ECUMASTER ADU

Application Note

DTAFast S Series

Revision 1.01

1. Copyright and trademarks

2. Introduction

This application note explains how to connect and configure the DTAFast S series ECU to work with the ECUMASTER ADU.

The supported models are:

- S40 and S40 Pro (firmware version 37.00 or higher)
- S60 and S60 Pro (firmware version 36.00 or higher)
- S80 and S80 Pro (firmware version 40.00 or higher)
- S100 and S100 Pro (firmware version 43.00 or higher)

3. Electrical connection

S40/S40 PRO

S40/S40 PRO	ADU CAN1	ADU CAN2	Comment
17	4	6	CAN L
16	3	5	CAN H

S80/S100/S100 PRO/S100 PRO (connector with two bottom keys)

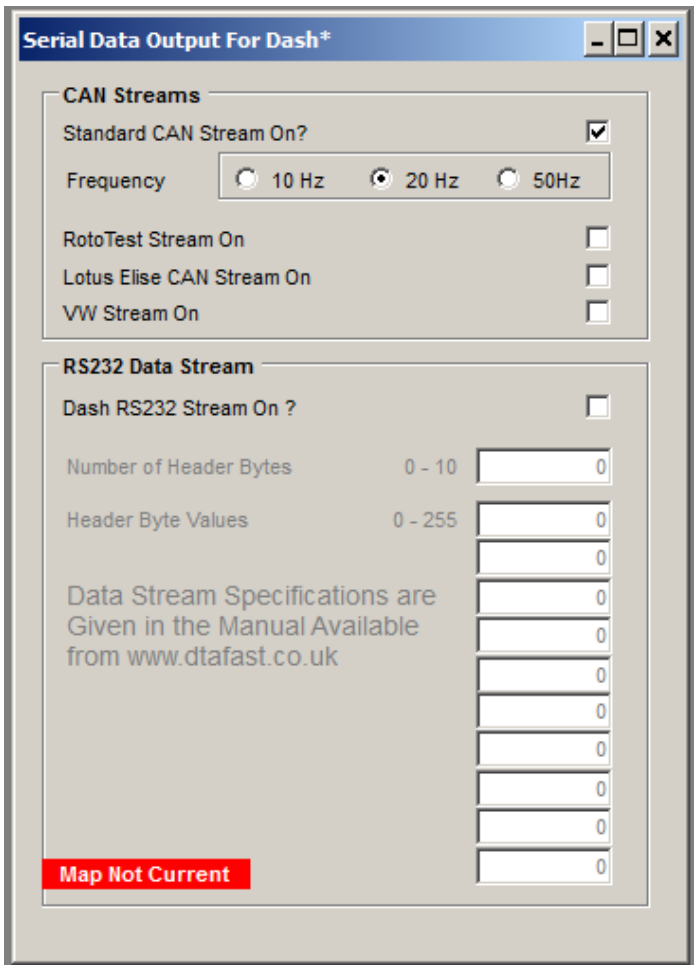
S40/S40 PRO	ADU CAN1	ADU CAN2	Comment
28	4	6	CAN L
26	3	5	CAN H

Twisted pair cable is required for any CAN BUS connection.

Ensure that the CAN BUS is properly terminated.

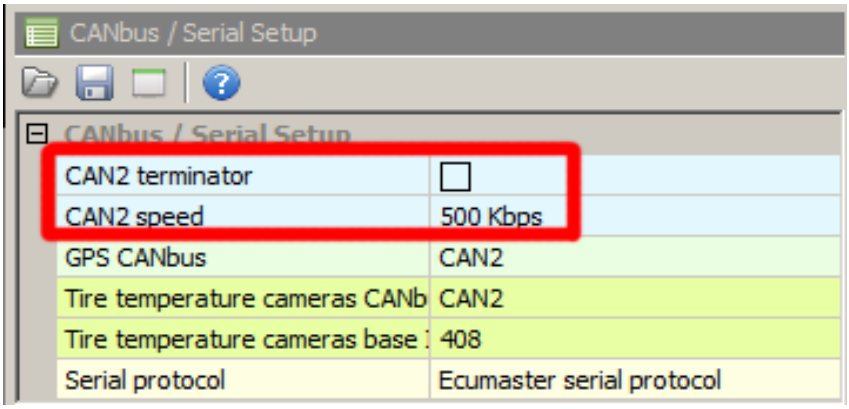
4. ADU and DTAFast configuration

The first step is to enable the output protocol. This option is available in the menu titled “Other Map Settings / *Data stream”.* The DTAFast standard CAN stream is send at a fixed speed of 1Mbps, so it can be connected to either CAN1 or CAN2 on the ADU.

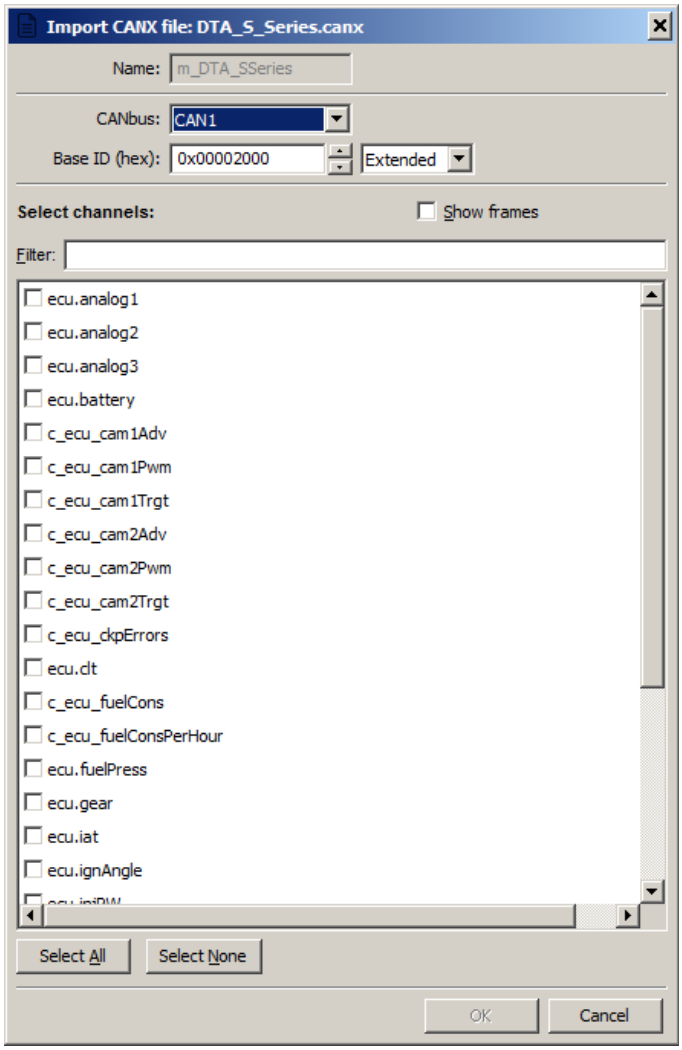


If you use the ADU CAN1 network, the speed is fixed at 1Mbps and no CAN configuration is required.

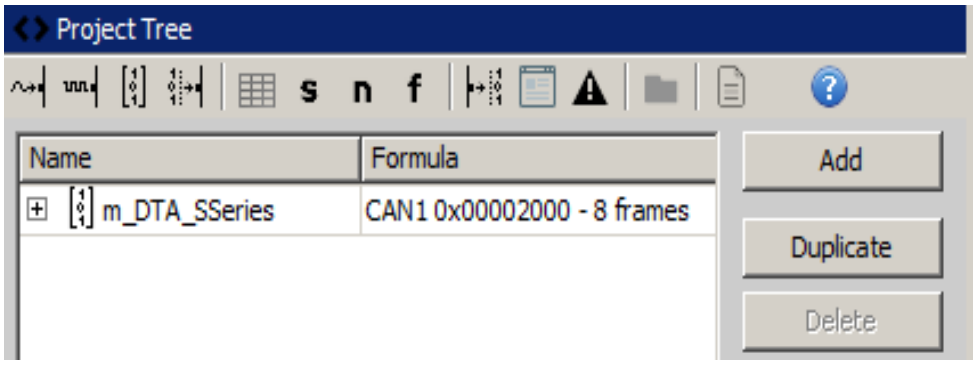
If you plan to connect the DTAFast ECU to CAN2, you will need to set proper CAN BUS speed and termination. To open CAN2 configuration, press F9 to show pane selector. Then open *General / CAN BUS Serial setup.*



The next step is to load the proper CANX file with DTAFast S series channel definitions. On the Project tree, click the “Add” button and select “Import .CANX file”. When the file dialog opens, select “*DTA_S_Series.canx* file”. The following dialog will appear:



You can then select the CAN BUS that will be used for communication (CAN1 or CAN2) and which channels you want to read. In most situations all channels should be loaded (Select All). The Project tree should look like the following:



When “*m_DTA_SSeries* mob” is opened, all available CAN inputs will be visible.

5. Supported channels

ADU channel	Description
ecu.analog1	Analog input #1 voltage
ecu.analog2	Analog input #2 voltage
ecu.analog3	Analog input #3 voltage
ecu.battery	Battery voltage
ecu.clt	Engine coolant temperature
ecu.fuelPress	Fuel pressure
ecu.gear	Current gear
ecu.iat	Intake manifold temperature
ecu.ignAngle	Ignition advance
ecu.injPW	Injector pulsewidth
ecu.lambda1	Lambda from oxygen sensor #1
ecu.map	Manifold absolute pressure
ecu.oilPres	Engine oil pressure
ecu.oilTemp	Engine oil temperature
ecu.rpm	Engine RPM
ecu.speed	Vehicle speed
ecu.tps	Throttle position sensor
c_ecu_cam1Adv	VVTi CAM #1 advance
c_ecu_cam1Pwm	VVTi CAM #1 PWM duty cycle
c_ecu_cam1Trgt	VVTi CAM #1 advance target
c_ecu_cam2Adv	VVTi CAM #2 advance
c_ecu_cam2Pwm	VVTi CAM #2 PWM duty cycle
c_ecu_cam2Trgt	VVTi CAM #2 advance target
c_ecu_ckpErrors	Crank errors
c_ecu_fuelCons	Fuel consumption per 100 km
c_ecu_fuelConsPerHour	Fuel consumption per hour
c_ecu_camErrors	Cam errors

6. Revision log

1.01

- ADU CAN terminals description fixed