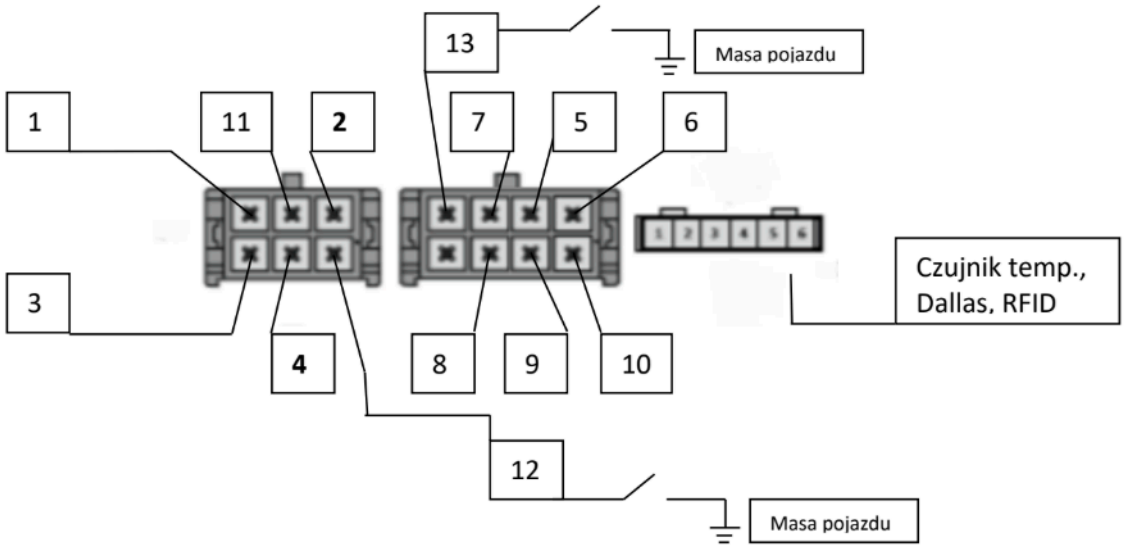
Installation manual for S10.5 GPS tracker – basic version

(short version v. 1.04)

Tracker: S10.5



Description of tracker connectors (view of sockets in the casing)



Description of cable colours and functions:

1. Red – tracker power supply before ignition (+) (from +9V= to +30V=)
2. **Purple – permanent positive after ignition (+ after ignition)**
3. Black – ground (-)
4. **Green – permanent positive after ignition (+ after ignition)**
5. Orange-green – CAN H
6. Orange-brown – CAN L
7. Pink – Output JP2-2
8. Brown – Pulse output JP2-7
9. Green-black – Tachograph C5
10. Green-white – Tachograph C7
11. Orange – Tachograph D8 (K-Line)
12. Grey – additional ground signal (e.g. door, bonnet, or fuel cap opening) (option) we4
13. White – additional ground signal (e.g. door, bonnet, or fuel cap opening) (option) we5

The cable colours described above refer to the original plugs supplied with the S10.5 tracker. The remaining cables should be left unconnected. They are used for other device functions. In this basic version, they are not used.

Installation of the GPS tracker in the vehicle – cable connection

To correctly install the S10.5 tracker in the vehicle, you should:

- Place the tracker in a dry location in the vehicle (preferably in the dashboard)
- Connect [ground] [power supply 'before ignition'] [positive 'after ignition' x 2] [GPS antenna] [GSM antenna] according to the diagram above

- **The purple (2) and green (4) cables should be joined and connected together to the positive after ignition**

- Connect the CAN bus and tachograph connectors
- Place the GPS antenna so that there are no metal elements above it
- Leave the GSM antenna loose or stick it to a plastic or glass element. Do not stick the GSM antenna to a metal part of the bodywork.
- The distance between the GSM and GPS antennas must be at least 1m

Connection to the tachograph

To correctly connect the S10.5 tracker to the tachograph, perform the following steps.

Before connecting connectors 9 and 10 to pins C5/C7 of the digital tachograph, measure the resistance between pins C5/C7 of the tachograph. During resistance measurement, the 9/10 twisted pair must not be connected to pins C5/C7, as it contains a resistor that will cause an incorrect measurement result.

Switch off the vehicle ignition.

Measure the resistance between C5 and C7; if the multimeter shows:

1. ~120 Ohms, which is **CORRECT** value and you should proceed
2. ~60 Ohms, which is **INCORRECT** value and you should cut the resistor from the JP2 harness, then proceed
3. 1k Ohm (>1000 Ohms), which is **INCORRECT** value and you should bridge pins C7 and C8 of the tachograph, then proceed

Connect pin 10 to C7 of the tachograph and pin 9 to C5 of the tachograph

Installation of temperature sensor(s) (option)

Connect the temperature sensor directly to the tracker. If more sensors are used, connect them via the supplied splitter.**NOTE:** Temperature sensors are paired with a specific tracker. They must be connected to the appropriate tracker according to the attached pairing description.

Verification of CAN connection to the data bus (CAN)

After connecting the CAN module to the vehicle installation according to the wiring diagram (provided individually for each vehicle), you should:

a. Switch on the vehicle ignition.
b. Press and hold the synchronisation button located on the side of the TERMINAL.
c. Connect the device power supply. The CAN module LED will light up red.
d. After 3 seconds, the LED will change to green – release the synchronisation button
e. The LED will start flashing red – this confirms the start of the automatic synchronisation process
f. After several seconds, synchronisation will complete:

1. **If the LED is green –** the vehicle has been recognised – switch off the power and switch it on again after 5

seconds.

2. **If the LED flashes alternately green/red –** this indicates a connection error with the bus. Check the connections carefully and ensure they match the diagram
3. **If the LED is red –** the connection with the bus is correct, but the vehicle has not been recognised. The current software version will not work with this vehicle model.

Description of CAN module LED signals

1. **Three flashes,** every 1 second – three buses connected correctly (J1939/J1708/D8 K-Line)
2. **Two flashes,** every 1 second – two buses connected correctly (J1939/J1708/D8 K-Line)
3. **One flash,** every 1 second – one bus connected correctly (J1939/J1708/D8 K-Line)

Connection diagnostics using LEDs

After connecting the above system components, check the basic operating parameters using the LEDs located on the device casing:

Green LED (GSM)

The number of LED flashes indicates GSM signal strength (scale 0 – 10) – **correct operation.**

A continuously lit GSM LED for more than 30 seconds indicates a problem with the SIM card (incorrect PIN, damaged SIM card)**Error!**

Red LED (GPS)

The number of LED flashes indicates the number of visible GPS satellites (scale 3–14) – **correct operation.**

A double-flashing GPS LED indicates a problem with GPS satellite visibility.**Error!**

The test should be performed with the ignition switched on.

Start-up

To start the device, connect power to wire (1). Then log in to your GPS tracking account and check the vehicle's visibility on the map.