AiM Infotech

Omex 600 and 710 ECUs

Release 1.01

ECU

1 Supported models

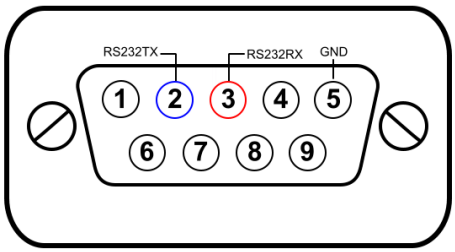
This tutorial explains how to connect ECUs to AiM devices. Supported models are:

- Omex 600 V0.70D or later
- Omex 710 V0.70D or later

Please note: this conversion is done directly by Omex

1 Wiring connection

Omex 600 and Omex 710 ECUs feature a data transmission bus based on CAN on the DB9 connector placed rear on the ECU and shown here below on the left. On the right you see DB9 connector pinout. Below is connection table.



Front connector pin	Pin function	AiM cable
2	RS232TX	RS232RX
3	RS232RX	RS232TX
5	GND	GND

2 AiM device configuration

Before connecting AiM device to the ECU, set it up as follows:

Run Race Studio 2 software and select:

- Device Configuration –> Select the device you are using;
- select the configuration or press “New” to create a new one;
- select ECU manufacturer “Gems” and ECU Model "Omex_600_710"
- transmit the configuration to the device pressing “Transmit”.

3 Available channels

Channels received by AiM devices connected to Gems "Omex_600_710" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	OMEX_RPM	RPM
ECU_2	OMEX_TPS	Throttle position sensor
ECU_3	OMEX_ECT	Engine coolant temperature
ECU_4	OMEX_IAT	Intake air temperature
ECU_5	OMEX_AIR_PRESS	Air pressure
ECU_6	OMEX_BATT_VOLT	Battery voltage
ECU_7	OMEX_MAPASLOAD	Manifold air pressure as load
ECU_8	OMEX_LAMBDA1	Lambda value 1
ECU_9	OMEX_LAMBDA2	Lambda value 2
ECU_10	OMEX_LAMBDATAR	Lambda target
ECU_11	OMEX_FUEL1_PW	Fuel injection
ECU_12	OMEX_SPARK_TOT	Spark advance