# Template:FMB96X Mounting recommendations

# **Mounting recommendations**

## Connecting wires

- Wires should be fastened to the other wires or non-moving parts. Try to avoid heat emitting and moving objects near the wires.
- The connections should not be seen very clearly. If factory isolation was removed while connecting wires, it should be applied again.
- If the wires are placed in the exterior or in places where they can be damaged or exposed to heat, humidity, dirt, etc., additional isolation should be applied.
- Wires cannot be connected to the board computers or control units.

### Connecting power source

- Be sure that after the car computer goes to sleep mode, power might be still available on the power wires. Depending on the car model, this may happen in 5 to 30 minutes period.
- When the module is connected, measure the voltage again to make sure it did not decrease.
- It is recommended to connect to the main power cable in the fuse box.
- o 3 A, 125 V external fuse shall be used.

### Connecting ignition wire

- $\circ$  Be sure to check if it is a real ignition wire i. e. power does not disappear after starting the engine.
- Check if this is not an ACC wire (when key is in the first position, most of the vehicle electronics are available).
- Check if power is still available when you turn off any of vehicles devices.
- Ignition is connected to the ignition relay output. As alternative, any other relay, which has power output when ignition is on, may be chosen.

#### Connecting ground wire

- $\circ$  Ground wire is connected to the vehicle frame or metal parts that are fixed to the frame.
- If the wire is fixed with the bolt, the loop must be connected to the end of the wire.
- $\circ$  For better contact scrub paint from the spot where loop is going to be connected.

PAY ATTENTION! Connecting the power supply must be carried out in a very low impedance point of on-board vehicle network. These points in the car are the battery terminals. Therefore, we recommend connecting the power of FMB96X (GND and POWER wires) directly to the battery terminals. Another valid option is to connect the wires to the main POWER cable inside the fuse box (if there is none, then to the power supply where the fuses of vehicle's computer are), GND wire must be connected in a special point, designed to connect GND vehicle computer. Connecting the GND at an arbitrary point to the mass of the car is unacceptable, as static and dynamic potentials on the line GND will be unpredictable, which can lead to unstable FMB96X operation and even its failure.

## **Safety information**

This chapter contains information on how to operate FMB96YX safely. By following these requirements and recommendations, you will avoid dangerous situations. You must read these instructions carefully and follow them strictly before operating the device!

- The device uses SELV limited power source. The nominal voltage is 12 V DC. The allowed range of voltage is 6 V...30 V DC.
- To avoid mechanical damage, it is advised to transport the FMB96YX device in an impact-proof package. Before usage, the device should be placed so that its LED indicators are visible, which show the status of operation the device is in.
- When connecting the connection (1x5) cables to the vehicle, the appropriate jumpers of the power supply of the vehicle should be disconnected.
- Before dismounting the device from the vehicle, the 1x5 connection must be disconnected.
- The device is designed to be mounted in a zone of limited access, which is inaccessible for the operator. All related devices must meet the requirements of standard EN 60950-1.
- The device FMB96YX is not designed as a navigational device for boats.

#### **Precautions**

- Do not disassemble the device. If the device is damaged, the power supply cables are not isolated or the isolation is damaged, DO NOT touch the device before unplugging the power supply.
- All wireless data transferring devices produce interference that may affect other devices which are placed nearby.
- The device must be connected only by qualified personnel.
- The device must be firmly fastened in a predefined location.
- The programming must be performed using a PC with autonomic power supply.
- The device is susceptible to water and humidity.
- Installation and/or handling during a lightning storm is prohibited.