

**Ferrari ECU for
Ferrari F430 GT2 Michelotto**



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 the vehicle ECU to our hi-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 model 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 ECU is connected to the logger, it is necessary to set it in the logger configuration in Race Studio 2 software.

Select Manufacturer “Ferrari” and Model “430GT2”.

Refer to Race Studio Configuration on user manual for further information concerning the loggers configuration.

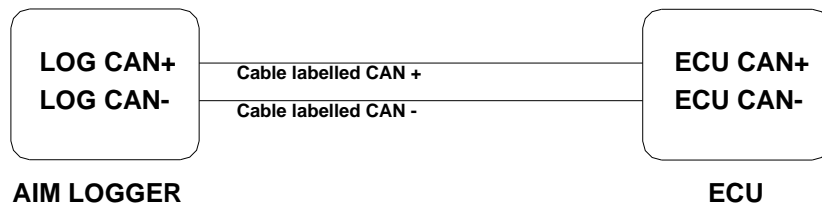
1 – Car Model and communication setup

Marelli Marvel 8.x ECU shown here below fits this car model:

- Ferrari F430 GT2 Michelotto.



Marvel 8.x has a CAN protocol used to communicate with external loggers. This ECU is equipped with 3 66 pins Deutsch connectors on the front panel: yellow, red and blue. Marvel 8.x ECU communicates with external loggers using the CAN bus.



3 – Connection to AIM loggers

With reference to the image here below it is possible to connect the ECU to AIM loggers using the **central red connector**.



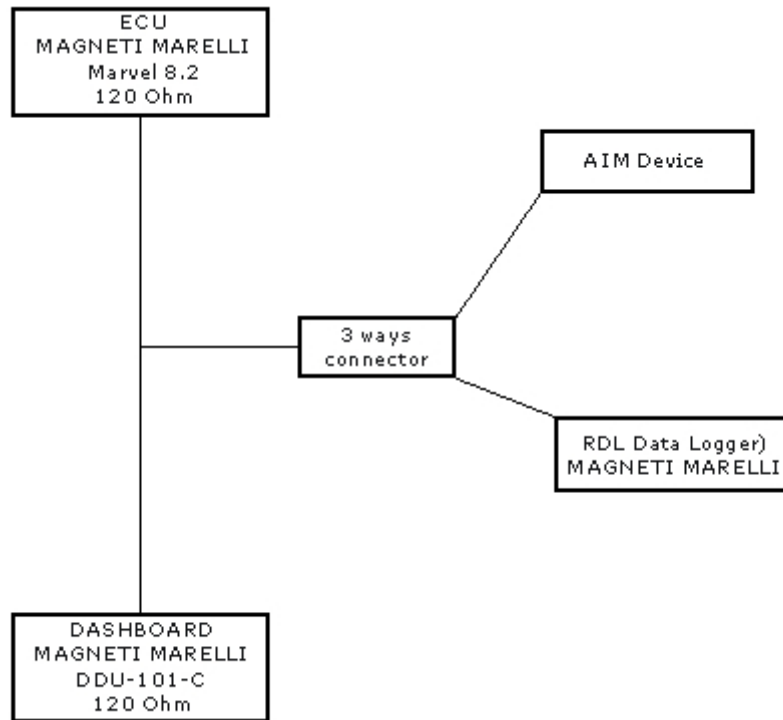
To connect Marelli Marvel 8.x to AIM loggers:

- connect pin 33 of the central red Deutsch connector to AIM cable labelled CAN+
- connect pin 41 of the central red Deutsch connector to AIM cable labelled CAN-

3.1 – Connection with AIM loggers using a 3 ways LEMO connector

It is also possible to connect AIM loggers with Ferrari ECU using a LEMO 3 ways connector.

The images below show a Ferrari F430 GT2 CAN network using A 3 ways Lemo connector on top and the cable connection on bottom.



Each way of 3 ways Lemo connector pinout is as follows:

1. N.C.
2. CAN+
3. CAN-
4. N.C.

4 – Communication protocol

ID	CHANNEL NAME	FUNCTION
ECU_1	F430GT2_RPM	RPM
ECU_2	F430GT2_WH_SPD_FL	Front Left wheel speed
ECU_3	F430GT2_WH_SPD_FR	Front right wheel speed
ECU_4	F430GT2_WH_SPD_RL	Rear left wheel speed
ECU_5	F430GT2_WH_SPD_RR	Rear right wheel speed
ECU_6	F430GT2_TPS	Throttle position sensor
ECU_7	F430GT2_F_BRK_P	Front brake pressure
ECU_8	F430GT2_R_BRK_P	Rear brake pressure
ECU_9	F430GT2_GEAR	Gear
ECU_10	F430GT2_STEERING_ANGLE	Steering angle
ECU_11	F430GT2_ACC_X	X accelerometer
ECU_12	F430GT2_ACC_Y	Y accelerometer
ECU_13	F430GT2_GYRO	Gyroscope
ECU_14	F430GT2_ECT	Engine cooling temperature
ECU_15	F430GT2_OIL_TEMP	Oil temperature
ECU_16	F430GT2_FUELPRESS	Fuel pressure
ECU_17	F430GT2_OILP_PRESS	Oil pressure
ECU_18	F430GT2_CARTER_P	Carter pressure
ECU_19	F430GT2_LAMBDA_L	Left Lambda value
ECU_20	F430GT2_LAMBDA_R	Right Lambda value
ECU_21	F430GT2_BATTVOLT	Battery voltage