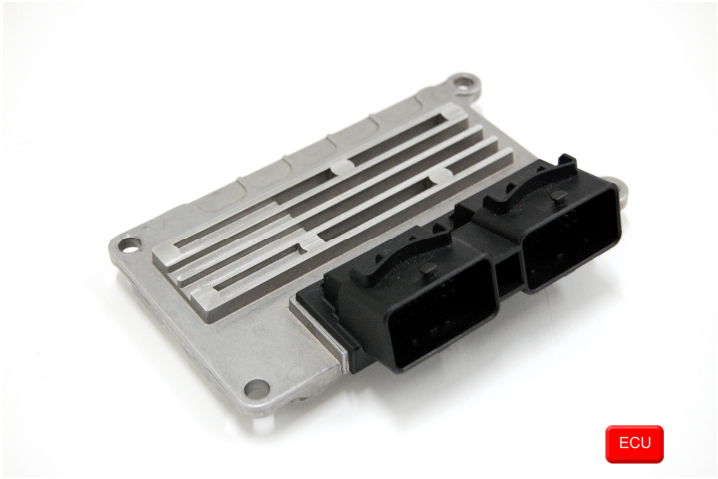
AiM Infotech

EFI EURO 4 V127 ECU

Release 1.02



1 Supported models

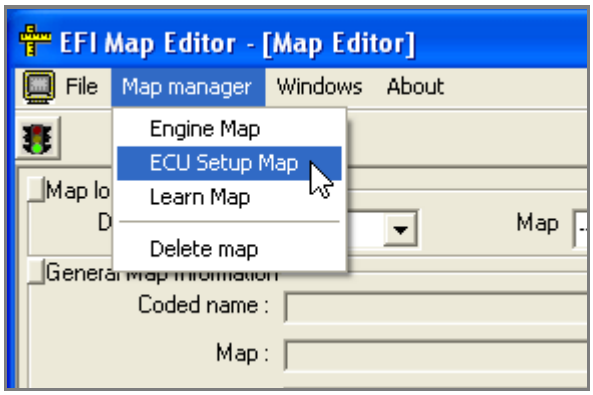
This tutorial explains how to connect EFI EURO 4 ECUs to AiM devices. Supported EURO 4 ECU is:

- EURO 4 V127

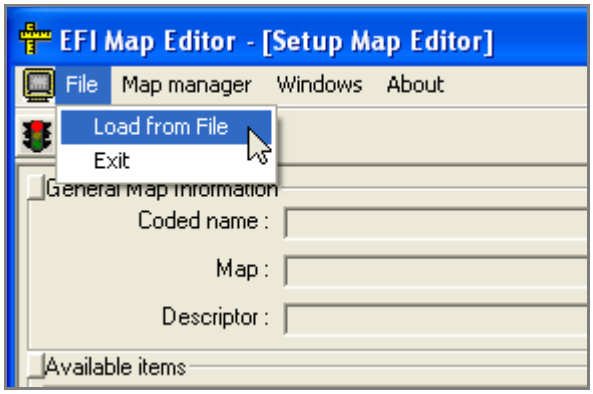
2 Software setup

EFI EURO 4 ECU comes with the dedicated "ECT_MOD" software to be used for setting the ECU.

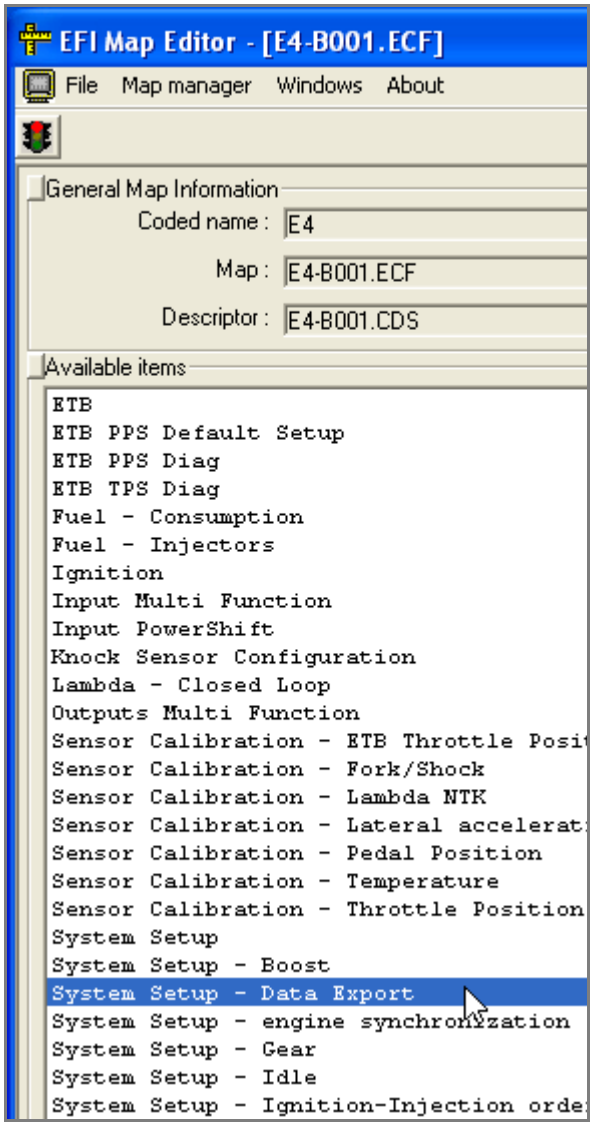
- Run the software
- Load EURO4_127 ECU
- Open Map Editor
- Follow the path: "Map Manager –> ECU Setup Map"



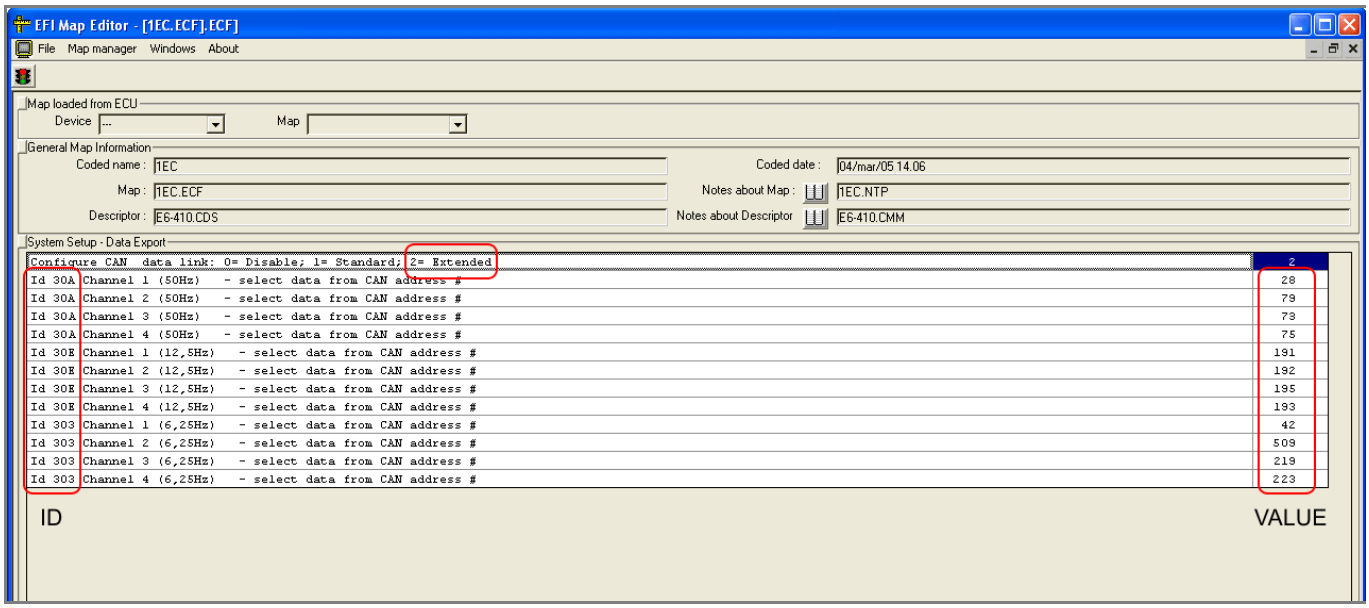
- Follow this path: "File" –> "Load from file"



- Select ".ECF" file
- Select ".CDS" file and the map is loaded
- Click "System setup – data export"



This way "Data export" , shown below, is loaded



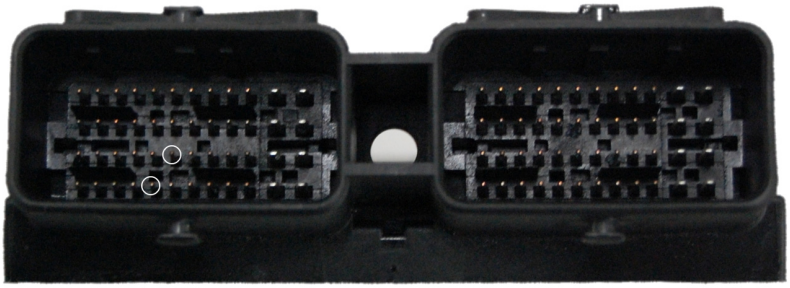
Perform these operations:

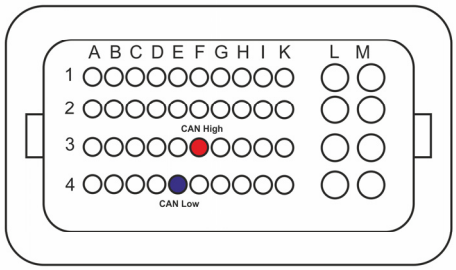
- set the first row on "2=Extended"
- check that "ID" and "Value" digits are as in the following table

ID	VALUE
30A	28
30A	79
30A	73
30A	75
30E	191
30E	192
30E	195
30E	193
303	42
303	509
303	219
303	223

3
Wiring connection

EFI Euro4 V127 ECU features a bus communication protocol based on CAN on the 48 pins front left male connector. Here below it is shown with its pinout. Below is connection table.





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

4
AiM device configuration

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

- ECU manufacturer “EFI_EUROPE”
- ECU Model "EURO_4_127"

5
Available channels

Channels received by AiM devices connected to "EFI EUROPE" "EURO_4_127" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	EFI_RPM	RPM
ECU_2	EFI_TPS	Throttle position sensor
ECU_3	EFI_MAP	Manifold air pressure
ECU_4	EFI_DFARF	Throttle derivative
ECU_5	EFI_DMAP	Manifold air pressure derivative
ECU_6	EFI_AE	Fuel enrichment for positive TPS transient
ECU_7	EFI_DE	Fuel enrichment for negative TPS transient
ECU_8	EFI_WHEELSPD	Driven wheel speed
ECU_9	EFI_DRAXSSPD	Driving wheel speed
ECU_10	EFI_SLIP	Slip factor
ECU_11	EFI_OSASLIP	Ignition cut vs slip factor
ECU_12	EFI_BRAKE_P_R	Rear brake pressure
ECU_13	EFI_BRAKE_P_F	Front brake pressure
ECU_14	EFI_TC_ACTIVE	Active traction control
ECU_15	EFI_TC_CUT_LEV	Advance cut (for traction control)
ECU_16	EFI_TEROGBASE	Injection table – injection time
ECU_17	EFI_TEROG	Real injection time
ECU_18	EFI_SABASE	Spark advance on ignition table
ECU_19	EFI_SA	Real spark advance
ECU_20	EFI_NTK1	Lambda value 1
ECU_21	EFI_KFUELLEARN	Fuel correction coefficient for auto mapping
ECU_22	EFI_GEAR	Engaged gear
ECU_23	EFI_GEARSHIFTTIME	Gear shift time
ECU_24	EFI_OILPRESS	Oil pressure
ECU_25	EFI_FUELPRESS	Fuel pressure

ECU_26	EFI_BARO_PRESS	Barometer pressure
ECU_27	EFI_LNR3L	Analogic linear input 3
ECU_28	EFI_LNR4L	Analogic linear input 4
ECU_29	EFI_BATTVOLTDIR	Direct battery supply
ECU_30	EFI_BATTVOLTKEY	ECU voltage supply
ECU_31	EFI_LNR1L	Analogic linear input 1
ECU_32	EFI_LNR2L	Analogic linear input 2
ECU_33	EFI_LNR5L	Analogic linear input 5
ECU_34	EFI_LNR6L	Analogic linear input 6
ECU_35	EFI_TC_TRIM	Slip multiplier (for traction control)
ECU_36	EFI_TEROG_LOG	Logged injection time
ECU_37	EFI_ECT	Engine cooling temperature
ECU_38	EFI_OILTEMP	Oil temperature
ECU_39	EFI_FUELTEMP	Fuel temperature
ECU_40	EFI_AIRTEMP	Intake air temperature
ECU_41	EFI_SELEPROMTAB	Selected Engine Map
ECU_42	EFI_KFUELCAL	Calibration fuel multiplier