

AiM Infotech

Marelli Proto V8

Release 1.01

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ECU



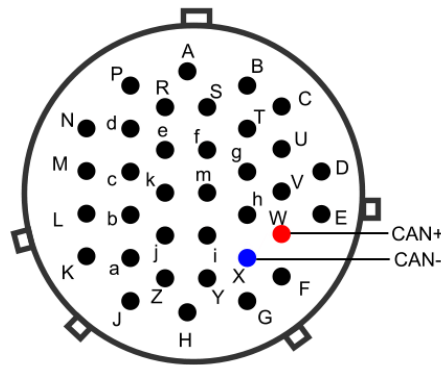
This tutorial explains how to connect Hill climb Proto V8 cars to AiM devices. These cars are equipped with a dedicated Marelli ECU.

# 1

## Wiring connection

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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-      |

# 2

## AiM device configuration

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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 "Marelli"
- ECU Model "PROTO\_V8"

### 3

## Available channels

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

| <b>ID</b> | <b>CHANNEL NAME</b> | <b>FUNCTION</b>                         |
|-----------|---------------------|---|
| 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        |