ECUMASTER ADU

Application Note

Autronic SM4/SM4 v1.08/SM4 v1.09

Revision 1.01

1. Copyright and trademarks

All trademarks, service marks, trade names, trade dress, product names and logos appearing in this document are the property of their respective owners.

2. Introduction

This application note explains how to connect and configure the Autronic SM4 ECU to the ECUMASTER ADU Dashboard.
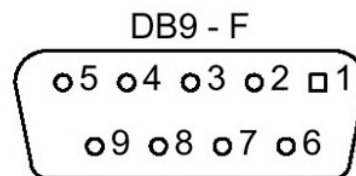
Supported models are:

- – SM4 V1.01 to V1.07
- – SM4 V1.08
- – SM4 V1.09

3. Electrical connection

On the front panel of the Autronic SM4 ECU there is a circular "mini jack" connector. The Autronic data connection cable is required.

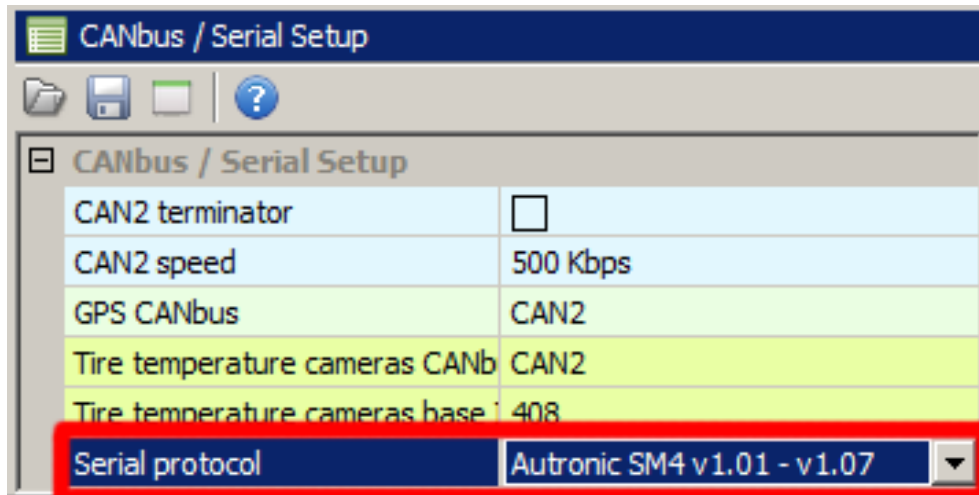**Autronic SM4 data connection cable**

The front view of DB9 connector

Data Tx from SM4 ECU (pin 2 of DB9 connector) needs to be connected to the Rx terminal of the ADU (terminal 7). If there is no common ground between devices, the SM4 ground (pin 5) needs to be connected to the common ground of ADU.

4. ADU configuration

To configure the ADU, the appropriate Autronic SM4 serial protocol should be selected in *CANBus / Serial Setup*. To open *CANBus / Serial Setup,* press F9 to open the pane selector and then select *General / CANBus Serial Setup*. There are 3 options for Autronic: SM4 v1.09, SM4 v1.08 and SM v1.01 to 1.07.

Make sure no CAN inputs override or conflict with the enabled ecu.* channels!

5. Supported channels

ADU channel	Description
ecu.rpm	Engine RPM
ecu.speed	Vehicle speed
ecu.clt	Engine coolant temperature
ecu.iat	Intake manifold temperature
ecu.battery	Battery voltage
ecu.tps	Throttle position
ecu.map	Manifold absolute pressure
ecu.afr	Air to fule ratio
ecu.injPW	Injector pulsewidth
ecu.ignAngle	Ignition advance
ecu.oilTemp	Oil temperature (Only V1.08)
ecu.fuelPress	Fuel pressure (Only V1.08)
ecu.errorFlags.cltSensor	Coolant temperature sensor failure
ecu.errorFlags.iatSensor	Intake manifold temperature sensor failure
ecu.errorFlags.mapSensor	Manifold pressure sensor failure
ecu.errorFlags.wboSensor	Oxygen sensor failure
ecu.flags2.paramOutput#1	User channel #1 status
ecu.flags2.paramOutput#2	User channel #2 status
ecu.flags2.paramOutput#3	User channel #3 status
ecu.flags2.paramOutput#4	User channel #4 status
ecu.userData1	User selectable channel 1 (v1.08 and v1.09 only)
ecu.userData2	User selectable channel 2 (v1.09 only)
ecu.userData3	User selectable channel 3 (v1.09 only)
ecu.userData4	User selectable channel 4 (v1.09 only)