AIM InfoTech

Mazda RX8
Second Generation J60N

Release 1.04

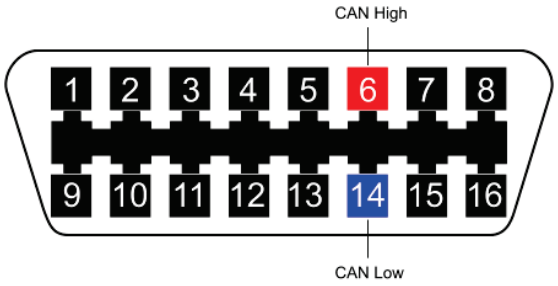
1 Models and years

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

- RX8 Second generation J60N from 2009 onward

2 OBDII Connection

These models feature a standard diagnostic protocol based on CAN, accessible through the OBDII plug, generally placed under the car steering wheel. For this installation refer to the following pinout of the OBDII plug (vehicle side – front view) and connection table.



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

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: **Mazda**
- ECU Model: **CAN_J60N_RX8**

4
"Mazda – CAN_J60N_RX8" protocol

Channels received by AIM loggers connected to "Mazda – CAN_J60N_RX8" protocol are:

CHANNEL NAME	FUNCTION
RPM	RPM
Gear	Active gear
SpeedFL	Front left wheel speed
SpeedFR	Front right wheel speed
SpeedRL	Rear left wheel speed
SpeedRR	Rear right wheel speed
WaterTemp	Water temperature
TPS	Throttle position sensor
BrakePress	Brake pressure
Brake1	Brake switch 1
Brake2	Brake switch 2
ETPS	Electronic throttle position sensor
CalcLoad	Calculation load
AbsISWAngle	Steering wheel angle
YawRate	Yaw rate
LateralAcc	Lateral accelerometer

LongAcc	Longitudinal accelerometer
SpeedVeh 01	Vehicle speed
ActEngTorque	Actual engine torque
ABSFail 01	ABS failure
ABSEvent	ABS activated
TxRatio	Voltage ratio
IgnitionAdvance	Ignition advance
IntakeAirTemp	Intake air temperature
MAF	Manifold air flow
OilSw	Oil pressure switch
FuelLevel	Fuel level
Catalyztemp	Catalytic converter temperature
AFR	Air/Fuel Ratio

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.