

Ducati 1098 and 1098S

ECU connection



INTRODUCTION

AIM has developed special applications for many of the most popular ECU: 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 “DUCATI” and Model “1098 07”.**

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

1 – Models

IAW 5AM2 is the stock ECU on the following bike models:

- 1098
- 1098S

2 – CAN communication setup

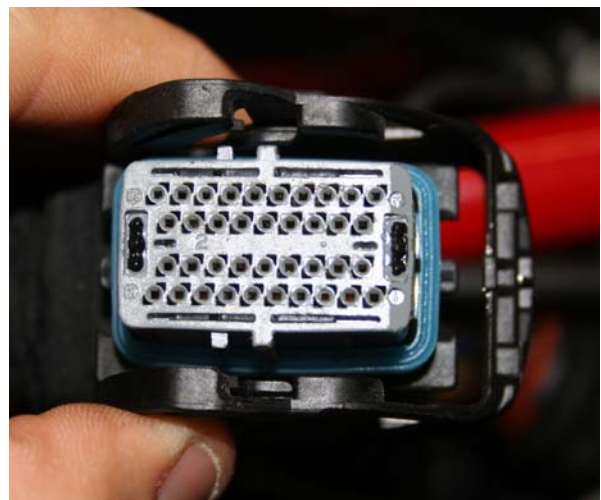
This ECU is equipped with a CAN and communication setup used to communicate parameters to an external logger whose standard setup is shown here below.

3 – Connection to AIM loggers

The ECU can be connected to AIM loggers in two different ways: directly, or using the connector placed on the dashboard.

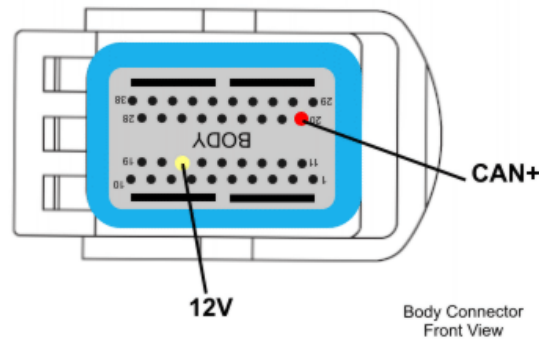
3.1. – Direct connection between AIM loggers and Marelli IAW 5AM2 ECU

IAW 5AM2 is 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**
- **Vbatt** is on **pin 17** (vehicle master switch).



3.2 – Dashboard connector

Connector is equipped with 26 pins and it is placed on the back of the dashboard.

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 – vehicle master switch.

Warning: to use Marelli dashboard , please remove 120 OHM resistance placed between CAN+ and CAN-; otherwise Marelli dash does not work.

4 – Communication protocol

Channels received by AIM loggers connected to Ducati IAW AM2 ECU are:

ID	CHANNEL NAME	FUNCTION
ECU_1	DUCATI_RPM	Rpm
ECU_2	DUCATI_SPEED	Speed
ECU_3	DUCATI_TPS	Throttle position sensor
ECU_4	DUCATI_ECT	Engine cooling temperature
ECU_5	DUCATI_AIRT	Air temperature