

AiM Infotech

GM Corvette C6-C7 ECUs

Release 1.02

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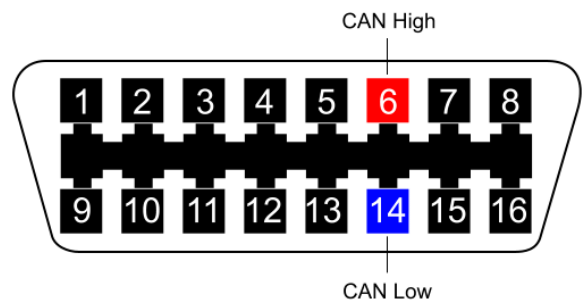
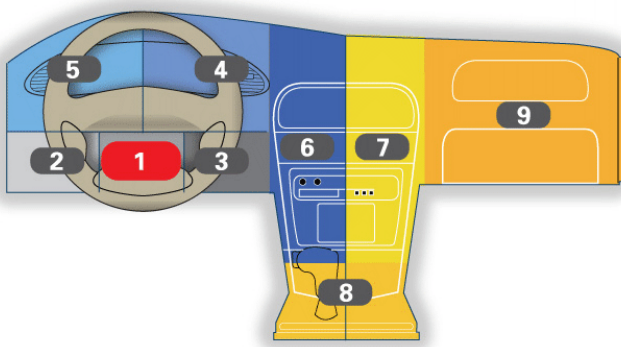
This tutorial explains how to connect GM Corvette cars to AiM devices. Supported models and years are:

- GM Corvette C6 LS2 2005-2008
- GM Corvette C6 LS3 2008-2013
- GM Corvette C6 Z06 LS7 2005-2013
- GM Corvette C7 Stingray from 2014

# 1

## CAN connection

Corvette cars feature a bus communication protocol based on CAN on the OBDII plug located left under the steering column as shown here below on the left (1). On the right is OBDII connector pinout and below connection table.



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

## 2

# AiM Logger configuration

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Before connecting the ECU to the logger, set this up using AiM Race Studio software. The parameters to select in the device configuration are: ECU manufacturer and ECU Model according to the following table:

<b>ECU Manufacturer</b>	<b>ECU Model</b>	<b>Car model</b>
GM	C6_LS2	C6 LS2 2005-2008 and C6 LS3 2008-2013
GM	Z06_LS7	C6 Z06 LS7 2005-2013
GM	C7_STINGRAY	C7 Stingray from 2014

## 3

### Available channels

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Channels received by AiM devices connected to Corvette cars depend on the selected protocol.

#### 3.1

#### "GM" "C6\_LS2" protocol

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Channels received by AiM devices connected to "GM" "C6\_LS2" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	GMX_RPM	RPM
ECU_2	GMX_SPEED	Vehicle speed
ECU_3	GMX_ACC	Accelerometer
ECU_4	GMX_PPS	Pedal position sensor
ECU_5	GMX_TPS	Throttle position sensor
ECU_6	GMX_TENGINE	Engine temperature
ECU_7	GMX_AIR_TEMP	Intake air Temperature
ECU_8	GMX_FUEL_LEVEL	Fuel Level
ECU_9	GMX_FUEL_USED	Used fuel
ECU_10	GMX_OIL_PRESS	Oil pressure
ECU_11	GMX_WH_SPD_FL	Front Left wheel speed
ECU_12	GMX_WH_SPD_FR	Front Rear wheel speed
ECU_13	GMX_WH_SPD_RL	Rear left wheel speed
ECU_14	GMX_WH_SPD_RR	Rear right wheel speed
ECU_15	GMX_STR_WHEEL_ANG	Steering angle
ECU_16	GMX_YAW_RATE	Yaw rate
ECU_17	GMX_GEAR	Engaged gear
ECU_18	GMX_OIL_TEMP	Oil temperature

**Technical note:** not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.

## 3.2

### "GM" "Z06\_LS7" protocol

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Channels received by AiM devices connected to "GM" "Z06\_LS7" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	GMX_RPM	RPM
ECU_2	GMX_SPEED	Vehicle speed
ECU_3	GMX_ACC	Acceleration
ECU_4	GMX_PPS	Pedal position sensor
ECU_5	GMX_TPS	Throttle position sensor
ECU_6	GMX_TENGINE	Engine temperature
ECU_7	GMX_AIR_TEMP	Intake air temperature
ECU_8	GMX_FUEL_LEVEL	Fuel level
ECU_9	GMX_FUEL_USED	Used fuel
ECU_10	GMX_OIL_PRESS	Oil pressure
ECU_11	GMX_WH_SPD_FL	Front left wheel speed
ECU_12	GMX_WH_SPD_FR	Front right wheel speed
ECU_13	GMX_WH_SPD_RL	Rear left wheel speed
ECU_14	GMX_WH_SPD_RR	Rear right wheel speed
ECU_15	GMX_STR_WH_ANG	Steering angle
ECU_16	GMX_YAW_RATE	Yaw rate

**Technical note:** not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.

## 3.3 "GM" "C7\_STINGRAY" protocol

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Channels received by AiM devices connected to "GM" "C7\_STINGRAY" protocol are:

<b>ID</b>	<b>CHANNEL NAME</b>	<b>FUNCTION</b>
ECU_1	ECU_RPM	RPM
ECU_2	ECU_VEH_SPD	Vehicle speed
ECU_3	ECU_TPS	Throttle position sensor
ECU_4	ECU_STEER_ANG	Steering angle
ECU_5	ECU_STEER_SPD	Steering speed
ECU_6	ECU_ECT	Engine coolant temperature
ECU_7	ECU_IAT	Intake air temperature
ECU_8	ECU_BRK_SW	Brake switch
ECU_9	ECU_OILP_SW	Oil pressure switch
ECU_10	ECU_MAP_OBD	Manifold air pressure via OBD
ECU_11	ECU_CLUTCH	Clutch switch
ECU_12	ECU_HANDBRK	Hand brake switch
ECU_13	ECU_GEAR	Engaged gear
ECU_14	ECU_BRK_PRES	Brake pressure
ECU_15	ECU_SPD_RL	Rear left wheel speed
ECU_16	ECU_SPD_RR	Rear right wheel speed
ECU_17	ECU_SPD_FL	Front left wheel speed
ECU_18	ECU_SPD_FR	Front right wheel speed
ECU_19	ECU_TRASM_T	Transmission temperature
ECU_20	ECU_OIL_T	Oil temperature
ECU_21	ECU_BRK_PERC	Brake percentage
ECU_22	ECU_LAT_ACC	Lateral accelerometer



ECU_23	ECU_GYRO	Gyroscope
ECU_24	ECU_OIL_P	Oil pressure
ECU_25	ECU_RED_PW	Reduced power indication
ECU_26	ECU_MIL	Malfunctioning indication lamp

**Technical note:** not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.