

**Bosch MS4 ECU for
Porsche 997 GT3 RSR**



INTRODUCTION

AIM has developed special applications for many of the most common ECUs: by special applications we mean user-friendly systems which allow to easily connect your ECU to our high tech data loggers: user needs only to install harness between the **logger** and the ECU.

Once connected, the logger displays (and/or records, depending on the logger and on the ECU data stream) values like RPM, engine load, throttle position (TPS), air and water temperatures, battery voltage, speed, gear, lambda value (air/fuel ratio) analog channels... All AIM loggers include – free of charge – **Race Studio 2** software, a powerful tool to configure the system and analyze recorded data on your PC.

Warning: once the ECU is connected to the logger, it is necessary to set it in the logger configuration in Race Studio 2 software.

Select Manufacturer “Bosch” and Model “MS4_997”.

Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

Warning: it is strongly recommended to always verify whether the ECU needs specific software settings to export data.

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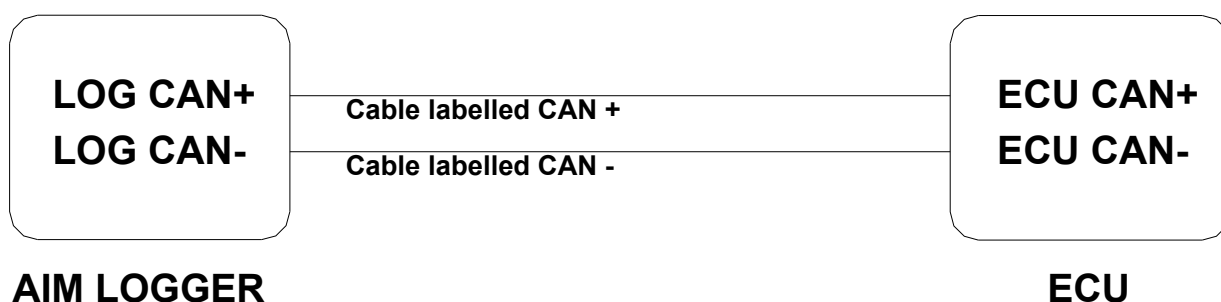
Chapter 1 – Car Models

Bosch MS4 ECU can be installed on Porsche 997 GT3 RSR.

Chapter 2 – CAN communication Setup

Bosch MS4 ECU is equipped with a CAN communication protocol used to communicate parameters to a data logger.

The CAN bus communication is available connecting the Porsche 997 GT3 RSR ECU to AIM loggers.



Chapter 3 – Connection with AIM loggers

Due to the fact that ECU model has to CAN outputs, it is necessary to try two connections to find out the one that is enabled to work properly with AIM logger. The table here below shows two couples of pins: 60 (CAN+) / 58 (CAN-) and 79 (CAN+) / 77 (CAN-).

PIN	FUNCTION	COMMENTS
60/58	CAN+/CAN-	CAN1
79/77	CAN+/CAN-	CAN2

WARNING: never connect pins belonging to different couples –
like pin 60 with pin 77 for example.

Chapter 4 – Porsche 997 GT3 RSR communication protocol.

Channels received by AIM loggers connected to Porsche 997 GT3 RSR ECU are:

ID	CHANNEL NAME	FUNCTION
ECU_1	BOSCH_RPM	RPM
ECU_2	BOSCH_SPEED1	Speed1
ECU_3	BOSCH_SPEED2	Speed2
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	Air Temperature
ECU_11	BOSCH_THROTT_ANG	Throttle Angle
ECU_12	BOSCH_IGNIT_ANG	Ignition Angle
ECU_13	BOSCH_AIR_CHARGE	Engine load
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_LAMBDA_2	Lambda Value 2
ECU_18	BOSCH_LAM_CONTR1	Lambda Controller 1
ECU_19	BOSCH_LAM_CONTR2	Lambda controller 2
ECU_20	BOSCH_FUEL_USED	Injected Fuel
ECU_22	BOSCH_GEAR	Gear Number
ECU_23	BOSCH_VBATT	Battery Voltage