Porsche 911, Boxster and Cayman Plug&Play kit







INTRODUCTION

The P&P kit specifically designed for Porsche 911, Boxster and Cayman – including an **ECU Bridge** with an OBDII 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 the key values from the engine control unit and record/overlay them on **SmartyCam** videos.



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Chapter 1 – Communication protocols

Porsche cars can support one of these OBDII diagnosis protocols: K Line (ISO9141/2) or CAN (ISO 15765/4). Please check below which is the appropriate protocol for each model.

1.1 – OBDII CAN (15765/4) protocol

OBDII CAN protocol is supported by the following models:

- Porsche Cayman S 987 MK2
- Porsche Boxster S 987 MK2
- Porsche 997 MK1 GT2
- Porsche 997 MK2 all models

1.2 –OBDII K Line (ISO9141/2) protocol

OBDII Kline protocol is supported by the following models:

- Porsche 996 MK2 all models;
- Porsche 997 MK1 all models except for GT2;
- Porsche 986 Boxster;
- Porsche 987 MK1 Boxster;
- Porsche 987 MK1 Cayman.



Chapter 2 – Kit and optionals

2.1 – The kit



- 1 SmartyCam; (1)
- 1 ECU Bridge with car adapter; (2)
- 1 2m or 4m CAN cable;(3)

2.2 – The optionals





Suction cup kit:

- 1 ball head
- 1 60 mm. arm
- 1 suction cup
- 1 washer





Roll-bar kit:

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



CAN cable with external microphone



Chapter 3 – Connections

To receive the info provided by the vehicle ECU it is necessary to connect:

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

The image below shows the connections .



3.1 – Porsche OBDII connector position

Porsche OBDII purple connector is placed on the driver's side, on the right of steering column, near the clutch pedal – refer to the images below.





3.2 – 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.

3.3 – Connecting ECU Bridge to the car

To connect ECU Bridge to the vehicle:

- plug ECU Bridge OBDII male connector into OBDII socket (see image below);
- put the car adapter in the car cigarette lighter socket.







Chapter 4 - Select the configuration

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

- Launch Race Studio2 Configuration Software
- Create a configuration pressing "New".



- select from "ECU manufacturer" drop down menu: "OBD_II";
- select from "ECU Model" drop down menu (image below highlighted): "ISO9141/2" or "CAN" please, refer to chapter 1 on this manual for further details.



• Select "SmartyCam Function setting" to set SmartyCam channels (refer to Race Studio Configuration manual for more details).

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	ECU_S	Enabled	OBDII_IAT		No_Mem	-	Temperature sensor		~	-40	2	16
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Aim system identification	ECU_7	Enabled	OBDII_MAF		No_Mem	•	Raw value			• 0	6	55
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• transmit the configuration to **AIM** logger clicking "**Transmit**" (see below).

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Note: it is suggested to enable non-used channels (see image above).



Chapter 5 – OBDII communication Protocol

Channels received by AIM loggers connected to OBDII are:

ID	CHANNEL NAME	FUNCTION
ECU_1	OBDII_RPM	Engine Speed
ECU_2	OBDII_SPEED	Speed Value
ECU_3	OBDII_ECT	Engine Coolant Temperature
ECU_4	OBDII_TPS	Throttle Position Sensor
ECU_5	OBDII_IAT	Intake Air Temperature
ECU_6	OBDII_MAP	Manifold Absolute Pressure
ECU_7	OBDII_MAF	Mass Air Flow
ECU_8	OBDII_FUEL_LEV	Fuel Level
ECU_9	OBDII_PPS	Pedal Position Sensor

Note: all the above channels are managed by AIM OBDII. Please consider that acquired channels depend on the car model; for this reason some of them could not be available. Moreover it is suggested to disable the error channels to allow a faster data transmission.

Appendix – Part numbers

Kit:

ECU Bridge OBDII with lighter plug: **X90BGCK12** SmartyCam with 2m CAN cable: **X90SMYCEC2** SmartyCam with 4m CAN cable: **X90SMYCEC4 Optional:**

Suction cup kit: X9KSSMC1

Roll bar kit: **X9KSSMC0**

CAN cable with external microphone: V02566100