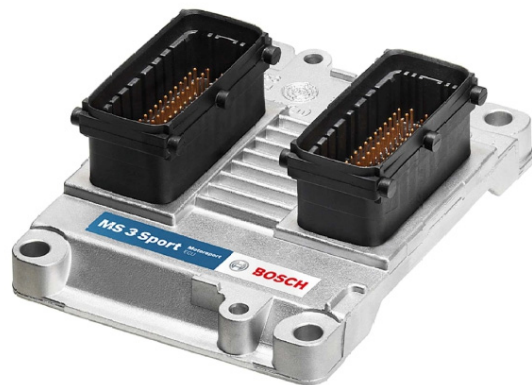


AiM Infotech

Bosch MS3 and Bosch MS3 Sport ECU

Release 1.00



ECU



This tutorial explains how to connect Bosch MS3 ECU to AiM devices.

1

Supported models

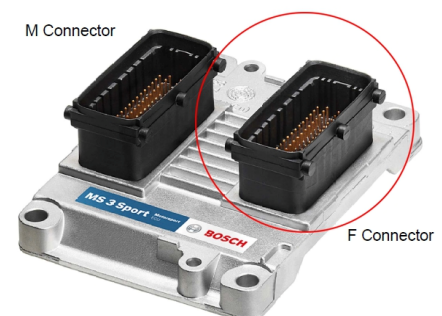
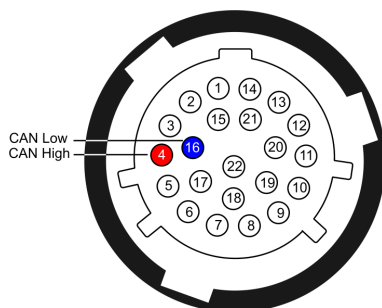
Supported ECU models are:

- Bosch MS3
- Bosch MS3 Sport

2

Connection to AiM devices

Bosch MS3 and Bosch MS3 Sport ECU feature a bus communication protocol based on CAN that can be reached in two ways: through the 22 pins diagnosis Deutsch female connector you find on the ECU wiring and shown here below on the left (recommended) or using "F" connector highlighted here below on the right. Bottom of them is connection table.



ECU connector pin

F29

F12

22 pins Deutsch connector pin

4

16

Pin function

CAN High

CAN Low

Pin function

CAN High

CAN Low

AiM cable

CAN+

CAN-

AiM cable

CAN+

CAN-

3

AiM Logger configuration

Before connecting the device to the ECU set it up as follows:

- Run Race Studio 2 software and follow this path:
- Device Configuration → Select the device you are using;
- select the configuration or press "New" to create a new one;
- select ECU manufacturer "Bosch" and ECU Model
 - "MS3" or
 - "MS3 SPORT"
- transmit the configuration to the device pressing "Transmit".

4

Available channels

Channels received by AiM devices connected to "Bosch" ECU changes according to the selected protocol.

4.1

"Bosch" "MS3" protocol

Channels received by AiM devices connected to "Bosch" "MS3" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	BOSCH_RPM	RPM
ECU_2	BOSCH_SPEED1	Speed 1
ECU_3	BOSCH_SPEED2	Speed 2
ECU_4	BOSCH_OIL_PRESS	Oil pressure
ECU_5	BOSCH_FUEL_PRESS	Fuel pressure
ECU_6	BOSCH_ATM_PRESS	Atmospheric pressure
ECU_7	BOSCH_FUEL_TEMP	Fuel temperature
ECU_8	BOSCH_OIL_TEMP	Oil temperature
ECU_9	BOSCH_ENGINE_TEMP	Engine temperature
ECU_10	BOSCH_AIR_TEMP	Intake air temperature
ECU_11	BOSCH_THROTT_ANG	Throttle angle
ECU_12	BOSCH_IGNIT_ANG	Ignition angle
ECU_13	BOSCH_AIR_CHARGE	Air charge
ECU_14	BOSCH_INJEC_TIME1	Injection time 1
ECU_15	BOSCH_INJEC_TIME2	Injection time 2
ECU_16	BOSCH_LAMBDA1	Lambda value 1
ECU_17	BOSCH_LAMBDA2	Lambda value 2
ECU_18	BOSCH_LAM_CONTR1	Lambda control 1
ECU_19	BOSCH_LAM_CONTR2	Lambda control 2
ECU_20	BOSCH_FUEL_USED	Injected fuel
ECU_22	BOSCH_GEAR	Engaged gear
ECU_23	BOSCH_VBATT	Battery supply

4.2

"Bosch" "MS3 SPORT" protocol

Channels received by AiM devices connected to "Bosch" "MS3 SPORT" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	MS3_RPM	RPM
ECU_2	MS3_SPEED	Speed
ECU_3	MS3_TPS	Throttle position sensor
ECU_4	MS3_GEAR	Engaged gear
ECU_5	MS3_WH_SPD_FL	Front left wheel speed
ECU_6	MS3_WH_SPD_FR	Front right wheel speed
ECU_7	MS3_WH_SPD_RL	Rear left wheel speed
ECU_8	MS3_WH_SPD_RR	Rear right wheel speed
ECU_9	MS3_LAM1	Lambda 1
ECU_10	MS3_LAM2	Lambda 2
ECU_11	MS3_OIL_P	Oil pressure
ECU_12	MS3_ATM_P	Intake air temperature
ECU_13	MS3_FUEL_P	Fuel pressure
ECU_14	MS3_CRANK_P	Crank pressure
ECU_15	MS3_OIL_T	Oil temperature
ECU_16	MS3_ATM_T	Intake air temperature
ECU_17	MS3_FUEL_T	Fuel temperature
ECU_18	MS3_ECT	Engine cooling temperature
ECU_19	MS3_EX_T1	Exhaust temperature 1
ECU_20	MS3_EX_T2	Exhaust temperature 2
ECU_21	MS3_BATTVOLT	Battery supply