

AiM InfoTech

ME Motorsport Electronics

ME_13_14

ME_13_14_1MB

Release 1.00



ECU



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Models and years

This document explains how to connect AiM devices to the Engine Control Unit (ECU) data stream, with vers 1.3 and 1.4 of the manufacturer's fixed CAN protocol. Supported models are:

- ME Gen2 ECUs (ME221 ME360 ME442) Wire In and Plug In

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Wiring connection

These models feature a specific protocol based on CAN, accessible through the main connector of Wire-in ECUs or the Auxiliary connector of Plug In Ecus.

ECU connector pin	Function	AiM cable	AiM cable color
All ECUs - 21	CAN1-H	CAN+	White
All ECUs - 51	CAN1 L	CAN-	Blue
Only ME442 - 36	CAN2 H	CAN+	White
Only ME442 - 35	CAN2 L	CAN-	Blue
AUX connector pin	Function	AiM cable	AiM color cable
18	CAN2 H	CAN+	White
17	CAN1 L	CAN-	Blue

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Race Studio configuration

Before connecting the AiM device to the ECU, set all functions using AiM software Race Studio. The parameters to set in the device configuration are:

- ECU manufacturer: **ME**
- ECU model: **ME_13_14** (RaceStudio3 only) for **500kbs** connections
ME_13_14_1MB (RaceStudio3 only) for **1Mbs** connections



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“ME – ME_13_14” protocol

Channels received by AiM devices configured with "ME – ME_13_14" protocol are:

CHANNEL NAME	FUNCTION
RPM	Engine RPM
TPS	Throttle position sensor
MAP	Manifold air pressure
Intake Air Temp	Intake air temperature
RPM Hard Limit	Hard cut RPM
AFR Curr 1	Current Air/Fuel ratio on bank 1
AFR Curr 2	Current Air/Fuel ratio on bank 2
Fuel Lambda Trim	Lambda trim
AFR Target	Air/Fuel ratio target
Fuel Eth Perc	Ethanol percentage
Ign Adv Angle	Ignition advance angle
Ign Dwell	Ignition dwell time
Pri Inj Angle	Primary injection angle
Pri Inj Pulse	Primary injection pulse
Pri Inj Duty	Primary injection duty cycle
Sec Inj Duty	Secondary injection duty cycle
Sec Inj Angle	Secondary injection angle
Sec Inj Pulse	Secondary injection pulse
Boost Ctrl Duty	Boost control duty cycle
Oil Temp	Engine oil temperature
Oil Pressure	Engine oil pressure
Coolant Temp	Engine coolant temperature
Battery Voltage	Battery voltage
Gear	Selected gear



MAP Target	Manifold air pressure target
Vehicle Speed	Vehicle speed
ESP Ev Mask	Bitfield coded fail message
	1= Oil temperature
	2= Oil pressure
	3= Fuel pressure
	4= Lambda
	5= EGT
	6= Knock
	7= Overboost
Knock Reading	Knock peak reading
Knock Ign Adv Mo	Ignition advance modifications by knock
Fuel Press	Fuel pressure
Fuel Temp	Fuel temperature
EGT 1	Exhaust gas temperature bank 1
Knocks Evs Cnt	Knock events counter
EGT 2	Exhaust gas temperature bank 2
GPT1	General purpose table 1
GPT 2	General purpose table 2
EGT 1 ME14	Exhaust gas temperature bank 1 for ME1.4 protocol
GPT 2 ME14	General purpose table 2 for ME 1.4 protocol
EGT 2 ME14	Exhaust gas temperature bank 2 for ME1.4 protocol
GPT 1 ME14	General purpose table 1 for ME 1.4 protocol
Vehicle Speed 01	Vehicle speed

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer's model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.