

Aprilia

RSV4 Factory – RSV4R



Racing Data Power

INTRODUCTION

AIM has developed a special application for Aprilia RSV4 (Factory and R): by special application we mean a user friendly systems which allow to easily connect the ECU to **EVO3 Pro/Pista**, **EVO4**, **ECU Bridge** and **SoloDL** just installing harness between the logger and the ECU.

Once connected, the stock dash displays values like RPM, the map selected, fuel level, battery voltage, speed, gear, water temperature...and in the meantime AIM loggers record the same values.

AIM loggers come with **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: "APRILIA", Model: "RSV4".**

Chapter 1 – Bike Models and communication with AIM loggers

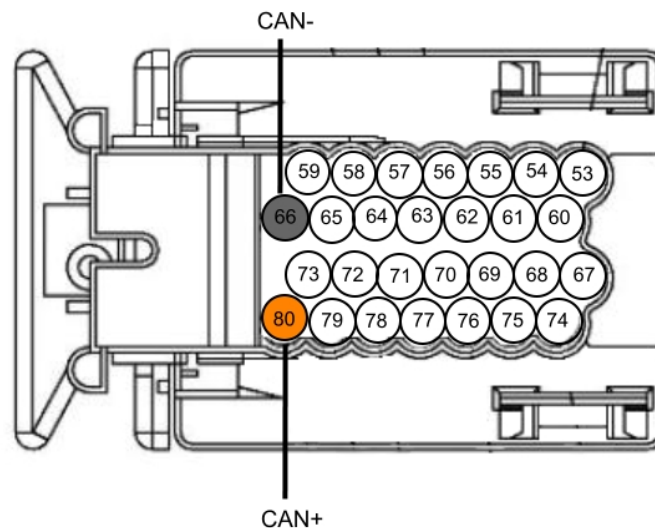
AIM **EVO3 Pro/Pista**, **EVO4**, **ECU Bridge** and **SoloDL** support these Aprilia models:

- RSV4 Factory 2009-2010;
- RSV4R 2009-2010;

Aprilia RSV4 ECU is equipped with a CAN communication protocol used to communicate parameters to an external logger. It can be connected with AIM loggers directly or through the stock dashboard connector. The easiest connector to be reached is the dashboard one.

2.1 – ECU direct connection

Aprilia RSV4 ECU is equipped with 2 connectors called “ECU1” (engine) and “ECU2” (vehicle). CAN-bus is on ECU2 connector, right of the fuel tank. Here below is the connector pinout:

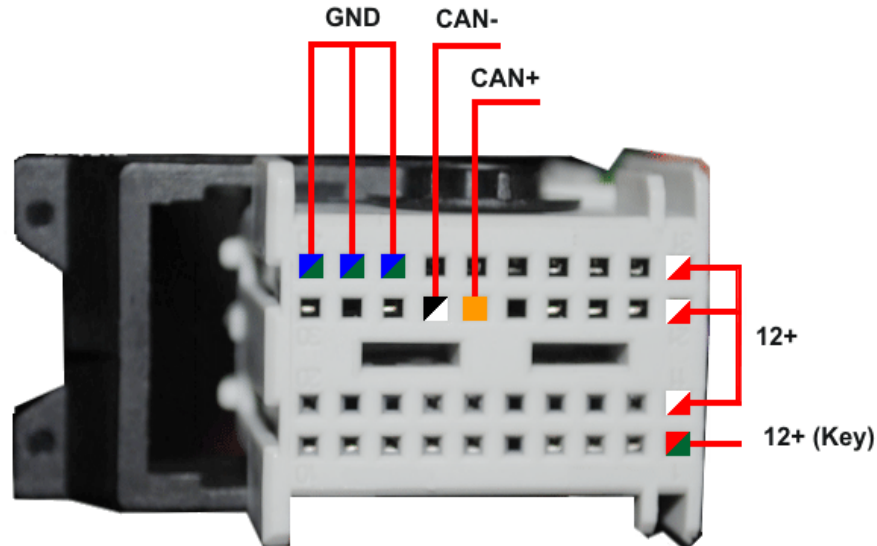


For the bike ECU to communicate with AIM loggers connect:

- **AIM cable labelled CAN+** to **pin 80** of “ECU2” connector (orange wire);
- **AIM cable labelled CAN-** to **pin 66** of “ECU2” connector (white/black wire).

2.2 – Dashboard connector

The stock dash has a 40 pins connector placed on its back. To see the connector it is necessary to remove the dash.



To connect **AIM** loggers to ECU:

- connect **AIM cable labelled CAN+** to **pin 26** (orange wire) connector;
- connect **AIM cable labelled CAN-** to **pin 27** (white/black wire) connector;
- 12+ is on pin 11 or 21 or 31 (white/red);
- 12+ (key) is on pin 1 (green/red);
- GND is on pin 38 or 39 or 40 (blue/green).

Chapter 3 – Supported channels

Channels received by AIM loggers connected to Aprilia RSV4 ECU are:

ID	CHANNEL NAME	FUNCTION
ECU_1	RSV4_RPM	RPM
ECU_2	RSV4_SPEED	Speed
ECU_3	RSV4_GEAR	Engaged Gear
ECU_4	RSV4_SEL_MAP	Selected MAP: 1 = "T" Track/race 2 = "S" Sport 3 = "R" Road
ECU_5	RSV4_NEUTRAL	Neutral led
ECU_6	RSV4_WARNING	General warning Led
ECU_7	RSV4_SIDESTAND	Side Stand led
ECU_8	RSV4_ENG_TEMP	Water Temperature
ECU_9	RSV4_V_BATT	Battery Voltage
ECU_10	RSV4_FUEL_LOW	Low fuel level led