

AiM Infotech

MAN truck from 2011

Release 1.01



ECU

This tutorial explains how to connect MAN truck ECU to AiM devices. Supported years are:

- MAN truck from 2011 onwards

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INTRODUCTION

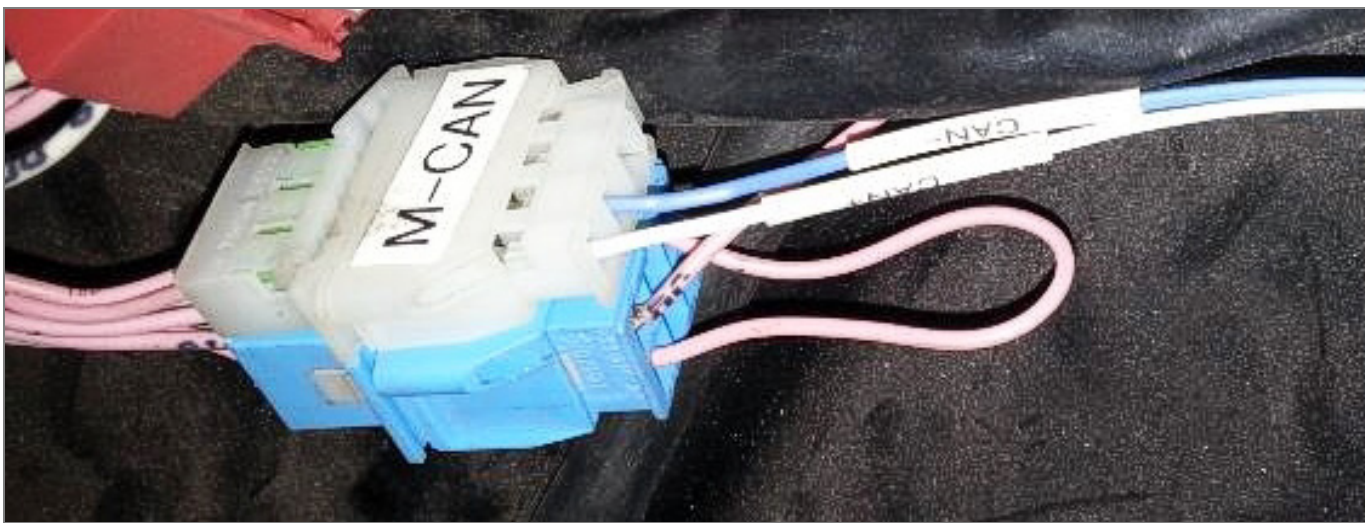
Starting from 2011 MAN trucks are equipped with a Bosch EDC 7C32D26 ECU. Its communication protocol as well as the software version changes according to the truck production year; to say:

- MAN truck 2011-2012:
 - communication protocol EDC CAN Bus
 - software version 1.39;
- MAN truck 2013:
 - communication protocol EDC CAN BUS_2
 - software version: 3.0.4.

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CAN connection

MAN trucks from 2011 onwards ECU are equipped with a CAN communication protocol. This CAN is available on the white connector placed in the cabin between the two seats. Here below you see the connector and the connection table.



Connector pin	Pin function	AiM cable
1	CAN High	CAN+
2	CAN Low	CAN-

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AiM Logger configuration

Before connecting the logger to the ECU, set up the logger as follows:

Run Race Studio 2 software and select:

- Device Configuration -> Select the device you are using;
- select the configuration or press "New" to create a new one;
- select ECU manufacturer "MAN TRUCK" and ECU Model
 - EDC CAN BUS for MAN truck 2011-2012
 - EDC CAN BUS_2 for MAN truck from 2013 onwards
- transmit the configuration to the device pressing "Transmit".

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Available channels

Channels received by AiM devices changes according to the selected protocol.

4.1

Channels received with EDC CAN BUS protocol

Channels received by EDC CAN BUS protocol are.

ID	CHANNEL NAME	FUNCTION
ECU_1	TK_RPM	RPM
ECU_2	TK_VEH_SPEED	Vehicle speed
ECU_3	TK_WHEEL_FL	Front left wheel speed
ECU_4	TK_WHEEL_FR	Front right wheel speed
ECU_5	TK_WHEEL_RL	Rear left wheel speed
ECU_6	TK_WHEEL_RR	Rear right wheel speed
ECU_7	TK_PPS	Pedal position sensor
ECU_8	TK_GEAR	Engaged gear
ECU_9	TK_LAMBDA	Lambda value
ECU_10	TK_WATER_TEMP	Engine coolant temperature
ECU_11	TK_FUEL_TEMP	Fuel temperature
ECU_12	TK_OIL_TEMP	Oil temperature
ECU_13	TK_ATM_TEMP	Atmospheric temperature
ECU_14	TK_EXHGAS_TEMP	Exhaust gas temperature
ECU_15	TK_IN_AIR_TEMP	Intake air temperature
ECU_16	TK_WATER_PR	Water pressure
ECU_17	TK_IN_AIR_PR	Intake air pressure
ECU_18	TK_OILP_PR	Oil pressure
ECU_19	TK_ATM_PR	Atmospheric pressure



ECU_20	TK_EXHGAS_PR	Exhaust gas pressure
ECU_21	TK_BATT_VOLT	Battery supply
ECU_22	TK_FUELHIGH_PR	Fuel high pressure
ECU_23	TK_FUELLOW_PR	Fuel low pressure
ECU_24	TK_FUEL_CONS	Fuel consumption
ECU_25	TK_ENG_LOAD	Engine load
ECU_26	TK_FULL_LOAD	Full load
ECU_27	TK_DRVR_LOAD	Driver demand load
ECU_28	TK_CURR_LOAD	Current engine load
ECU_29	TK_MAN_SW1	MAN switch 1
ECU_30	TK_MAN_SW2	MAN switch 2
ECU_31	TK_H_IDLE_CTRL	High idle control
ECU_32	TK_FUELIM_CTRL	Fuel limitation control
ECU_33	TK_L_IDLE_CTRL	Low idle control
ECU_34	TK_SMOKECTRL	Smoke control
ECU_35	TK_IDLE_SW	Idle switch
ECU_36	TK_CLUTCH_SW	Clutch switch
ECU_37	TK_RACECTRL_SW	Race control switch
ECU_38	TK_DIA_LAMP	Diagnosis lamp status
ECU_39	TK_MAN_CONF	MAN configuration
ECU_40	TK_TURBO	Turbo speed
ECU_41	TK_ACC_CTRL	Acceleration control flag

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.

4.2

Channels received with EDC CAN BUS_2 protocol

Channels received by EDC CAN BUS_2 protocol are.

ID	CHANNEL NAME	FUNCTION
ECU_1	TK_RPM	RPM
ECU_2	TK_FUE_QTY_MOD	Fuel quantity mode
ECU_3	TK_DRIVE_AB_QTY	Driveability quantity
ECU_4	TK_LAMBDA	Lambda value
ECU_5	TK_V_BATT	Battery supply
ECU_6	TK_RAIL_PRESS	Rail pressure
ECU_7	TK_THROTTLE1	Throttle channel 1 position
ECU_8	TK_THROTTLE2	Throttle channel 2 position
ECU_9	TK_THROTTLE_TOT	Resulting throttle position
ECU_10	TK_MANIF_AIR_P	Manifold air pressure
ECU_11	TK_WATER_PRES	Water pressure
ECU_12	TK_OIL_PRESS	Oil pressure
ECU_13	TK_FUEL_PRESS	Fuel pressure
ECU_14	TK_BARO_PRES	Barometric pressure
ECU_15	TK_INT_AIR_TEMP	Intake air temperature
ECU_16	TK_AMBIENT_TEMP	Ambient temperature
ECU_17	TK_ENGINE_TEMP	Engine coolant temperature
ECU_18	TK_OIL_TEMP	Oil temperature
ECU_19	TK_FUEL_TEMP	Fuel temperature
ECU_20	TK_GEAR	Engaged gear
ECU_21	TK_CLUCH	Clutch switch
ECU_22	TK_SPD_MODE	Speed mode
ECU_23	TK_STACK_SPD	Stack GPS active speed value
ECU_24	TK_VEH_SPD_LIMIT	Vehicle speed limiter
ECU_25	TK_GEAR_REV	Gearshift revolution counter



ECU_26	TK_GAUGE_SPD	Gauge speed
ECU_27	TK_INJ_QTY	Injection quantity
ECU_28	TK_AVG_INJ_QTY	Average injection quantity
ECU_29	TK_VEH_SPD_QTY	Vehicle speed limiter quantity
ECU_30	TK_DEMD_RAIL_P	Demanded rail pressure
ECU_31	TK_GPS_h	GPS hours
ECU_32	TK_GPS_min	GPS minutes
ECU_33	TK_GPS_sec	GPS seconds
ECU_34	TK_PRESS_VALVE	Pressure regulating valve status
ECU_35	TK_WASTE_GATE	Waste gate overpressure status
ECU_36	TK_LAMBDA_DEV	Lambda deviation
ECU_37	TK_ENGINE_LOAD	Engine load
ECU_38	TK_SMOKE_UP_QTY	Smoke upper quantity
ECU_39	TK_PUMP_H_PRESS	high pressure pump pre control duty cycle.

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