SVEL ECU

AiM
Racing Data Power

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 "AIM" Model "PROT_CAN".
Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

# INDEX

Chapter 1 – SVEL ECU Models

This tutorial refers to the following SVEL ECUs:

- SVEL Generic
- SVEL Clio RS fase 1 with or without ETC (Electronic Throttle Control)
- SVEL Honda Civic EP3
- SVEL Honda Civic FN2

Chapter 2 – CAN communication Setup

Svel ECUs are equipped with a CAN communication setup used to communicate parameters to an external logger.
The image here below shows the standard CAN communication setup.

LOG CAN+
LOG CAN-

Cable labelled CAN +

Cable labelled CAN -

ECU CAN+
ECU CAN-

AIM LOGGER

ECU
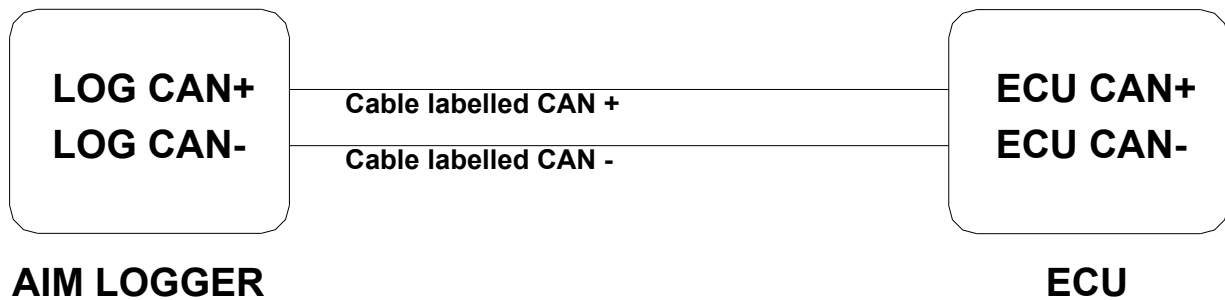
Chapter 3 – Connection with AIM loggers

SVEL ECUs are equipped with different connectors used to communicate parameters to an external data logger.

3.1 – Connection of Svel generic ECU

Svel generic ECU is equipped with a 55 pin male connector. To make it communicate with AIM loggers:

- connect AIM cable labelled CAN+ with pin 51 of the 55 pins male connector;
- connect AIM cable labelled CAN- with pin 14 of the 55 pins male connector.

3.2 – Connection of Svel Clio RS ECU

Svel Clio RS ECU is equipped with a 90 pin male connector. To make it communicate with AIM loggers:

- connect AIM cable labelled CAN+ with pin 55 of the 90 pins male connector;
- connect AIM cable labelled CAN- with pin 25 of the 90 pins male connector.

3.3 – Connection of Svel Honda Civic EP3 and FN2

Svel Honda Civic EP3_FN2 ECU is equipped with an internal 10 pins in line service connector. To make it communicate with AIM loggers:

- connect AIM cable labelled CAN+ with pin 6 of the internal connector;
- connect AIM cable labelled CAN- with pin 7 of the internal connector.

Chapter 4 – SVEL ECUs communication protocol

Svel ECUs use the AIM proprietary CAN BUS. Channels received by those ECUS are:

ID	CHANNEL NAME	FUNCTION
ECU_1	AIM_RPM	RPM
ECU_2	AIM_WHEELSPEED	Vehicle speed
ECU_3	AIM_OILPRESS	Oil pressure
ECU_4	AIM_OILTEMP	Oil temperature
ECU_5	AIM_WATERTEMP	Water temperature
ECU_6	AIM_FUELPRESS	Fuel pressure
ECU_7	AIM_BATTVOLT	Battery voltage
ECU_8	AIM_TPS	Throttle position sensor
ECU_9	AIM_MAP	Mainfold pressure
ECU_10	AIM_AIRTEMP	Air temperature
ECU_11	AIM_EXHAUST_TEMP	Exhaust temperature
ECU_12	AIM_LAMBDA	Lambda value
ECU_13	AIM_FUELTEMP	Fuel temperature
ECU_14	AIM_GEAR	Engaged gear
ECU_15	AIM_ERRORS	Error signal