AiM Infotech

EFI Euro 1

Release 1.02

This tutorial explains how to connect AiM devices to EFI Euro 1 ECU using the CAN Bus.

1 Recommended check

Before connecting EFI Euro 1 ECU to AiM devices two checks are strongly recommended.

- **Hardware check**: all AiM devices feature a 120 Ohm resistor integrated in the logger (MXL Strada/ Pista/Pro05) or mounted on the device harness (SoloDL, EVO4, ECU Bridge). Your network should be equipped with another 120 Ohm resistor. In case you find a third resistor, please remove it.

- **Firmware check**: according to their firmware version, EFI Euro 1 ECU may be compatible or not with AiM devices. In detail:

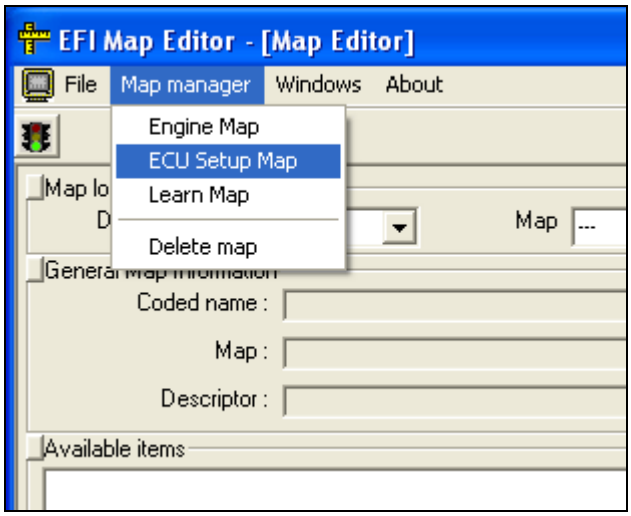
    - ECU with firmware version 200-299: not compatible
    - ECU with firmware version 300-379: firmware upgrading needed – contact EFI dealer
    - ECU with firmware version 380-399: compatible
    - ECU with firmware version 400 onwards software setup needed – see below

Please note: always ensure that your AiM device is upgraded to the latest available firmware version checking www.aim-sportline.com download area, firmware section.

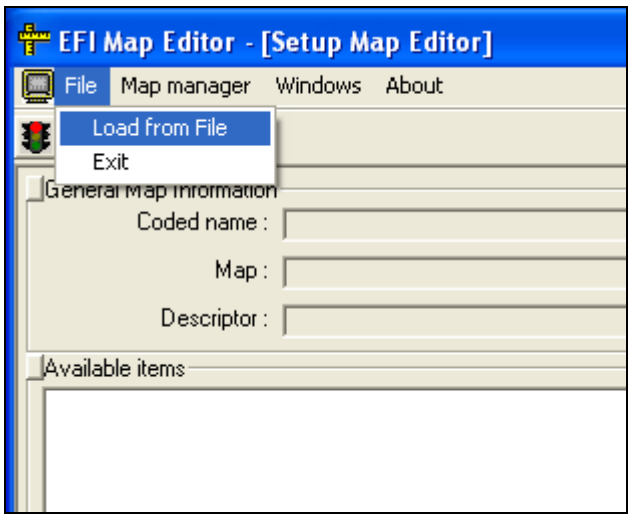
1.1
Software setup

To setup your EFI Euro 1 ECU with firmware versions from 400 onwards follow this procedure.

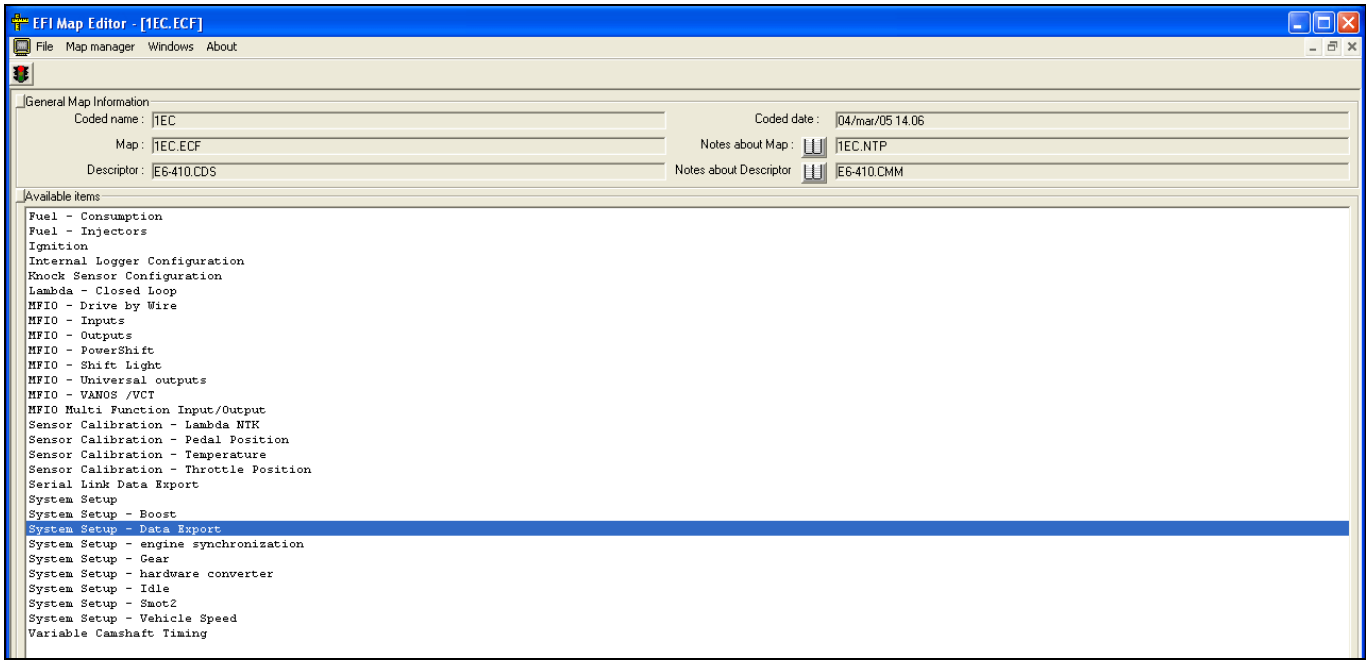
- Run “ECT Mode” and load Euro 1 ECU
- click “Map Editor”
- select “Map Manager –> ECU Setup Map”



- click “File” and select “Load from File”

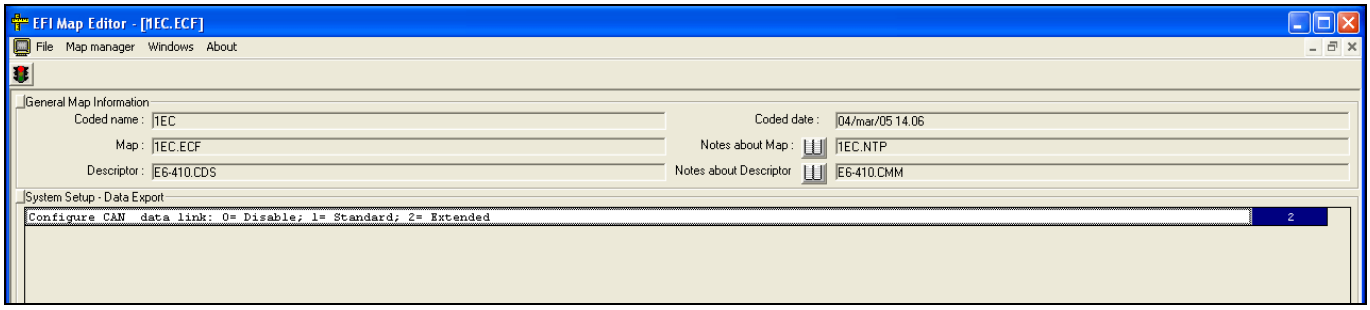


- select ".ECF" file
- select ".CDS" file
- the map is loaded
- the page shows a long list of options: select "System Setup – Data Export"



"Data export" table is loaded. Available options are:

- 0 = disable
- 1 = standard
- 2 = extended – type this one



2
Wiring connection

To connect EFI Euro 1 ECU with AiM devices use the 35 pins AMP male connector located frontally on it. Here below the connection table.

AMP connector pin	Pin function	AiM cable
22	CAN High	CAN+
6	CAN Low	CAN-

3
AiM Logger configuration

Once the ECU connected to the logger, set up the logger as follows:

Run Race Studio 2 software and select:
- Device Configuration –> select the device you are using;
- select the configuration or press “New” to create a new one;
- select ECU manufacturer “EFI_EUROPE” and ECU Model “Euro_1”;
- transmit the configuration to the device pressing “Transmit”.

3
Available channels

Channels received by AiM loggers connected to EFI Euro 1 protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	EFI_RPM	RPM
ECU_2	EFI_TPS	Throttle position
ECU_3	EFI_DFARF	Throttle position derivative
ECU_4	EFI_MAP	Manifold air pressure
ECU_5	EFI_BARO	Barometric pressure
ECU_6	EFI_ARR_TRANS	Fuel enrichment multiplier on throttle position transient
ECU_7	EFI_SPEED	Vehicle speed
ECU_8	EFI_VBATT	Battery supply
ECU_13	EFI_TEROGBASE	Injection table – injection time
ECU_14	EFI_TEROG	Real injection time
ECU_15	EFI_TEROG12	Injection time of cylinder 1-2
ECU_16	EFI_TEROG34	injection time of cylinder 3-4
ECU_17	EFI_SABASE	Ignition table - spark advance
ECU_18	EFI_SA	Real spark advance
ECU_19	EFI_SA1	Spark advance 1
ECU_20	EFI_SA2	Spark advance 2
ECU_21	EFI_NTK1	Lambda value 1
ECU_22	EFI_FCCLAT	Auto mapping flag
ECU_23	EFI_KFUELLEARN	Fuel correction coefficient for auto mapping
ECU_24	EFI_CLC1	Clutch 1
ECU_31	EFI_TH2O	Engine coolant temperature
ECU_32	EFI_TAIR	Intake air temperature