

AiM InfoTech

Marelli
FIA – TCR
from 2020

Release 1.00



ECU



1 Models and years

This document explains how to connect AiM devices to the vehicle Engine Control Unit (ECU) data stream.

Supported models and years are:

- TCR Cupra Leon from 2020 onwards

2 Wiring connection

These models feature a specific protocol based on CAN, accessible through the DTM04-6P female connector, located in the right corner at the base of the A pillar/ passenger side. For this installation refer to the following pinout of the DTM connector and its connection table:



| DTM04-6P connector pin | Function | AiM cable | AiM color cable |
|------------------------|-----------------|-----------|-----------------|
| 1 | Battery voltage | V Batt | Red |
| 2 | Ground | GND | Black |
| 3 | CAN High | CAN + | White |
| 4 | CAN Low | CAN - | Blue |

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Race Studio configuration

Before connecting the AiM device to the ECU, set all functions using AiM software Race Studio. The parameters to set in the device configuration are:

- ECU manufacturer: **MARELLI**
- ECU Model: **FIA_TCR_Mar_SC** (Only RS3)

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"MARELLI – FIA_TCR_Mar_SC" protocol.

Channels received by AiM devices configured with "MARELLI – FIA_TCR_Mar_SC" protocol are:

| CHANNEL NAME | FUNCTION |
|---------------------|--------------------------|
| Team RPM | Engine RPM |
| Team Gear | Engaged gear |
| Team Wsp FL | Front left wheel speed |
| Team Wsp FR | Front right wheel speed |
| Team Wsp RL | Rear left wheel speed |
| Team Wsp RR | Rear right wheel speed |
| Team Acc X | Inline accelerometer |
| Team Acc Y | Lateral accelerometer |
| Team Pbrake F | Front brake pressure |
| Team Pbrake R | Rear brake pressure |
| Team Steering | Steering position sensor |
| Team AnaPedal | Pedal position sensor |

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer's model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.