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# Porsche GT3 Cup Plug&Play kit

Release 1.05







# **INTRODUCTION**

The P&P kit specifically designed for Porsche GT3 Cup – including an **ECU Bridge** with a Deutsch connector 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 – Plug&Play kit

#### 1.1 – Car models

Plug& Play kit for Porsche Cup is available for these car models:

- 997 GT3 Cup
- 997 GT3 Cup S
- 996 GT3 Cup (2002/2005)

### 1.2 – The kit



- 1 SmartyCam; (1)
- 1 ECU Bridge for Porsche GT3 Cup; (2)
- 1 2m or 4m CAN cable;(3)

## 1.3 – The optional





Roll bar bracket kit includes:

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



CAN cable with external microphone



# **Chapter 2 – Connections**

To receive the info provided by the vehicle ECU it is necessary to go through two steps.

Step 1 – Connect SmartyCam to ECU Bridge Step 2 – Connect ECU Bridge to the vehicle

## 2.1 – Connecting SmartyCam to ECU Bridge



To connect SmartyCam to ECU Bridge:

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

## 2.2 – Connecting ECU Bridge to Porsche GT3 Cup

To connect the ECU Bridge to the vehicle:

• plug the 5-pins male connector of **ECU Bridge** into the 5-pins female Deutsch socket placed near the ECU (see below images).

Furthermore – If the vehicle is equipped with a data acquisition system – connect the 5 pins female connector of ECU Bridge to the logger.







**Chapter 3 – Select the configuration** 

Once **ECU Bridge** is properly connected, it is necessary to configure it in **Race Studio 2** software. Please follow these instructions:

- Run Race Studio2 Software;
- create a configuration pressing "New";
- select "Bosch"; from "ECU manufacturer" drop down menu;
- select from "ECU Model" drop down menu: "MS3";
- 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".

Note: it is suggested to disable these channels that are not in use.



# **Chapter 4 – ECU communication protocol**

Channels received by **ECU Bridge** connected to **Porsche 997 GT3 Cup**, **997 GT3 Cup S**, **996 GT3 Cup** (2002/2005) Bosch MS3 ECU are:

| ID     | CHANNEL NAME      | FUNCTION             |
|--------|-------------------|----------------------|
| ECU_1  | BOSCH_RPM         | RPM                  |
| ECU_2  | BOSCH_SPEED1      | Speed1               |
| ECU_3  | BOSCH_SPEED2      | Speed2               |
| ECU_4  | BOSCH_OIL_PRESS   | Oil Pressure         |
| ECU_5  | BOSCH_FUEL_PRESS  | Fuel Pressure        |
| ECU_6  | BOSCH_ATM_PRESS   | Atmospheric Pressure |
| ECU_7  | BOSCH_FUEL_TEMP   | Fuel Temperature     |
| ECU_8  | BOSCH_OIL_TEMP    | Oil_ Temperature     |
| ECU_9  | BOSCH_ENGINE_TEMP | Engine Temperature   |
| ECU_10 | BOSCH_AIR_TEMP    | Air Temperature      |
| ECU_11 | BOSCH_THROTT_ANG  | Throttle Angle       |
| ECU_12 | BOSCH_IGNIT_ANG   | Ignition Angle       |
| ECU_13 | BOSCH_AIR_CHARGE  | Engine load          |
| ECU_14 | BOSCH_INJEC_TIME1 | Injection time 1     |
| ECU_15 | BOSCH_INJEC_TIME2 | Injection time 2     |
| ECU_16 | BOSCH_LAMBDA1     | Lambda Value 1       |
| ECU_17 | BOSCH_LAMBDA_2    | Lambda Value 2       |
| ECU_18 | BOSCH_LAM_CONTR1  | Lambda Controller 1  |
| ECU_19 | BOSCH_LAM_CONTR2  | Lambda controller 2  |
| ECU_20 | BOSCH_FUEL_USED   | Injected Fuel        |
| ECU_22 | BOSCH_GEAR        | Gear Number          |
| ECU_23 | BOSCH_VBATT       | Battery Voltage      |
|        |                   |                      |





## Appendix A – Porsche Cup ECU Bridge pinout



# **Appendix B – Part numbers**

#### Kit:

- ECU Bridge for Porsche GT3 Cup: X90BGPCMA
- SmartyCam with 2m CAN cable: **X90SMYCEC2**
- SmartyCam with 4m CAN cable: X90SMYCEC4

#### **Optional:**

- Roll bar kit: X9KSSMC0
- CAN cable with external microphone: V02566100