



# **STAG-OBD Adapter**

**CONNECTION MANUAL** 



Manufacturer: AC Spółka Akcyjna. 15-182 Białystok, ul. 27 Lipca 64, Poland tel. +48 85 7438148, fax +48 85 653 8649 www.ac.com.pl, e-mail: autogaz@ac.com.pl



# **Specifications:**

Power supply	: 12V ± 25%
Operating temperature	: -40ºC ÷ +125ºC
Protection class	: IP40

## Intended use

STAG-OBD enables to coupling STAG-300 PREMIUM injection controller with the on-board diagnostic systems compliant with the OBDII/EOBD standard.

# Principle of operation.

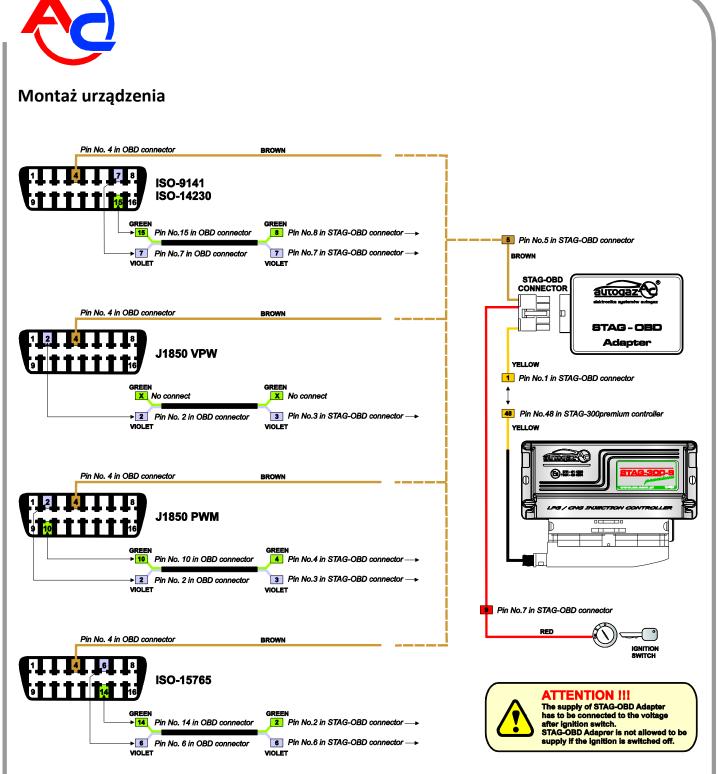
To enable connection and transfer of data from the vehicle's diagnostic system, it has to support appropriate digital communication interface. The following digital communication interfaces are used in OBDII/EOBD systems:

- 1. interface compatible with ISO-9141 (so called "K line")
- 2. interface compatible with ISO-14230 (known as "KWP 2000")
- 3. interface compatible with SAE J1850 (available in two versions known as "PWM" and "VPW")
- 4. interface compatible with ISO-15765 (using CAN bus-bar)

STAG-OBD supports transmission in all digital communication interfaces dedicated to OBDII/EOBD systems.

The correctly installed STAG-OBD Adapter in a vehicle equipped with OBDII/EOBD system receives diagnostic information and transfer it to gas injector controller. Via the adapter, a gas injector controller can receive:

- current values of the powertrain parameters measured by the system at a given moment
- stored trouble codes
- pending trouble codes
- vehicle's identification data



Locate the vehicle's 16-pin diagnostic connector. The connector should be located in the vehicle's cab on the driver's side or in the passenger compartment.

Define the communication interface type.

WARNING!!! To define the communication interface type you can use diagnostic scanner SXC 1011 (manufacturer: AC S.A.)

## ISO-9141 and ISO-14230

Check if pin 15 of diagnostic connection is active; if yes, connect with a quick coupling and the green wire to pin 8 of the adapter plug.

Connect the wire from pin 7 of the diagnostic socket with pin 7 of the adapter plug with a quick coupling and the violet wire.



### J1850 VPW

Connect the wire from pin 2 of the diagnostic socket with pin 3 of the adapter plug with a quick coupling and the violet wire.

### J1850 PWM

Connect the wire from pin 2 of the diagnostic socket with pin 3 of the adapter plug with a quick coupling and the violet wire.

Connect the wire from pin 10 of the diagnostic socket with pin 4 of the adapter plug with a quick coupling and the green wire.

## ISO-15765

Connect the wire from pin 6 of the diagnostic socket with pin 6 of the adapter plug with a quick coupling and the violet wire.

Connect the wire from pin 14 of the diagnostic socket with pin 2 of the adapter plug with a quick coupling and the green wire.

Identify the wire powered from ignition switch and connect it with a quick coupling to the red wire of the adapter cable harness.

Use a quick coupling to connect the wire from pin 4 of the diagnostic socket to the brown wire of the adapter cable harness.

Identify the yellow wire of gas injector controller harness in pin 48 and connect it to the yellow wire of the adapter cable harness.

In the case pin 48 has no wire, use a loose wire enclosed in the set.