AIM Infotech

Autronic SMC V191 ECU
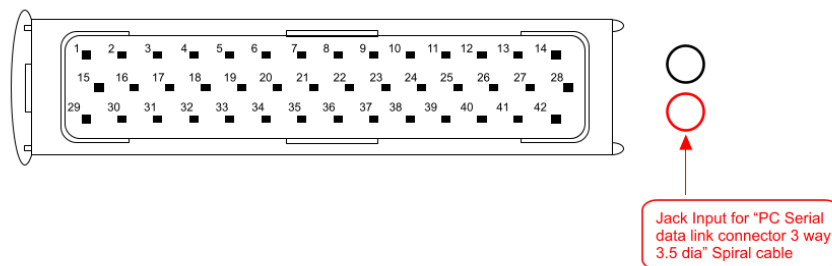
Release 1.02

ECU

This tutorial explains how to connect Autronic SMC V191 ECU to AiM devices.

1
Wiring connection

Autronic SMCV191 ECU is equipped with a serial communication protocol. The ECU features a 42 pins connector and two Jack connectors on its front as shown here below.

Jack Input for "PC Serial data link connector 3 way 3.5 dia" Spiral cable

The ECU comes with a spiral cable ending with a Jack on one side and alternatively a DB9 female or a DB25 female on the other side. The Jack input of the ECU to be used is shown here above. The spiral cable is used to program the ECU as well as to communicate with external devices, like AIM ones.
Here below the spiral cable ending with a DB9 female connector is shown.

DB9 Female connector

Jack connector

Here follow technical drawing of the two possible cables as well as connection tables.
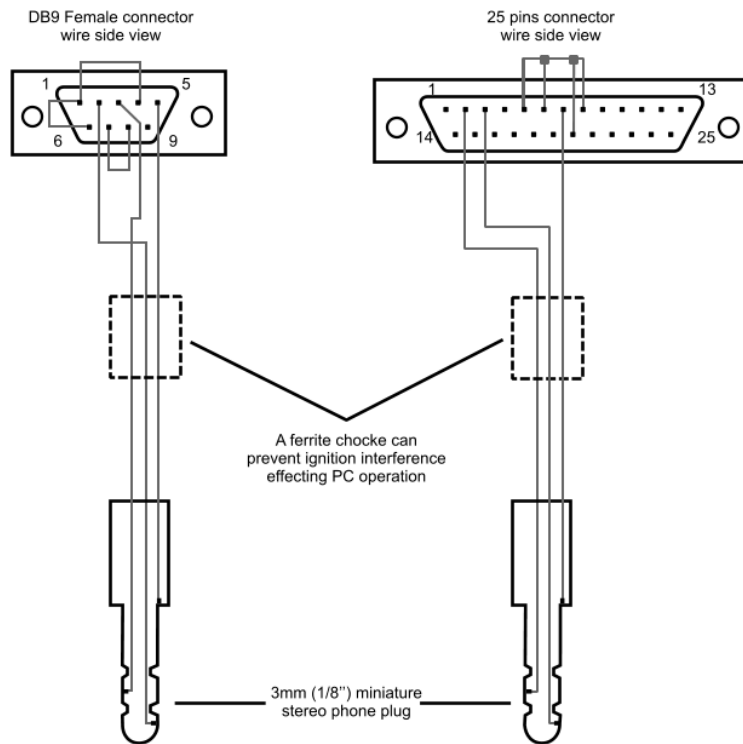
DB9 connector pin	Pin function	AiM cable
5	GND	GND
2	RS232TX	RS232RX

DB25 connector pin	Pin function	AiM cable
7	GND	GND
3	RS232TX	RS232RX

Please note: ECU RS232RX is not to be connected.

2

AiM device configuration

Before connecting the ECU to AiM device set this up using AiM Race Studio software. The parameters to select in the device configuration are:

- ECU manufacturer "Autronic"
- ECU Model "SM2_V190/1/SMC_V191"

3

Available channels

Channels received by AiM device connected to "Autronic" "SM2_V190/1/SMC_V191" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	AUTR_RPM	RPM
ECU_2	AUTR_SPEED	Vehicle speed
ECU_3	AUTR_DRVWHEEL_SPD	Driving wheel speed
ECU_4	AUTR_WATER_TEMP	Engine coolant temperature
ECU_5	AUTR_CHARGE_TEMP	Air/Fuel mix temperature
ECU_6	AUTR_INTAKEAIR_TEMP	Intake air temperature
ECU_7	AUTR_EXHAUST_PRESS	Exhaust pressure
ECU_8	AUTR_MANIF_PRESS	Manifold air pressure
ECU_9	AUTR_THROTPOS	Throttle position
ECU_10	AUTR_INJECT_TIME	Injection time
ECU_11	AUTR_IGNIT_ANG	Ignition angle
ECU_12	AUTR_AF_RATIO	Air/Fuel ratio
ECU_13	AUTR_BATT_VOLT	Battery supply