

AiM Infotech

EFI Euro 8

Release 1.00



ECU

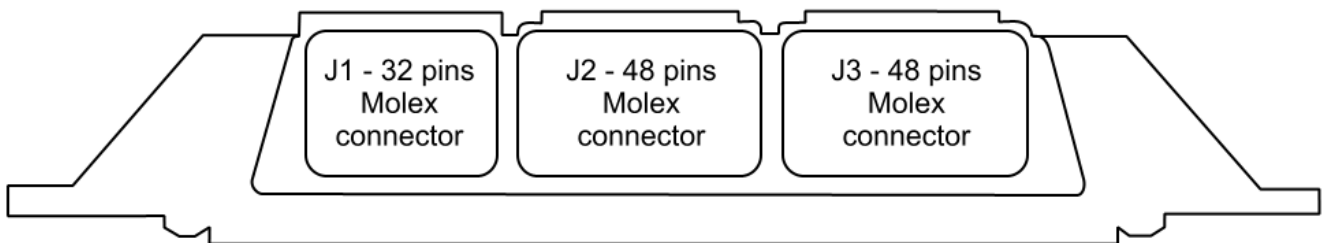


This tutorial explains how to connect AiM devices to EFI Euro 8 ECU using the CAN Bus.

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Wiring connection

EFI Euro 8 ECU features three data transmission buses based on CAN on the J2 and J3 front connectors shown here below.

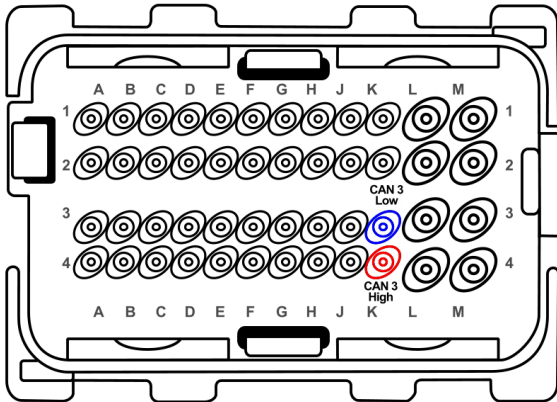


The different CAN buses are normally used to:

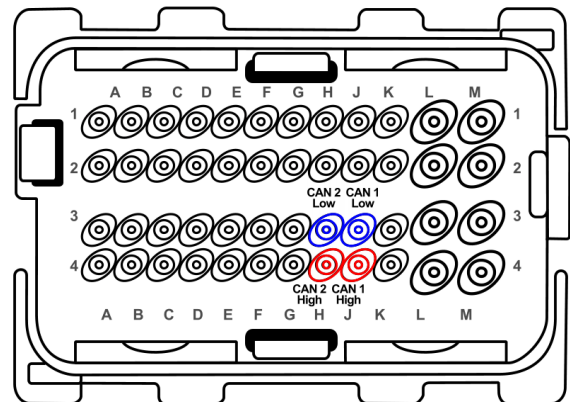
- CAN1: program and calibrate the ECU; it is the only one that features an internal 120 Ohm resistor; on J3 connector
- CAN2: communicate with other devices as dash loggers, ABS etc...; on J3 connector
- CAN3: communicate with other devices as dash loggers, ABS etc...; on J2 connector

Here below you find connectors pinout and connection table.

J2 – 48 pins Molex central connector



J3 – 48 pins Molex right connector



J2 connector pin	Pin function	AiM cable	J3 connector pin	Pin function	AiM cable
K4	CAN3 High	CAN+	J4	CAN1 High	CAN+
K3	CAN3 Low	CAN-	J3	CAN1 Low	CAN-
			H4	CAN2 High	CAN+
			H3	CAN2 Low	CAN-

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AiM Logger configuration

Before connecting AiM device to the ECU set it up 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 "EFI_EUROPE" and ECU Model "Euro_8";
- transmit the configuration to the device pressing "Transmit".

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Available channels

Channels received by AiM loggers connected to EFI Euro_8 protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	E8_RPM	RPM
ECU_2	E8_TPS1	Throttle position sensor 1
ECU_3	E8_TPS2	Throttle position sensor 2
ECU_4	E8_MAP	Manifold air pressure
ECU_5	E8_LNR1L	Analog linear input 1
ECU_6	E8_SPEED_FR	Front right wheel speed
ECU_7	E8_SPEED_RR	Rear right wheel speed
ECU_8	E8_SPEED_FL	Front left wheel speed
ECU_9	E8_SPEED_RL	Rear left wheel speed
ECU_10	E8_VEH_SPEED	Vehicle speed
ECU_11	E8_DAX_SPEED	Driving wheel speed
ECU_12	E8_SLIP	Slip factor
ECU_13	E8_OSA_SLIP	Ignition cut vs slip factor
ECU_14	E8_TRIM_SLIP	Slip multiplier (for traction control)
ECU_15	E8_TC_ACTIVE	Traction control active
ECU_16	E8_LNR2L	Analog linear input 2
ECU_17	E8_LNR3L	Analog linear input 3
ECU_18	E8_LNR4L	Analog linear input 4
ECU_19	E8_TEROG_BASE	Injection table - injection time
ECU_20	E8_TEROG	Real injection time
ECU_21	E8_SA_BASE	Injection table - injection time
ECU_22	E8_SA	Real spark advance
ECU_23	E8_AFR_NGK1	Air/Fuel ratio Lambda 1
ECU_24	E8_AFR_NGK2	Air/Fuel ratio Lambda 2
ECU_25	E8_KFUELLEARN	Fuel correction coefficient for auto mapping



ECU_26	E8_CLC1	Closed loop control 1 (injection)
ECU_27	E8_CLC2	Closed loop control 2 (injection)
ECU_28	E8_GEAR	Engaged gear
ECU_29	E8_SHIFT_FLAG	Shift flag
ECU_30	E8_SHIFT_TIMER	Shift timer
ECU_31	E8_OIL_PRESS	Oil pressure
ECU_32	E8_FUEL_PRESS	Fuel pressure
ECU_33	E8_BARO_PRESS	Barometric pressure
ECU_34	E8_LNR5L	Analog linear input 5
ECU_35	E8_LNR6L	Analog linear input 6
ECU_36	E8_VBATT_DIR	Direct battery supply
ECU_37	E8_VBATT_KEY	ECU voltage supply
ECU_38	E8_BRAKE_F	Front brake
ECU_39	E8_BRAKE_R	Rear brake
ECU_40	E8_LNR7L	Analog linear input 7
ECU_41	E8_LNR8L	Analog linear input 8
ECU_42	E8_IN_CAMA_ADV	Inlet camshaft advance A
ECU_43	E8_IN_CAMB_ADV	Inlet camshaft advance B
ECU_44	E8_EX_CAMC_RET	Exhaust camshaft retard C
ECU_45	E8_EX_CAMD_RET	Exhaust camshaft retard D
ECU_46	E8_TH20	Water temperature
ECU_47	E8_TOIL	Oil temperature
ECU_48	E8_TFUEL	Fuel temperature
ECU_49	E8_TAIR	Air temperature
ECU_50	E8_TSPARE	Custom temperature channel
ECU_51	E8_DFARF	Throttle position derivative
ECU_52	E8_DMAP	Manifold pressure Derivative
ECU_53	E8_AE1	Fuel enrichment for positive TPS 1 transient
ECU_54	E8_DE1	Fuel enrichment for negative TPS 1 transient