AiM Infotech

BMW M235i Racing ECU

Release 1.03

ECU
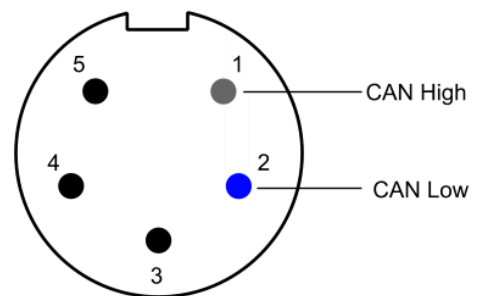
1
Supported models

This tutorial explains how to connect BMW cars to AiM devices. Supported models are:

- BMW M235i Racing   from 2014 onward

2
Connection to AiM devices

BMW M235i Racing ECU features a bus communication protocol based on CAN on the 5 pins Binder 712 female connector located in the vehicle passenger area. As you can see here below on the left, in the passenger area you find two Binder connectors; the one to be used is labelled **Data System Team**.

Here below: on the left the connectors – please remember to use the one labelled Data System Team- and on the right the connector pinout front view. Bottom is connection table.

Binder 712 female connector pin	Pin function	AiM cable
1	CAN High	CAN+
2	CAN Low	CAN-

Warning: do not plug the connector directly in AiM devices ECU inputs.

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 "BMW"
- ECU Model "M235i"

4
Available channels

Channels received by AiM devices connected to "BMW" "M235i" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	RPM	RPM
ECU_2	ECU_THROTTLE	Throttle position sensor
ECU_3	ECU_BRK_STATE	Brake status
ECU_4	ECU_SPEED	Vehicle speed
ECU_5	ECU_AIR_T	Intake air temperature
ECU_6	ECU_WATER_T	Engine coolant temperature
ECU_7	ECU_OIL_T	Oil temperature
ECU_8	ECU_GEAR	Engaged gear
ECU_9	ECU_AIR_P	Air pressure
ECU_10	ECU_GEAR_T	Gearbox Temperature
ECU_11	ECU_STER_ANG	Steering angle
ECU_12	ECU_FUEL_RAW	Fuel value
ECU_13	ECU_BATTERY	Battery supply
ECU_14	ECU_INL_ACC	Inline acceleration
ECU_15	ECU_LAT_ACC	Lateral acceleration
ECU_16	ECU_GYRO	Gyroscope
ECU_17	ECU_CUR_IBS	Battery current
ECU_18	ECU_WS_RL	Rear left wheel speed
ECU_19	ECU_WS_RR	Rear right wheel speed
ECU_20	ECU_WS_FL	Front left wheel speed
ECU_21	ECU_WS_FR	Front right wheel speed

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