

Fiat Abarth OBDII connection



INTRODUCTION

AIM has developed special applications for many of the most common ECUs: by special applications we mean user-friendly systems which allow to easily connect your ECU to our high tech data loggers: user needs only to install harness between the **logger** and the ECU.

Once connected, the logger displays (and/or records, depending on the logger and on the ECU data stream) values like RPM, engine load, throttle position (TPS), air and water temperatures, battery voltage, speed, gear, lambda value (air/fuel ratio) analog channels...

All AIM loggers include – free of charge – **Race Studio 2** software, a powerful tool to configure the system and analyze recorded data on your PC.

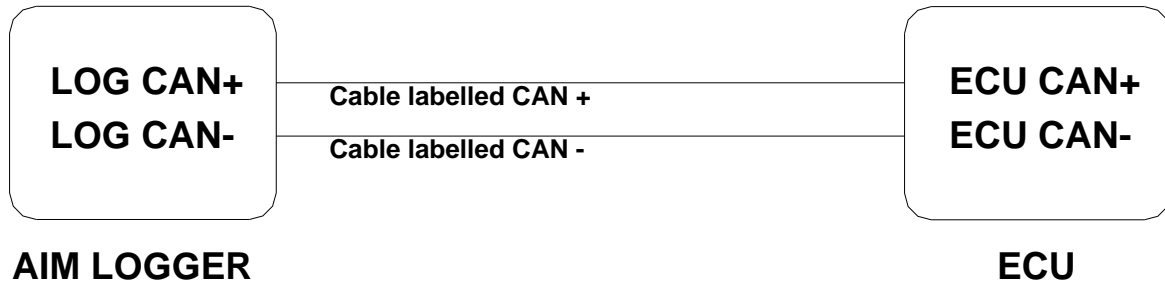
Warning: once the DLC is connected to the logger, it is necessary to set it in Race Studio 2 software.

Select Manufacturer “FIAT_ABARTH” and Model “CAN”.

Refer to Race Studio Configuration user manual for further information concerning logger configuration.

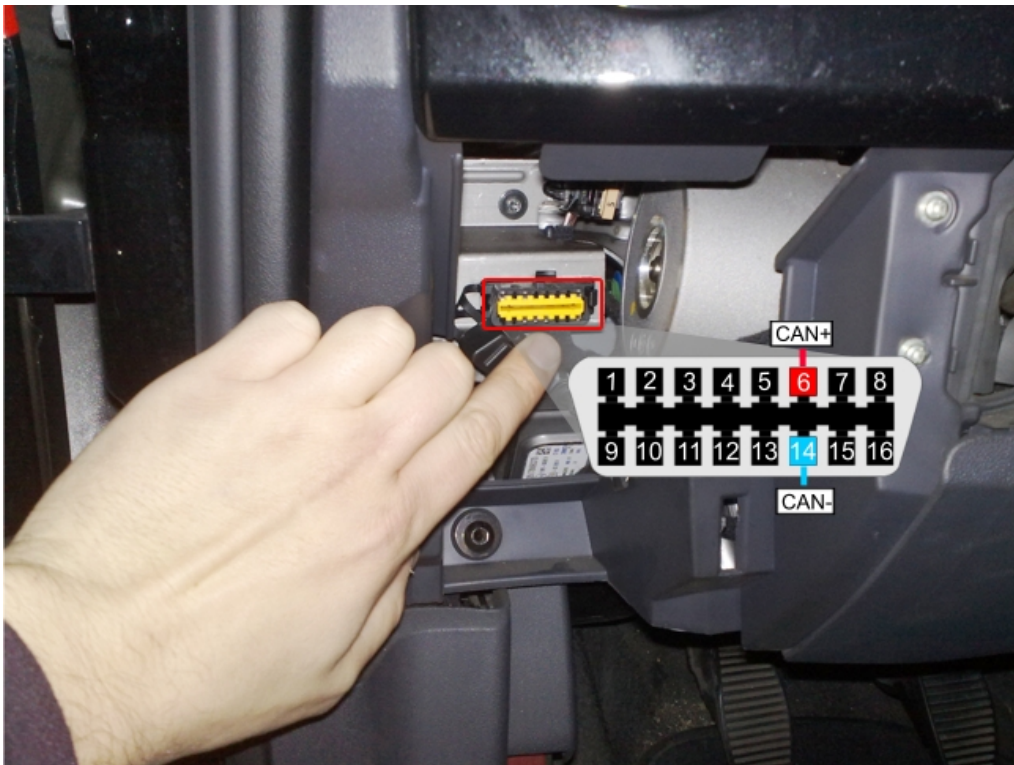
Chapter 1 – Communication Setup

Fiat Abarth cars (all models) use CAN to communicate parameters to AIM dataloggers; the image here below shows the standard CAN communication setup.



Chapter 2 – Connection to AIM loggers

In order to get ECU data it is enough to connect AIM logger to DLC connector, which is placed on the left of the steering column under the dashboard. Lift the plastic cover to find the plug.



To connect AIM logger to the vehicle (see above):

- connect pin 6 of DLC connector to AIM cable labelled CAN+
- connect pin 14 of DLC connector to AIM cable labelled CAN-.

Chapter 3 – Communication protocol

Channels received by AIM loggers connected to Fiat Abarth DLC (CAN ECU) are:

ID	CHANNEL NAME	FUNCTION
ECU_1	FA_RPM	RPM
ECU_2	FA_PPS	Pedal position sensor
ECU_3	FA_TPS	Throttle position sensor
ECU_4	FA_BRAKE_SW	Brake switch
ECU_5	FA_BRAKE_PRESS	Brake pressure
ECU_6	FA_VEH_SPEED	Vehicle Speed
ECU_7	FA_WH_SPD_RR	Wheel speed Rear Right
ECU_8	FA_WH_SPD_RL	Wheel speed Rear Left
ECU_9	FA_WH_SPD_FR	Wheel speed Front Rear
ECU_10	FA_WH_SPD_FL	Wheel speed Front Left
ECU_11	FA_STEER_ANGLE	Steering angle
ECU_12	FA_STEER_SPEED	Steering speed
ECU_13	FA_ECT	Engine coolant temperature
ECU_14	FA_OILP SW	Oil pressure switch
ECU_15	FA_CLUTCH_SW	Clutch switch