January 9, 2003

Installing OrangeUSB Drivers

Download the OrangeUSB Driver Setup from: (http://www.orangemicro.com/updateusb2win.html)
Note: Do not install OrangeUSB card before installing OrangeUSB drivers in Windows.

Installing OrangeUSB in Windows XP

Double click on the OrangeUSB Setup icon [Setup.exe]

Step 1

- The OrangeUSB Setup dialog will appear.
- Click "Next." To continue The OrangeUSB 2.0 drivers will be copied to: C:\windows\drivers\ousb2\
  or
  C:\winnt\drivers\ousb2\

Figure 1

Step 2

- When Setup has finished, select "No, I will restart my computer".

- Click on the Close button,

- Shutdown Windows XP and install the OrangeUSB card

Figure 2

Once the OrangeUSB card is installed and the computer is restarted,

Step 3

- Windows will detect "Universal Serial Bus (USB) Controller".

- Select "Install from a list or specific location"

- Click Next to continue.

Figure 3

Step 4

- The Windows "choose you search and installation options" dialog appears.

- Select "Don't search, I will choose the driver to install".
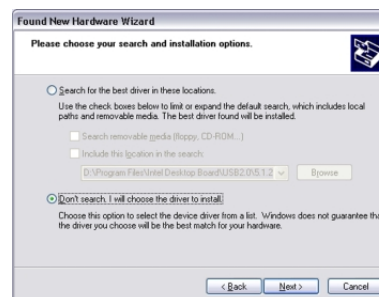
- Click Next to continue.

Figure 4

Step 5

- The Windows "Select the device driver you want to install" dialog appears.

- Select "OrangeUSB USB 2.0 Host Controller.

- Click Next to continue

Figure 5

Step 6

- The Windows "wizard has finished installing the software" dialog appears.

- Click "Finish" to continue

Figure 6

Step 7

- Windows will detect "USB 2.0 Root Hub Device".

- Select "Install the software automatically"

- Click "Next" to continue

Figure 7

Step 8

- The Windows "wizard has finished installing the software" dialog appears.

- Click "Finish" to continue

Figure 8

Verifying USB 2.0 Hi-Speed hardware settings

USB 2.0 Hi-Speed products that use an NEC chipset have 3 USB host controller engines on card. Two of the host controller engines handle USB 1.1 transactions. One of the host controllers engines handle USB 2.0 transactions.

USB data traffic is automatically routed to the proper host controller engine depending on the speed of the device that is plugged into the USB 2.0 port. This essentially creates 3 concurrent USB buses. These USB buses allow devices to run in a less congested traffic environment. This helps devices such as color printers, scanners, video cameras and mass storage devices, which require a high bandwidth, to work well together.

The OrangeUSB 2.0 Host Controller driver handles USB 2.0 Hi-Speed (480 Mbits/s) traffic. The two NEC PCI to USB Open Host Controllers handle Full-Speed (12 Mb/s) and Low-Speed (1.5 Mb/s) traffic.
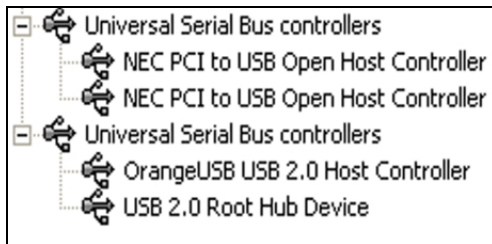
Check your Windows System/Device Manager to confirm proper installation of USB 2.0 Hi-Speed drivers:

Right click on the "My Computer" icon. Select **Properties** from the pop up menu, click on the "Hardware" tab then click on the Device Manager button. Scroll down to the "Universal Serial Bus controllers" category and click on the plus sign next to it. There may be additional devices in the list being displayed, but all of the below devices should appear.
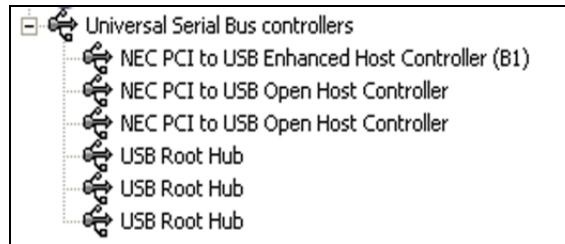
> **Note: Under Windows XP, the "My Computer" icon may appear on the Windows XP Start menu**

An X through a device's icon means the device as been disabled. A circled exclamation point through the device's icon means the device has a problem. The type of problem will appear in the **Properties** dialog box for the device. To view the Properties dialog box for a device, double click on it.

If the Windows XP Device Manager "Universal Serial Bus controllers" category does not look the same as the Orange Micro supplied USB 2.0 drivers below, Windows XP may have installed the Microsoft supplied USB 2.0 drivers "NEC PCI to USB Enhanced Host Controller" instead of the "OrangeUSB USB 2.0 Host Controller".

```
Universal Serial Bus controllers
    NEC PCI to USB Open Host Controller
    NEC PCI to USB Open Host Controller
Universal Serial Bus controllers
    OrangeUSB USB 2.0 Host Controller
    USB 2.0 Root Hub Device
```

```
Universal Serial Bus controllers
    NEC PCI to USB Enhanced Host Controller (B1)
    NEC PCI to USB Open Host Controller
    NEC PCI to USB Open Host Controller
    USB Root Hub
    USB Root Hub
    USB Root Hub
```

Orange Micro supplied USB 2.0 drivers   **Microsoft supplied USB 2.0 drivers**

If you prefer to use the Orange Micro supplied USB 2.0 drivers instead of the Microsoft supplied USB 2.0 drivers under Windows XP, double click on the "NEC PCI to USB Enhanced Host Controller" driver in the Windows Device Manager. Click on the Driver tab, then the Update Driver button. Go back to the above section "Installing USB 2.0 Drivers" Step 3 and follow the instructions.

Where to go for additional Troubleshooting assistance?

Visit the OrangeUSB Windows troubleshooting web site.
http://www.orangemicro.com/orangeusbwinfaqs.html
Contact Orange Micro for technical support.
http://www.orangemicro.com/supportform.html