

AiM Infotech

Mazda 3  
2004-2009

Release 1.01

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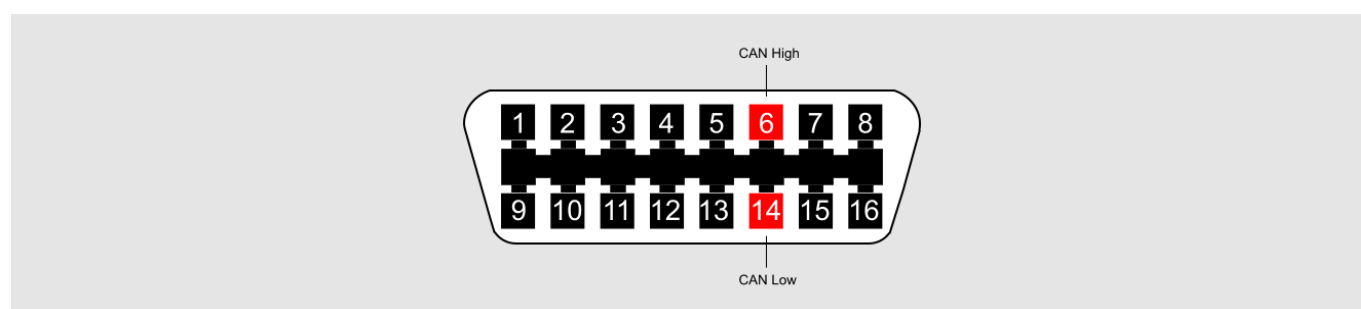
This tutorial explains how to connect Mazda 3 to AiM devices. Supported years are:

- Mazda 3 2004-2009

## 1

# Wiring connection

Mazda 3 communicates using the CAN Bus on the OBDII connector. The OBDII plug should be on the steering column. Other possible positions are: in the central column, on the pedal area or on the left of the steering wheel. Please note: according to the international rules the OBDII plug is to be in a 60 cm distance area from the steering column. 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-

## 2

# AiM Logger configuration

Once the ECU connected to the logger, this last one is to be configured as connected to the ECU.

Run Race Studio 2 software and follow this path:

- Device Configuration → Select the device you are using;
- select the configuration or press "New" to create a new one;
- select ECU manufacturer "Mazda" and ECU Model "CAN\_J68C";
- transmit the configuration to the device pressing "Transmit".

# 3

## Available channels

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Channels received by AiM loggers connected to Mazda 3 CAN J68C protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	MZ_RPM	RPM
ECU_2	MZ_VEH_SPEED	Vehicle speed
ECU_3	MZ_VEH_SPD_GND	Vehicle speed GND
ECU_4	MZ_WH_SPEED_FL	Front Left wheel speed
ECU_5	MZ_WH_SPEED_FR	Front Right wheel speed
ECU_6	MZ_WH_SPEED_RL	Rear Left wheel speed
ECU_7	MX_WH_SPEED_RR	Rear Right wheel speed
ECU_8	MZ_YAW_RATE	Yaw rate
ECU_9	MZ_LAT_ACC	Lateral acceleration
ECU_10	MZ_LONG_ACC	Longitudinal Acceleration
ECU_11	MZ_A_STEER_ANG	Absolute steering angle
ECU_12	MZ_R_STEER_ANG	Relative steering angle
ECU_13	MZ_STEER_SPEED	Steering speed
ECU_14	MZ_GEAR	Engaged gear
ECU_15	MZ_TRASM_RATIO	Transmission ratio
ECU_16	MZ_TRASM_OIL_T	Transmission oil temperature
ECU_17	MZ_TPS	Throttle position sensor
ECU_18	MZ_PPS	Pedal position sensor
ECU_19	MZ_KICKDOWN	Kickdown
ECU_20	MZ_BRAKE_PR	Brake pressure
ECU_21	MZ_BRAKE_SW	Brake switch
ECU_22	MZ_ECT	Engine cooling temperature
ECU_23	MZ_LAMBDA	Lambda value
ECU_24	MZ_INTK_AIRT	Intake air temperature
ECU_25	MZ_BARO	Barometric pressure



ECU_26	MZ_MAP	Manifold air pressure
ECU_27	MZ_FUEL_RAIL_P	Fuel rail pressure
ECU_28	MZ_BOOST	Boost
ECU_29	MZ_OIL_PRESS_SW	Oil pressure switch
ECU_30	MZ_ADVANCE	Advance
ECU_31	MZ_ABS_EVENT	ABS activated
ECU_32	MZ_ABS_FAIL	ABS Failure
ECU_33	MZ_CURR_LOAD	Current load
ECU_34	MZ_CALC_LOAD	Calculated load
ECU_35	MZ_IGN_ADV	Ignition advance
ECU_36	MZ_A_ENG_TQ_NM	Actual engine torque moment
ECU_37	MZ_M_ENG_TQ_NM	Maximum engine torque moment
ECU_38	MZ_CRK_TIM_SEC	Crank time second
ECU_39	MZ_FUEL_LEVEL	Fuel level