# **Firewire – Performance improvement guide**

This guide will provide you with the basic steps to insure the DV Action, your Firewire controller (also known as IEEE 1394) is correctly configured to be use for video capture.

<u>Minimum requirements</u> <u>Resource sharing</u> <u>Power management</u> <u>Networking</u> <u>other Hotfix</u>

#### **Minimum Requirements**

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

With certain configurations using **Windows XP Service Pack 2**, the installation of this Microsoft Hotfix might be necessary.

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

At the end of this document, you will find a list of other Microsoft hotfix related to specific configuration or manufacturers.

### **Resource sharing**

Make sure the Firewire controller is not sharing resource with other components of the computer, which could result in problems during the video capture, or even prevent your camera 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.

HCI Compliant II	EEE 1394 Host C	ontroller Properties	?
General Driver F	lesources Power M	lanagement	
	mpliant IEEE 1394 H	ost Controller	
	uter to turn off this de	and the second careful	
Allow this devic	e to bring the compu	ter out of standby.	

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.

## <u>Networking</u>

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**:

Vindows	irewall		
eneral Exce	eptions Advanced		
	Connection Area Connection 2	Set	tings

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

## **Other Hotfix**

• You experience problems when you disconnect a single IEEE 1394 device from a computer that is running Windows XP SP2

http://support.microsoft.com/default.aspx?scid=kb;en-us;887170

• You cannot render digital video on an IEEE 1394 (FireWire) device

http://support.microsoft.com/default.aspx?scid=kb;en-us;271464

• Some PAL format digital video cameras are incorrectly detected as NTSC format digital video cameras

http://support.microsoft.com/default.aspx?scid=kb;en-us;893008

• An error has occurred with your capture device" error message when you try to connect your Sony digital video camera

http://support.microsoft.com/default.aspx?scid=kb;en-us;318684

• Panasonic DV Camera May Not Enumerate

http://support.microsoft.com/default.aspx?scid=kb;en-us;810032

• The image in a video stream from an IEEE 1394 video device may roll onscreen

http://support.microsoft.com/default.aspx?scid=kb;en-us;840136