

**VOLKSWAGEN ECUS for
GOLF 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 “VOLKSWAGEN” and Model “VWGroup”.

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

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Chapter 1 – Car Models

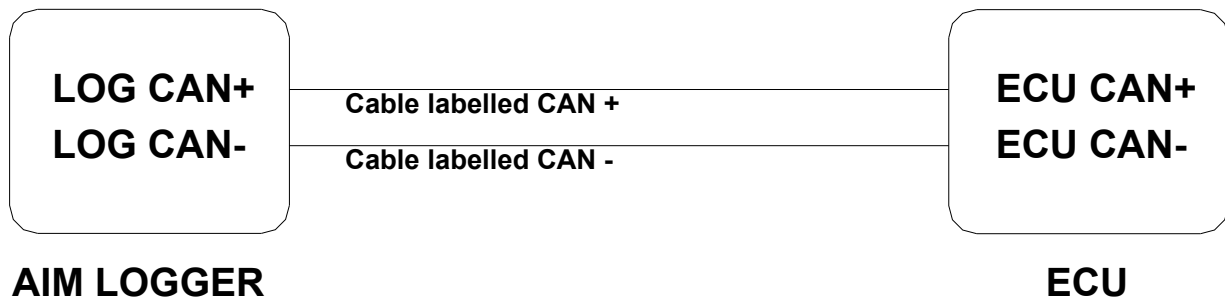
Bosch MED 9.1 ECU is installed as stock one on the following car models:

- Volkswagen Golf 16V TFSI 200 CV
- Volkswagen Golf 16V TFSI 230 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.

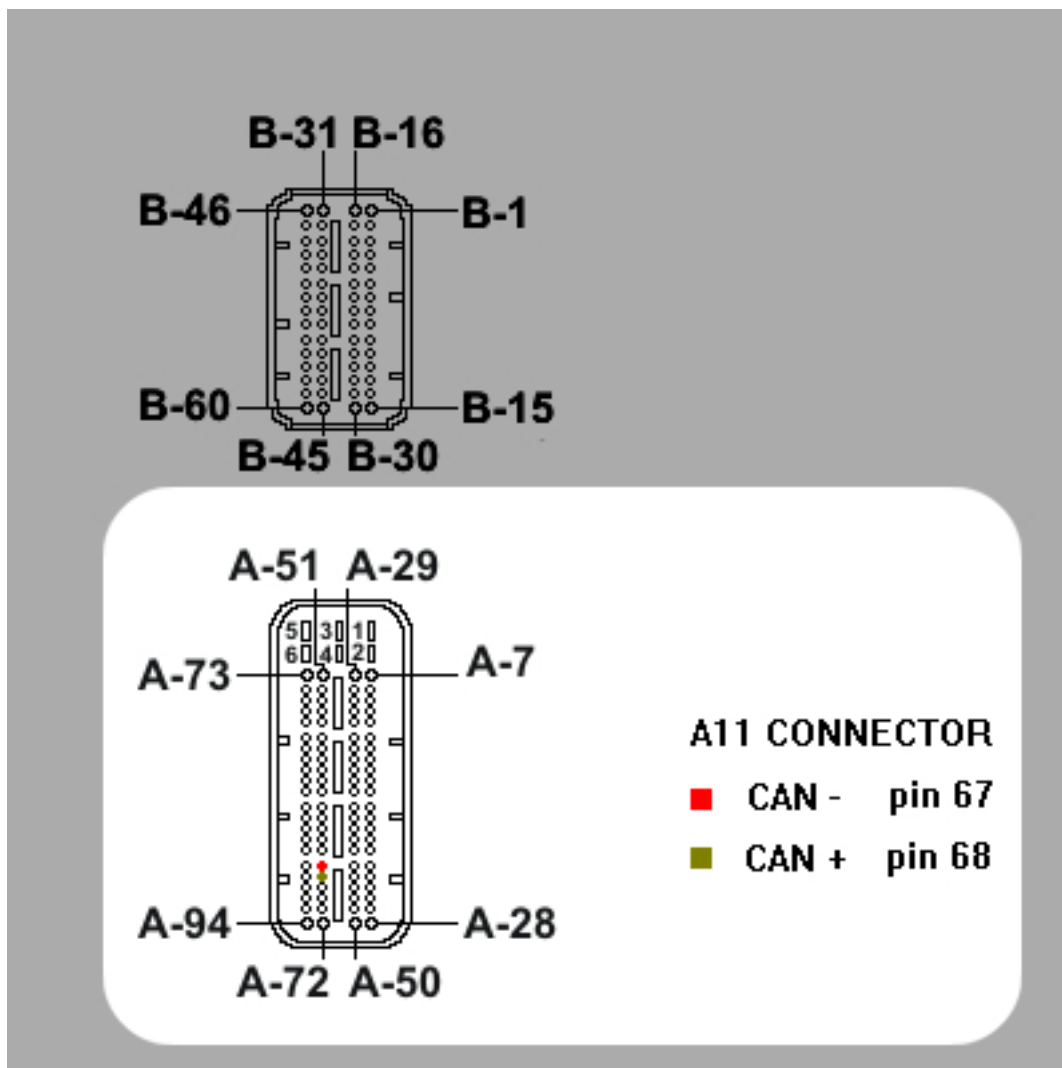
The image here below shows the standard CAN communication setup.



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 – VW Group communication protocol

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

ID	CHANNEL NAME	FUNCTION
ECU_1	VW_RPM	RPM
ECU_2	VW_SPD1	Speed1
ECU_3	VW_WATERTEMP	Water Temperature
ECU_4	VW_ENGINEMOMENT	Engine Torque
ECU_5	VW_AIRTEMP	Manifold Air Temperature
ECU_6	VW_GASPERC	Pedal Position Sensor
ECU_7	VW_BRKPR	Brake Pressure Sensor
ECU_8	VW_SPD2	Speed2
ECU_9	VW_SPDAS	Dash Speed
ECU_10	VW_ACCLAT	Lateral Acceleration
ECU_11	VW_STMOM	Steering Torque
ECU_12	VW_ATMTEMP	Atmospheric Temperature
ECU_13	VW_OILTEMP	Oil Temperature
ECU_14	VW_FRLF_SPEED	Front Left Speed sensor
ECU_15	VW_FRRG_SPEED	Front Right Speed sensor
ECU_16	VW_RRLF_SPEED	Rear Left Speed sensor
ECU_17	VW_RRRG_SPEED	Rear Right Speed Sensor
ECU_18	VW_YAWRATE	Gyroscope
ECU_19	VW_STSPD	Steering speed
ECU_20	VW_STANG	Steering angle
ECU_21	VW_BRK	Brake sensor
ECU_22	VW_FUEL	Fuel sensor
ECU_23	VW_GEAR	Engaged gear
ECU_24	VW_ENGOILT	Engine oil temperature
ECU_25	VW_TPS	Throttle position sensor
ECU_26	VW_CLUTCH	Switch Clutch
ECU_27	VW_BOOST_TDI	Boost pressure
ECU_28	VW_ENG_MOM	Engine torque
ECU_29	VW_SHIFT_ACT	Shifting in progress
ECU_30	VW_TIP_TK_DW	Tiptronic down
ECU_31	VW_TIP_TK_UP	Tiptronic down
ECU_32	VW_SIN_NAM	
ECU_33	VW_SIN_NEW1	
ECU_34	VW_SIN_NEW2	
ECU_35	VW_SIN_NAB	
ECU_36	VW_SIP_PK1	
ECU_37	VW_SIP_PK2	
ECU_38	VW_BOOST_TFSI	Overboost TFSI