

Bosch 7.8.1. ECU for Porsche 996*



*For more details concerning the car models refer to "Car Models" chapter

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 “Porsche_911(996)”.**
Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

Warning: for any further information concerning ECU firmware/software settings and/or upgrading it is always recommended to address to the ECU dealer.

1 – Car Models

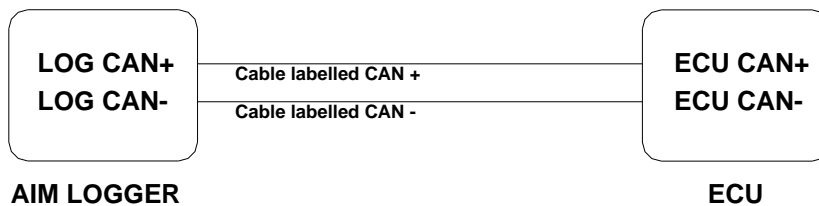
Bosch 7.8.1. ECU is installed as a stock on the following car models:

- 996 MK2 GT2
- 996 MK2 GT3
- 996 MK2 GT3 RS
- 996 MK2 TURBO
- 996 MK2 TURBO S
- 996 MK2 Carrera 3.6 Coupè – Cabrio – Targa
- 996 MK2 Carrera S 3.6 Coupè – Cabrio
- 996 MK2 Carrera 4 3.6 Coupè – Cabrio
- 996 MK2 Carrera 4S 3.6 Coupè – Cabrio – Targa

2 – CAN communication Setup

Bosch 7.8.1. ECU is equipped with a CAN communication protocol used to communicate parameters to a data logger.

The CAN bus communication is available connecting the ECU to AIM loggers.



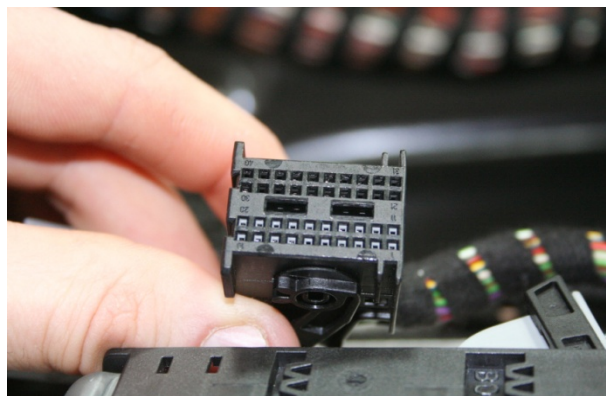
3 – Connection to AIM loggers

There are two ways to connect AIM logger to 7.8.1. Bosch ECU:

- Connection directly to ECU
- Connection through 36 pins dashboard connector.

3.1 – ECU connection

The ECU communicates with external logger using a 40 pins black connector - (see below).



To connect AIM logger to Bosch 7.8.1. ECU connector, please connect cable labelled CAN+ of the logger with the light blue/white cable (pin 36) – of the ECU connector, and cable labelled CAN - with the grey/white (pin 37) cable of the ECU connector.

Pin Number	Cables colour	Function
36	Light Blue / White	Connect to AIM cable labelled CAN+
37	Grey / White	Connect to AIM cable labelled CAN-

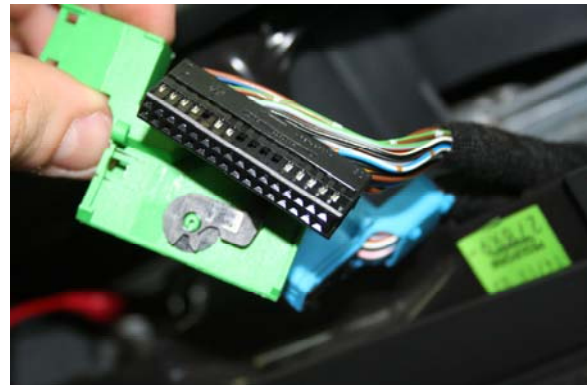
Note: ECU is situated behind the rear seats, under the cover – see below.



3.2 – Dashboard connection

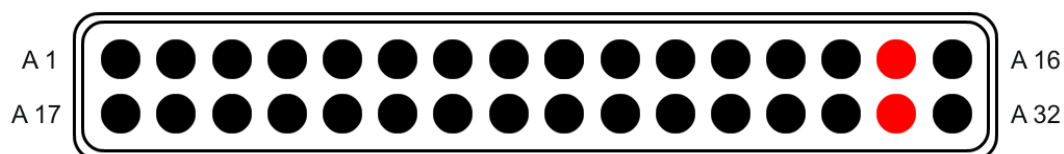
All dashboard connectors are situated behind it: for this reason it is necessary to remove the dashboard cover.

Get the green cover off to see the connector (images below).



To connect AIM logger to Bosch 7.8.1. ECU:

- connect AIM cable labelled CAN+ to pin A15 of “A” connector (light blue/white wire).
- connect AIM cable labelled CAN- to pin A31 of “A” connector(grey/white wire).



4 – ECU communication protocol

Channels received by AIM loggers connected to Porsche cars – Bosch 7.8.1 ECU – are:

ID	CHANNEL NAME	FUNCTION
ECU_1	P911_RPM	RPM
ECU_2	P911_SPEED1	Speed Value
ECU_3	P911_PPS	Pedal position sensor
ECU_4	P911_ENGINEMOMENT	Engine moment
ECU_5	P911_WATERTEMP	Engine cooling temperature
ECU_6	P911_AIRTEMP	Intake Air temperature
ECU_7	P911_BRAKE	Brake switch