

AiM Infotech

MBE 992 ECU

Release 1.01

---



ECU



This tutorial explains how to connect MBE 992 ECU to AiM devices.

# 1

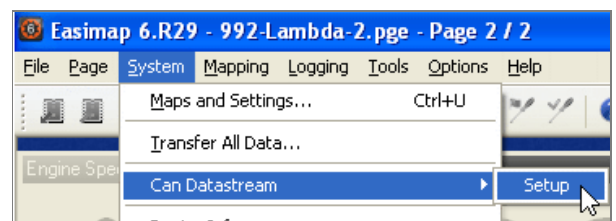
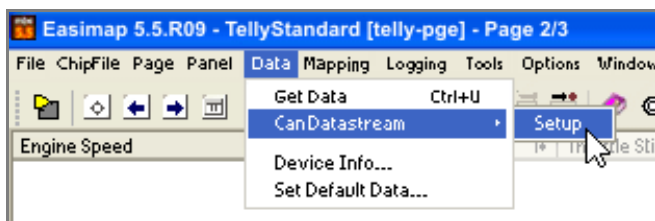
## Software setup

---

MBE 992 comes with EasyMap software. For a correct communication with AiM devices set it up as follows:

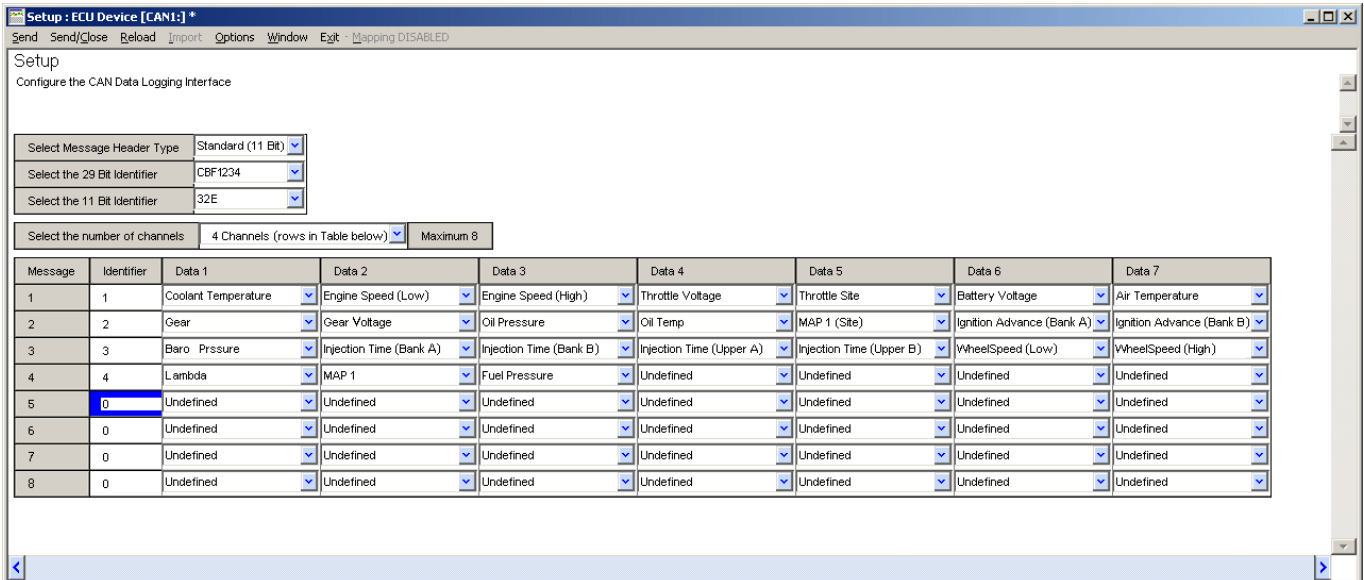
- Connect the ECU to your PC and power it.
- Run Easy Map and follow this path:
  - Data → CAN Datastream → Setup if you have EasyMap 5.5 release
  - System → Can Datastream → Setup if you have EasyMap 6 release

Here below you see images of EasyMap 5.5 – on the left – and EasyMap 6 – on the right.



- This way the software reads information coming from the ECU and opens a new window to configure the CAN communication;

- Parameters must be configured in the right sequence and with the right scaling; complete the table with the information suggested here below:



**Please note:** data logging configuration with EasiMap software is intended for expert users only. The software can of course be changed by MBE. Refer to [www.mbesystems.com](http://www.mbesystems.com) for further information.

- once all parameters configured press "Send" and choose "ECU Device" when requested; the configuration is stored in ECU memory
- close configuration window and quit the program
- before connecting MBE ECU to AiM device enable "Broadcast Mode" ensuring a nominally zero voltage (or open circuit) on fuel trim and ignition trim inputs.

## 2 Wiring connection

MBE 992 ECU features a bus communication protocol based on CAN on J2 36 pins front connector. Here below is connection table.

| J2 36 Pins connector pin | Pin function | AiM cable |
|--------------------------|--------------|-----------|
| 9                        | CAN High     | CAN+      |
| 8                        | CAN Low      | CAN-      |

## 3

# 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 "MBE"
- ECU Model "992CAN"

## 4

# Available channels

---

Channels received by AiM devices connected to "MBE" "992CAN" protocol are:

| <b>ID</b> | <b>CHANNEL NAME</b> | <b>FUNCTION</b>            |
|-----------|---------------------|----------------------------|
| ECU_1     | MBE_WATER_TEMP      | Engine coolant temperature |
| ECU_2     | MBE_RPM             | RPM                        |
| ECU_3     | MBE_THROT_VOLT      | Throttle voltage           |
| ECU_4     | MBE_TPS             | Throttle position sensor   |
| ECU_5     | MBE_BATTERY         | Battery supply             |
| ECU_6     | MBE_AIR_TEMP        | Intake air temperature     |
| ECU_7     | MBE_GEAR            | Engaged gear               |
| ECU_8     | MBE_GEAR_VOLT       | Gearbox voltage            |
| ECU_9     | MBE_OIL_PRESS       | Oil pressure               |
| ECU_10    | MBE_OIL_TEMP        | Oil temperature            |
| ECU_11    | MBE_MAP_SIDE        | Manifold air pressure side |
| ECU_12    | MBE_IGN_BANK_A      | Ignition time bank A       |
| ECU_13    | MBE_IGN_BANK_B      | Ignition time bank B       |
| ECU_14    | MBE_BARO_PRESS      | Barometric pressure        |
| ECU_15    | MBE_INJ_BANK_A      | Injection time bank A      |
| ECU_16    | MBE_INJ_BANK_B      | Injection time bank B      |



|        |                |                              |
|--------|----------------|------------------------------|
| ECU_17 | MBE_INJ_UP_A   | Injection time upper bank A  |
| ECU_18 | MBE_INJ_UP_B   | Injection time upper bank B  |
| ECU_19 | MBE_WHEELSPEED | Wheel speed sensor           |
| ECU_20 | MBE_LAMBDA     | Lambda value                 |
| ECU_21 | MBE_MAP        | Manifold air pressure        |
| ECU_22 | MBE_FUEL_PRESS | Fuel pressure                |
| ECU_23 | MBE_TPP        | Throttle position percentage |