AIM Infotech

Hondata KPro ECU

#### Release 1.03







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

These requires the PRB calibration.

- KPro PRB;
- KPro PNF: `
- Kpro PND;
- Kpro PC;
- Kpro PRD.

#### 1 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.



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## 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. This setup changes according to the ECU firmware version.

# 2.1 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.

Image: Second Status   RPM   Advanced Analog Inputs Boost Control Closed Loop   VSS Digital Input Fuel Compensation Fuel Trim Gear Comp   CLV Idle Ignition Compensation Knock / TPS Lean Protection MAP   CLV Idle Ignition Compensation Knock / TPS Lean Protection MAP   CLV Idle Ignition Compensation Knock / TPS Lean Protection MAP   CAM Onboard Datalogging Protection Rev Limits Seq Shilt Cut VTEC   INJ Intra Detalogger (6 600 bps) Multiplexer Multiplexer Help onted Status   IAT Disabled Intra (2008-) Intra (2008-) Order Status Supported -   SO2 Lotus (2008-) Otioneter correction % Shift light 1 0 mpm   AFCMD Odometer correction % Shift light 2 0 mpm   Truel Status KLimit KLimit Status 5 72 38 04 05 72 38
K.Retard 50 1700 1050 550 550



# 2.2 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.

File Modifica Formato Vis	Jalizza ?	
[[MainForm] WindowState=2 [TableForm] Splitter=385 Left=300 Width=638 Top=300 Height=308 WindowState=0		
[ParametersForm] CurrentTab=5		
width=458 Top=5 Height=480 windowState=0 [ErrorCodeForm] Splitter=169 Left=345 width=374 Top=21 Height=313 windowState=0		
[View] SensorsForm=0		
DefaultDirectory=C DefaultDatalogging AutoConnect=0	\Programmi\KManager\ irectory_C:\Programmi\KManager\	
AccumaticOpdtes=1 TableBoostView=0 TableSFollow/TEC=1 TableSFollow/TEC=1 ShowColour=1 Show3DGraph=1 SettingSTab=0 VacuumUnit=2	[Settings] Dataloggingoutput=1 DefaultDirectory=C:\Programmi\KManager\	

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



• Press "Misc"

🗱 Hondata KManager 1.3.4.0 - [Parameters]					
🇱 File Edit Online Datalog Options View Window Help					
	Tables Parameters Sensors Display Graph Error Codes				
Advanced Boost Control Closed Loop Fuel Trim Gear Comp	dle Knock / TPS Lean Protection MAP Misc Nitro				
Temp Compensation	VTEC				



• 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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## 3 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 follows connection diagram of AIM device, AIM Board and Hondata KPro ECU and connection table.



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### 4 AIM Logger configuration

Before connecting the ECU connected to the logger, set it up as follows:

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".



## 5 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