AiM Infotech

Ferrari
458 Challenge
458 GT3

Release 1.01

This tutorial explains how to connect Ferrari cars to AiM devices.

1 Supported years and models

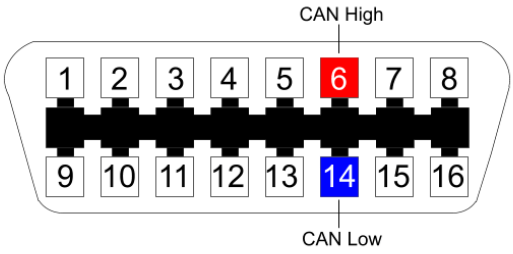
Supported years and models are:

- Ferrari 458 Challenge from 2011 onwards
- Ferrari 458 GT3 from 2011 onwards

2 Wiring connection

Ferrari 458 Challenge and 458 GT3 feature a bus communication protocol based on CAN on the diagnosis OBDII plug. The plug should be front of the passenger side or under the stock dash left of the steering column as shown here below.

OBDII connector pinout and connection table are shown below.



OBDII connector pin	Pin function	AiM cable
6	CAN High	CAN+
14	CAN Low	CAN-

2 AiM Logger configuration

Before connecting the ECU to AiM device 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 “Ferrari” and ECU Model “458_GT3”
- transmit the configuration to the device pressing “Transmit”.

3
Available channels

Channels received by AiM devices connected to "Ferrari" "458_GT3" protocol are.

ID	CHANNEL NAME	FUNCTION
ECU_1	ECU_RPM	RPM
ECU_2	ECU_PPS	Pedal Position
ECU_3	ECU_TPS	Throttle Position
ECU_4	ECU_ECT	Water Temperature
ECU_5	ECU_OUT_AIR_T	Ambient Air Temperature
ECU_6	ECU_BRAKE_SW	Brake switch
ECU_7	ECU_STEER_ANGLE	Steering Angle
ECU_8	ECU_BRAKE_PRESS	Brake Pressure
ECU_9	ECU_GEAR	Engaged Gear
ECU_10	ECU_WH_SPD_RR	Rear Right Wheel Speed
ECU_11	ECU_WH_SPD_RL	Rear Left Wheel Speed
ECU_12	ECU_WH_SPD_FR	Front Right Wheel Speed
ECU_13	ECU_WH_SPD_FL	Front Left Wheel Speed
ECU_14	ECU_VEH_SPEED	Vehicle Speed
ECU_15	ECU_STEER_SPD	Steering speed angle
ECU_16	ECU_YAW_RATE	Yaw rate sensor
ECU_17	ECU_LONG_ACC	Longitudinal Accelerometer
ECU_18	ECU_LAT_ACC	Lateral Accelerometer
ECU_19	ECU_TC_INTERV	Traction Control (Intervention)
ECU_20	ECU_VDC_INTERV	Vehicle Dynamic Control (intervention)
ECU_21	ECU_CLUTCH_SW	Clutch switch (manual gear only)
ECU_26	ECU_GEAR_AUTO	Automatic Gear mode
ECU_27	ECU_TC_ASR_CTR	Traction and stability control disabled
ECU_29	ECU_ROLL_RATE	Steering wheel speed
ECU_30	ECU_LAUNCH	Performance Launch Control

ECU_31	ECU_SUSP_SET	Selected suspension setting
ECU_32	ECU_MAIN_SET	ECU Mode selector
ECU_33	ECU_CAT1_TEMP	Catalyst Temperature 1
ECU_34	ECU_CAT2_TEMP	Catalyst Temperature 2
ECU_35	ECU_FUEL_LEV	Fuel level
ECU_36	ECU_FUEL_CONS	Fuel Consumption L per hour
ECU_37	ECU_ENG_TORQ	Engine Torque
ECU_38	ECU_ENG_TQ_DRV	Engine Torque Drive
ECU_39	ECU_ENG_TQ_REQ	Requested Engine Torque
ECU_40	ECU_EDIFF_PR	Differential Pressure
ECU_41	ECU_EDIFF_TQ	Differential Torque
ECU_42	ECU_CALC_LOAD	Calculated Load Value
ECU_43	ECU_ABS_LOAD	Absolute Load Value
ECU_44	ECU_PITCH_RATE	Pitch Rate
ECU_45	ECU_ENG_OILT	Engine Oil temperature
ECU_46	ECU_ENG_OILP	Engine Oil Pressure

Please note: channels listed above are those polled by AiM devices. They may or may not come across in the data stream depending on models. RPM, TPS,ECT and speed are generally available.