Nira I2 ECU

Racing Data Power

INTRODUCTION

AIM has developed special applications for many of the most popular ECU: 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 temperature, battery voltage, speed, gear, lambda value (air/fuel ratio analog channels…

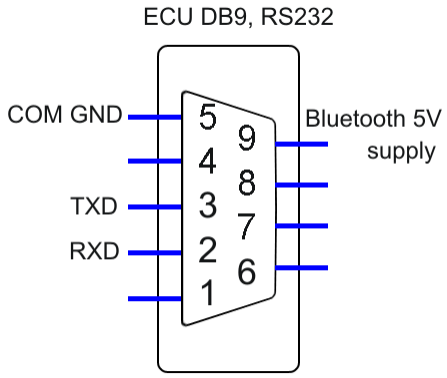
All AIM loggers include – free of charge – **Race Studio 2** software, a powerful tool to configure the system and analyze recorded data on your PC.

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 "Nira" and Model "I2".
Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

Warning: for any further information concerning ECU firmware/software settings and/or upgrading it is always recommended to address to the ECU dealer.

1 – Nira I2 – serial communication setup

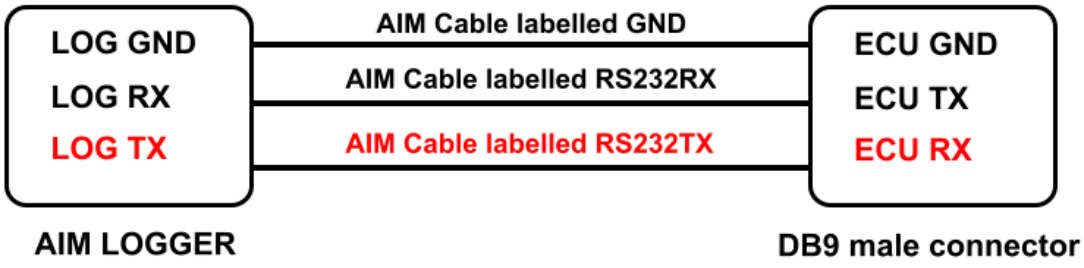
Nira I2 ECU has a serial communication protocol (RS232) and is equipped with a male DB9 connector used to communicate parameters to an external logger or to configure the ECU itself. Here below the DB9 connector pinout is shown.

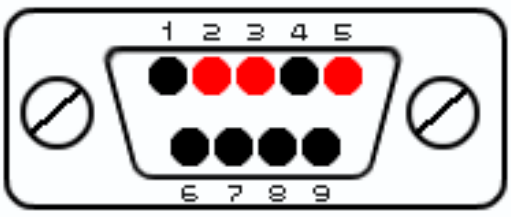


2 – Connecting Nira I2 ECU to AIM loggers

To put **AIM loggers** in communication with Nira I2 please connect cables as follows :

- AIM cable labelled “RS232RX” to pin 3 DB9 male connector.
- AIM cable labelled “RS232TX” to pin 2 of the DB9 male connector.
- AIM cable labelled “GND” to pin 5 of the DB9 male connector.





3 – Nira I2 communication protocol

Channels received by AIM loggers connected to Nira I2 ECU are:

ID	NOME CANALE	FUNZIONE
ECU_1	I2_RPM	RPM
ECU_2	I2_TPS	Throttle position sensor
ECU_3	I2_TPS_ROC	Throttle position sensor
ECU_4	I2_ECT	Engine cooling temperature
ECU_5	I2_CHARGE_TEMP	Charge temperature
ECU_6	I2_MAP	Manifold air pressure
ECU_7	I2_MAP_SENSOR	Manifold air sensor
ECU_8	I2_VOL_EFF_COMP	Volumetric efficiency comp
ECU_9	I2_LAMBDA_M	Lambda
ECU_10	I2_LAMBDA_T	Lambda
ECU_11	I2_INJ_TIME1	Injection time 1
ECU_12	I2_INJ_TIME2	Injection time2
ECU_13	I2_IGN_ANG	Ignition angle
ECU_14	I2_INJ_STOP_ANG	Injection stop angle
ECU_15	I2_SYNC	Sync
ECU_16	I2_BATTVOLT	Battery voltage