

IGNIJET 2007 Plug&Play Ducati 999/1098



INTRODUCTION

AIM has developed special applications for many of the most popular ECUs: by special applications we mean user-friendly systems which allow to easily connect your ECU to our high 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 logger and on the ECU data stream and configuration) 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 “IGNITECH” Model “IGNIJET_2007_125K_DUCATI”.

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

Warning: for any further information concerning ECU firmware/software settings and/or upgrading it is always recommended to address to the ECU dealer.

Chapter 1 – CAN Communication Setup

Ingrijet_2007 P&P Ducati 998/1098 is equipped with a CAN communication setup used to communicate parameters to an external logger.

The image here below shows the standard CAN communication setup.

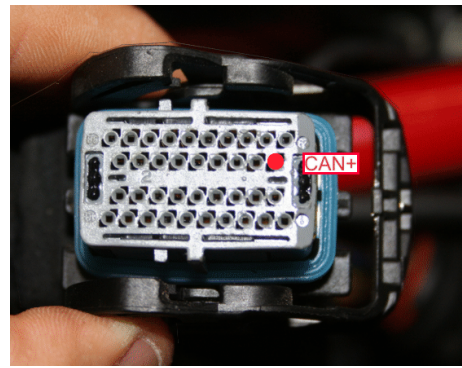
Chapter 2 – Connection with AIM loggers

ECU can be connected to **AIM** loggers in two different ways: directly, or using the connector placed on the dashboard (CAN communication).

2.1 – CAN connection

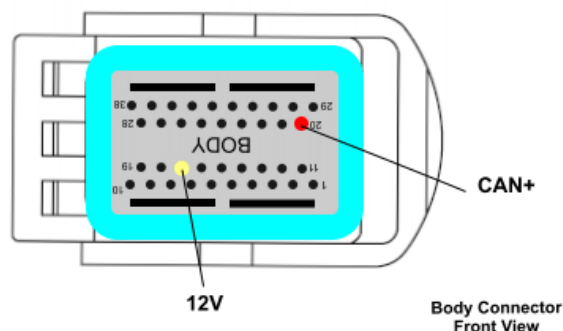
2.1.1 – Direct connection between AIM loggers and Marelli IAW 5.9M/5.AM ECU

IAW 5.9M/5.AM are equipped with two 38 pins connectors, named “Body “ and “Engine” – see below: “engine” is black (on the left). “Body” connector is grey (on the right).



To connect **AIM** loggers to Ducati ECU:

- connect **AIM** cable labelled **CAN+** to pin 20 of Body connector.
- connect AIM cable labelled CAN- to **ground**.



2.1.2 – Dashboard connector - Marelli IAW 5.9M(Ducati 999)

To connect **AIM** loggers to ECU using the dashboard connector:

- connect **AIM cable** labelled **CAN+** to **pin 14** (brown/white twisted cable) of the Ducati stock Dashboard connector.
- connect AIM cable labelled **CAN-** to **ground**.
- **12 V** (connected to the vehicle master switch) is on **pin 21** (red/black cable).

2.1.3 – Dashboard connector – Marelli IAW 5.AM (Ducati 1098)

To connect **AIM** loggers to ECU using the dashboard connector:

- connect **AIM cable** labelled **CAN+** to **pin 19** (green/black twisted cable) connector.
- connect **AIM cable** labelled **CAN-** to **ground**.
- Vbatt is on pin 23 – red /black cable.

Warning: to use Marelli dashboard it is necessary to remove 120 OHM resistance placed between CAN+ and CAN-.

Chapter 3 – Communication protocol

Channels received by AIM loggers connected to Ingnijet_2007 Plug&Play for Ducati 999/1098 are:

ID	CHANNEL NAME	FUNCTION
ECU_1	IG_RPM	RPM value
ECU_2	IG_SPEED	Speed value
ECU_3	IG_GEAR	Gear number
ECU_4	IG_WATER_TEMP	Water temperature
ECU_5	IG_AIR_TEMP	Air temperature
ECU_6	IG_TPS	Throttle position sensor
ECU_7	IG_INL_AIR_P	Inlet Air Pressure
ECU_8	IG_AIR_PRESS	Air Pressure
ECU_9	IG_SUP_VOLT	Supply Voltage
ECU_10	IG_AFR	Air Fuel Ratio
ECU_11	IG_ACC_C_INJ	Accelerometer C Injection
ECU_12	IG_GEAR_SH_LT	Gear Shift Light
ECU_13	IG_SERVO_EX	Not available
ECU_14	IG_SERVO_INL	Not available
ECU_15	IG_POT_VOLT	Not available
ECU_16	IG_START_LIMIT	Start limit
ECU_17	IG_CLUTCH_MS	Clutch
ECU_18	IG_RPM_LIM_IGN	RPM limiter ignition
ECU_19	IG_RPM_LIM_INJ	RPM limiter injection
ECU_20	IG_RPM_LIM_ADV	RPM limiter advance
ECU_21	IG_ADV_CYL1	Advance
ECU_22	IG_MAIN_INJT_1	Main injection time
ECU_23	IG_SEC_INJT_	Secondary injection time