# AiM Infotech

# Marelli Proto V8

# Release 1.00







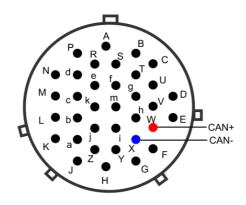


This tutorial explains how to connect Hill climb Proto V8 cars to AiM devices. These cars are equipped with a dedicated Marelli ECU.

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### **CAN** bus connection

Marelli ProtoV8 features a data transmission bus based on CAN on the 35 pins Farnell front connector. Its part number is: **TR2235RFS1NB**. Here below you see the connector pinout.



Farnell connector pin	Pin function	AiM cable
W	CAN High	CAN+
X	CAN Low	CAN-

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# AiM device configuration

Before connecting AiM device to the ECU set it up as follows:

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 "Marelli" and ECU Model "PROTO\_V8"
- transmit the configuration to the device pressing "Transmit".



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# Available channels

Channels received by AiM devices connected to "Marelli" "PROTO\_V8" protocol are.

ID	CHANNEL NAME	FUNCTION
ECU_1	ECU_RPM	RPM
ECU_2	ECU_TPS	First cylinder throttle position sensor
ECU_3	ECU_TPS_B	Second cylinder throttle position
ECU_4	ECU_PEDAL	Used pedal position
ECU_5	ECU_PEDAL_1	First pedal position
ECU_6	ECU_PEDAL_2	Second pedal position
ECU_7	ECU_P_OIL_LIN	Oil pressure
ECU_8	ECU_P_FUEL_LIN	Fuel pressure
ECU_9	ECU_P_BARO_LIN	Barometric pressure
ECU_10	ECU_AIR_TEMP	Intake air temperature
ECU_11	ECU_ENGINE_TEMP	Engine temperature
ECU_12	ECU_OIL_TEMP	Oil temperature
ECU_13	ECU_V_BATT	Battery supply
ECU_14	ECU_SW_GEARCUT	Up shift gear cut switch (on/off)
ECU_15	ECU_SW_START	Start switch on/off
ECU_16	ECU_ROT_START	Selected limiter at start
ECU_17	ECU_ROT_PDL_RUL	Selected pedal rule
ECU_18	ECU_ROT_FUEL_MP	Selected fuel map
ECU_19	ECU_ROT_ENDSTART	Selected limiter after start
ECU_20	ECU_VCT1_I_DIAG	Real AAC inlet position bank 1
ECU_21	ECU_VCT2_I_DIAG	Real AAC inlet position bank 2
ECU_22	ECU_VCT1_E_DIAG	Real AAC exhaust position bank 1
ECU_23	ECU_VCT2_E_DIAG	Real AAC exhaust position bank 2