Clio III Cup – ECU connection

Racing Data Power

INTRODUCTION

AIM has developed special applications for many of the most popular 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 and configuration) values like RPM, engine load, throttle position (TPS), air and water temperatures, battery voltage, speed, gear, lambda value (air/fuel ratio) analog channels…

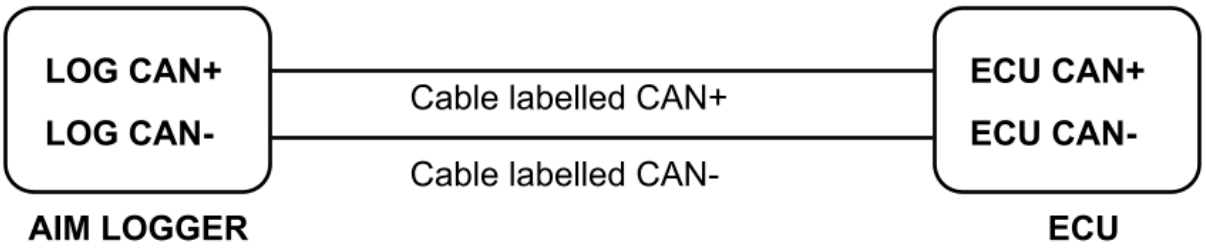
All AIM loggers include – free of charge – **Race Studio 2** software, a powerful tool to configure the system and analyze recorded data on your PC.

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

Warning: it is always suggested to verify if the ECU needs any software/firmware setting or upgrade to export data to an external logger.

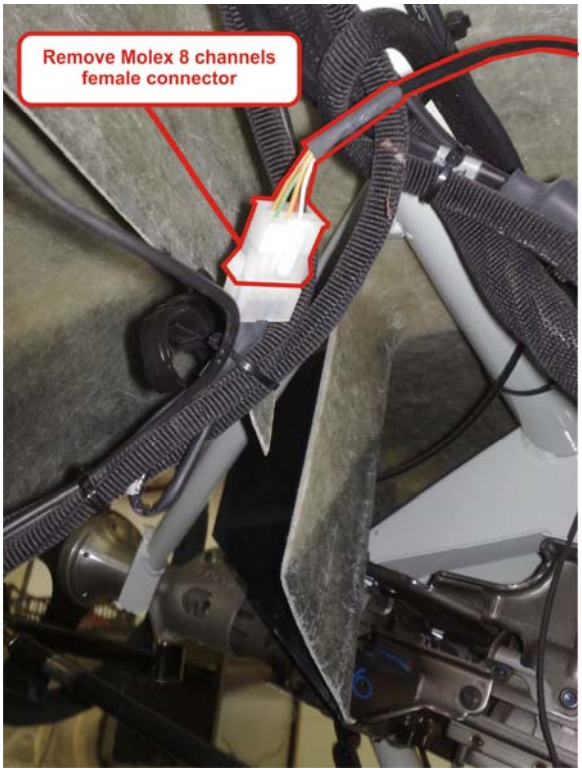
1 – CAN Communication Setup

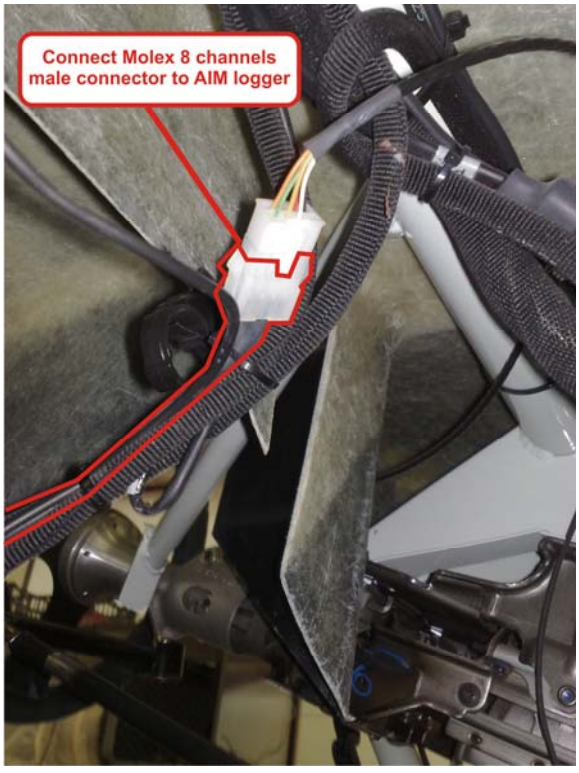
Renault Clio III CUP is equipped with Magneti Marelli ECU. Marelli ECU communicates with AIM loggers using CAN communication setup.



2 – Connection to AIM loggers

To connect AIM loggers to the ECU it is necessary to unplug Molex 8 channels female connector from Marelli Dash and replace it with AIM logger. See below:





Now connect AIM wirings to Molex male connector as follows:

- Connect AIM cable labelled CAN+ to the Molex connector orange wire (CAN+)
- Connect AIM cable labelled CAN- to the Molex connector yellow wire (CAN-)

3 – Communication Protocol

Channels received by AIM loggers connected to Renault Clio III CUP ECU are:

ID	CHANNEL NAME	FUNCTION
ECU_1	CUP_RPM	RPM
ECU_2	CUP_THROTTLE	Throttle position
ECU_3	CUP_GEAR	Gear
ECU_4	CUP_GEAR_BARR	Gear Value in Volt
ECU_5	CUP_GEAR_SW	Gear Switch
ECU_6	CUP_OIL_PRESS	Oil pressure
ECU_7	CUP_WATER_TEMP	Water temperature
ECU_8	CUP_BATT_VOLT	Battery Voltage
ECU_9	CUP_INLET_PR	Inlet Pressure
ECU_10	CUP_AIR_TEMP	Air temperature
ECU_11	CUP_BRK_PR_R	Brake Pressure Rear
ECU_12	CUP_BRK_PR_F	Brake Pressure Front
ECU_13	CUP_BRAKE_BIAS	Brake Bias
ECU_14	CUP_SPEED	Speed
ECU_15	CUP_WH_SP_FR	Wheel speed front rear
ECU_16	CUP_WH_SP_FL	Wheel speed front right
ECU_17	CUP_FUEL_LIT	Fuel level in liters