Delphi MEFI 4B ECU





INDEX

Chapter 1 – CAN communication setup	3
Chapter 2 – Connection to AIM loggers	4
Chapter 3 – Delphi MEFI 4B communication protocol	5



INTRODUCTION

AIM has developed special applications for many of the most common ECUs: by special applications we mean user-friendly systems which allow to easily connect your ECU to our hi-tech data loggers: user need 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) 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 "DELPHI" and Model "MEFI – 4B". Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

Warning: it is strongly recommended to always verify whether the ECU needs specific software settings to export data.



Chapter 1 – CAN communication setup

This ECU has got a CAN protocol to communicate parameters to a data logger or to configure the ECU itself and is equipped with 2 connectors (J1 and J2).

The images here below show the standard CAN communication set up and the connectors. The pins used to communicate to AIM loggers are situated in J2 connector – highlighted in the figure below.







Chapter 2 – Connection to AIM loggers

To connect AIM logger to the ECU connect:

- AIM cable labelled CAN + with pin 24 of the J2 ECU connector.
- AIM cable labelled CAN with **pin 9** of the J2 ECU connector.

The scheme here below shows the pins position on J2 connector.







Chapter 3 – Delphi MEFI 4B communication protocol

Channels received by AIM loggers connected to Delphi MEFI 4B ECU are:

ID CHANNEL NAME

FUNCTION

ECU_1	MEFI_4B_RPM	RPM
ECU_2	MEFI_4B_ECT	Engine cooling temperature
ECU_3	MEFI_4B_EIV	Voltage
ECU_4	MEFI_4B_EOP	Engine oil pressure
ECU_5	MEFI_4B_SPEED	Vehicle Speed
ECU_6	MEFI_4B_FUELCONS	Fuel consumption
ECU_7	MEFI_4B_STATUS	ECU Status
ECU_8	MEFI_4B_FUELPRESS	Fuel pressure
ECU_9	MEFI_4B_EGRFB	
ECU_10	MEFI_4B_FTEMP	Fuel temperature
ECU_11	MEFI_4B_MAT	Manifold air temperature
ECU_12	MEFI_4B_RUNTIME_HOUR	Running timer hours
ECU_13	MEFI_4B_RUNTIME_MIN	Running timer minutes
ECU_14	MEFI_4B_RPM2	RPM 2
ECU_15	MEFI_4B_MAP_VOLTS	Manifold air pressure voltage
ECU_16	MEFI_4B_MAP	Manifold air pressure