

AiM Infotech

Mazda 3
2004-2009

Release 1.04



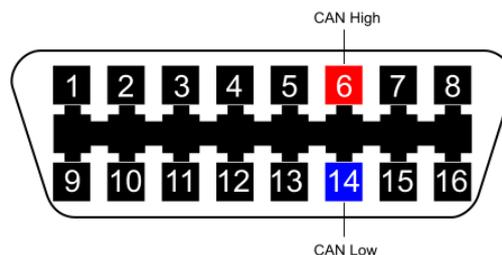
This tutorial explains how to connect Mazda 3 to AiM devices. Supported years are:

- Mazda 3 2004-2009

1

Wiring connection

Mazda 3 ECU features a bus communication protocol based on CAN on the OBDII plug; this 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 device configuration

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

- ECU manufacturer "Mazda"
- ECU Model "CAN_J68C";

3

Available channels

Channels received by AiM loggers connected to "Mazda" "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	Kick down
ECU_20	MZ_BRAKE_PR	Brake pressure
ECU_21	MZ_BRAKE_SW	Brake switch
ECU_22	MZ_ECT	Engine coolant 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

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.