Lamborghini Gallardo 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.
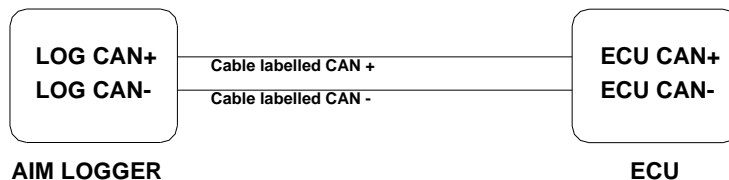
Warning: once the DLC is connected to the logger, it is necessary to set it in Race Studio 2 software.
Select Manufacturer "Lamborghini" and Model "Gallardo".
Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

1 –Communication Setup and Connection

Lamborghini Gallardo* ECU uses CAN to communicate parameters to AIM dataloggers; the image here below shows standard CAN communication setup.

In order to get ECU data it is enough to connect AIM logger to DLC. DLC (OBDII) connector is under the steering column (see image below). Lift the cover to find it.

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

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

* AIM loggers are compatible with Lamborghini Gallardo models from 2008 on, (i.e. LP560-4) and not with models from 2003 to 2007.

2 – Communication protocol

Channels received by AIM loggers connected to Lamborghini Gallardo ECU are:

ID	CHANNEL NAME	FUNCTION
ECU_1	LM_RPM	RPM
ECU_3	LM_WATER_TEMP	Water Temperature
ECU_4	LM_ENG_MOM1	Engine Moment
ECU_5	LM_AIR_TEMP	Air Temperature
ECU_6	LM_GAS_PERC	Gas Percentage
ECU_7	LM_BRK_PRESS	Brake Pressure
ECU_8	LM_VEH_SPEED	Vehicle speed
ECU_12	LM_ATM_TEMP	Atmospheric Pressure
ECU_13	LM_OILTEMP	Oil Temperature
ECU_14	LM_FRLF_SPEED	Front Left Speed
ECU_15	LM_FRRG_SPEED	Front Right Speed
ECU_16	LM_RRLF_SPEED	Rear Left Speed
ECU_17	LM_RRRG_SPEED	Rear Right Speed
ECU_18	LM_YAW_RATE	Yaw Rate
ECU_19	LM_STEER_SPEED	Steering Speed
ECU_20	LM_STEER_ANG	Steering Angle
ECU_21	LM_BRK_SW	Brake Switch