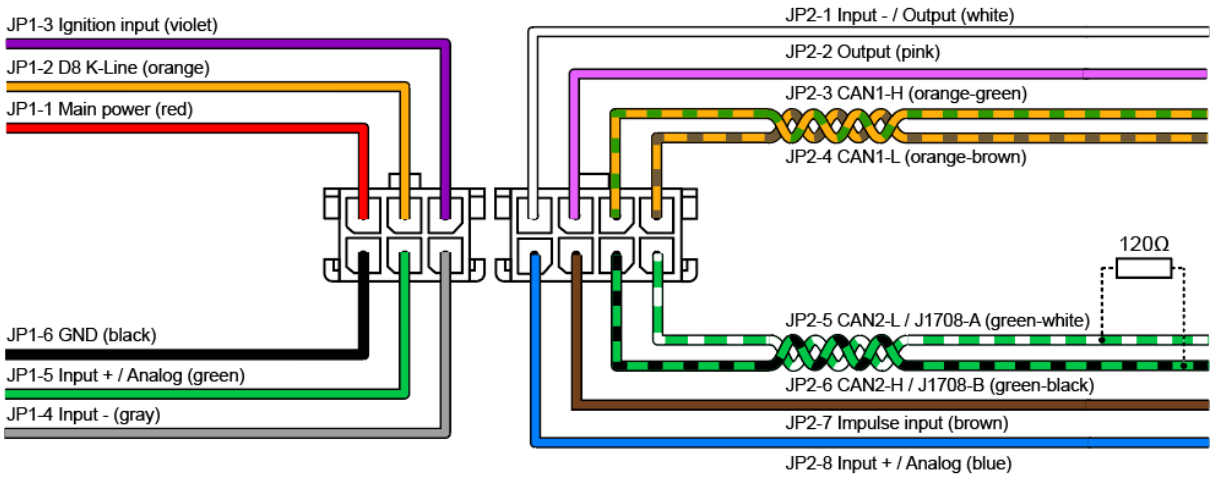


Fig. 1. S10.5 inputs/outputs

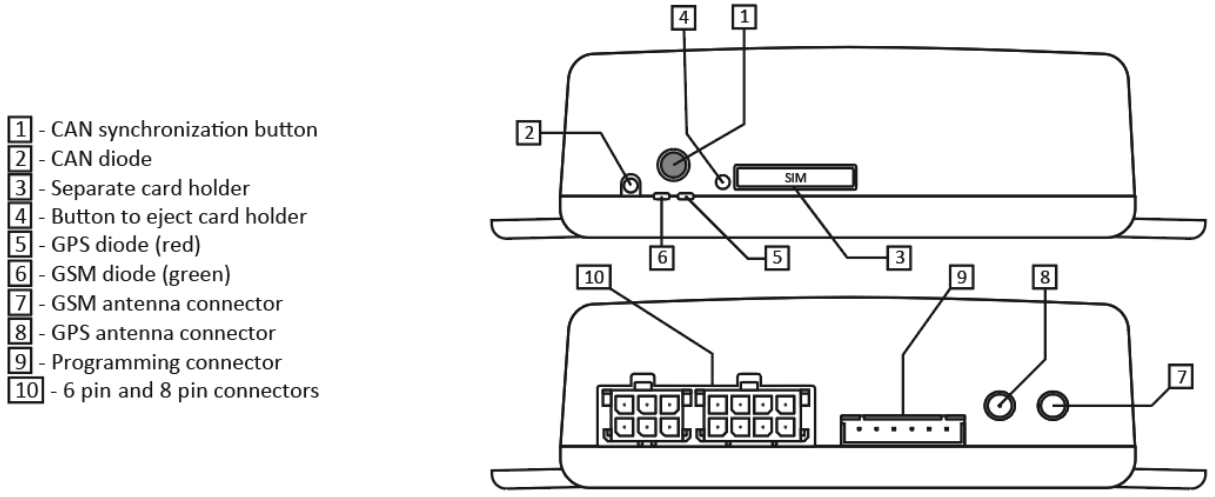


Fig. 2. S10.5 view

1. Proper device working requires to connect below wires:

   1.1. **JP1-1 (Plus of the main power)** - input to connect the main power plus from the car installation after the factory fuse. Power voltage range: +9V to +30V.
   1.2. **JP1-3 (Ignition input)** - input to connect a constant plus when ignition is turned on.
   1.3. **JP1-6 (Ground of the main power)** - input to connect ground power supply of the device. The line must be connected to a ground point in the vehicle.

   Below wires should be connected according to CAN module installation manual that is dedicated for a given model:

   1.4. **JP2-3** - CAN1-H
   1.5. **JP2-4** - CAN1-L

   If the CAN module installation scheme shows that twisted pair "***JP2-3*** - *CAN1-H*" - "***JP2-4*** - *CAN1-L*" should be connected to C5/C7 pins of the digital tachograph or connected to the FMS connector, it means that using this twisted pair you will get logistic data, data from digital tachograph and you will be able to download DDD files. In that case, resistance has not to be checked and points from 1.9 to 1.12 should be skipped.

   Additional connection twisted pair "***JP2-5*** - *CAN2-L / J1708B*" - "***JP2-6*** - *CAN2-H / J1708A*" to C5/C7 or to FMS connector - in case described above - is not recommended because it can causes problems while downloading DDD files remotely.

   1.6. **JP2-5** - CAN2-L / J1708A
   1.7. **JP2-6** - CAN2-H / J1708B

   If the CAN module installation scheme shows that twisted pair "***JP2-5*** - *CAN2-L / J1708B*" - ***"JP2-6*** - *CAN2-H / J1708A"* should be connected to the J1708 bus, you should make decision, what kind of task will be realizing by this twisted pair:

reading data from the J1708 bus **OR** reading data from the digital tachograph and downloading DDD files. Using S10.5 it is impossible to realize both tasks at the same time.

If the twisted pair "***JP2-5*** *- CAN2-L / J1708B"* - ***"JP2-6*** *- CAN2-H / J1708A"* will be connected to the J1708 bus then cut the loop with the resistor and make wires shorter as it is possible. After installation, the wires must not be twisted or tangled.

1.8. Turn off the vehicle ignition.
1.9. Measure resistance between the C5 and C7, if the multimeter shows:

1.9.1. ~120 Ohms, what is **GOOD** value and you can go to the 1.10 step,
1.9.2. ~60 Ohms, what is **WRONG** value and you have to cut off resistor from the JP2 bundle and then go to the 1.10 step,
1.9.3. 1k Ohm (>1000 Ohms), what is **WRONG** value and you have to connect tachograph C8 and C7 with wire, after that, go to the 1.10 step.

1.10. Connect below wires:

1.10.1. **JP2-5** - CAN2-L / J1708B - has to be connected to the tachograph C7 pin.
1.10.2. **JP2-6** - CAN2-H / J1708A - has to be connected to the tachograph C5 pin.

The device reads driver card numbers and driver work types using these wires. In case of using „FMS 12PIN S8.3/S10.3/S10.5 CONNECTOR" you should be sure that CAN-bus is available in the truck FMS connector.

Attention! If an other device to downloading DDD files is installed in the vehicle then downloading DDD files using S10.5 can be disturbed..

In case of confirm that other device is installed, you should report this fact to service principal.

You should not leave a installation place until you get information about proper installation of the TMR module.

2. Optional wires:

2.1. **JP1-2** - not used
2.2. **JP1-4** - input (-)
2.3. **JP1-5** - input (+) / analog measurement (0-36V) f.e. fuel probe
2.4. **JP2-1** - input (-) / output
2.5. **JP2-2** - output
2.6. **JP2-7** - pulse input (analog turnover measurement)
2.7. **JP2-8** - input (+) / analog measurement (0-36V) f.e. fuel probe

3. CAN module synchronization and connection verification:

3.1. Turn on the vehicle ignition.
3.2. Press and hold the synchronization button.
3.3. Connect the JP1 connector to the device - you will see that the LED CAN module diode will light red.
3.4. When the LED CAN module diode will light green - release the synchronization button.
3.5. The LED CAN module diode will start blinking red and after few second you will see one of options below:

3.5.1. **The LED lights green** - the vehicle has been recognized - disconnect the JP1 connector and turn it on again after 5 seconds.
3.5.2. **The LED blinks green/red** - this means an error of connecting to the bus. You should check the connection and compatibility with the CAN module installation manual.
3.5.3. **The LED lights red** - connection to the CAN-bus is correct but the vehicle is unrecognized. The current version of the software will not work with this model of the vehicle.

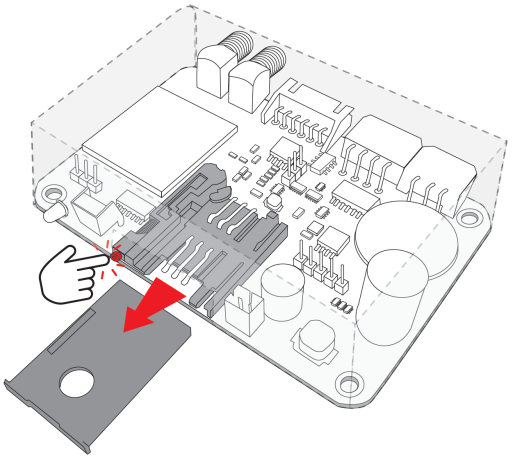
When CAN module is synchronized properly then when vehicle ignition is on you can see below information on LED diode:

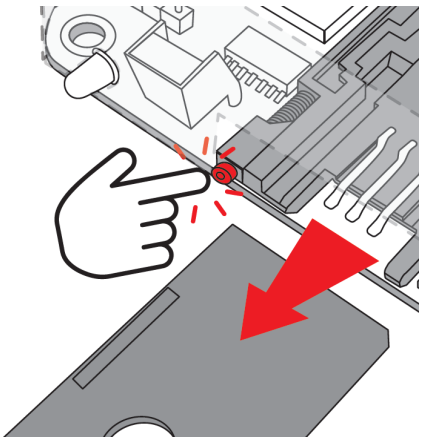
3.6. **One blink every 1 second** - one CAN-bus is connected properly (CAN1, CAN2 or J1708).
3.7. **Two blinks every 1 second** - two CAN-buses are connected properly (CAN1, CAN2 or J1708).

Correct CAN module working has to be confirmed by verification of read parameters with supported car/machines lists. In case of lack of any information or other data reading malfunction from CAN bus, the manufacturer of the device must be notified before installation will be ended. Wires connection to vehicle installation has to be performed without a connected device. Connections have to be insulated for securing electrical connections against breaks and short circuits.

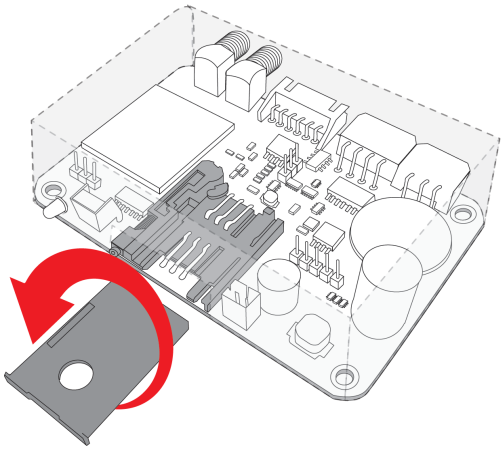
4. SIM card installation:

4.1. Eject sim card holder by pressing the button by left side:

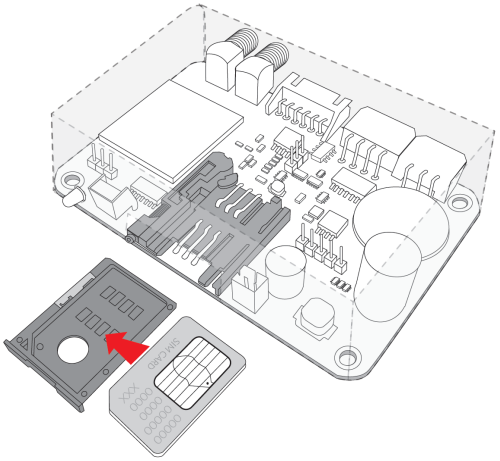




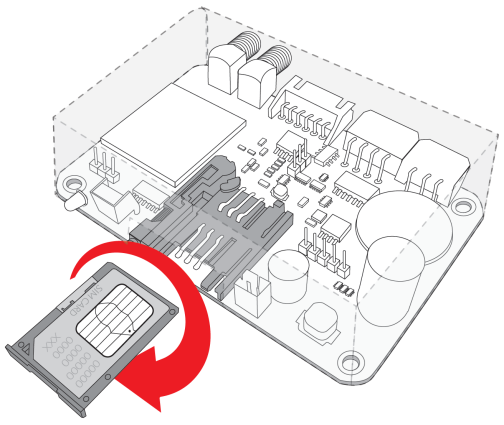
4.2. Rotate sim card holder:



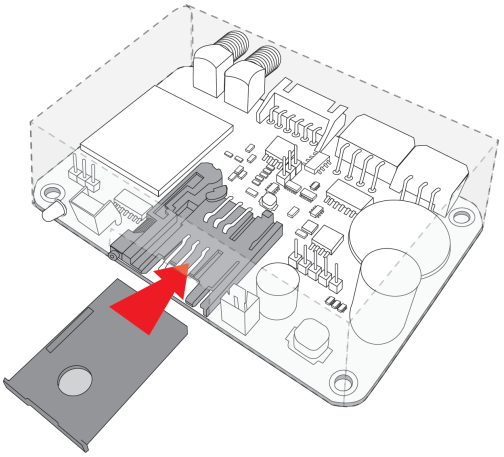
4.3. Insert sim card into sim card holder:



4.4. Rotate sim card holder:



4.5. Insert sim card holder:



5. GSM and GPS signals verification:

5.1. Turn on vehicle ignition.
5.2. Green LED diode (GSM):

5.2.1. **GOOD**: LED diode blinks - quantity of blinks inform about signal strength (f.e. 4 means 40% of maximum signal).
5.2.2. **BAD**: LED diode lights green - problems with signal, it can be incorrect PIN, damaged SIM card and so on.

5.3. Red LED diode (GPS):

5.3.1. **GOOD**: LED diode lights and periodically blinks - quantity of blinks inform about signal strength (f.e. 12 means 12 satellites are visible).
5.3.2. **BAD**: LED diode does not light and blink - problems with signal, it can be caused by disconnected GPS antenna or wrong direction/place for it.

6. Additional informations:

6.1. **GPS Antenna** - make sure that the antenna is connected as required by the assembly guidance. (assembly towards the sky)
6.2. **GSM Antenna** - should be mounted at least 1 meter from the GPS antenna.
6.3. **SIM Card** - is required with the PIN set as identical as in the device configuration (UNPM command or disabling the PIN request on the SIM CARD side).
6.4. The device has to be installed in a stable way to the body structure element that prevents its uncontrolled movement.