

FC-HAKO

Apexi PowerFC Compatible Tuning Hardware

By DMS Electronics Design

(ABN 95 651 040 899)

Introductory Guide

v1.04 (21-Mar-2012)

Thank you for purchasing the **FC-HAKO**. This guide is intended to provide a summary of how to get the FC-HAKO to function with drivers, how to test it to confirm it works, and what to do when there are problems or if you have any questions.

Drivers

FC-HAKO uses a USB-to-serial controller called Prolific. Drivers are recommended to be installed **PRIOR** to connecting to the USB port:

- 1) download driver from http://fc-hako.com/files/pl2303_v150.zip
alternatively, <http://fc-hako.com/pfc/technical/files/>
- 2) unarchive (extract) the zip file.
- 3) right click "PL2303_Prolific_DriverInstaller_v150.exe" and select "Run as Administrator"
- 4) follow the prompt.
- 5) If the FC-HAKO was already connected prior to this step, reconnection is required.

Issues

If there are any issues, please read the FAQ at <http://fc-hako.com/pfc/faq/> if you happen to miss anything simple but not obvious. If you have purchased the FC-HAKO prior to 21-Mar-2012, a firmware upgrade to v1.07 is recommended.

There are two (or three) methods to verify if communications to and via the FC-HAKO works. First method involves the debug tool **FC-HAKO-debug.exe**:

- 1) Download from the technical download files page - <http://fc-hako.com/pfc/technical/files/>
- 2) Connect **FC-HAKO** to the car and the PC. Start IGN.
- 3) Run **FC-HAKO-debug.exe COMX test**, where **COMX** is the USB port (*serial port*) you have connected the **FC-HAKO**.
- 4) The debug tool sends 10 commands to the PowerFC then repeats the process by sending each command 32 times. Each dot represents success. Any other character represents failure. If one out of ten command fails, then that is not a problem. Only if all commands fail.

The second method is to confirm if communications between PC and FC-HAKO works, omitting the possibility of a problem between FC-HAKO and PowerFC. This can be performed with the firmware update tool. For this method, see the technical download files page and download the 3 files under the Firmware section, then follow the instructions specified by [FC-HAKO-Firmware.pdf](#).

If it is still a problem - or you managed to resolve a problem yourself - **please send an email to sales@fc-hako.com** and David will attempt to analyse and resolve the problem.

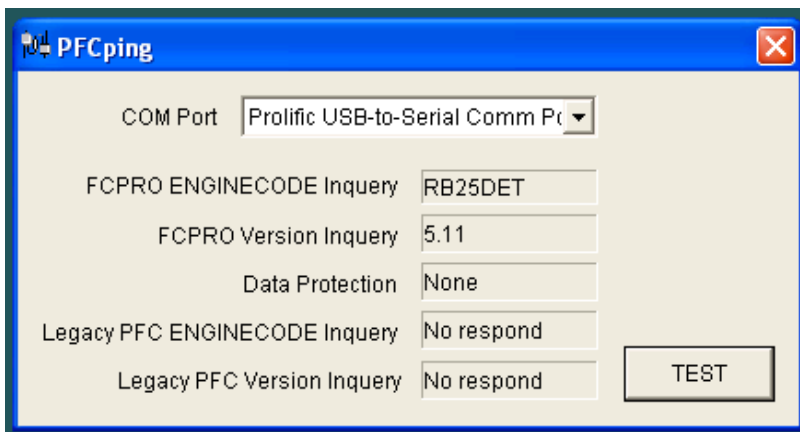
Initial Testing: OPTIONAL

It is possible to accidentally trigger strange issues when utilising the **FC-HAKO**. Some low-memory and harddrive-based laptops may take up to 60 seconds in order to load the usb-to-serial driver. Removing FC-HAKO and connecting it up again without restarting software will also trigger "hardware not detected" issues. Connecting the USB cable to a different port may register as a different COM port, if you have multiple usb-to-serial devices.

In order to perform first-time testing, please following the instructions:

- 1) Download and install **PFCping** (<http://www.kaele.com/~kashima/car/pfcadp/PFCping1006.zip>)
- 2) Connect **FC-HAKO** to the PowerFC and PC.
- 3) Turn ignition on your vehicle.
- 4) Run **PFCping** software and select the correct COM port. Press the "TEST" button:

You should then see the following:



- **FCPRO ENGINE CODE:** specific to your PowerFC.
- **FCPRO Version** specific to your PowerFC.
- **Data Protection:** (if "password" is set. only used by FC-PRO software)
- **Legacy PFC ENGINECODE** as "No respond" if you have an FCC3-based hand controller
- **Legacy PFC Version** as "No respond" if you have an FCC3-based hand controller.

6) If it consistently shows the same valid data, time and time again, the device and vehicle combo can be considered **WORKING**.

7) **Now try software such as Copilot (if vehicle is supported), FC-PRO or FC-Edit.**

8) If you intend to connect a WBo2 controller, please read the WBo2 guide ([FC-HAKO-WBo2.pdf](#)), also available at the technical download files page.

If there are any problems, questions or even feedback, please send it to sales@fc-hako.com.

All feedback or questions are welcome.

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