

AiM Infotech

Electromotive TEC3 and TEC3r

Release 1.03



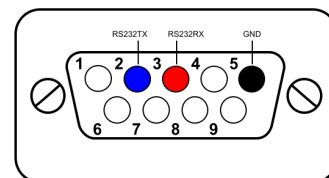
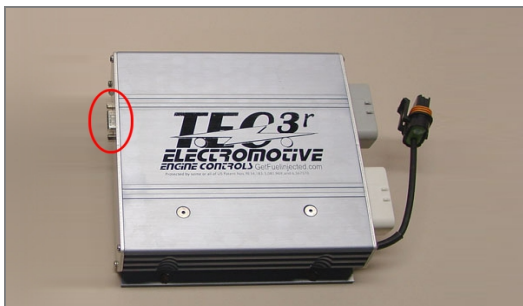
1 Supported models

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

2
3
5

Pin function

RS232TX
RS232RX
GND

AIM cable label

RS232RX/ECU RS232TX
RS232TX/ECU RS232RX
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)

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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**

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“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