AiM Infotech

EFI Euro4 Auto V3xx
Standard Motorsport

Release 1.00

ECU

1 Supported models

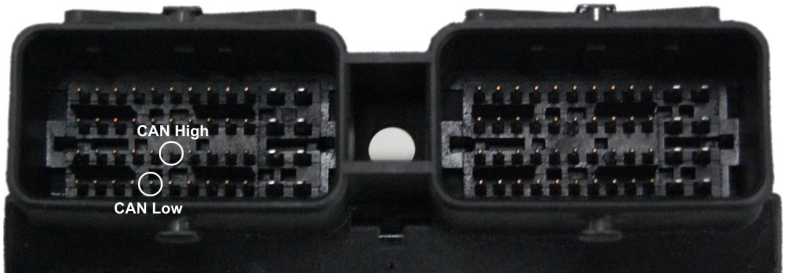
This document explains how to connect EFI Euro 4 ECU to AiM devices. Supported models are:

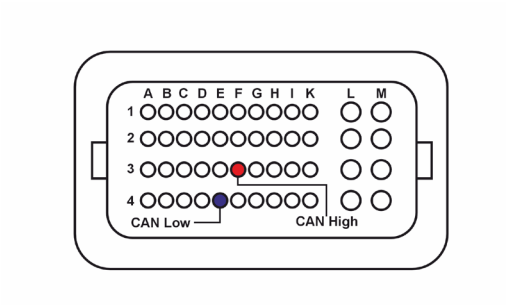
- EFI Euro4 **Standard Motorsport** from software version **V300** onwards.

2 Wiring connection

ECU Euro4 can broadcast engine data on CAN at **1Mbit/sec**.
Please note: CAN data broadcast **must be enabled** in the ECU configuration and **is only available on CAN2**. Refer to the ECU User manual for further information about its configuration.

EFI Euro 4 ECU features a communication protocol based on CAN on CAN2 pins you find on the 48 pins front left Molex connector shown below on the left. Image on the right shows the connector pinout and below the images is connection table.





EFI connector pin	Pin function	AiM cable
F3	CAN 2 High	CAN+
E4	CAN2 Low	CAN-

An alternative connection is generally represented by a DB9 connector used for the wiring. Check the pinout with the wiring harness builder.

3
AiM device configuration

Before connecting the ECU to AiM device set this up using AiM Race Studio 3 software. The parameters to select in the device configuration are:

- ECU manufacturer: EFI_EUROPE
- ECU model: Euro4_Auto_V3xx (RaceStudio 3 only)

4
"EFI_EUROPE – Euro4_Auto_V3xx"

Channels received by AiM devices connected to "EFI_EUROPE – Euro4_Auto_V3xx" protocol are:

CHANNEL NAME	FUNCTION
RPM	Engine RPM
Gear	Gear
VehSpd	Vehicle speed
SpeedFL	Wheel speed front left
SpeedFR	Wheel speed front right
SpeedRL	Wheel speed rear left
SpeedRR	Wheel speed rear right
OilTemp	Oil temperature
WaterTemp	Water temperature
AirTemp	Air temperature
OilPress	Oil pressure
FuelPress	Fuel pressure
BaroPress	Barometric pressure
ManifAirPress	Manifold air pressure
BattVoltDir	Direct battery supply (+30)
BattVoltKey	Switched battery supply (+15)

ThrotPos1	Throttle position sensor
TPS1 ETBCAN	Throttle 1 percentage from ETB controller
TPS2 ETBCAN	Throttle 2 percentage from ETB controller
DFarf	Throttle derivative
TrimSlip	Driver trim of target slip
Lambda1	Lambda1
Lambda2	Lambda2
TErogBase	Base injection time
TErog	Real injection time
OSaSlip	Spark advance offset due to slip
SparkAdvBase	Base spark advance
SparkAdvance	Spark advance
KFuelCal	Fuel injection correction due to fuel calibration
KFuelLearn	Fuel learn trim
CLC1	Closed loop fuel trim 1
CLC2	Closed loop fuel trim 2
Out1Active	Output 1 active
Out3Active	Output 3 active
LaunchActive	Launch control active
TempInput	Temperature input
DrAxSpd	Drive axle speed
DMAP	MAP derivative
AccelEnrich	Acceleration enrichment
Slip Calc	Slip factor for interpolations
EngineRunTime	Engine run time
TotalEngineRunT	Total engine run time
GearShiftTime	Gear shift time
LNR1	Linear input 1
LNR2	Linear input 2
LNR3	Linear input 3
LNR4	Linear input 4
LNR5	Linear input 5

LNR6	Linear input 6
PitLineActive	Pit line active
CutOffActive	Cut off active
TC Active	Traction control status
Out2Active	Output 2 active
ConsumoFuel	Fuel consumption

Technical note: Not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.