Firewire – Performance improvement guide (PC)

This guide will provide you with the basic steps to insure the Firewire controller (also known as IEEE 1394) of your computer is configured correctly to be used with the 16/12 FW.

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Minimum Requirements

This list includes all the minimum conditions required in order for the 16/12 FW to be installed on your computer

- Be sure to obtain the latest updates for your computer (BIOS and chipset drivers). These are available from the computer manufacturer's web site.

- As indicated on the box, **Windows XP Service Pack 1a or higher** is necessary to use your 16/12. Microsoft improved the support for Firewire from this major operating system update.

- The 16/12 FW was designed to work with **OHCI IEEE 1394A** Compatible controller. Recent **1394B** controllers, which support higher transfer, speed will also work, but won't provide any improvement, as the 16/12 FW is a 400 Mbps device.

Resource sharing

Make sure the Firewire controller is not sharing resource with other components of the computer, which could result in click and noises in the audio, or even prevent the 16/12 FW from being installed:

- From the Start menu, click "Run" and type:

msinfo32

This starts Windows System Information program.

- On the left hand side you can see a 'tree' view, similar to those used in the Windows Explorer. Select **Hardware Resources** and then **IRQs**.
- On the right hand side should appear a list of your devices with the respective IRQ to which it has been assigned.
- Find your Firewire controller (probably seen as OHCI IEEE 1394). Check if it shares an IRQ with other devices.
- It is normal for certain devices to share IRQ (such as USB ports), but certain components (such as graphic card, IDE, RAID, SATA or other components requiring a lot of bandwidth such as your Firewire controller in this case) should have their own IRQ to prevent any possible conflict.

In order to free some resources, a couple of solutions are possible:

- Disable unused components of your computer such as Printer (parallel) or Serial Port, as well as extra USB ports.

- Use a different PCI slot for some of your components.

- It might also be possible to force IRQ setting through the motherboard bios. Consult your computer manual for more details.

For more details about IRQ in Windows XP:

http://support.microsoft.com/default.aspx?scid=kb;EN-US;q314068

Power management

Depending on your computer configuration and Firewire controller, some additional options might be available regarding the power management.

For example, a tab could be available in Device Manager in the properties of the Firewire controller.
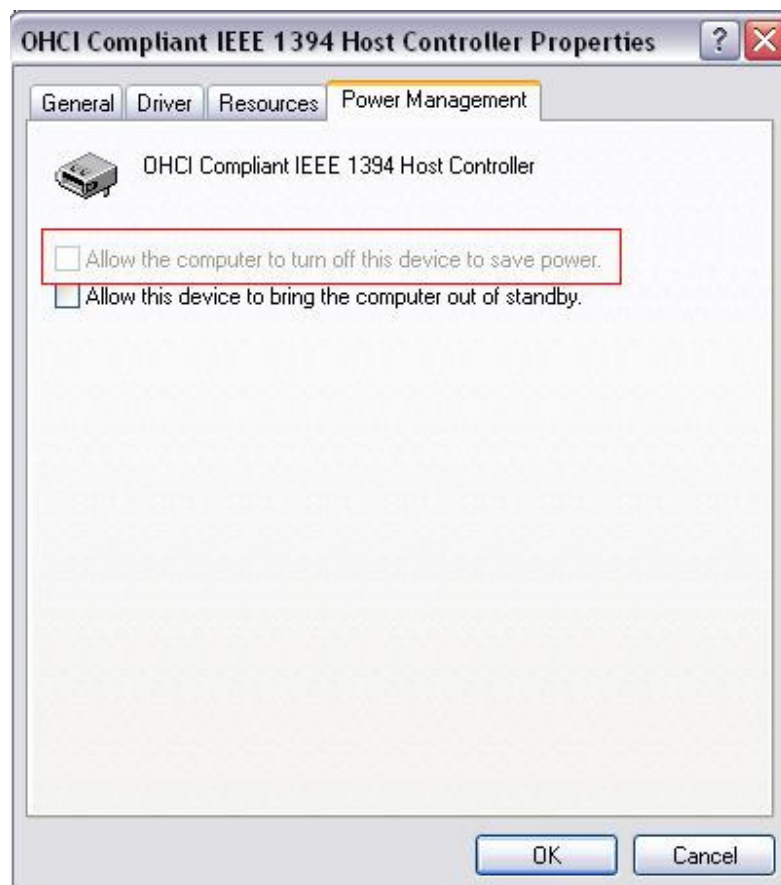
As shown, this option may or may not be available (or selectable) depending on your BIOS configuration or controller capability. Consult your documentation or the manufacturer for information related to your specific computer model.

Networking

As Firewire controllers can also be used for network connection, it is usually recommended to completely disable this functionality to prevent possible conflicts and data transfer problems. This can easily be performed through Device Manager:
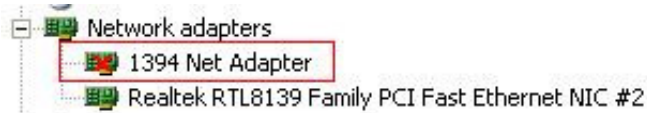
- Expand **Network Adapters**
- Right click on **1394 Net Adapter**, and select **Disable.**

Additionally, if you are using a Firewall to protect your computer, it might interfere with the data transfer of your Firewire controller, as is it normally set to protect all network adapters (even if disabled). Here again, it is recommended to disable this function.
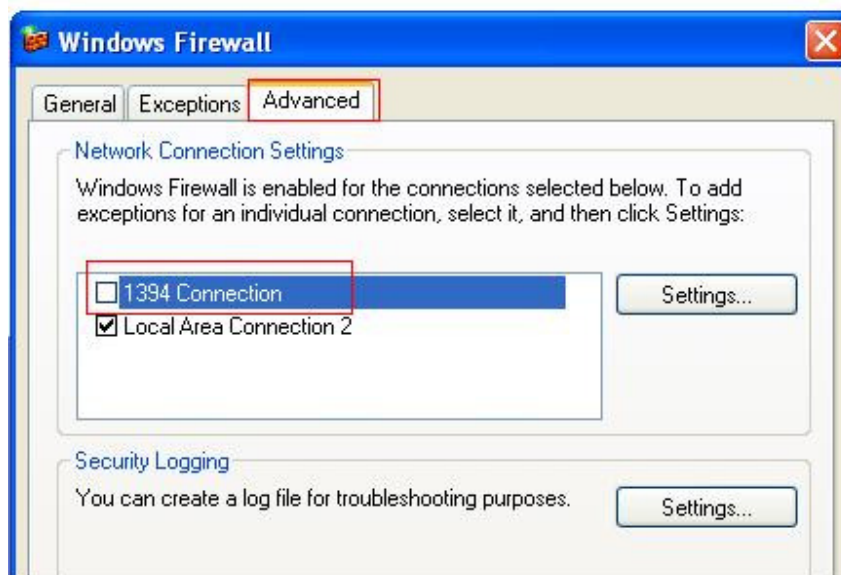
Here is how to proceed with Windows Firewall, which is accessible through Windows **Control Panel**:

If you are using another type of Firewall, consult your documentation to perform similar changes.

Known Issues

If you meet problems such as random non-detection of your Hercules 16/12 FW or errors in the process of flashing Hercules 16/12 FW Firmware, you may be experiencing one of the following known issues:

- If you are using an **integrated** Firewire controller, please disable it and try installing your 16/12 FW using a PCI or Cardbus controller instead. A few cases have been reported where this helped correct the problem, even though the new controller was using the exact same chip as the integrated one.

- When using certain controllers under **Windows XP Service Pack 2,** the installation of this Microsoft Hotfix might be necessary.

http://support.microsoft.com/kb/885222/en-us

Since Windows XP SP2 changed 1394B ports to S100 speed with this upgrade, it may affect some Firewire controllers.

If these step didn't help, and you are still experiencing problems installing your 16/12 FW, please contact our technical support.