

Ferrari 430 GT3 and 430 Challenge Kit



Racing Data Power

INTRODUCTION

The kit specifically designed for **Ferrari 430 GT3** and **430 Challenge** – including an **ECU Bridge** with Superseal connectors for immediate plug into the engine control unit (ECU) network – makes **SmartyCam** connection and activation very easy.

In fact, it is enough to connect the **ECU Bridge** to the vehicle socket – as detailed in this document – to get all desired values from the engine control unit and record/overlay them on **SmartyCam** videos.

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Chapter 1 – Ferrari 430 GT3/Challenge kit

1.1 – Models

The kit is available for these car models:

- Ferrari 430 GT3
- Ferrari 430 Challenge

1.2 – The kit



- 1 – ECU Bridge F430; (1)
- 1 – SmartyCam; (2)
- 1 – USB cable; (3)
- 1 – 2m or 4m CAN cable.(4)

1.3 – The optionals



Roll bar kit includes:

- 1 – ball head
- 1 – 60 mm. arm
- 1 – kit roll bar
- 1 – washer



CAN cable with external microphone

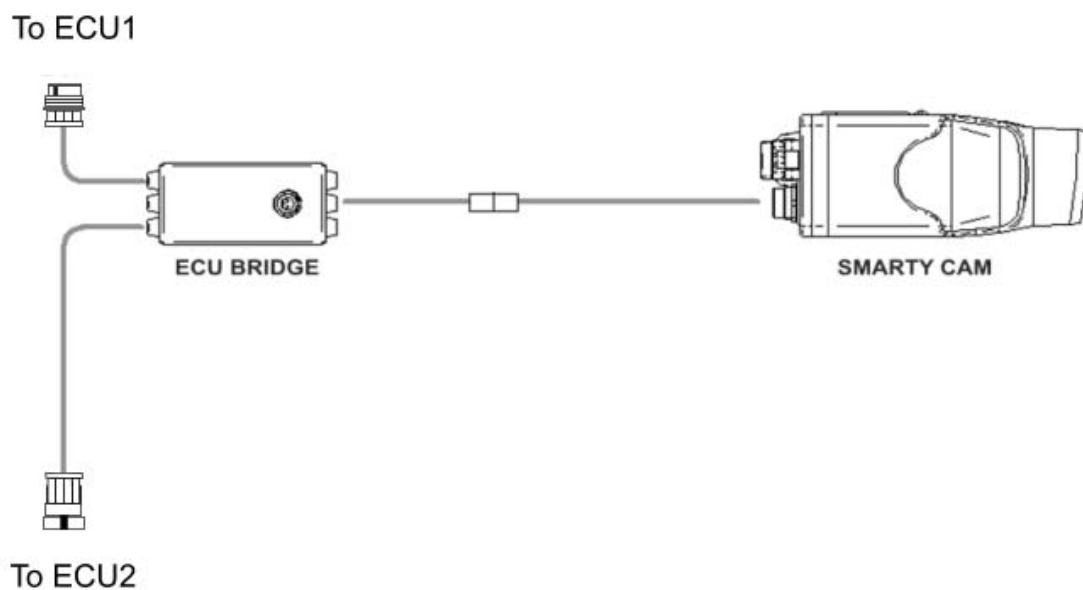
Chapter 2 – Connections

In order to receive the info provided by the vehicle ECU it is necessary to connect in sequence:

Step 1 – SmartyCam to ECU Bridge

Step 2 – ECU Bridge to the vehicle

2.1 – Connecting SmartyCam to ECU Bridge



To connect **SmartyCam** to **ECU Bridge**:

- Connect the 7-pins connector placed on the **SmartyCam** back to the 2m or 4m power cable + CAN supplied with the kit (see scheme above).

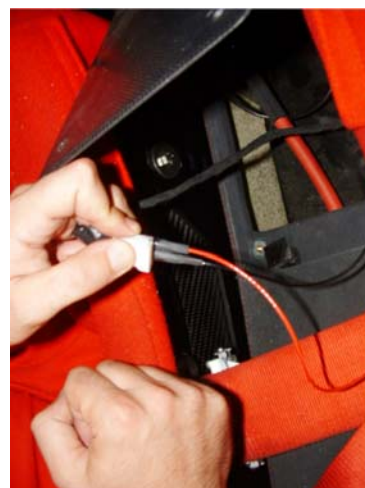
2.2 – Connecting ECU Bridge to Ferrari

To connect **ECU Bridge** to the vehicle:

- Disconnect the 4 contact superseal connectors which allow **CAN Bus** transmission. Connectors are placed under the cover, behind the seats.
- Connect properly **ECU Bridge** male/female 4 contacts superseal connectors to the female/male termination of **CANBus** ECUs (see image below).



AIM suggests to power using the cables terminations placed under the battery switch cover. As shown in the images here below, it is necessary to get the switch panel off to see the power supply cables.



Chapter 3 – Select the configuration

Once **ECU Bridge** is properly connected, it is necessary to configure it in **Race Studio 2 Configuration** software. Please refer to the following instructions:

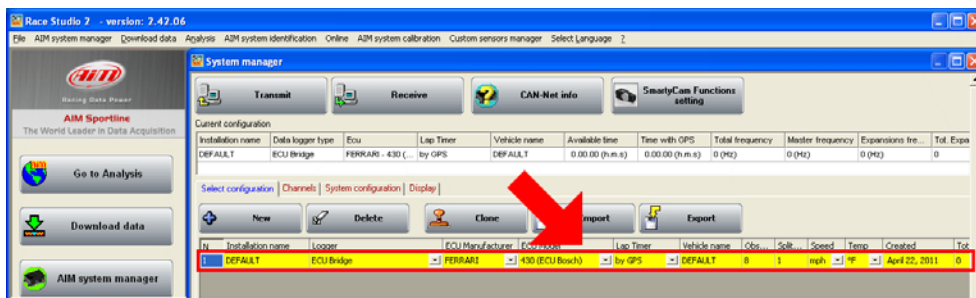
- Launch **Race Studio2 Configuration** Software
- Create a configuration pressing **“New”**.



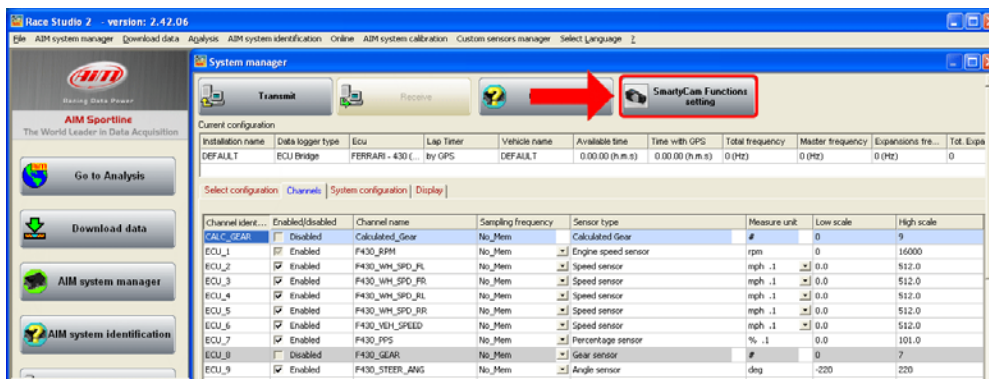
- select from **“ECU manufacturer”** drop down menu: **“Ferrari”**;

Note : it is strongly recommended to follow AIM configuration advices (see below); malfunctioning could be caused by any other configuration setting (e.i. “430”).

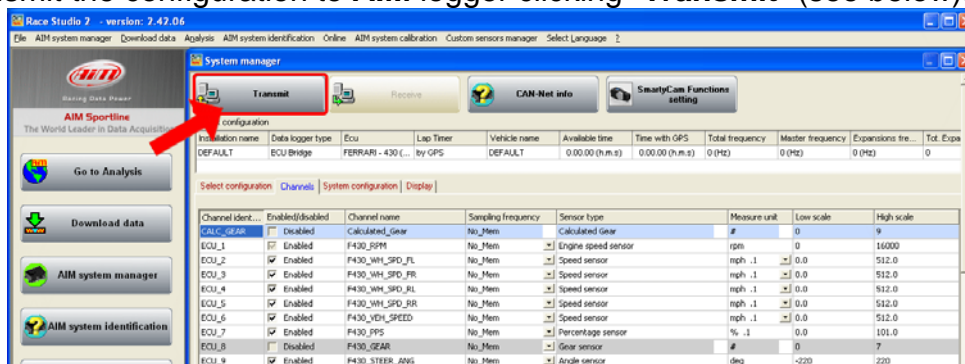
- select from **“ECU Model”** drop down menu **“430 (ECU Bosch)”**.



- select **“SmartyCam Function setting”** to set **SmartyCam** channels (refer to **Race Studio Configuration** manual for more details).



- transmit the configuration to **AIM** logger clicking **“Transmit”** (see below).



Chapter 4 – Communication Protocol

Channels received by **ECU Bridge** connected to **Ferrari 430 GT3** and **GT3 Challenge** ECUs are:

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

Appendix A –Part numbers

Products:

Ferrari F430 GT3 ECU Bridge: X90BGFF43MA

SmartyCam with 2m CAN cable: X90SMYCEC2

SmartyCam with 4m CAN cable : X90SMYCEC4

Optionals:

Roll-bar bracket kit: X9KSSMC0

CAN cable with external microphone : V02566100

Appendix B – Ferrari F430 GT3 ECU Bridge pinout

