

AiM Infotech

Porsche 997 GT3 R
from 2010 onwards ECU

Release 1.00



ECU



This tutorial explains how to connect Porsche race cars to AiM devices. Supported models and years are:

- Porsche 997 GT3 R from 2010 onwards

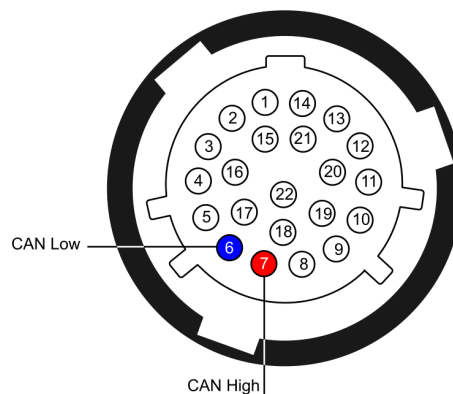
1

CAN connection

These cars can be equipped with Bosch MS4 or Bosch MS4 Sport ECU that feature a bus communication protocol based on CAN. This can be reached in two ways:

- using a 22 pins Deutsch female connector normally placed near the car dash;
- going to the vehicle ECU

Here below you see 22 pins Deutsch female connector pinout on top and connection table on bottom.



22 pins connector pin

7

6

Pin function

CAN High

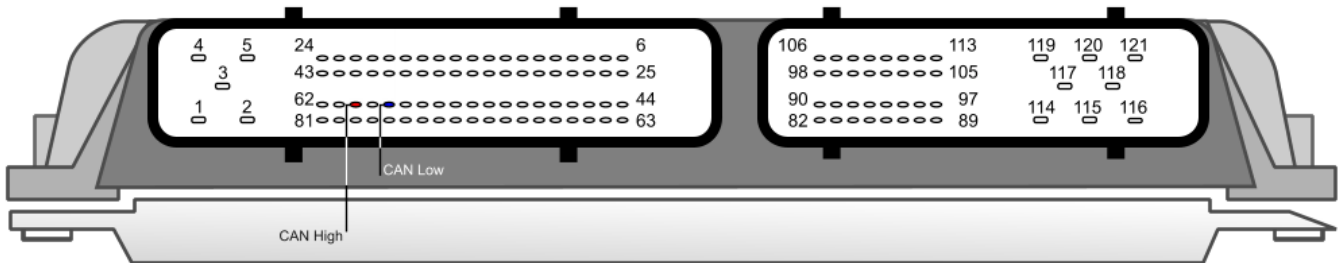
CAN Low

AiM cable

CAN+

CAN-

Here below you see Bosch MS4/MS4 Sport connectors pinout and below is connection table.



MS4 connector pin	Pin function	AiM cable
60	CAN High	CAN+
58	CAN Low	CAN-

2

AiM Logger configuration

Before connecting the ECU to the logger, set it up as follows:

Run Race Studio 2 software and select:

- Device Configuration → Select the device you are using;
- select the configuration or press "New" to create a new one;
- select ECU manufacturer "Porsche" and ECU Model "MS4_997_GT3_R"
- transmit the configuration to the device pressing "Transmit".

3

Available channels

Channels received by AiM devices connected to "Porsche" "MS4_997_GT3_R" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	GT3_RPM	RPM
ECU_2	GT3_TPS	Throttle position sensor
ECU_3	GT3_OIL_PRESS	Oil pressure
ECU_4	GT3_FUEL_PRESS	Fuel pressure
ECU_5	GT3_FUEL_TEMP	Fuel temperature
ECU_6	GT3_OILT	Oil temperature
ECU_7	GT3_ECT	Engine coolant temperature
ECU_8	GT3_IAT	Intake air temperature
ECU_9	GT3_BATT_VOLT	Battery supply
ECU_10	GT3_MAP_POS	Selected map
ECU_11	GT3_GEAR	Engaged gear – disabled by default*
ECU_12	GT3_PPS	Pedal position sensor
ECU_13	GT3_BRAKE_SW	Brake switch
ECU_14	GT3_WH_SP_FL	Front left wheel speed
ECU_15	GT3_WH_SP_FR	Front right wheel speed
ECU_16	GT3_WH_SP_RL	Rear left wheel speed
ECU_17	GT3_WH_SP_RR	Rear right wheel speed
ECU_18	GT3_STEER_ANG	Steering angle
ECU_19	GT3_VEH_SPEED	Vehicle speed
ECU_20	GT3_LAMBDA1	Lambda 1 value
ECU_21	GT3_LAMBDA2	Lambda 2 value
ECU_22	GT3_GEAR_POT	Gear potentiometer
ECU_23	GT3_GEAR_SH	Gearshift value
ECU_24	GT3_PWAT	Water pressure
ECU_25	GT3_MAP	Manifold air pressure



ECU_26	GT3_PCLUTCH	Clutch pressure
ECU_27	GT3_ACC_X	Horizontal acceleration
ECU_28	GT3_ACC_Y	Vertical acceleration
ECU_29	GT3_ACC_Z	Lateral acceleration
ECU_30	GT3_WH_FL_ABS	Front left ABS
ECU_31	GT3_WH_FR_ABS	Front right ABS
ECU_32	GT3_WH_RL_ABS	Rear left ABS
ECU_33	GT3_WH_RR_ABS	Rear right ABS
ECU_34	GT3_BRK_PR_MAS	Max brake pressure
ECU_35	GT3_BRK_PR_F1	Front brake pressure 1
ECU_36	GT3_BRK_PR_F2	Front brake pressure 2
ECU_37	GT3_BRK_PR_R1	Rear brake pressure 1
ECU_38	GT3_BRK_PR_R2	Rear brake pressure 2
ECU_40	GT3_INTKM_THRO	Intake manifold throttle
ECU_41	GT3_IGN_ANG	Ignition angle
ECU_42	GT3_FUEL_CONS	Fuel consumption

***Please note:** this channel is disabled by default. To enable it go to "System configuration layer" and enable "ECU" option in gear sensor box.