



AiM Infotech

MBE 992 ECU

Release 1.01



ECU



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

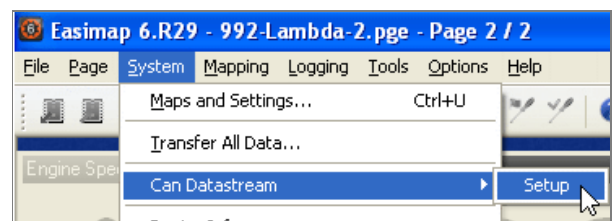
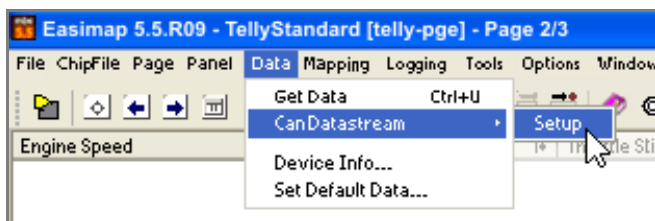
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Software setup

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

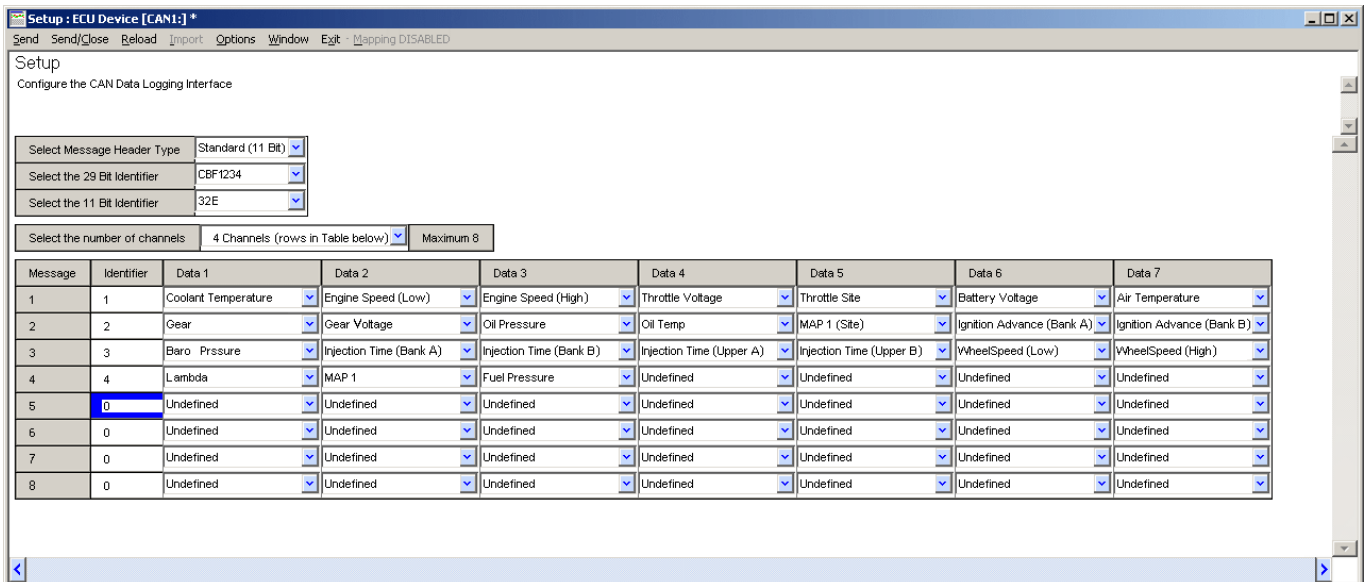
- Connect the ECU to your PC and power it.
- Run Easy Map and follow this path:
 - Data → CAN Datastream → Setup if you have EasyMap 5.5 release
 - System → Can Datastream → Setup if you have EasyMap 6 release

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:



Message	Identifier	Data 1	Data 2	Data 3	Data 4	Data 5	Data 6	Data 7
1	1	Coolant Temperature	Engine Speed (Low)	Engine Speed (High)	Throttle Voltage	Throttle Site	Battery Voltage	Air Temperature
2	2	Gear	Gear Voltage	Oil Pressure	Oil Temp	MAP 1 (Site)	Ignition Advance (Bank A)	Ignition Advance (Bank B)
3	3	Baro Pressure	Injection Time (Bank A)	Injection Time (Bank B)	Injection Time (Upper A)	Injection Time (Upper B)	WheelSpeed (Low)	WheelSpeed (High)
4	4	Lambda	MAP 1	Fuel Pressure	Undefined	Undefined	Undefined	Undefined
5	0	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
6	0	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
7	0	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined
8	0	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined	Undefined

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 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.

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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-

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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"

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Available channels

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

ID	CHANNEL NAME	FUNCTION
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