

AIM Infotech

Mazda RX8  
Second Generation J60N

Release 1.03

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

# 1 Supported models and years

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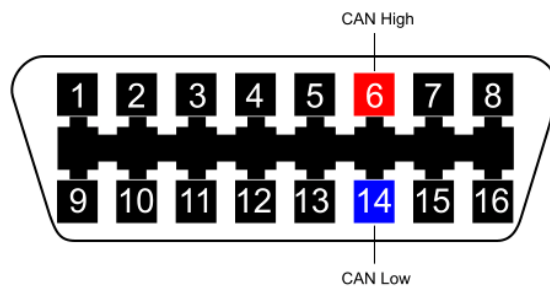
Supported models and years are:

- RX8 Second generation J60N from 2009 onward

# 2 Wiring connection

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Mazda RX8 Second generation J60N features a bus communication protocol based on CAN on the OBDII plug generally placed under the car steering wheel. Connector pinout as well as connection table are shown here below.



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

### 3

## AiM device configuration

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Before connecting the ECU to AiM device set this up using AiM Race Studio software. The parameters to be selected in the device configuration are:

- ECU manufacturer "Mazda"
- ECU Model "CAN\_J60N\_RX8";

### 4

## Available channels

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Channels received by AIM loggers connected to "Mazda" "CAN\_J60N\_RX8" protocol are:

<b>ID</b>	<b>CHANNEL NAME</b>	<b>FUNCTION</b>
ECU_1	RX8_RPM	RPM
ECU_2	RX8_VEH_SPEED	Vehicle speed
ECU_3	RX8_WH_SPEED_FL	Front left wheel speed
ECU_4	RX8_WH_SPEED_FR	Front right wheel speed
ECU_5	RX8_WH_SPEED_RL	Rear left wheel speed
ECU_6	RX8_WH_SPEED_RR	Rear right wheel speed
ECU_7	RX8_TPS	Throttle position sensor
ECU_8	RX8_ETPS	Electronic throttle position
ECU_9	RX8_ECT	Engine coolant temperature
ECU_10	RX8_INTK_AIRT	Intake air temperature
ECU_11	RX8_TEMP_CAT	Catalyst temperature
ECU_12	RX8_STEER_ANG	Steering angle
ECU_13	RX8_YAW_RATE	Yaw rate
ECU_14	RX8_LAT_ACC	Lateral acceleration
ECU_15	RX8_LONG_ACC	Longitudinal acceleration
ECU_16	RX8_AFR	Air/Fuel Ratio



ECU_17	RX8_FUEL_LEVEL	Fuel level
ECU_18	RX8_BRAKE_PR	Brake pressure
ECU_19	RX8_BRAKE_SW1	Brake switch 1
ECU_20	RX8_BRAKE_SW2	Brake switch 2
ECU_21	RX8_ABS_EVENT	ABS activated
ECU_22	RX8_ABS_FAIL	ABS failure
ECU_23	RX8_OIL_PR_SW	Oil pressure switch
ECU_24	RX8_GEAR	Engaged gear
ECU_25	RX8_TRASM_RATIO	Transmission ratio
ECU_26	RX8_CALC_LOAD	Calculation load
ECU_27	RX8_IGN_ADV	Ignition advance
ECU_28	RX8_ACT_TORQUE	Actual Torque
ECU_29	RX8_MAF	Manifold air flow

**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.