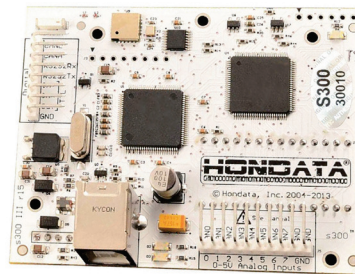


# AiM Infotech

## Hondata S300 V3 ECU

### Release 1.02

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ECU



# 1

## Supported models

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This document explains how to connect AiM devices to the Hondata S300 v3 datastream. Supported model is only the Hondata S300 version 3, the plug in module to the factory Honda Engine Computer as shown here below.

- S300 version 3



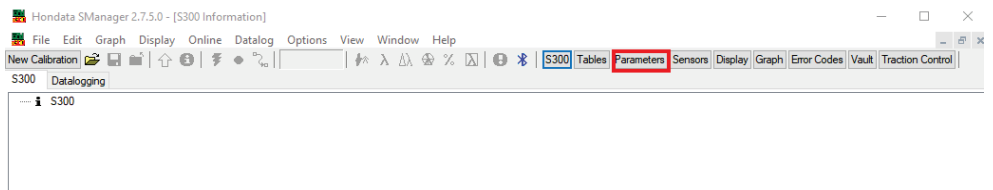
## 2 Software setup

For Hondata S300 v3 ECU to correctly communicate with AiM device it is necessary to set it up using the dedicate Hondata software "SManager". The setup changes according to the data bus communication protocol you choose.

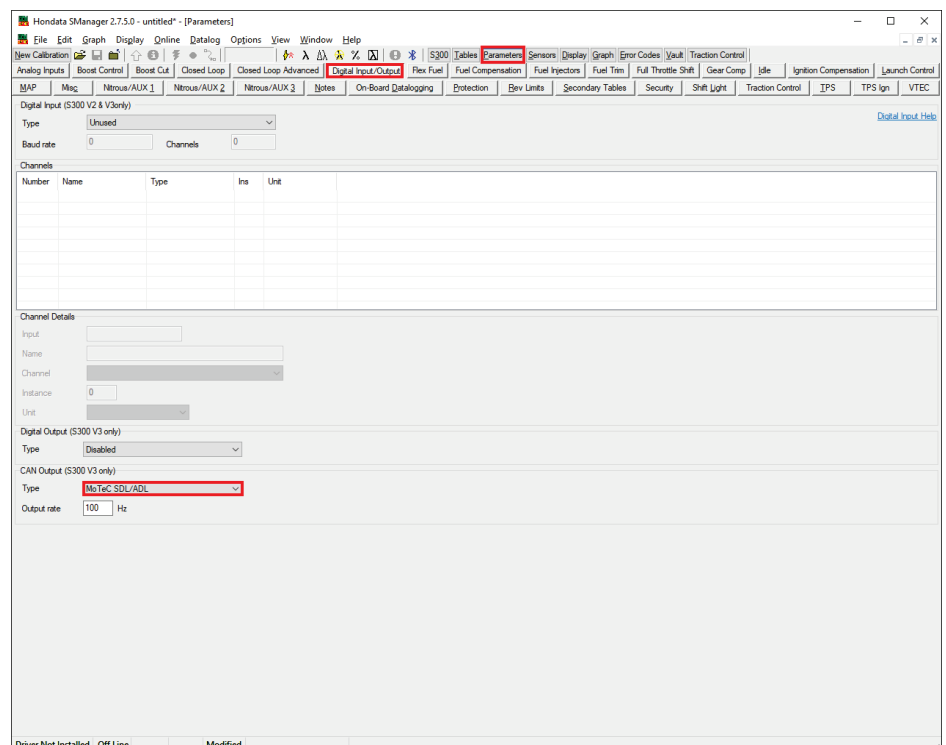
### 2.1 "CAN" protocol Software setup

Follow the steps shown below.

- Parameters



- Digital Input/Output



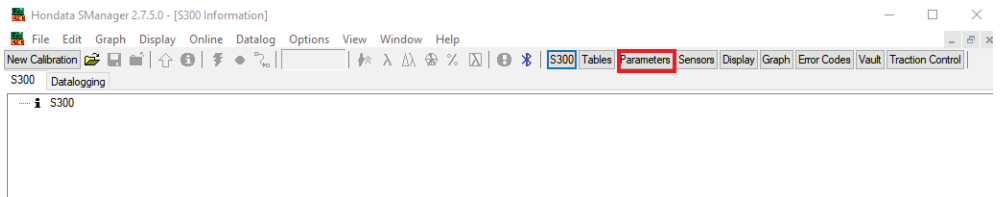
- CAN Output  
MoTeC SDL/ADL

## 2.2

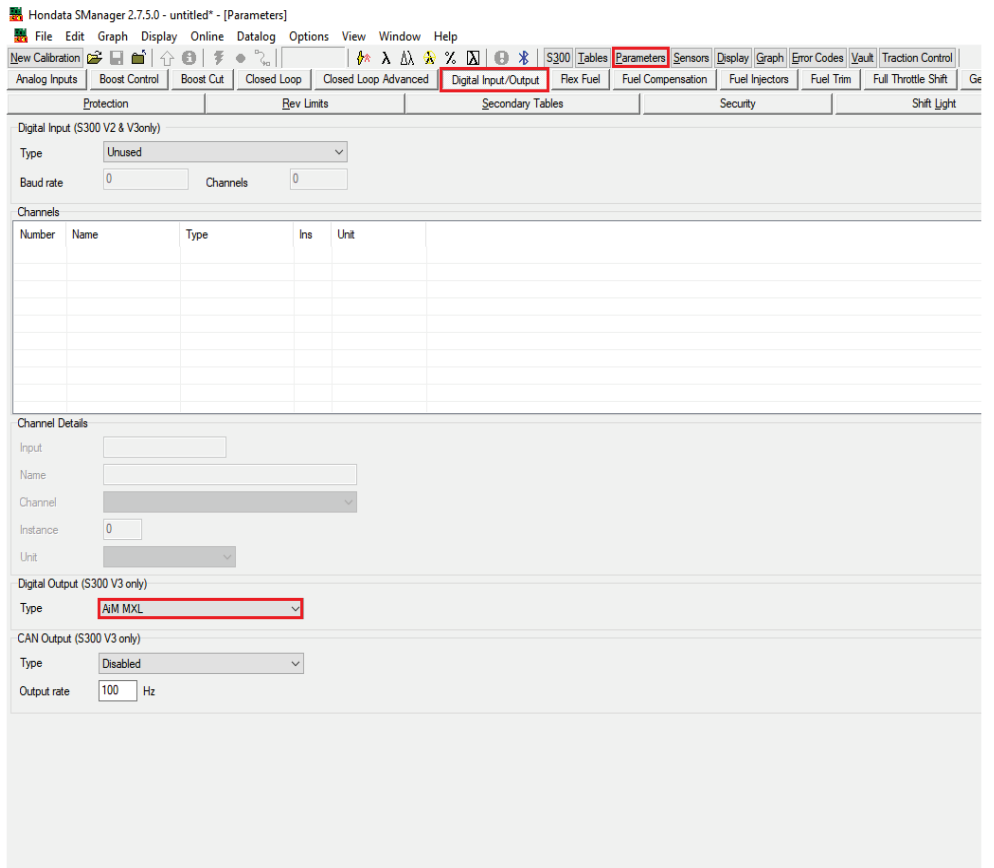
# “Serial – RS232” protocol software setup

Follow the steps shown below.

- Parameters



- Digital Input/Output



- Digital Output

**AiM MXL**

### 3

## Wiring connection

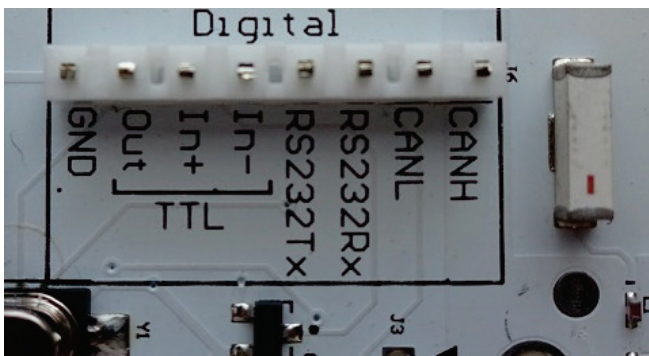
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Hondata S300 V3 module features a CAN and Serial RS232 communication protocol on the white connector shown here below, on the left with cable colour shown on the right. In the bottom there is connection table.

### 3.1

### “CAN” wiring connection

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**S300 Pin**  
CAN High  
CAN Low

**Function**  
CAN High  
CAN Low

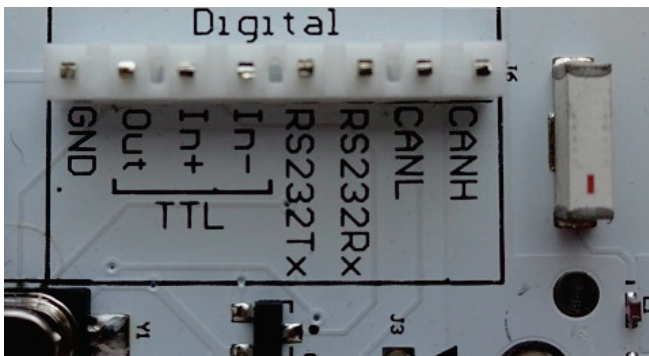


**AiM cable**  
CAN+  
CAN-

**AiM color cable**  
White  
Blue

### 3.2

## “Serial – RS232” wiring connection



**S300 Pin**  
Green

**Function**  
RS232 TX

**AiM cable**  
RS232 RX / ECU RS232 TX

**AiM color cable**  
White

**Please note:**

AiM wiring harnesses supplied after September 2018 have the following labels:

**ECU RS232TX** (white) to be connected to **ECU TX** pin

**ECU RS232RX** (blue) to be connected to **ECU RX** pin (if indicated in the connection table above)

AiM wiring harnesses supplied before September 2018 have the following labels:

**RS232RX** (white) to be connected to **ECU TX** pin

**RS232TX** (blue) to be connected to **ECU RX** pin (if indicated in the connection table above)

## 4

## Race Studio 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: **HONDATA**
- ECU Model: **KPRO4\_CAN** for CAN bus communication protocol  
**KPRO** for Serial RS232 communication protocol

## 5 Protocols

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Channels received by AiM devices change according to the selected protocol.

### 5.1 “Hondata – KPRO” protocol

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Channels received by AiM devices configured with "Hondata - KPRO" protocol are:

| <b>CHANNEL NAME</b>     | <b>FUNCTION</b>            |
|-------------------------|----------------------------|
| HONDATA_RPM             | RPM                        |
| HONDATA_SPEED           | Vehicle speed              |
| HONDATA_GEAR            | Engaged gear               |
| HONDATA_ECT             | Engine coolant temperature |
| HONDATA_IAT             | Intake air temperature     |
| HONDATA_BATTERY         | Battery voltage supply     |
| HONDATA_TPS             | Throttle position sensor   |
| HONDATA_MAP             | Manifold Air Pressure      |
| HONDATA_INJECTOR_TIME   | Injection time             |
| HONDATA_IGNITION_PHASE  | Ignition phase             |
| HONDATA_REVERSE_LOCKOUT | Reverse lockout            |
| HONDATA_BRAKE_SWITCH    | Brake indicator            |
| HONDATA_SCS             | SCS                        |
| HONDATA_EPS             | EPS                        |
| HONDATA_FUEL_PUMP       | Fuel pump indicator        |
| HONDATA_RADIATOR_FAN    | Radiator fan indicator     |
| HONDATA_VTEC_OIL_PRESS  | VTEC oil pressure          |
| HONDATA_VTECS1          | Solenoid indicator 1       |
| HONDATA_VTECS2          | Solenoid indicator 2       |



|                     |                               |
|---------------------|-------------------------------|
| HONDATA_MIL         | Malfunctioning indicator lamp |
| HONDATA_CAM_ANGLE   | Cam angle                     |
| HONDATA_LAMBDA      | Lambda value                  |
| HONDATA_AFR         | Air/Fuel ratio                |
| HONDATA_KNOCK_COUNT | Knock since power on          |

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.

## 5.2

### “Hondata – KPRO4\_CAN” protocol

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Channels received by AiM device connected to "Hondata – KPRO4\_CAN" protocol are:

| <b>CHANNEL NAME</b> | <b>FUNCTION</b>            |
|---------------------|----------------------------|
| ECU RPM             | RPM                        |
| ECU SPEED           | Vehicle speed              |
| ECU GEAR            | Engaged gear               |
| ECU VOLTAGE         | Battery supply             |
| ECU IAT             | Intake air temperature     |
| ECU ECT             | Engine coolant temperature |
| ECU TPS             | Throttle position sensor   |
| ECU MAP             | Manifold air pressure      |
| ECU INJ             | Injection time             |
| ECU IGN             | Ignition angle             |
| ECU LAMBDA          | Lambda value               |
| ECU KNOCK CNT       | Knock counter              |
| ECU CAM TARGET      | Camshaft target            |
| ECU CAM ACTUAL      | Actual camshaft            |
| ECU POIL            | Oil pressure               |
| ECU OILT            | Oil temperature            |





|              |                  |
|--------------|------------------|
| ECU ANALOG2  | Analog signal 2  |
| ECU ANALOG3  | Analog signal 3  |
| ECU ANALOG4  | Analog signal 4  |
| ECU ANALOG5  | Analog signal 5  |
| ECU ANALOG6  | Analog signal 6  |
| ECU ANALOG7  | Analog signal 7  |
| ECU FREQ Hz  | Frequency        |
| ECU ETH CONT | Ethanol counter  |
| ECU FUEL T   | Fuel temperature |

Technical note: not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.