

USB 2.0 Host Controller Driver Update Application Note

Verifying the Current USB 2.0 Host Controller Drivers

The Lumenera cameras will only work with Windows 2000 with Service Pack 4 installed. To verify if your computer is running this, go to the Control Panel and select the System icon. The following diagram shows an example of what you should expect to see.

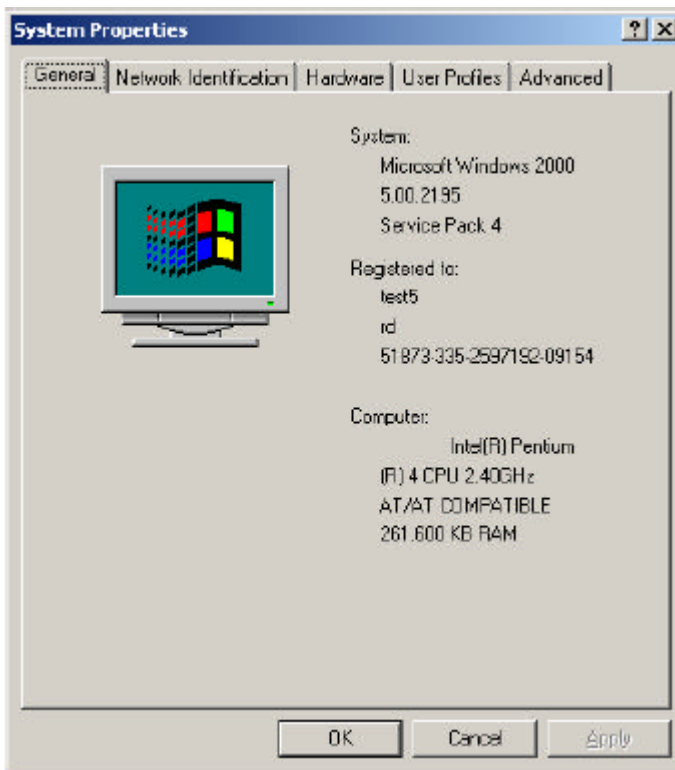


Figure 1 Windows 2000 System Properties dialog box

The next step is to verify that the USB 2.0 Host Controller Drivers are the correct ones. Select the Hardware tab in the System Properties dialog box, then select the Device Manager button, as shown in the following figure.

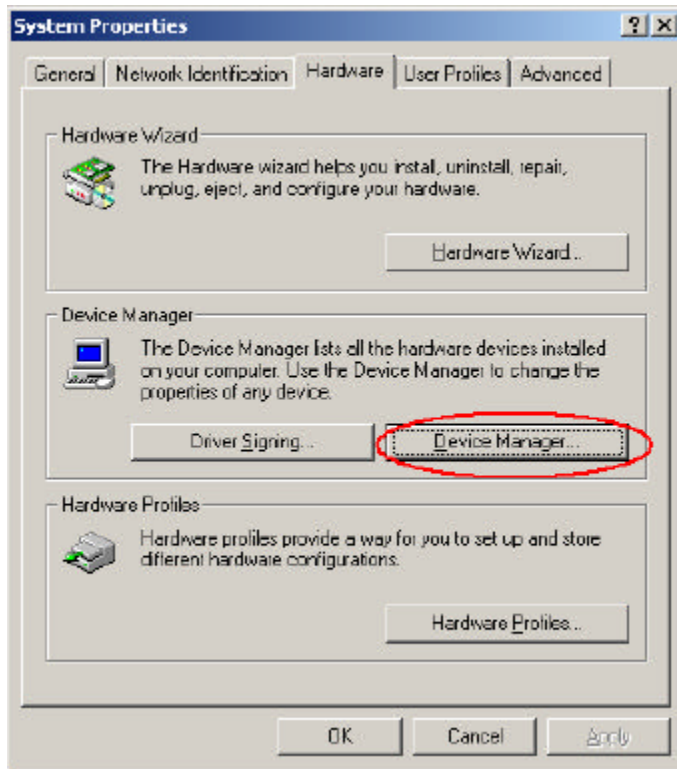


Figure 2 Selecting the Device Manager

The next dialog box is the Device Manager. This dialog box allows you to check the drivers for the USB 2.0 Host Controllers. Within the Universal Serial Bus controllers section, you should see entries that have “Enhanced Host Controller” in their title. These entries correspond to the USB 2.0 Host Controllers installed on your computer. The following figure provides an example of how this should look.

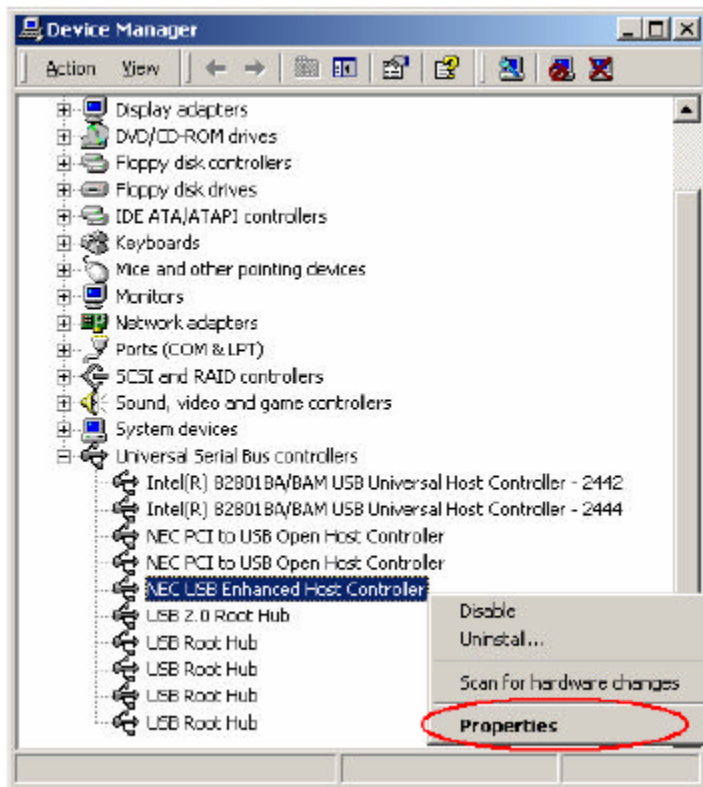


Figure 3 Device Manager dialog box with USB 2.0 Host Controllers

To verify that the drivers installed for these USB 2.0 Host Controllers are indeed those provided by Microsoft, right-click on one of these entries and select Properties. This will bring up the Properties dialog box for this device. An example of this dialog box is shown in the following figure.

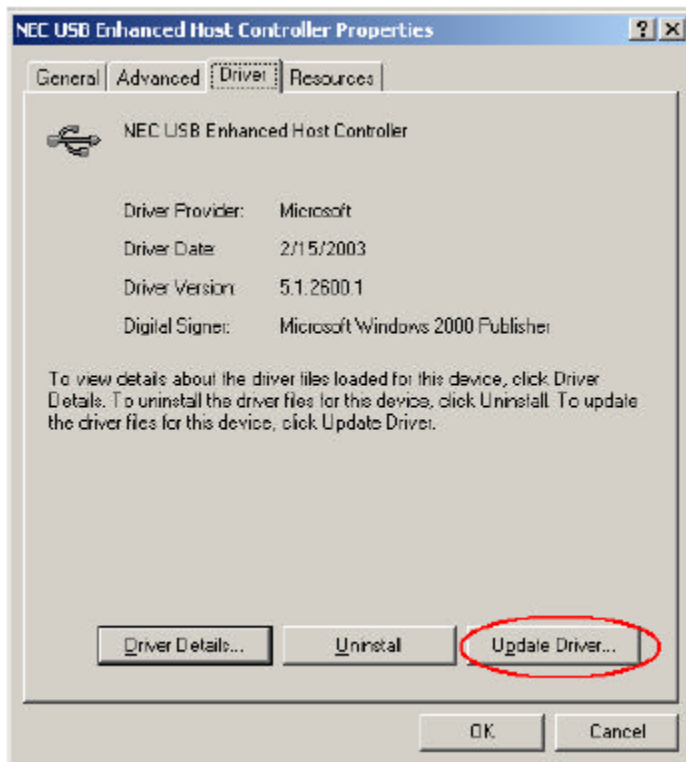


Figure 4 USB 2.0 Host Controller Driver Properties dialog box

As you can see from the above figure, the drivers for this controller are provided from Microsoft. If, on your computer, the Driver Provider is not Microsoft, follow the instructions below to reinstall the Microsoft drivers.

Updating the USB 2.0 Host Controller Drivers

This document explains how users who are using Win2K with SP4 can upgrade their computer to use the Microsoft USB 2.0 Host Controller Drivers.

NOTE: Service Pack 4 should be installed before proceeding.

1. Go to the Windows Update site. Usually this is an option on the start menu. Or go to:
<http://v4.windowsupdate.microsoft.com/en/default.asp>.
2. Scan for upgrades. If the USB 2.0 driver is NOT part of the list continue to step2a otherwise continue to step 3.
 - a. In the right side panel of the web page, click on "Windows Update Catalog". **Do not choose the "Windows Catalog" tab at the top of the web page.** If this item is not listed in the panel, select "Personalize Windows Update" item in the panel, turn on the "Windows Update

- Catalog” option, and click on “Save Settings”. This will display the “Windows Update Catalog” item in right side panel. Click on it.
- b. From the Windows Update Catalog page select "Find driver updates for hardware devices"
 - c. Select "Other Hardware"
 - d. Select "Microsoft Corporation" as the manufacturer, and "Windows 2000 Professional SP4" as the Operating System, and click Search.
 - e. Add the "Microsoft USB Version 5.1.2600.0" driver to your download basket, and select "Go to Download Basket"
 - f. Enter a temporary path for the download and click "Download now". A CAB file will be downloaded to your destination path. Extract the driver files either with a utility like Winzip or a similar Microsoft extraction utility.
3. After downloading the new USB 2.0 drivers, find the USB 2.0 Extended Host controller in the device manager. Double-click to open the properties dialog box. Select "Update Driver", and follow the prompts to specify the new drivers at the location of the directory you downloaded to.
 4. Reboot the computer.
 5. Verify that the drivers are installed properly.
 - a. Open the Windows Device Manager.
 - b. Right-click on the “NEC PCI to USB Enhanced Host Controller B1” entry and select properties.
 - c. Select the Driver tab. Validate the following information:
 - i. Driver Provider: Microsoft
 - ii. Driver Date: 6/1/2001
 - iii. Driver Version: 5.1.2600.0
 - d. Click the Driver Details button. Validate the following information
 - i. usbehci.sys version: 5.00.2195.5652
 - ii. usbport.sys version: 5.00.2195.5652
 - iii. hccoin.dll version: 5.00.2195.5602
 6. If all the information is correct in Step 5, the USB 2.0 Host Controller driver was installed correctly.

Disclaimer

Lumenera Corporation reserves the right to make corrections, modifications, enhancements, improvements, and other changes to its products and services at any time and to discontinue any product or service without notice. Customers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All products are sold subject to Lumenera Corporation’s terms and conditions of sale supplied at the time of order acknowledgment.

Lumenera Corporation warrants performance of its hardware products to the specifications applicable at the time of sale in accordance with Lumenera Corporation’s standard warranty. Testing and other quality control techniques are used to the extent Lumenera Corporation deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Lumenera Corporation assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using Lumenera Corporation components. To minimize the risks associated with customer products and applications, customers should provide adequate design and operating safeguards.

Lumenera Corporation does not warrant or represent that any license, either express or implied, is granted under any Lumenera Corporation patent right, copyright, mask work right, or other Lumenera Corporation intellectual property right relating to any combination, machine, or process in which Lumenera Corporation products or services are used. Information published by Lumenera Corporation regarding third-party products or services does not constitute a license from Lumenera Corporation to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from Lumenera Corporation under the patents or other intellectual property of Lumenera Corporation.

Reproduction of information in Lumenera Corporation data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. Reproduction of this information with alteration is an unfair and deceptive business practice. Lumenera Corporation is not responsible or liable for such altered documentation.

Resale of Lumenera Corporation products or services with statements different from or beyond the parameters stated by Lumenera Corporation for that product or service voids all express and any implied warranties for the associated Lumenera Corporation product or service and is an unfair and deceptive business practice. Lumenera Corporation is not responsible or liable for any such statements.