

**AUDI ECUS for  
A3, A4 TT 2000 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 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 "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 .....	4
Chapter 3 – Connection with AIM loggers .....	5
Chapter 4 – Bosch MED 9.1 communication protocol.....	6

## Chapter 1 – Car Models

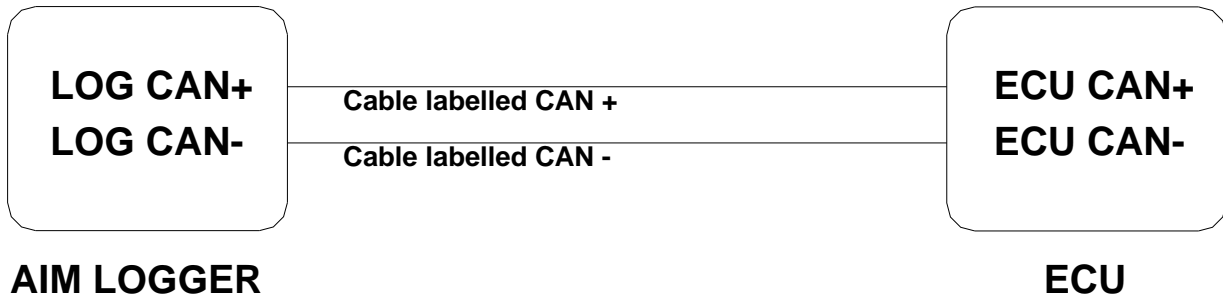
Bosch MED 9.1 ECU is installed as stock one on the following car models:

- Audi A3 2000 16V TFSI 200 CV
- Audi A3 2000 16V TFSI 200 CV Quattro
- Audi A3 Sportback 2000 16V TFSI 200 CV
- Audi A4 2000 16V TFSI 200 CV
- Audi A4 Avant 2000 16V TFSI 200 CV
- Audi S3 2000 16V TFSI 265 CV
- Audi TT Coupé 2000 16V TFSI 200 CV
- Audi TT Roadster 2000 16V TFSI 200 CV

## Chapter 2 – CAN communication Setup

Bosch MED 9.1 ECU is equipped with a CAN communication protocol used to communicate parameters to a data logger and has a 94 pins connector named “A11” used to communicate with an external logger.

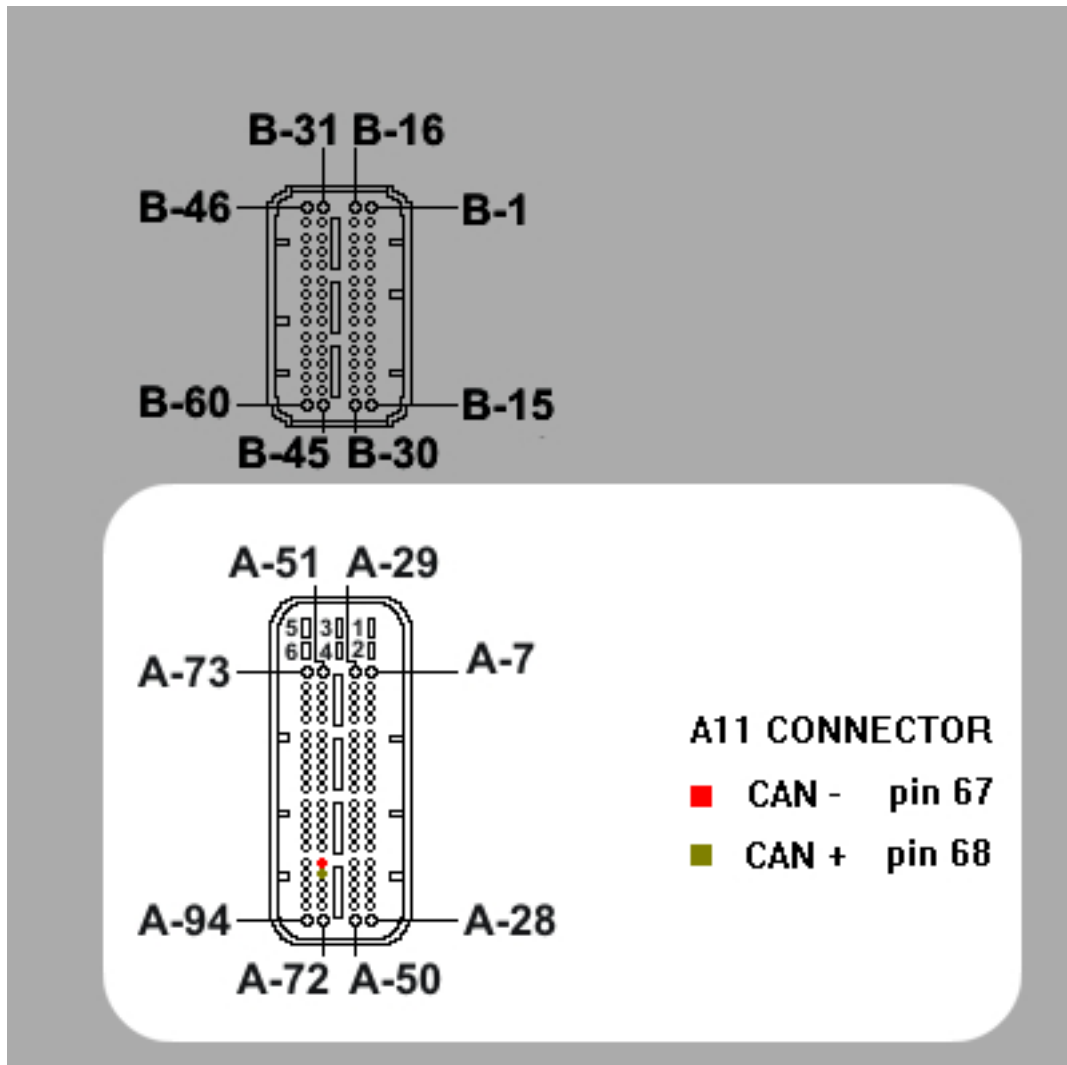
The image here below shows the standard CAN communication setup.



## Chapter 3 – Connection with AIM loggers

To connect Bosch MED 9.1 ECU to AIM loggers use the “A11” male connector highlighted here below and:

- connect pin 68 of “A11” connector to AIM cable labelled CAN+
- connect pin 67 of “A11” connector to AIM cable labelled CAN-



## Chapter 4 – Bosch MED 9.1 communication protocol

Channels received by AIM loggers connected to Bosch MED 9.1 ECU are:

<b>ID</b>	<b>CHANNEL NAME</b>	<b>FUNCTION</b>
ECU_1	AUDI_RPM	RPM
ECU_2	AUDI_SPEED1	Speed
ECU_3	AUDI_WATERTEMP	Water temperature
ECU_4	AUDI_ENGINEMOMENT	Engine Torque
ECU_5	AUDI_AIRTEMP	Manifold Air Temperature
ECU_6	AUDI_GASPERC	Pedal position sensor
ECU_7	AUDI_BRAKEPRESS	Brake pressure sensor
ECU_8	AUDI_SPEED2	Speed 2
ECU_9	AUDI_SPEEDDASH	Speed
ECU_10	AUDI_ACCLAT	Lateral acceleration
ECU_11	AUDI_STEERMOMENT	Steering Torque
ECU_12	AUDI_ATMTEMP	Atmospheric Temperature
ECU_13	AUDI_OILTEMP	Oil Temperature
ECU_14	AUDI_FRLF_SPEED	Front Left Speed sensor
ECU_15	AUDI_FRRG_SPEED	Front Right Speed sensor
ECU_16	AUDI_RRLF_SPEED	Rear Left Speed sensor
ECU_17	AUDI_RRRG_SPEED	Rear Right Speed Sensor
ECU_18	AUDI_YAWRATE	Gyroscope
ECU_19	AUDI_STEERSPEED	Steering speed
ECU_20	AUDI_STEERANGLE	Steering angle
ECU_21	AUDI_BRAKE	Brake sensor
ECU_22	AUDI_FUEL	Fuel sensor
ECU_23	AUDI_GEAR	Engaged gear
ECU_24	AUDI_ENGOILT	Engine oil temperature
ECU_25	AUDI_TPS	Throttle position sensor
ECU_26	AUDI_CLUTCH	Switch Clutch
ECU_27	AUDI_BOOST_PRESS	Boost pressure
ECU_28	AUDI_ENGINE_MOMENT	Engine torque
ECU_29	AUDI_SHIFTING_ACTIVE	Shifting in progress
ECU_30	AUDI_TIP_TRONIK_DW	Tiptronic down
ECU_31	AUDI_TIP_TRONIK_UP	Tiptronic down
ECU_32	AUDI_SIN_NAM	
ECU_33	AUDI_SIN_NEW1	
ECU_34	AUDI_SIN_NEW2	
ECU_35	AUDI_SIN_NAB	
ECU_36	AUDI_SIP_PK1	
ECU_37	AUDI_SIP_PK2	