Performance Electronic

EDGE ECU

Racing Data Power

INTRODUCTION

AIM has developed special applications for many of the most popular ECUs: 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.

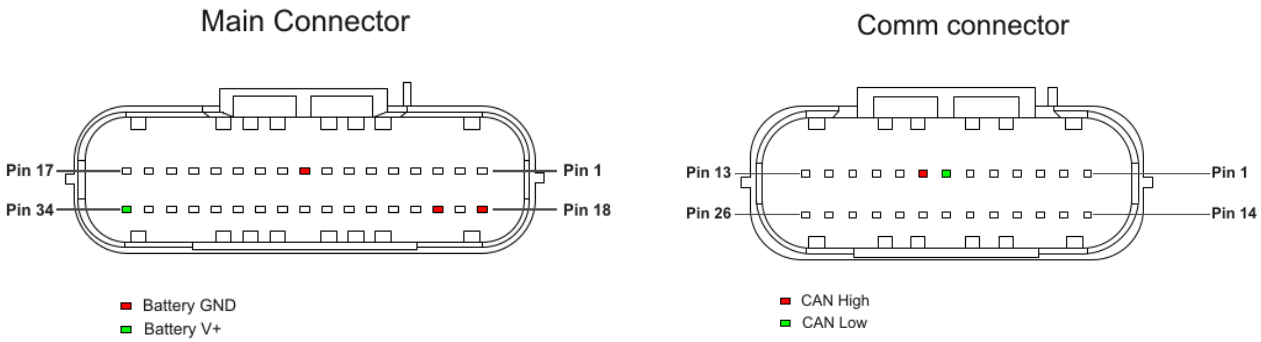
Once connected, the logger displays (and/or records, depending on the logger and on the ECU data stream and configuration) values like RPM, engine load, throttle position (TPS), air and water temperatures, battery voltage, speed, gear, lambda value (air/fuel ratio) analog channels…

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 "Performance Electronic" Model "ECU_EDGE".
Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

1 – Connection with AIM loggers

Performance Electronic ECU is equipped with two connectors labelled as M (Main connector) and C (Comm connector) in the wiring diagram. Here below they are shown



Ground channel is on the main connector while CAN bus is on the Comm one as shown in the table here below.

Connector	Pin	Function	AIM cable
Main	9	Battery GND	GND
Main	18	Battery GND	GND
Main	20	Battery GND	GND
Main	34	Battery V+	+V Battery
Comm	7	Can Low	CAN Low
Comm	8	CAN High	CAN High

2 – Communication protocol

Channels received by AIM loggers connected to Performance Electronic EDGE ECU are:

ID	CHANNEL NAME	FUNCTION
ECU_1	EDGE_RPM	RPM
ECU_2	EDGE_TPS	Throttle Position Sensor
ECU_3	EDGE_FUEL_TIME	Fuel injection time
ECU_4	EDGE_IGN_ANG	Ignition angle
ECU_5	EDGE_BARO	Barometric pressure
ECU_6	EDGE_MAP	Manifold air pressure
ECU_7	EDGE_LAMBDA	Lambda sensor
ECU_8	EDGE_ANA_IN1	Analog input 1
ECU_9	EDGE_ANA_IN2	Analog input 2
ECU_10	EDGE_ANA_IN3	Analog input 3
ECU_11	EDGE_ANA_IN4	Analog input 4
ECU_12	EDGE_ANA_IN5	Analog input 5
ECU_13	EDGE_ANA_IN6	Analog input 6
ECU_14	EDGE_ANA_IN7	Analog input 7
ECU_15	EDGE_ANA_IN8	Analog input 8
ECU_16	EDGE_FREQ1	Frequency 1
ECU_17	EDGE_FREQ2	Frequency 2
ECU_18	EDGE_FREQ3	Frequency 3
ECU_19	EDGE_FREQ4	Frequency 4
ECU_20	EDGE_BATTVOLT	Battery supply
ECU_21	EDGE_IAT	Intake air temperature
ECU_22	EDGE_ECT	Engine cooling temperature
ECU_23	EDGE_THERMIST1	Analog Input 5 thermo resistor
ECU_24	EDGE_THERMIST2	Analog Input 7 thermo resistor