

AiM Infotech

Emtron KV8, KV12, KV16,
SL4, SL8 ECUs

Release 1.00



ECU



1 Supported Models

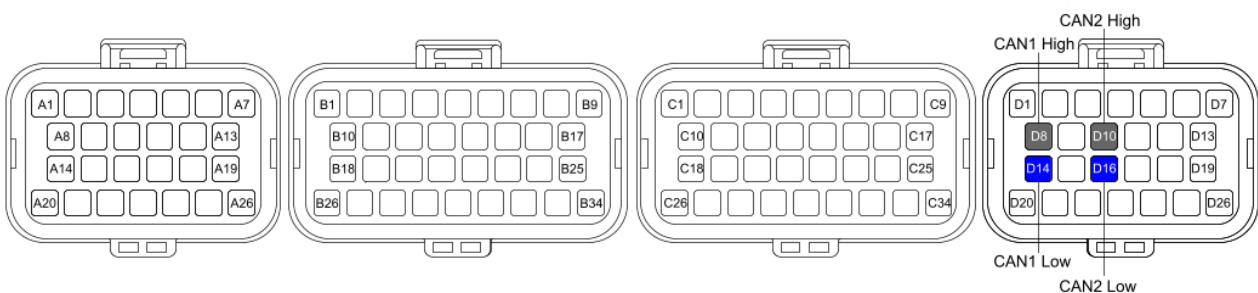
This tutorial explains how to connect Emtron ECUs to AIM devices. Supported ECU models are:

- Emtron KV8
- Emtron KV12
- Emtron KV16
- Emtron SL4
- Emtron SL8

2 Wiring connections

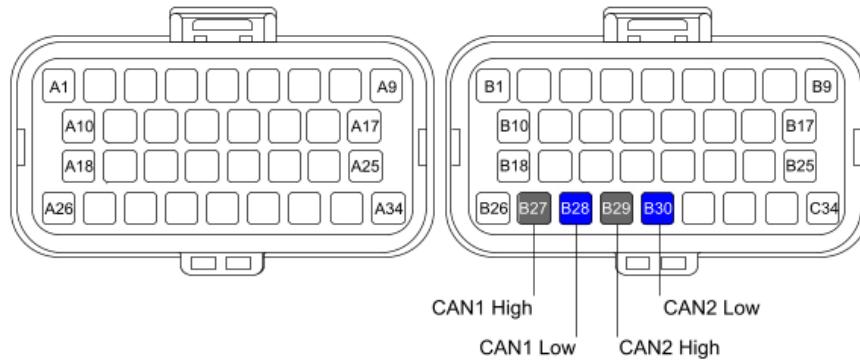
Emtron ECUs feature a bus communication protocol based on CAN on the front connectors. Connector pinout changes according to the ECU model.

Here below are connector pinout of Emtron KV8, KV12 and KV16 as well as connection table.



Connector pin	Pin function	AiM cable label
D8	CAN1 High	CAN+
D14	CAN1 Low	CAN-
D10	CAN2 High	CAN+
D16	CAN2 Low	CAN-

Here below are connector pinout of Emtron SL4 and SL8 as well as connection table.



Connector pin	Pin function	AiM cable label
B27	CAN1 High	CAN+
B28	CAN1 Low	CAN-
B29	CAN2 High	CAN+
B30	CAN2 Low	CAN-

3 AiM device configuration

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

- ECU manufacturer: "Emtron"
- ECU Model: "CAN"

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Available channels

Channels received by AIM devices connected to "Emtron" "CAN" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	ECU_RPM	RPM
ECU_2	ECU_MAN_AIR_PR	Manifold air pressure
ECU_3	ECU_ENG_TMP	Engine temperature
ECU_4	ECU_ENG_IN_T	Intake air temperature
ECU_5	ECU_THROTTLE1	Throttle position sensor 1
ECU_6	ECU_CHARGE_T	Estimated charge temperature
ECU_7	ECU_GEAR	Engaged gear
ECU_8	ECU_V_BATT	Battery supply
ECU_9	ECU_OIL_PR	Oil pressure
ECU_10	ECU_OIL_TMP	Oil temperature
ECU_11	ECU_FUEL_PR	Fuel pressure
ECU_12	ECU_FUEL_TMP	Fuel temperature
ECU_13	ECU_EXH_PRE	Exhaust gas pressure
ECU_14	ECU_FUEL_DIF	Fuel pressure differential
ECU_15	ECU_CRANK_P1	Crankcase pressure 1
ECU_16	ECU_COOLANT_P	Engine coolant pressure
ECU_17	ECU_LAMBDA1	Lambda value 1
ECU_18	ECU_LAMBDA2	Lambda value 2
ECU_19	ECU_LAMB_TARG	Lambda target
ECU_20	ECU_VEH_SPD	Vehicle speed
ECU_21	ECU_LAMB_SH1	Lambda 1 short
ECU_22	ECU_LAMB_SH2	Lambda 2 short
ECU_23	ECU_LAMB_LO1	Lambda 1 long
ECU_24	ECU_LAMB_LO2	Lambda 2 long
ECU_25	ECU_INJ_DUTY	Injector duty cycle



ECU_26	ECU_IGN_ANG	Ignition angle
ECU_27	ECU_BARO	Barometric pressure
ECU_28	ECU_TEMP	ECU temperature
ECU_29	ECU_DTPS	Throttle position sensor derivative
ECU_30	ECU_DRPM	RPM derivative
ECU_31	ECU_FUEL_CUT	Fuel cut level
ECU_32	ECU_IGN_CUT	Ignition cut level
ECU_33	ECU_ETHANOL	Ethanol content
ECU_34	ECU_G_LAT	Lateral G-force
ECU_35	ECU_G_LON	Longitudinal G-force
ECU_36	ECU_G_VERT	Vertical G-force
ECU_37	ECU_CAM_ERR	Crank/cam error counter
ECU_38	ECU_MAX_RPM	Max RPM value
ECU_39	ECU_TBA1	TBA1
ECU_40	ECU_TBA2	TBA2