ECUMASTER ADU

Application Note

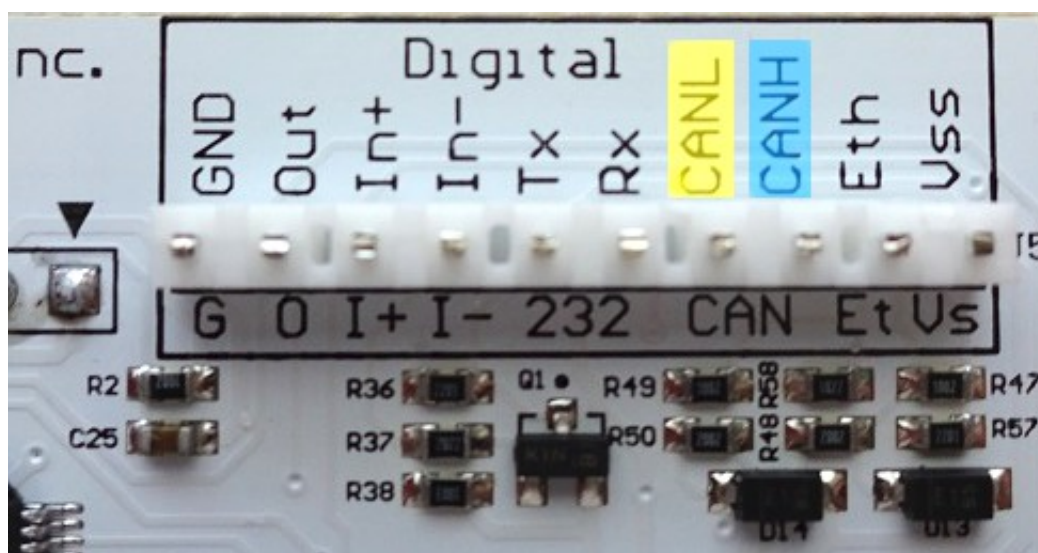## HONDATA KPro4

Revision 1.00

1. Copyright and trademarks

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2. Introduction

This application note explains how to connect and configure the HONDATA KPro4 series with the ECUMASTER ADU.

3. Electrical connection

The HONDTATA KPro4 is able to send the data stream over the CAN BUS. The CAN BUS connection is located on the KPro4 board.


There are two options for connection. If the Hondata KPro4 is configured to 1Mbps speed (*Hondata protocol 1mbps*) then you may use ADU CAN1 or CAN2. If the Hondata KPro4 speed is set to 500kbps (*Hondata protocol 500kbps*) then you may only use ADU CAN2.

KPro4 terminal	ADU CAN1	ADU CAN2	Comment
CANL (yellow wire)	4	6	CAN L
CANH (blue wire)	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 HONDATA KPro4 configuration

The first step is to enable the HONDATA KPro4 CAN output protocol. The option is available in "*Parameters / Multiplexer Digital Output*" .
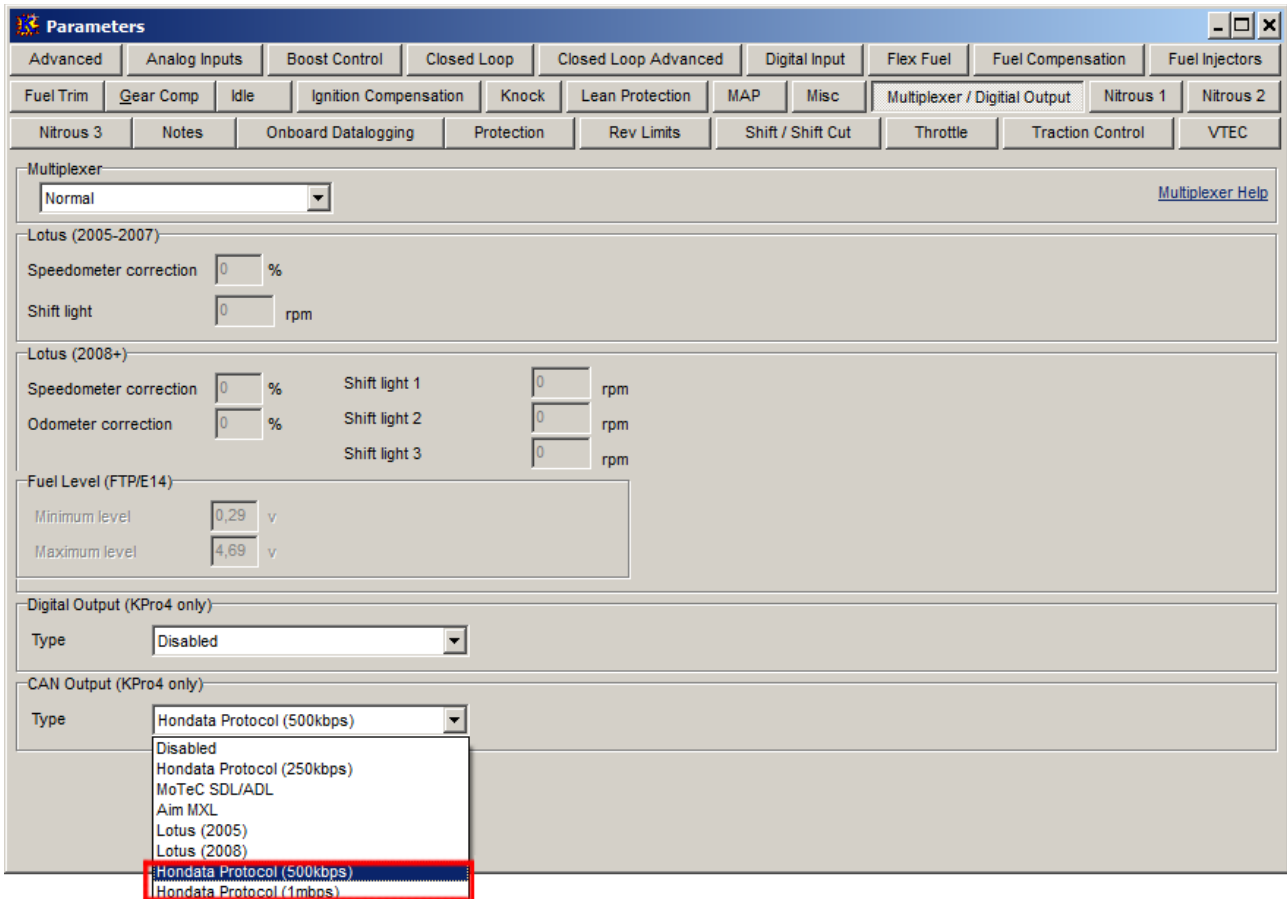

t is important to select the proper CAN BUS speed. If you choose to connect HONDATA to CAN1 or CAN2 at 1Mbps you must select 1Mbit speed (*Hondata protocol 1mpbs)*. If you choose to connect to CAN2 with 500kbps speed, you must to select 500kbit (*Hondata protocol 500kbps)*.

If you use ADU CAN1, the speed is fixed at 1Mbps and no CAN configuration is required. If you choose to connectHONDATA KPro4 to CAN2, you must set proper CAN BUS speed and termination.

To open CAN2 configuration, press F9 to show the pane selector. Then open "*General / CAN BUS Serial setup".*
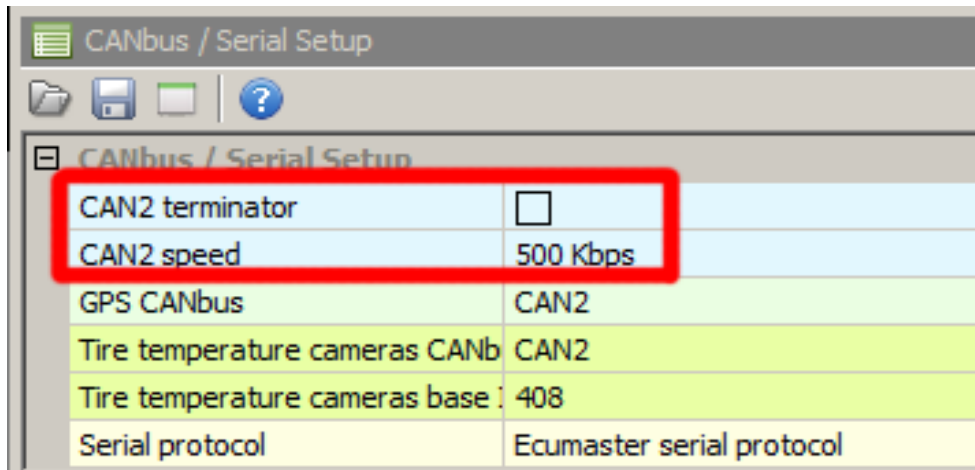
The next step is to load the CANX file with HONDATA KPro4 channel definitions.
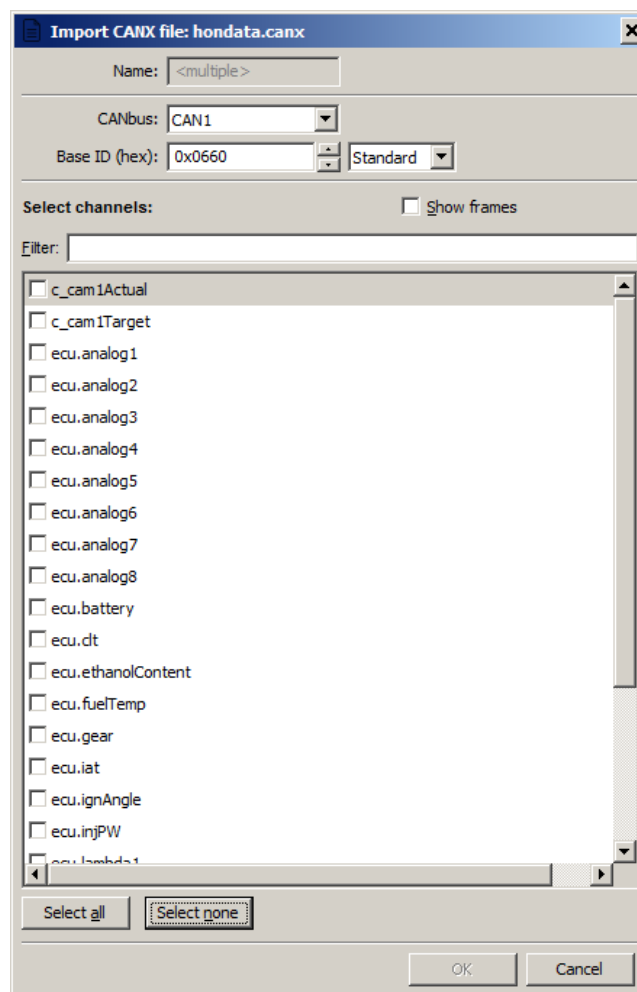
On the Project tree, click the "Add" button and select "Import .CANX file". When the file dialog opens, select the "Hondata.canx" file. The following dialog appears:

At this point, select the CAN BUS that will be used for communication (CAN1 or CAN2) and the channels you want to read. In most situations all channels should be loaded (Select All). The project tree should look like the following:
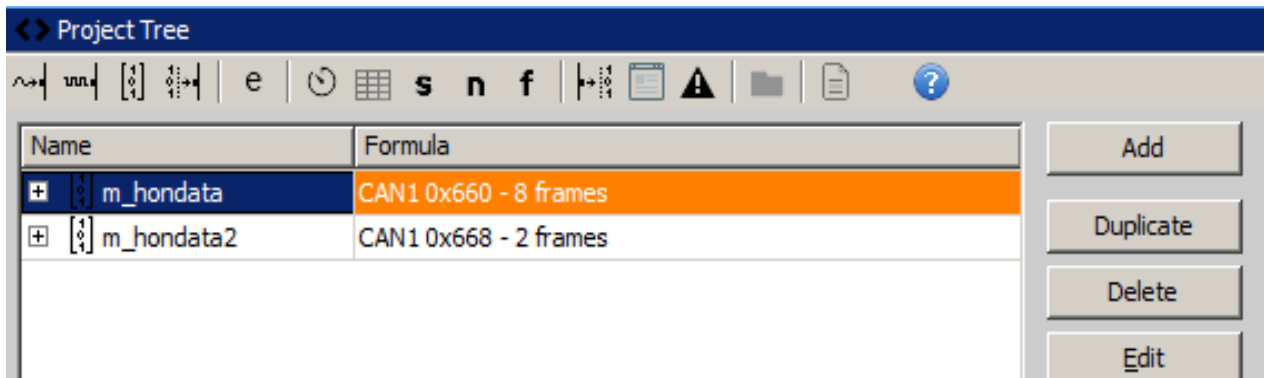
If you open "*m_hondata*" or "m_hondata2*" mobs, all available CAN inputs should be visible.

5. Supported channels

ADU channel	Description
ecu.analog1	Analog input #1
ecu.analog2	Analog input #2
ecu.analog3	Analog input #3
ecu.analog4	Analog input #4
ecu.analog5	Analog input #5
ecu.analog6	Analog input #6
ecu.analog7	Analog input #7
ecu.analog8	Analog input #8
ecu.battery	Battery voltage
ecu.clt	Engine coolant temperature
ecu.ethanolContent	Fuel ethanol content
ecu.fuelTemp	Fuel temperature (Flex Fuel)
ecu.gear	Current gear
ecu.iat	Intake manifold temperature
ecu.ignAngle	Ignition advance
ecu.injPW	Injectors pulse width
ecu.lambda1	Lambda from oxygen sensor #1
ecu.map	Manifold absolute pressure
ecu.rpm	Engine RPM
ecu.speed	Vehicle speed
ecu.tps	Throttle position sensor
c_cam1Actual	Current camshaft position (angle)
c_cam1Taraget	Camshaft target position (angle)
c_flexFuleFreqency	Freqency from Flex Fuel ethanol content sensor
c_knockCount	Knock count

6. Revision log