AiM Infotech

## Performance Electronics PE3 ECU

#### Release 1.00







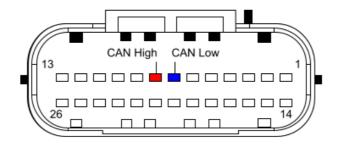
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This tutorial explains how to connect Performance Electronics PE3 ECU to AiM devices.

# 1 Connection to AiM devices

Performance Electronics PE3 ECU features a bus communication protocol based on CAN on "C" rear connector. The ECU has two rear connectors labelled respectively "C" (Comm) and "M" (Main). AiM devices use "C" one. Here below you see its pinout as well as connection table.



| DB9 connector pin | Pin function | AiM cable |
|-------------------|--------------|-----------|
| 8                 | CAN High     | CAN+      |
| 7                 | CAN Low      | CAN-      |

## 2 AiM Logger configuration

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

- Run Race Studio 2 software and follow this path:
- Device Configuration -> Select the device you are using;
- select the configuration or press "New" to create a new one;
- select ECU manufacturer "Performance EI" and ECU Model "ECU\_PE3"
- transmit the configuration to the device pressing "Transmit".



## 3 Available channels

Channels received by AiM devices connected to "Performance EI" "ECU\_PE3" protocol are:

| ID     | CHANNEL NAME  | FUNCTION                       |
|--------|---------------|--------------------------------|
| ECU_1  | PE3_RPM       | RPM                            |
| ECU_2  | PE3_TPS       | Throttle Position Sensor       |
| ECU_3  | PE3_FUEL_TIME | Fuel injection time            |
| ECU_4  | PE3_IGN_ANG   | Ignition angle                 |
| ECU_5  | PE3_BARO      | Barometric pressure            |
| ECU_6  | PE3_MAP       | Manifold air pressure          |
| ECU_7  | PE3_LAMBDA    | Lambda sensor                  |
| ECU_8  | PE3_ANA_IN1   | Analog input 1                 |
| ECU_9  | PE3_ANA_IN2   | Analog input 2                 |
| ECU_10 | PE3_ANA_IN3   | Analog input 3                 |
| ECU_11 | PE3_ANA_IN4   | Analog input 4                 |
| ECU_12 | PE3_ANA_IN5   | Analog input 5                 |
| ECU_13 | PE3_ANA_IN6   | Analog input 6                 |
| ECU_14 | PE3_ANA_IN7   | Analog input 7                 |
| ECU_15 | PE3_ANA_IN8   | Analog input 8                 |
| ECU_16 | PE3_FREQ1     | Frequency 1                    |
| ECU_17 | PE3_FREQ2     | Frequency 2                    |
| ECU_18 | PE3_FREQ3     | Frequency 3                    |
| ECU_19 | PE3_FREQ4     | Frequency 4                    |
| ECU_20 | PE3_BATTVOLT  | Battery supply                 |
| ECU_21 | PE3_IAT       | Intake air temperature         |
| ECU_22 | PE3_ECT       | Engine cooling temperature     |
| ECU_23 | PE3_THERMIST1 | Analog Input 5 thermo resistor |
| ECU_24 | PE3_THERMIST2 | Analog Input 7 thermo resistor |