SEAT ECU for Ibiza Leon (1800 cc)







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 AlM 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 "Audi".

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



INDEX

| Chapter 1 – Car Models | 3 |
|---|---|
| Chapter 2 – CAN communication Setup | |
| Chapter 3 – Connection with AIM loggers | |
| Chapter 4 – Bosch ME 7.5.1 communication protocol | |



Chapter 1 – Car Models

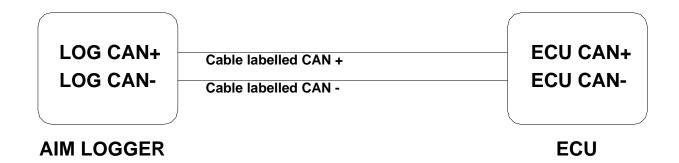
Bosch ME 7.5.1 ECU is installed as stock one on the following car models:

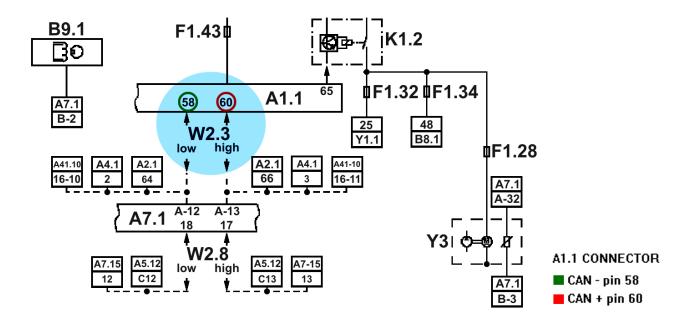
- Seat Ibiza 1800 20V Turbo 150 CV
- Seat Ibiza 1800 20V Turbo 180 CV
- Seat Leon 1800 20V 125 CV

Chapter 2 – CAN communication Setup

Bosch ME 7.5.1 ECU is equipped with a CAN communication protocol used to communicate parameters to a data logger and has "A1.1" connector used to communicate with an external logger.

The images here below show the standard CAN communication setup on top and the ECU wiring diagram on bottom. In this second image is highlighted "CAN" connection and are indicated the pins to connect to AIM wiring.







Chapter 3 – Connection with AIM loggers

To connect Bosch ME 7.5.1 ECU to AIM loggers use the "A1.1" male connector and:

- connect pin 60 of A1.1 connector to AIM cable labelled CAN+
- connect pin 58 of A1.1 connector to AIM cable labelled CAN-.



Chapter 4 – Bosch ME 7.5.1 communication protocol

Channels received by AIM loggers connected to Bosch ME 7.5.1 ECU are:

| ID | CHANNEL NAME | FUNCTION |
|--------|----------------------|--------------------------|
| ECU_1 | SEAT_RPM | RPM |
| ECU_2 | SEAT_SPEED1 | Speed |
| ECU_3 | SEAT_WATERTEMP | Water temperature |
| ECU_4 | SEAT_ENGINEMOMENT | Engine Torque |
| ECU_5 | SEAT_AIRTEMP | Manifold Air Temperature |
| ECU_6 | SEAT_GASPERC | Pedal position sensor |
| ECU_7 | SEAT_BRAKEPRESS | Brake pressure sensor |
| ECU_8 | SEAT_SPEED2 | Speed 2 |
| ECU_9 | SEAT_SPEEDDASH | Speed |
| ECU_10 | SEAT_ACCLAT | Lateral acceleration |
| ECU_11 | SEAT_STEERMOMENT | Steering Torque |
| ECU_12 | SEAT_ATMTEMP | Atmospheric Temperature |
| ECU_13 | SEAT_OILTEMP | Oil Temperature |
| ECU_14 | SEAT_FRLF_SPEED | Front Left Speed sensor |
| ECU_15 | SEAT_FRRG_SPEED | Front Right Speed sensor |
| ECU_16 | SEAT_RRLF_SPEED | Rear Left Speed sensor |
| ECU_17 | SEAT_RRRG_SPEED | Rear Right Speed Sensor |
| ECU_18 | SEAT_YAWRATE | Gyroscope |
| ECU_19 | SEAT_STEERSPEED | Steering speed |
| ECU_20 | SEAT_STEERANGLE | Steering angle |
| ECU_21 | SEAT_BRAKE | Brake sensor |
| ECU_22 | SEAT_FUEL | Fuel sensor |
| ECU_23 | SEAT_GEAR | Engaged gear |
| ECU_24 | SEAT_ENGOILT | Engine oil temperature |
| ECU_25 | SEAT_TPS | Throttle position sensor |
| ECU_26 | SEAT_CLUTCH | Switch Clutch |
| ECU_27 | SEAT_BOOST_PRESS | Boost pressure |
| ECU_28 | SEAT_ENGINE_MOMENT | Engine torque |
| ECU_29 | SEAT_SHIFTING_ACTIVE | Shifting in progress |
| ECU_30 | SEAT_TIP_TRONIK_DW | Tiptronic down |
| ECU_31 | SEAT_TIP_TRONIK_UP | Tiptronic down |
| ECU_32 | SEAT_SIN_NAM | |
| ECU_33 | SEAT_SIN_NEW1 | |
| ECU_34 | SEAT_SIN_NEW2 | |
| ECU_35 | SEAT_SIN_NAB | |
| ECU_36 | SEAT_SIP_PK1 | |
| ECU_37 | SEAT_SIP_PK2 | |