cable harness away from moving and metal parts in order to avoid cable damage.

In case of equipment malfunction due to non-compliance to above mentioned general installation notes, the product warranty will be lost.



>>> INSTALLATION PRINCIPLE <<<

Tuning Modul W Keypad SENT is designed for all types of engines and can manage multiple sensors simultaneously. Especially made for digital sensors with SENT protocols but can also handle the analogue sensors. A special feature of this model is the keypad with which you can choose up to 4 different strengths programs - Economy, Sport, Power, OFF. Specially designed for your car, Tuning Modul W Keypad SENT enables more acceleration, greater engine power, more driving dynamics, and reduces fuel consumption depending on your driving mode. For all these reasons, you'll get to enjoy driving so much more with the Tuning Modul W Keypad SENT.

In order to avoid damages on electronic vehicle components, you have to be sure that you install the Tuning Module in a waterproof and vibration-less place, away as much as possible from heat sources. The Module should be placed in engine compartment.

Please do not open the Tuning Module nor expand or shorten the cable harness.

The Tuning Module W Keypad SENT has following features:

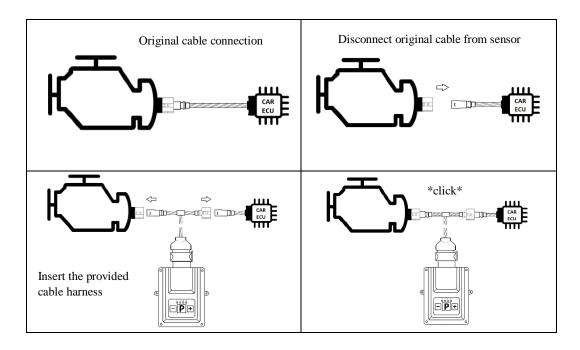


<u>Please note:</u> The keypad is active only for certain time only (1 minute and 30 seconds) after the engine start. After this period expired you will not be able to make any changes over keypad. In order to make further changes after the keypad activity period you will need to stop the engine, and then start again.



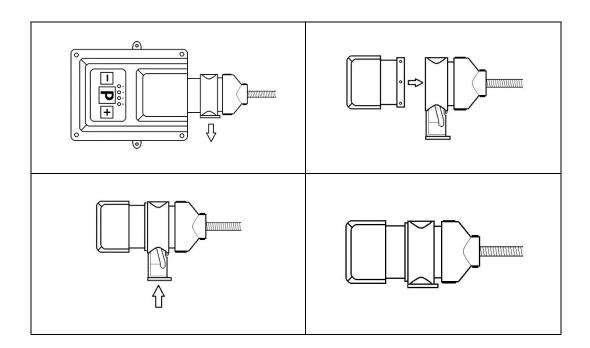
CAUTION: DO NOT PLUG OR UNPLUG THE TUNING MODULE DURING ENGINE RUN.

Example of the connection diagram is shown on the picture below.



If you need to remove the Tuning Module, please follow the installation preparation procedure; with opening the engine hood, turning the ignition key off, and removing the key from car lock. Afterwards you can disconnect the Tuning Module with respect on time to allow all electrical devices to stay without voltage.

After removing the Tuning Module, in order to leave the existed cable harness at place, please plug the provided Bridge plug instead of Tuning Module on cable harness. Procedure is shown on the picture below.





>>> PROGRAM SETTINGS AND FINE TUNING <<<

The Tuning Module is pre-loaded with following programs:

- 1) POWER Enables you the maximum performance in terms of power and torque.
- 2) SPORT Program optimized for best agility with slightly less power and torque.
- 3) ECONOMY Programed for lower fuel consumption due to increased engine torque.
- 4) STANDARD Using this mode you will use the vehicle factory setting, like there is no Tuning Module installed.

First 3 programs can be further fine-tuned in 3 upward and 3 downward steps.

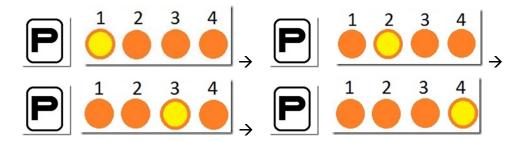
By default, the Tuning Module is delivered to start with program number 2 - SPORT.

Once you placed the Tuning Module in your vehicle, and engine was started you can choose between the programs. By pressing the P-key the LED respective to active program will lit. At beginning it will be LED number 2. If you do not do anything further after 5 seconds all 4 LED's will start to flash, and program will be saved as active. The drawing shows following:



Drawing of the LED's at starting point. After the running lights during program saving sequence all LED's turning off.

If you press P-key again during LED lit in period shorter than 3 seconds the next right LED will start to lit, and if you leave it after 5 seconds all LED's will flash in running light pattern and next program will become active. By pressing the P-key you can scroll through 4 main pre-loaded programs in Tuning Module. When you are satisfied with chosen program, just leave it, and after 5 seconds the LED's will start to flash, and program of your choice will be active. The main program selection can be represented with drawings:

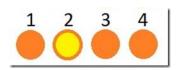


On described drawing the program number 4 - STANDARD is selected, and in order to confirm the selection please wait for 5 seconds that all 4 LED's are finished with flashing.





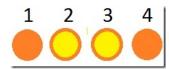
On this way your choice is saved and will be recalled as main program even after you stop the engine or disconnect the Tuning Module from cable harness.



In order to get the active program, you must once press the P-key and the active program will be shown in the way that corresponding LED will lit.

For fine tuning of active program, you should use the +/- keys on the keypad. As stated the main programs are set in the middle of performances, and you can increase or decrease of the active program for maximum 3 steps. The keypad must be active (setting can be done within 90 seconds from engine start), and in order to increase the power press the + key.

Afterwards you will get following combination of LED's:



And by further pressing the + key the LED number 4 will lit. If you would like to decrease the level on active program please press the – key, and the LED will go backward. For increasing the power with + key you will be able to go from LED 2 till LED 4.

If you decided to decrease the power from its original value, please press the – key. In this case the LED's will start from LED 3, and will go backwards. In next step the LEDs 2 and 3 will lit, and in the lowest position the LEDs 1, 2, and 3 will lit. Same as for setting the main program after you are satisfied with fine tuning settings leave the keypad for 5 seconds, and it will start to flash in order to save the changes.



>>> TROUBLESHOOTING <<<

Error description	Problem solution
The engine does not start.	 Check all connected components Are the adapter plugs at the right position? Is the adapter cable correct one? Is the module correctly connected with the cable?
The engine is bucking and does not run smoothly.	 Are the adapter plugs in right positions? Have you change the settings of Tuning Module?
The car emergency program runs immediately and/or Malfunction Indication Lamp is lit.	 Lower the performance by fine tuning of the program. Contact the support
The emergency (fail save) program turns on at higher rpm.	 Lower the performance by fine tuning of the program.
The car shows no extra performance	o Increase the performance by fine tuning of the program
The car makes too much soot	Lower the performance by fine tuning of the program
How can I get back on car producer settings?	 You can use provided Bridging plug instead of Tuning Module You can remove complete installation including the cable harness provided with the Tuning set

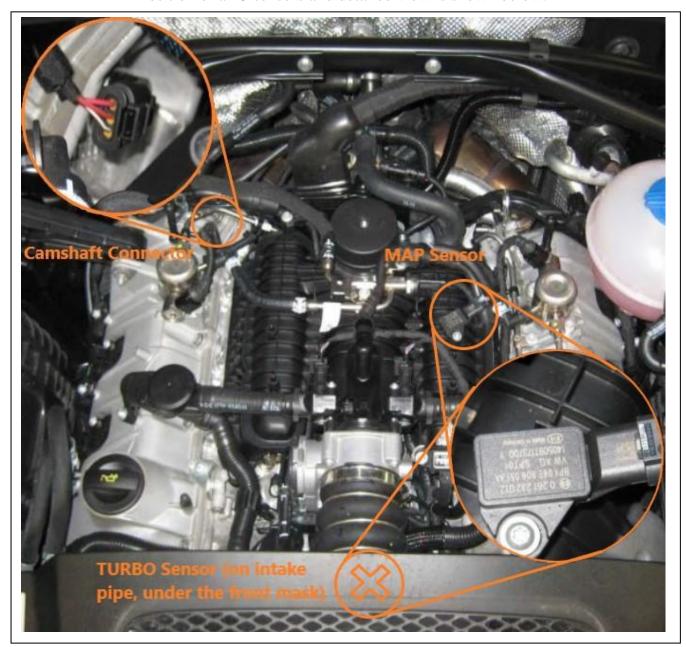


>>> INSTALLATION FOR PORSCHE MACAN S 3.0 <<<

Following 3 sensors are affected with our tuning system:

- 1) Camshaft sensor (3-pin connector)
- 2) MAP sensor (3-pin connector)
- 3) Turbo charger sensor (3-pin connector)

Position of all 3 sensors and detailed view is shown below:





Detailed view of MAP sensor (3-pin) placed on intake pipe:



Detailed view on Turbo charger sensor (3-pin) placed behind the front mask:





Detailed view on Camshaft sensor connector (3-pin) placed on left upper side of engine:



