

## MME 481 ECU connection

## 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 "MME" Model "ECU481".  
Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.**

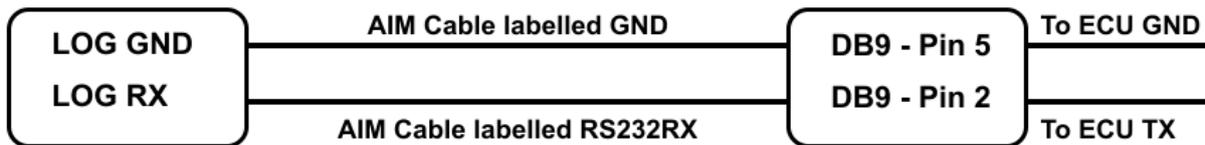
**Warning: it is always suggested to verify if the ECU needs any software/firmware setting or upgrade to export data to an external logger.**

## 1 – Serial communication setup and connection to AIM Loggers

MME 481 ECU has a serial communication protocol (RS232) and is equipped with a female DB9 connector used to communicate parameters to an external data logger or to configure the ECU itself.

To connect AIM loggers to ECU connect the cables as follows:

- AIM cable labelled “RS232RX” to pin 2 of the DB9 female connector;
- AIM cable labelled “GND” to pin 5 of the DB9 female connector.



## Communication protocol

Channels received by AIM loggers connected to MME 481 ECU are:

<b>ID</b>	<b>Channel Name</b>	<b>Function</b>
ECU_1	MME_RPM	RPM
ECU_2	MME_SPEED	Wheel Speed
ECU_3	MME_OIL_PRESS	Oil Pressure
ECU_4	MME_OIL_TEMP	Oil Temperature
ECU_5	MME_WATER_TEMP	Water Temperature
ECU_6	MME_FUEL_PRESS	Fuel pressure
ECU_7	MME_BATT_VOLT	Battery voltage
ECU_8	MME_THROT_ANG	Throttle position sensor
ECU_9	MME_MANIF_PR	Manifold air pressure
ECU_10	MME_AIR_CH_T	Air charge temperature
ECU_11	MME_EXH_TEMP	Exhausted Gas Temperature
ECU_12	MME_LAMBDA	Lambda
ECU_13	MME_GEAR	Gear number
ECU_14	MME_ECU_ERRORS	Errors
ECU_15	MME_MME_CYLCHARGE	Charge cycle
ECU_16	MME_CYLCHARGE	Cylinder charge
ECU_17	MME_ING_ANG	Steering angle
ECU_18	MME_KNOCKNOISE	Not available
ECU_19	MME_MAF1_KgH	Mass air flow1 KgH
ECU_20	MME_MAF2_KgH	Manifold air flow 2 KgH