

AIM Infotech

Hondata KPro ECU

Release 1.02



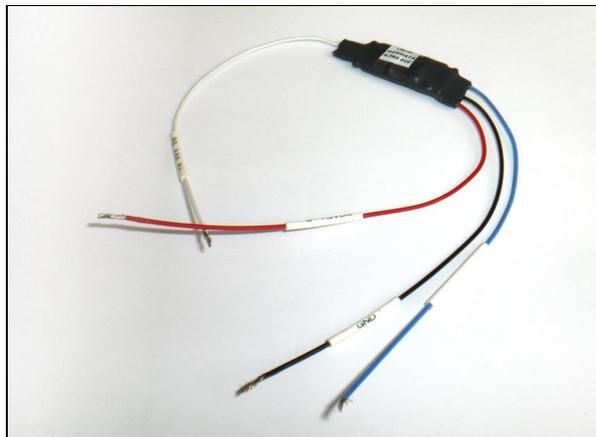
This tutorial explains how to connect Hondata KPro ECU to AIM devices.
Hondata KPro protocol can be used for properly managing the following ECU:

- KPro PRB;
 - KPro PNF;
 - Kpro PND;
 - Kpro PC;
 - Kpro PRD.
- } These requires the PRB calibration.

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Prerequisite

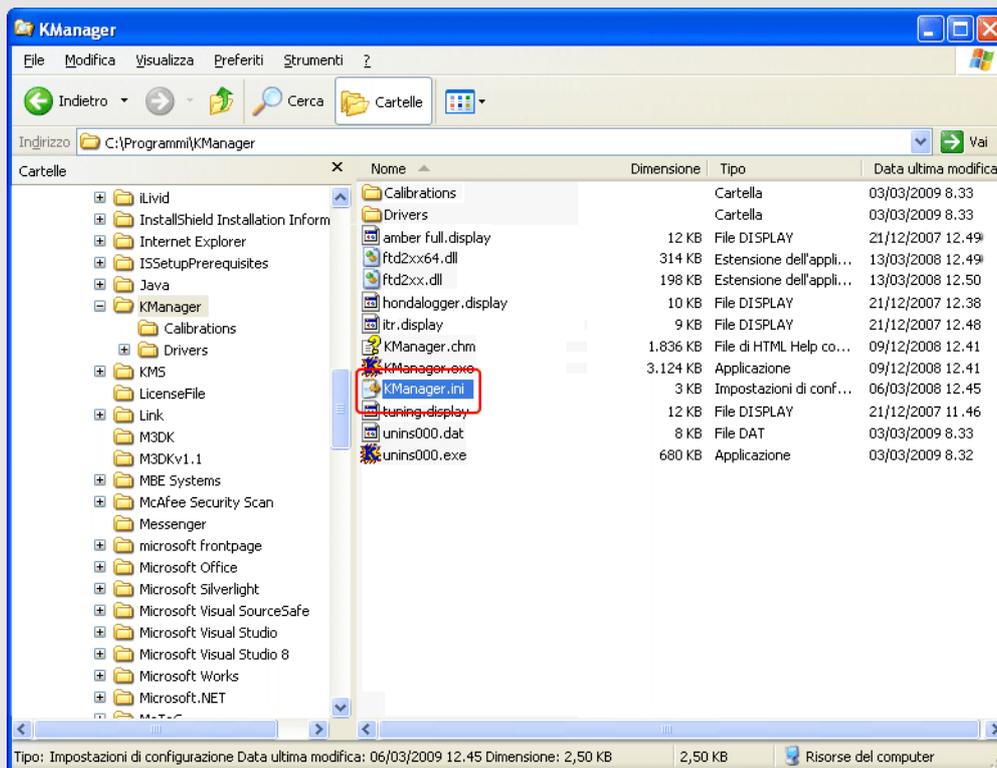
Hondata KPro ECU communicates with AIM devices using an optional board that has been properly designed and developed by AIM. Its part number is: X05EFIHKPRO and it is shown here below.



2 Software Setup

Hondata KPro ECU communicates and exports data to an external logger through the serial communication protocol. The ECU comes with KManager software and needs a software setup before connecting it to AIM devices. Install KManager software and follow these steps.

- Open KManager installation folder in your PC.
- Double click on it and search for “KManager.ini”

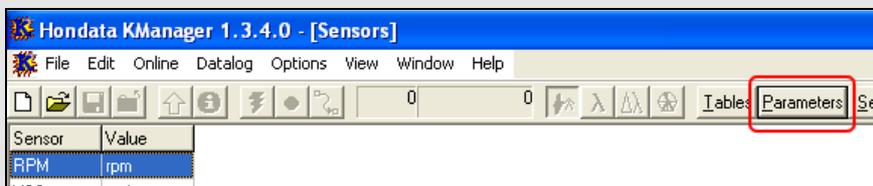


Right click on it and select “Open with –> Notepad”.

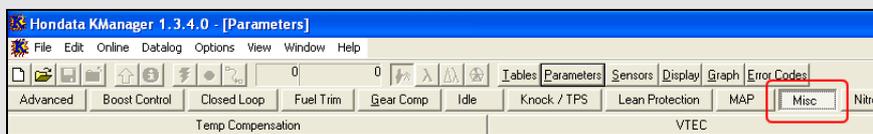
- The window here below appears;
- Add a row stating "Dataloggingoutput=1" after [Settings] one as shown here below;
- Save and close the file.

```
[[MainForm]
WindowState=2
[TableForm]
Splitter=385
Left=300
Width=638
Top=300
Height=308
WindowState=0
[ParametersForm]
CurrentTab=5
Left=78
Width=458
Top=5
Height=480
WindowState=0
[ErrorCodeForm]
Splitter=169
Left=345
Width=374
Top=21
Height=313
WindowState=0
[View]
SensorsForm=0
[Settings]
DefaultDirectory=C:\Programmi\KManager\
DefaultDataLoggingDirectory=C:\Programmi\KManager\
AutoConnect=0
AutomaticUpdates=1
OutdatedCheck=1
TableBoostView=0
TablesFollowVTEC=1
TablesFollowCamAngle=0
ShowColour=1
Show3DGraph=1
SettingsTab=0
VacuumUnit=2
VacuumBase=0
```

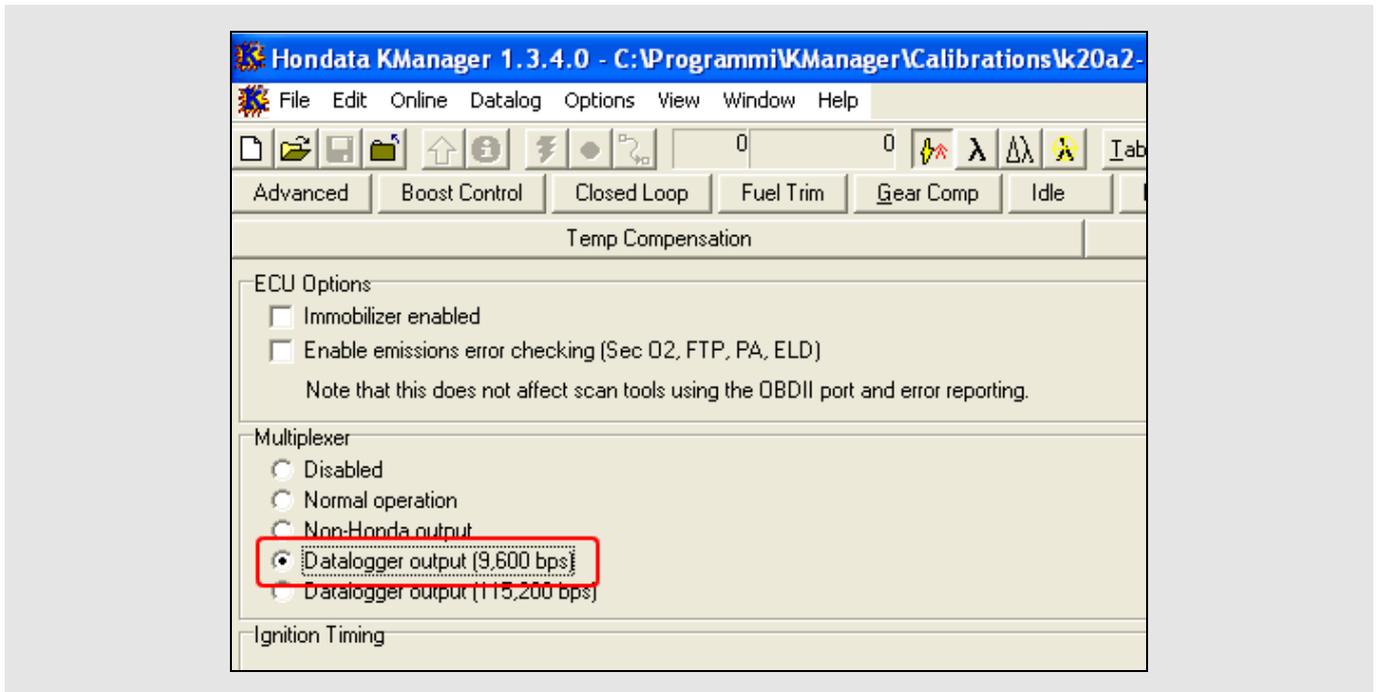
- Run "KManager" software;
- Press "Parameters";



- Press "Misc"



- Set "Datalogger Output (9.600 bps)" as shown here below.

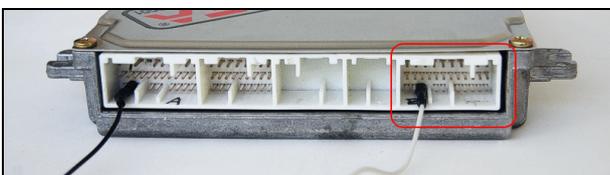


- Power the ECU and upload the calibration.
- Connect AIM device to pin E24 of the ECU right connector (a serial stream on E24 should appear whenever the ECU is powered on).

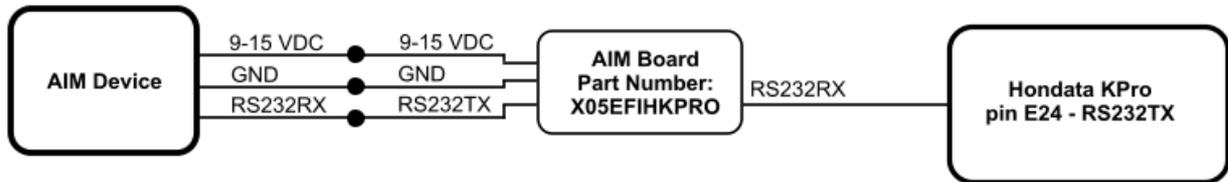
Please note: for further information concerning ECU firmware / software settings and/or upgrading it is always recommended to address to the ECU dealer.

3 Wiring connection

Hondata KPro ECU connects with AIM devices through the AIM Board and the ECU "E" connector shown below.



Here follows connection diagram of AIM device, AIM Board and Hondata KPro ECU and connection table.



| AIM Hondata board cable | AIM device cable | Hondata KPro E connector pin |
|-------------------------|------------------|------------------------------|
| 9-15 VDC | 9-15 VDC | |
| GND | GND | |
| RS232TX | RS232RX | |
| RS232RX | | E24 |

4 AIM Logger configuration

Once the ECU connected to the logger, this last one is to be configured as connected to that ECU.

Run Race Studio 2 software and follow this path:

- Device Configuration -> Select the device you are using;
- select the configuration or press "New" to create a new one;
- select ECU manufacturer "Hondata" and ECU Model "KPro";
- transmit the configuration to the device pressing "Transmit".



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Available channels

Channels received by AIM loggers connected to Hondata KPro ECU are:

| ID | CHANNEL NAME | FUNCTION |
|--------|-------------------------|-------------------------------|
| ECU_1 | HONDATA_RPM | RPM |
| ECU_2 | HONDATA_SPEED | Vehicle speed |
| ECU_3 | HONDATA_GEAR | Engaged gear |
| ECU_4 | HONDATA_ECT | Engine cooling temperature |
| ECU_5 | HONDATA_IAT | Intake air temperature |
| ECU_6 | HONDATA_BATTERY | Battery voltage supply |
| ECU_7 | HONDATA_TPS | Throttle position sensor |
| ECU_8 | HONDATA_MAP | Manifold Air Pressure |
| ECU_9 | HONDATA_INJECTOR_TIME | Injection time |
| ECU_10 | HONDATA_IGNITION_PHASE | Ignition phase |
| ECU_11 | HONDATA_REVERSE_LOCKOUT | Reverse lockout |
| ECU_12 | HONDATA_BRAKE_SWITCH | Brake indicator |
| ECU_13 | HONDATA_SCS | SCS |
| ECU_14 | HONDATA_EPS | EPS |
| ECU_15 | HONDATA_FUEL_PUMP | Fuel pump indicator |
| ECU_16 | HONDATA_RADIATOR_FAN | Radiator fan indicator |
| ECU_17 | HONDATA_VTEC_OIL_PRESS | Oil pressure |
| ECU_18 | HONDATA_VTECS1 | Solenoid indicator 1 |
| ECU_19 | HONDATA_VTECS2 | Solenoid indicator 2 |
| ECU_20 | HONDATA_MIL | Malfunctioning indicator lamp |
| ECU_21 | HONDATA_CAM_ANGLE | Cam angle |
| ECU_22 | HONDATA_LAMBDA | Lambda value |
| ECU_23 | HONDATA_AFR | Air/Fuel ratio |
| ECU_24 | HONDATA_KNOCK_COUNT | Knock since power on |