

Ferrari F430 GT3 ECU Connection



INTRODUCTION

AIM has developed special applications for many of the most common ECUs: by special applications we mean user-friendly systems which allow to easily connect the vehicle ECU to our hi-tech data loggers: user needs only to install harness between the **logger** and the ECU.

Once connected, the logger displays (and/or records, depending on the model and on the ECU data stream) values like RPM, engine load, throttle position (TPS), air and water temperatures, battery voltage, speed, gear, lambda value (air/fuel ratio) analog channels...

All AIM loggers include – free of charge – **Race Studio 2** software, a powerful tool to configure the system and analyze recorded data on your PC.

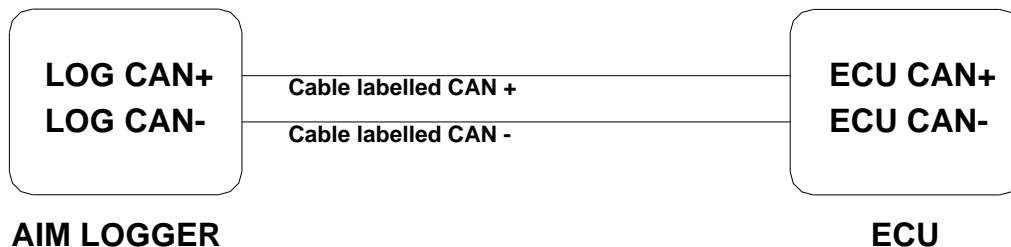
Warning: once the ECU is connected to the logger, it is necessary to set it in the logger configuration in Race Studio 2 software.

Select Manufacturer “Ferrari” and Model “430 (ECU Bosch)”.

Refer to Race Studio Configuration on user manual for further information concerning the loggers configuration.

1 – CAN communication setup

Ferrari F430 GT3 ECUs are equipped with a CAN communication protocol used to communicate parameters to an external devices. The standard communication setup is shown here below.

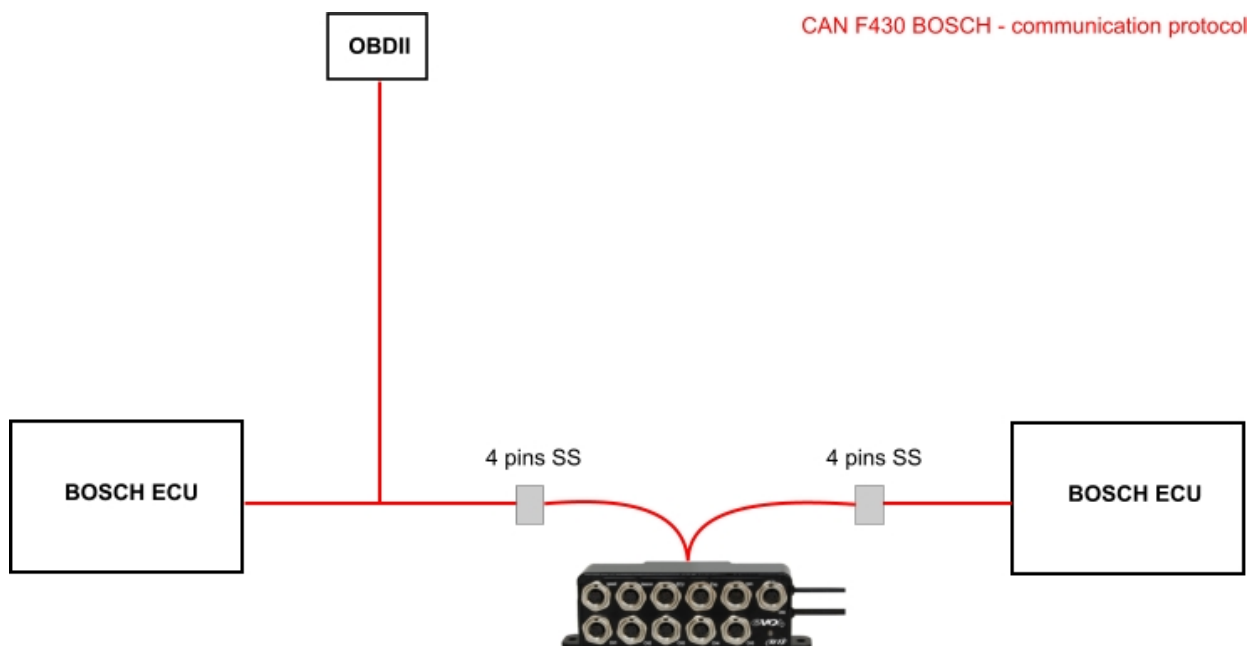


2 – Connection to AIM loggers

Ferrari F430 GT3 is equipped with two Bosch ECUs which communicate using 4 pins Superseal connector. These ECUs are placed under the cover, behind the seats. With reference to the image below, put the AIM logger between the Bosch ECUs as follows:

- connect AIM cable labelled CAN+ to pin 1 of 4 pins Superseal connectors.
- connect AIM cable labelled CAN- to pin 2 of 4 pins Superseal connectors.

The images here below show the connection scheme and connections detail.



Pins numbers are printed on the connectors.



3 – Communication protocol

Channels received by AIM logger connected to Bosch ECUs are listed here below:

| ID | CHANNEL NAME | FUNCTION |
|--------|----------------|----------------------------|
| ECU_1 | F430_RPM | RPM |
| ECU_2 | F430_WH_SPD_FL | Wheel Speed Front Left |
| ECU_3 | F430_WH_SPD_FR | Wheel Speed Front Right |
| ECU_4 | F430_WH_SPD_RL | Wheel Speed Rear Left |
| ECU_5 | F430_WH_SPD_RR | Wheel Speed Rear Right |
| ECU_6 | F430_VEH_SPEED | Vehicle Speed |
| ECU_7 | F430_PPS | Pedal Position Sensor |
| ECU_8 | F430_GEAR | Engaged gear |
| ECU_9 | F430_STEER_ANG | Steering angle |
| ECU_10 | F430_BRK_SW | Brake switch |
| ECU_11 | F430_STEER_SPD | Steering speed |
| ECU_12 | F430_ECT | Engine coolant temperature |
| ECU_13 | F430_OILT | Oil temperature |