AiM InfoTech

Hyundai
Avante
Elantra

Release 1.00

1
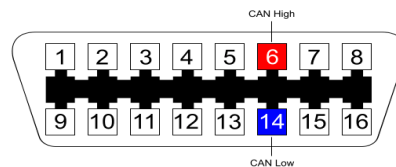
Models and years

This document explains how to connect AiM devices to the vehicle Engine Control Unit (ECU) data stream.
Supported models are:

- Avante   2016-2018
- Elantra   2016-2018

2

Wiring Connection

These models feature a specific manufacturer protocol based on CAN accessible through the OBDII plug placed on the left of the steering wheel column. For this installation refer to the following pinout of the OBDII plug and connection table.

OBDII Pin	Pin function	AiM cable	AiM color cable
6	CAN High	CAN +	White
14	CAN Low	CAN -	Blue

3

Race Studio configuration

Before connecting the AiM device to the ECU, set all functions using AiM software Race Studio. The parameters to set in the device configuration are:

- ECU manufacturer: **Hyundai**
- ECU Model: **CAN AD DCT**

4

"Hyundai - CAN AD DCT" protocol

Channels received by AiM devices configured with "Hyundai – CAN AD DCT" protocol are:

CHANNEL NAME	FUNCTION
ECU_RPM	Engine RPM
ECU_GEAR	Gear position
ECU_WS_FL	Front left wheel speed
ECU_WS_FR	Front right wheel speed
ECU_WS_RL	Rear left wheel speed
ECU_WS_RR	Rear right wheel speed
ECU_LONG_g	Inline acceleration
ECU_LAT_g	Lateral acceleration
ECU_STEER_SPD	Steering speed
ECU_ENG_TEMP1	Engine temperature1
ECU_AMB_T	Ambient temperature
ECU_ENG_OIL_T	Oil temperature
ECU_BRK_PRESS1	Brake pressure 1
ECU_BST_PRE	Boost pressure
ECU_STEER_ANGLE	Steering angle
ECU_THROTTLE	Throttle position sensor
ECU_PEDAL	Pedal position sensor
ECU_V_BATTERY	Voltage battery
ECU_BRK_SW	Brake switch
ECU_IAT	Intake air temperature
ECU_ABS_ACT	ABS activation
ECU_LSD_TQC_CUR	LSD torque current
ECU_GEAR_MODE	Gear mode
ECU_DASH_LIGHT7	Dash light 7
ECU_DYN_CTRL	Dynamic control

ECU_HILL_DESCEND	Hill descent control
ECU_DASH_LIGHT2	Dash light 2
ECU_DASH_LIGHT4	Dash light 4
ECU_DASH_LIGHT5	Dash light 5
ECU_DASH_LIGHT1	Dash light 1
ECU_SWITCHES	ECU switches
	2=Brake switch
	5=Clutch switch 1
	7=Clutch switch 2
	8=Clutch op ack

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