

AIM Infotech

Hondata KPro ECU

Release 1.04



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Supported models

This tutorial explains how to connect Hondata KPro ECU to AiM devices. Supported models are:

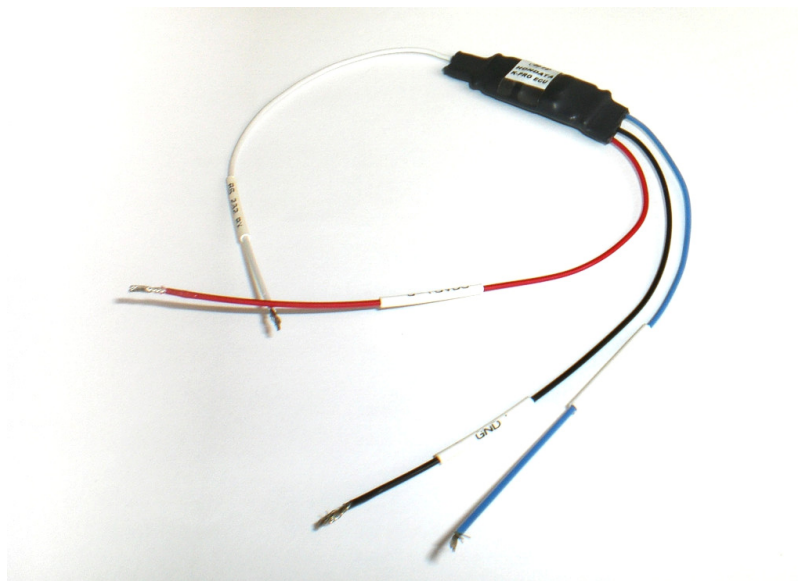
- KPro PRB
- KPro PNF*
- Kpro PND*
- Kpro PC*
- Kpro PRD*

***Please note:** these ECU need 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.



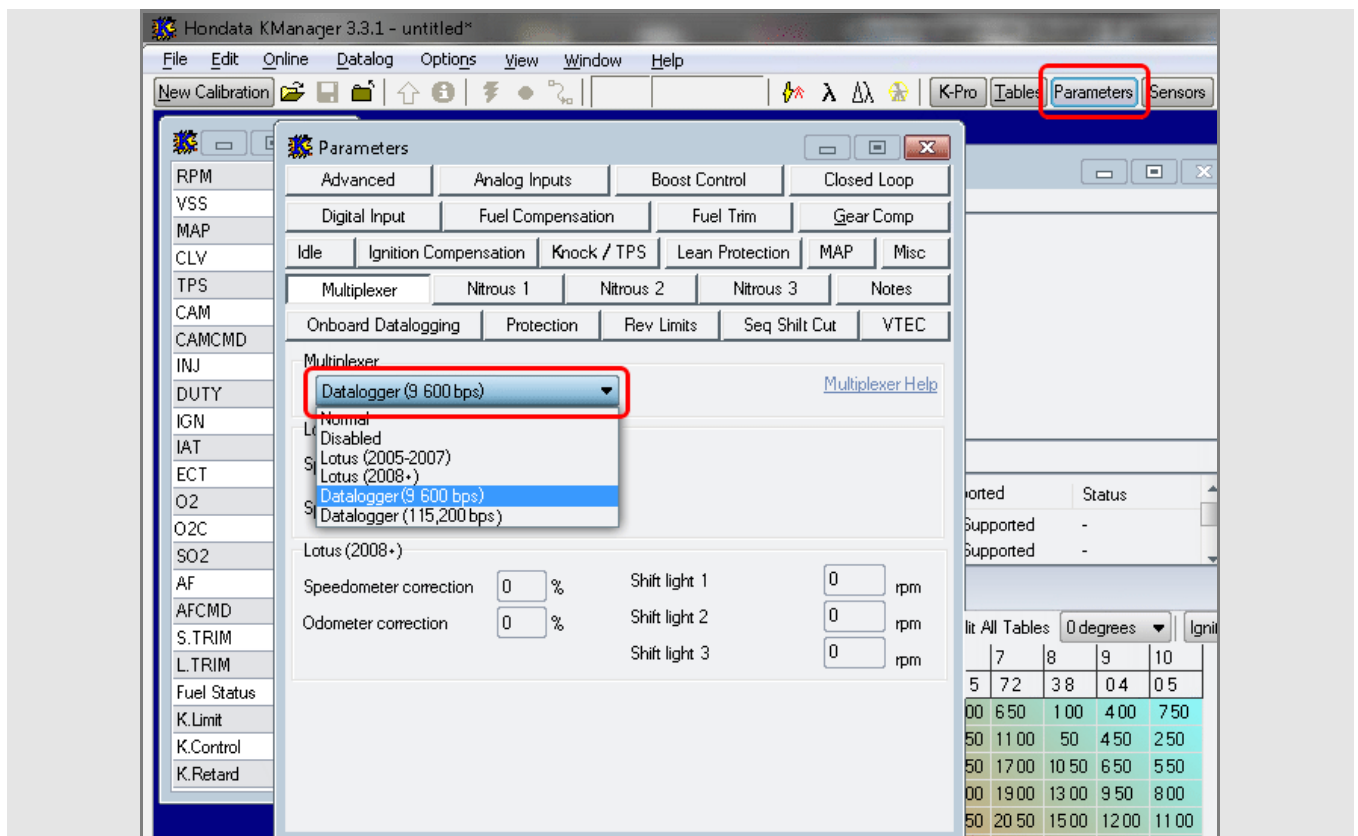
3 Software Setup

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. This setup changes according to the ECU firmware version.

3.1 ECU with firmware version 3.3.1 or higher

Install KManager software and follow these steps.

- Click "Parameters" button
- "Parameters" panel appears: activate the drop down menu in "Multiplexer" box and select "Datalogger (9600 bps)" as shown here below.

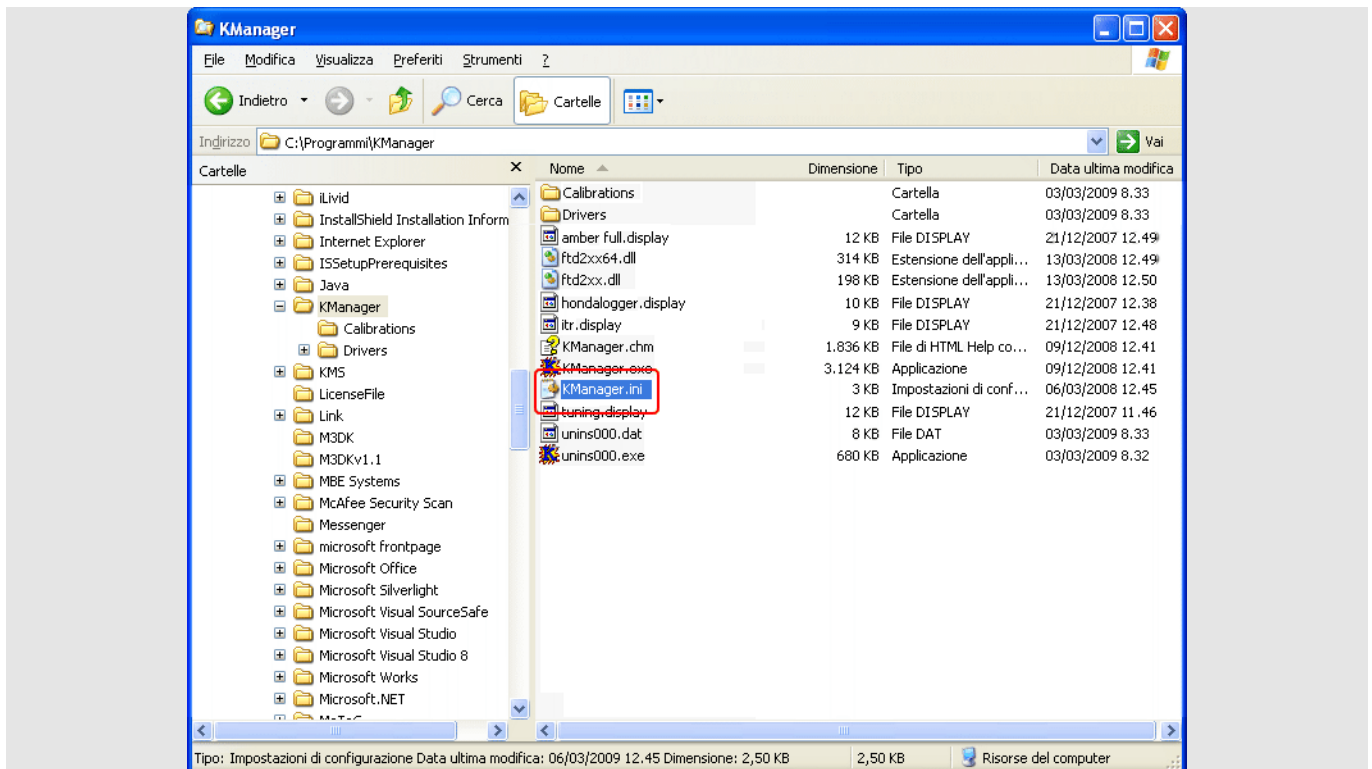


3.2

ECU with firmware version lower than 3.3.1

Install KManager software and follow these steps.

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

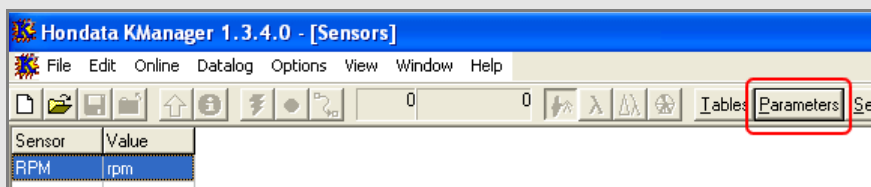


Right click on it and select “Open with → Notepad”.

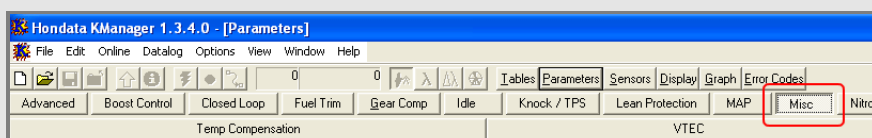
- The window here below appears;
- Add a row stating “**Dataloggingoutput=1**” after [Settings] one as shown here below;
- Save and close the file.

```
[[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
```

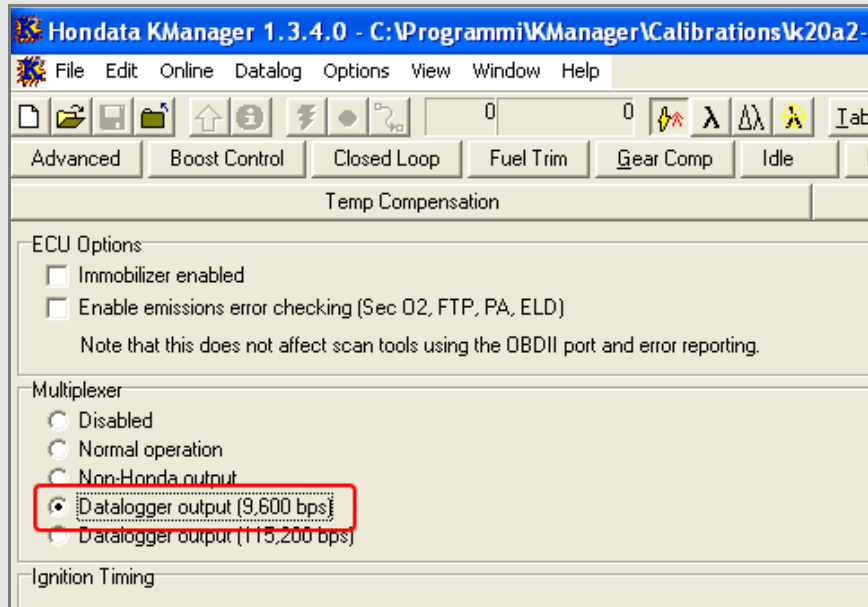
- Run “KManager” software;
- Press “Parameters”;



- Press “Misc”



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



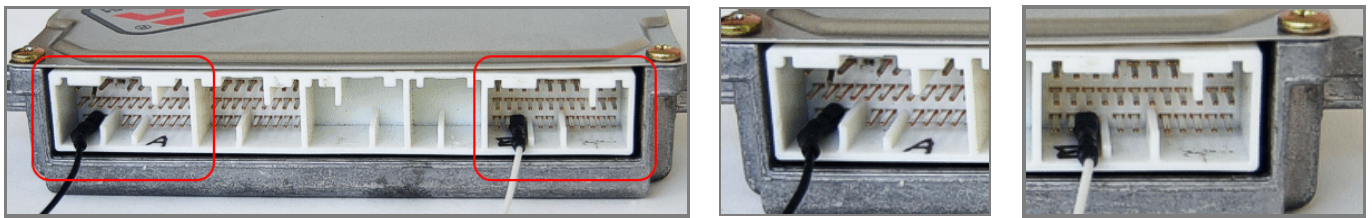
- Power the ECU and upload the calibration.
- Connect AIM device to pin E24 of the ECU right connector (a serial stream on E24 should appear whenever the ECU is powered on).

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

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Wiring connection

Hondata KPro ECU connects with AiM devices through an AiM Board, part number **X05EFIHKPRO**, and the ECU "A" and "E" connectors as shown below.



Here below is 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 | A24 |
| RS232TX | RS232RX | |
| RS232RX | | E24 |

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AiM device 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 "KPro";

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Available channels

Channels received by AiM device connected to "Hondata" "KPro" protocol 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 |