AiM Infotech

Electromotive TEC3 and TEC3r

Release 1.03

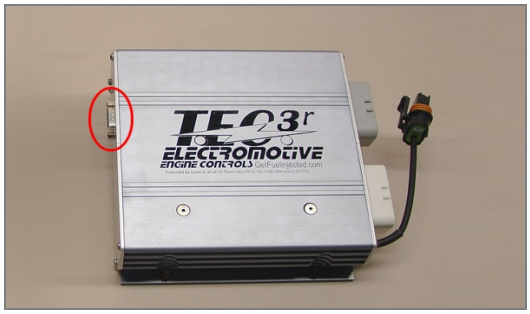
1 Supported models

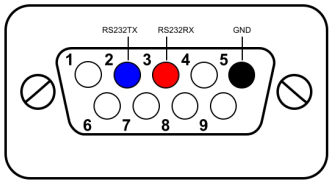
This document explains how to connect AiM devices to the Engine Control Unit (ECU) datastream. Supported models are:

- TEC3
- TEC3r

2 Wiring connection

Electromotive TEC3 and TEC3r feature a serial communication bus on its DB9 rear connector highlighted here below on the left. On the right is connector pinout and follows the connection table.





DB9 connector pin	Pin function	AIM cable label
2	RS232TX	RS232RX/ECU RS232TX
3	RS232RX	RS232TX/ECU RS232RX
5	GND	GND

Please note:
AiM wiring harnesses supplied after September 2018 have the following labels:
ECU RS232TX (white) to be connected to **ECU TX** pin
ECU RS232RX (blue) to be connected to **ECU RX** pin (if indicated in the connection table above)

AiM wiring harnesses supplied before September 2018 have the following labels:
RS232RX (white) to be connected to **ECU TX** pin
RS232TX (blue) to be connected to **ECU RX** pin (if indicated in the connection table above)

3
Race Studio configuration

Before connecting AiM devices to the ECU, set all functions using AiM software Race Studio. The parameters to set in the device configuration are:

- ECU manufacturer: **ELECTROMOTIVE**
- ECU Model: **TEC3**

4
"Electromotive – TEC3" protocol

Channels received by AIM devices configured with "Electromotive - TEC3" protocol are:

CHANNEL NAME	FUNCTION
TEC3_RPM	RPM
TEC3_ADVANCE	Spark advance
TEC3_MAP	Manifold air pressure
TEC3_ECT	Engine coolant temperature
TEC3_TFPW	Total fuel injector pulse width
TEC3_KNOCK	Knock sensor
TEC3_MAT	Manifold air temperature
TEC3_TPS	Throttle position sensor
TEC3_BATV	Battery supply
TEC3_ENGINE_LIGHT	Shift lights
TEC3_GPO1	General purpose output 01
TEC3_UAP	User adjustable pulse width
TEC3_ACTUAL_AFR	Actual air/fuel ratio
TEC3_EGO	Exhausts gas oxygen

TEC3_DESIRED_AFR	Desired air/fuel ratio
TEC3_EGO_VOLT	Exhaust gas oxygen sensor voltage
TEC3_TPS_BLEND_OFFSET	TPS and MAP sensor blended offset
TEC3_STAGED_PW	Staged power
TEC3_PRIMARY_PW	Primary power
TEC3_AD_INPUT1	Analog device input 1
TEC3_AD_INPUT2	Analog device input 2
TEC3_AD_INPUT3	Analog device input 3
TEC3_AD_INPUT4	Analog device input 4
TEC3_GPO2	General purpose output 02
TEC3_GPO3	General purpose output 03
TEC3_GPO4	General purpose output 04
TEC3_SECONDARY_ADV	Secondary Advance
TEC3_KNK_RETARD	Knock retard