

AiM Infotech

Bosch MS4.3 Grand Am and  
Bosch MS4.3 Turbo ECU

Release 1.00

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ECU



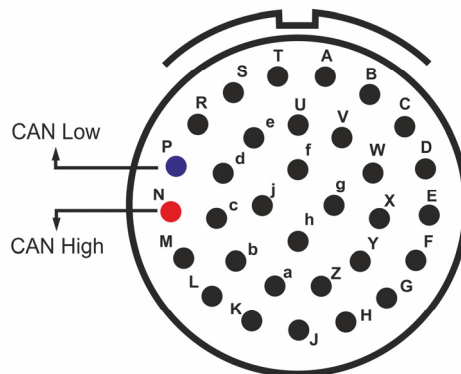
This tutorial explains how to connect Bosch MS4.3 ECU to AiM devices. Supported years and models are:

- Bosch MS4.3 Grand Am 2011
- Bosch MS 4.3 Turbo 2011

# 1

## CAN bus connection

Bosch MS4.3 Grand Am and Bosch MS4.3 Turbo ECU feature a data transmission bus based on CAN on the 32 pins Deutsch front connector. Its part number is: **MS 3476 L18-32P**. Here below you see the connector pinout.



### Deutsch connector pin

N  
P

### Pin function

CAN High  
CAN Low

### AiM cable

CAN+  
CAN-

## 2

# AiM device configuration

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Before connecting AiM 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
  - "MS43N\_(2011) Grand-Am" if your ECU is a Bosch MS 4.3 Grand Am 2011
  - "MS 4.3N Turbo (2011 GA)" if your ECU is a Bosch MS 4.3 Turbo 2011
- transmit the configuration to the device pressing "Transmit".

## 3

# Available channels

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Channels received by AiM devices connected to "Bosch" "MS 4.3N (2011) Grand Am " protocol are.

ID	CHANNEL NAME	FUNCTION
ECU_1	MS43_RPM	RPM
ECU_2	MS43_SPEED	Vehicle speed
ECU_3	MS43_WH_SPD_FL	Front left wheel speed
ECU_4	MS43_WH_SPD_FR	Front Right wheel speed
ECU_5	MS43_WH_SPD_RL	Rear left wheel speed
ECU_6	MS43_WH_SPD_RR	Rear Right wheel speed
ECU_7	MS43_TPS	Throttle position
ECU_8	MS43_MAP_BE_T1	Manifold air pressure before time 1
ECU_9	MS43_MAP_BE_T2	Manifold air pressure before time 2
ECU_10	MS43_MAP_AF_T1	Manifold air pressure after time 1
ECU_11	MS43_MAP_AF_T2	Manifold air pressure after time 2
ECU_12	MS43_BARO_PR	Barometric pressure
ECU_13	MS43_WATER_PR	Water pressure



ECU_14	MS43_CRANK_PR	Crank pressure
ECU_15	MS43_OIL_PR	Oil pressure
ECU_16	MS43_BRK_PRESS	Brake pressure
ECU_17	MS43_SWPOS_ABS	ABS switch position
ECU_18	MS43_FUEL_PR1	Fuel pressure 1
ECU_19	MS43_FUEL_PR2	Fuel pressure 2
ECU_20	MS43_FUEL_USED	Used fuel
ECU_21	MS43_ECT	Engine coolant temperature
ECU_22	MS43_OIL_T	Oil temperature
ECU_23	MS43_FUEL_T	Fuel temperature
ECU_24	MS43_AIR_T	Intake air temperature
ECU_25	MS43_EXH_T1	Exhausted temperature 1
ECU_26	MS43_EXH_T2	Exhausted temperature 2
ECU_27	MS43_GEAR_T1	Gearbox temperature
ECU_28	MS43_LAMBDA_T1	Lambda temperature 1
ECU_29	MS43_LAMBDA_T2	Lambda temperature 2
ECU_30	MS43_LAMBDA1	Lambda value 1
ECU_31	MS43_LAMBDA2	Lambda value 2
ECU_34	MS43_INJ_TIME1	Injection time 1
ECU_35	MS43_INJ_TIME2	Injection time 2
ECU_36	MS43_IGN_ANG	Ignition angle
ECU_37	MS43_GEAR	Engaged gear
ECU_38	MS43_YAW_ACC	Yaw acceleration
ECU_39	MS43_YAW	Yaw rate
ECU_40	MS43_TC_ACTIVE	Traction control active
ECU_41	MS43_ACC_X	Lateral acceleration
ECU_42	MS43_ACC_Y	Longitudinal acceleration
ECU_44	MS43_RL_AIR_CH	Relative air charge
ECU_45	MS43_LAM_SET_P	Lambda setting
ECU_46	MS43_OILP_GAUGE	Oil pressure gauge

Channels received by AiM devices connected to "Bosch" " MS 4.3N Turbo (2011 GA)" protocol are.

ID	CHANNEL NAME	FUNCTION
ECU_1	MS43_RPM	RPM
ECU_2	MS43_SPEED	Vehicle speed
ECU_3	MS43_WH_SPD_FL	Front left wheel speed
ECU_4	MS43_WH_SPD_FR	Front Right wheel speed
ECU_5	MS43_WH_SPD_RL	Rear left wheel speed
ECU_6	MS43_WH_SPD_RR	Rear Right wheel speed
ECU_7	MS43_TPS	Throttle position
ECU_8	MS43_MAP_BE_T1	Manifold air pressure before time 1
ECU_9	MS43_MAP_BE_T2	Manifold air pressure before time 2
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ECU_28	MS43_LAMBDA_T1	Lambda temperature 1
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ECU_30	MS43_LAMBDA1	Lambda value 1
ECU_31	MS43_LAMBDA2	Lambda value 2
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ECU_36	MS43_IGN_ANG	Ignition angle
ECU_37	MS43_GEAR	Engaged gear
ECU_38	MS43_YAW_ACC	Yaw acceleration
ECU_39	MS43_YAW	Yaw rate
ECU_40	MS43_TC_ACTIVE	Traction control active
ECU_41	MS43_ACC_X	Lateral acceleration
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