



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:

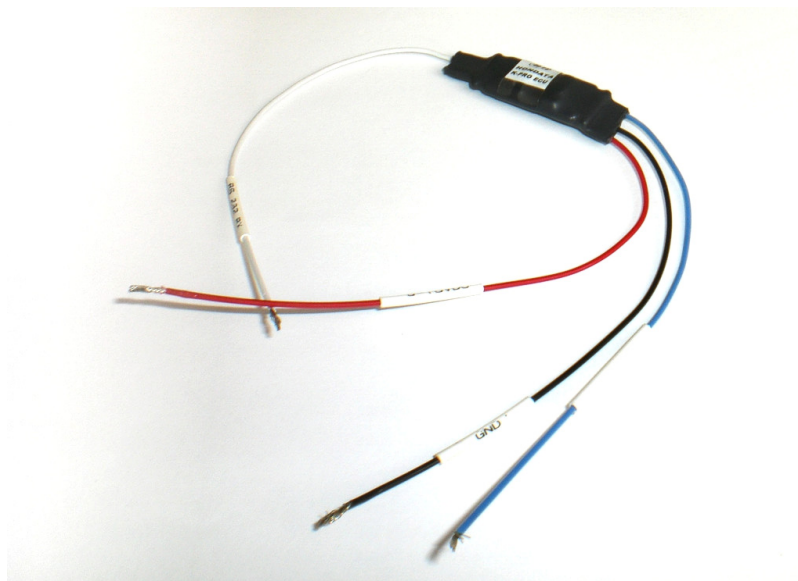
- KPro PRB
- KPro PNF*
- Kpro PND*
- Kpro PC*
- Kpro PRD*

***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.



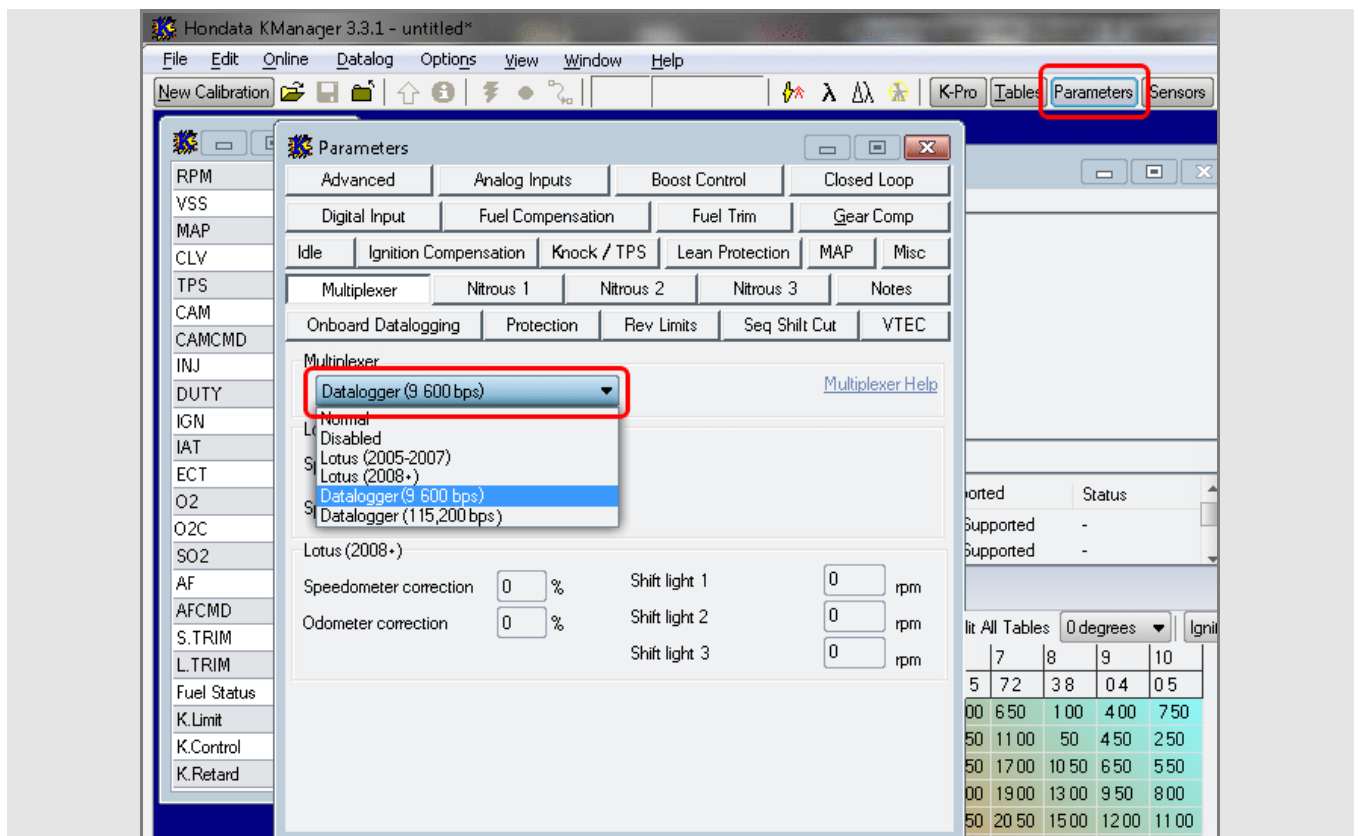
3 Software Setup

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.

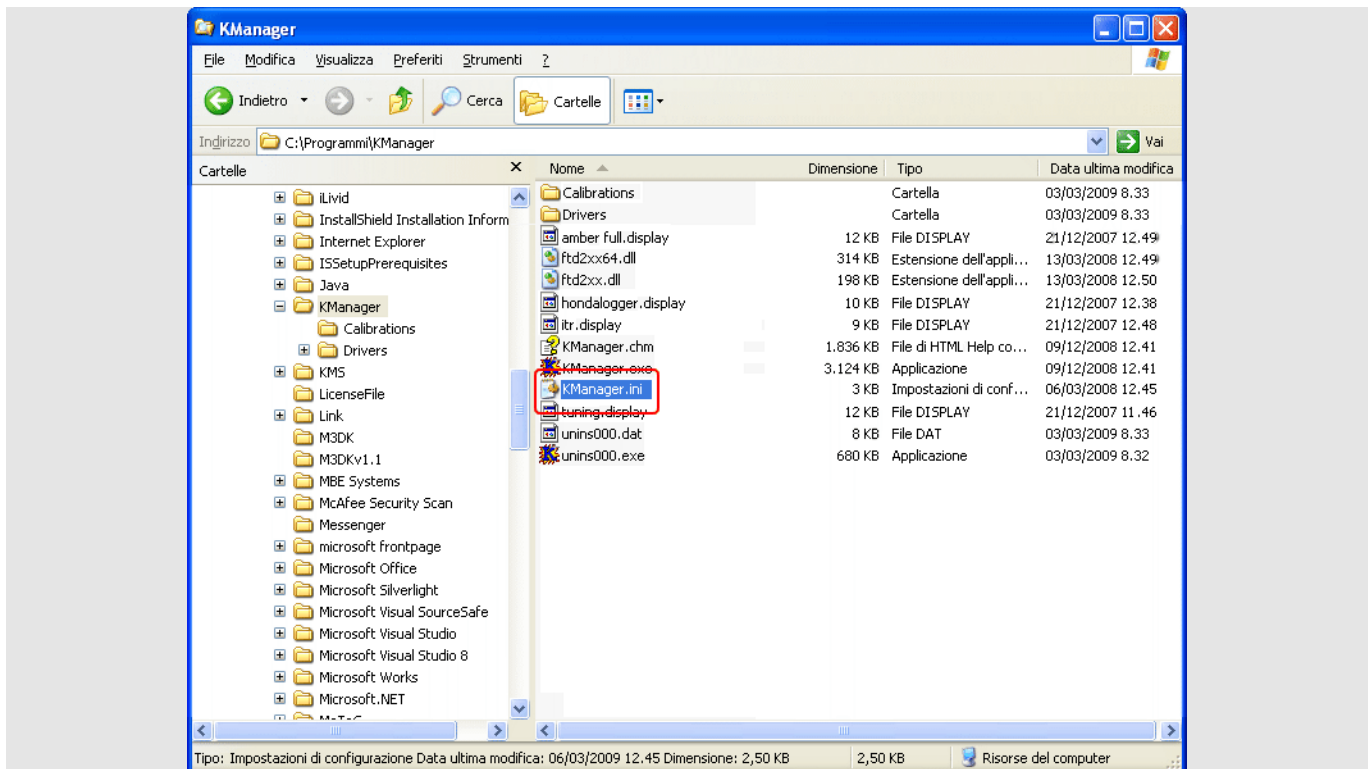


3.2

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”

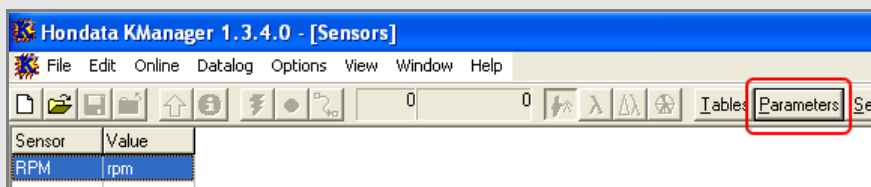


Right click on it and select “Open with → Notepad”.

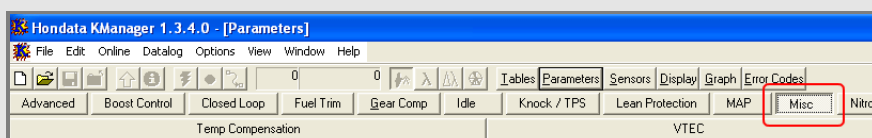
- The window here below appears;
- Add a row stating “**Dataloggingoutput=1**” after [Settings] one as shown here below;
- Save and close the file.

```
[[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
[Settings]
Dataloggingoutput=1
DefaultDirectory=C:\Programmi\KManager\
```

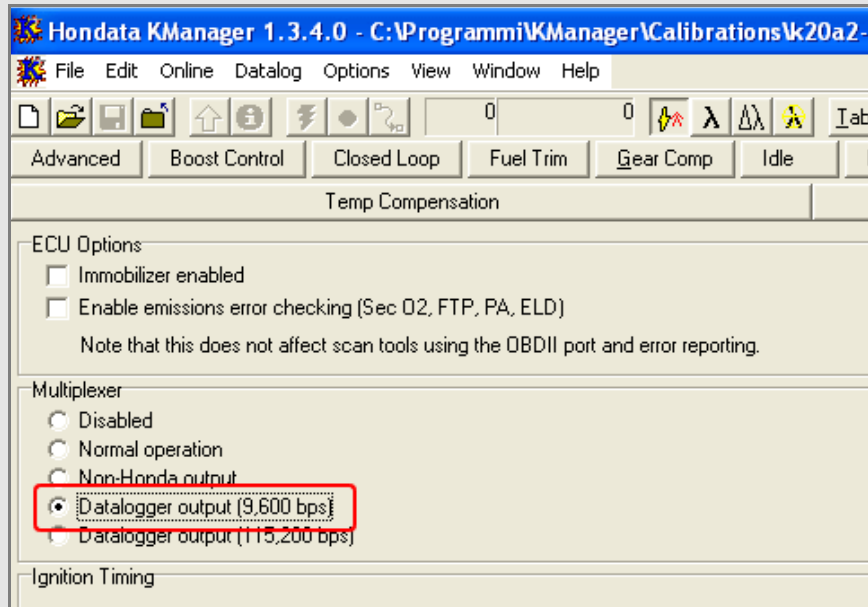
- Run “KManager” software;
- Press “Parameters”;



- Press “Misc”



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



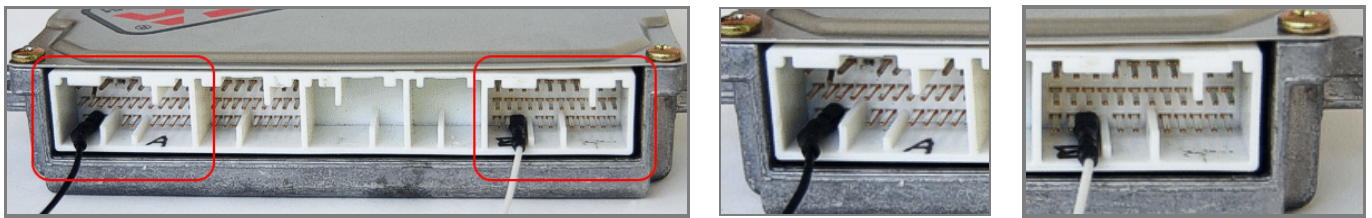
- Power the ECU and upload the calibration.
- Connect AIM device to pin E24 of the ECU right connector (a serial stream on E24 should appear whenever the ECU is powered on).

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