

USB2.0 PCI Host Board

PCIU2

User's Manual

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 **RATOC Systems, Inc.**

Contents

1. Introduction.....	3
1-1. Features	3
1-2. Restrictions	3
1-3. Required Operating Systems	3
1-4. Other Requirements	3
2. Before installing... ..	4
2-1. Package	4
2-2. Using Low-Profile Bracket	4
3. Setting up	5
3-1. Installing the PCI board	5
3-2. Installing the driver(Windows 98SE).....	6
3-3. Installing the driver(Windows 2000)	11
3-4. Installing the driver(Windows Me)	14
4. Registration and Tech-support	16
4-1. How to Register	16
4-2. Software Update and Support	16
5. Options	17
6. Specifications	18
Appendix	19

1. Introduction

This User's Guide describes how to install the RATOC USB2.0 PCI Host Adapter Board. (called PCIU2 in this User's Guide).

The information in the README.TXT file on the CD-ROM may include the latest information. Be sure to read the file as well.

1-1. Features

- Supports 480Mbps(High-speed), 12Mbps(Full-speed), 1.5Mbps(Low-speed) data transfer mode. This USB2.0 host adapter is fully backwards compatible with the current USB1.1 devices.
- Certified and passed USB HI-SPEED Compliance test.
- Includes our original USB2.0 EHCI driver. Supports Windows 98SE, Windows Me, Windows 2000.
- 500mA max. per port available.
- Includes Low-Profile PCI bracket. You can use this PCIU2 PCI board with a Low-Profile PC.

1-2. Restrictions

- You can't connect a USB2.0 device via a USB2.0 HUB.
- The driver doesn't support Isochronous transfer mode.
- When you remove a USB device and connect it again, you have to wait for over 3 seconds before you connect it again.
- You can't remove/connect a USB device when PC is in the following status:
 - In standby mode, getting ready for standby mode, resuming from standby mode.
 - In hibernation mode, getting ready for hibernation mode, resuming from hibernation mode.
- This driver doesn't support remote wake up from a USB device.
- Other restrictions are written in the readme.txt file.

1-3. Required Operating Systems

- Windows 98 SE(Second Edition)
- Windows 2000
- Windows Me(Millennium Edition)

1-4. Other Requirements

- Available PCI slot

2. Before installing...

2-1. Package

Check the package contents:

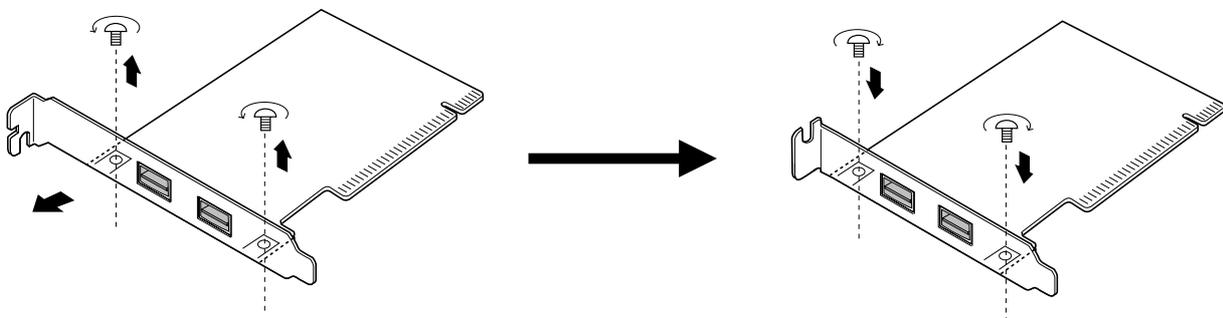
- PCIU2 PCI Board
- Low profile bracket
- Software CD-ROM
- User's manual

NOTE

If any of these items are missing from the PCIU2 retail package, contact your supplier immediately.

2-2. Using Low-Profile Bracket

If you use the PCIU2 with a Low-Profile PC, you have to replace the bracket with the bundled Low-Profile bracket as shown below.



3. Setting up

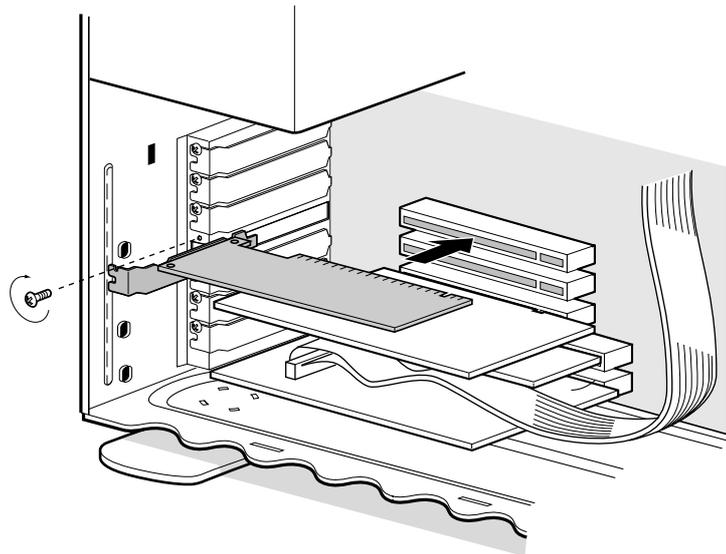
3-1. Installing the PCI board

Turn off your computer and install the PCIU2 into a PCI slot.

Please note the following:



1. You have to install the PCIU2 firmly. If the PCIU2 isn't installed firmly, this product or your PC may get damaged.
2. Be sure the gold contact of the PCI board is completely in a white PCI slot.
3. Be sure to fasten the bracket of the PCI board with a screw as shown below.



After installing it, start your PC. Then, you need to install the driver for the PCIU2.

A) When you use Windows 98SE----- Proceed to Chapter 3-2.

B) When you use Windows 2000----- Proceed to Chapter 3-3.

C) When you use Windows Me----- Proceed to Chapter 3-4.

3-2. Installing the driver(Windows 98SE)

When you use Windows 98SE, follow the steps to install the driver.

1. When you start your PC after installing the PCIU2, the following Hardware Wizard will appear. Insert the PCIU2 CD-ROM into the CD-ROM drive and click [Next].



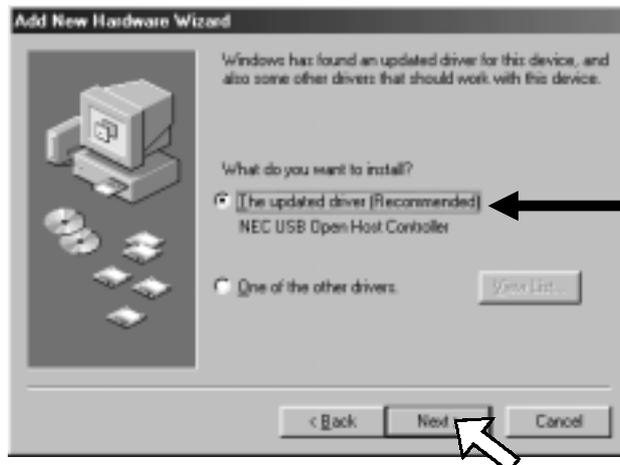
2. Select [Search for the best driver for your device.(Recommended)] and click [Next].



3. Click [Next]. Uncheck all the options.



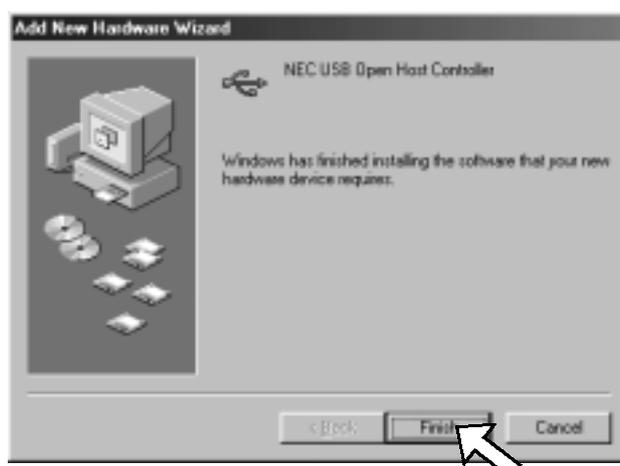
4. Select [**The updated driver(Recommended) NEC USB Open Host Controller**] and click [**Next**].



5. Click [**Next**].



6. Click [**Finish**].

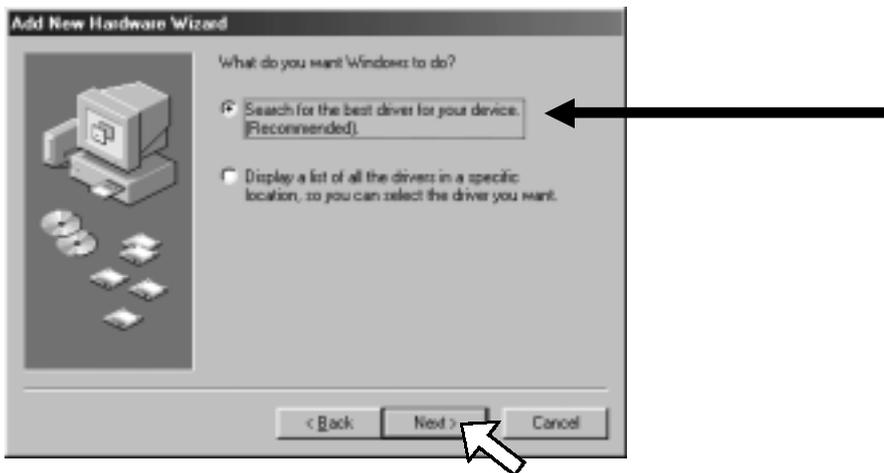


7. **The same hardware wizard as shown at the step 1 through 6 will appear again. Follow the same procedure.**

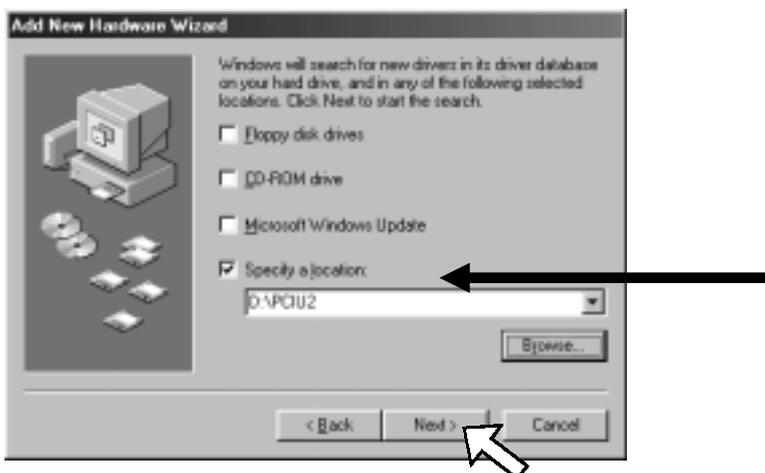
8. Then, the following hardware wizard will appear.



9. Select [Search for the best driver for your device.(Recommended)] and click [Next].



10. Select [Specify a location] and type in [D:\PCIU2] and click [Next].
(D means your CD-ROM drive letter. If your CD-ROM is “E”, you have to type in [E:\PCIU2].)



11. Make sure Windows found the PCIEHCI.INF file in the PCIU2 folder in the CD-ROM drive. Then, click **[Next]**.

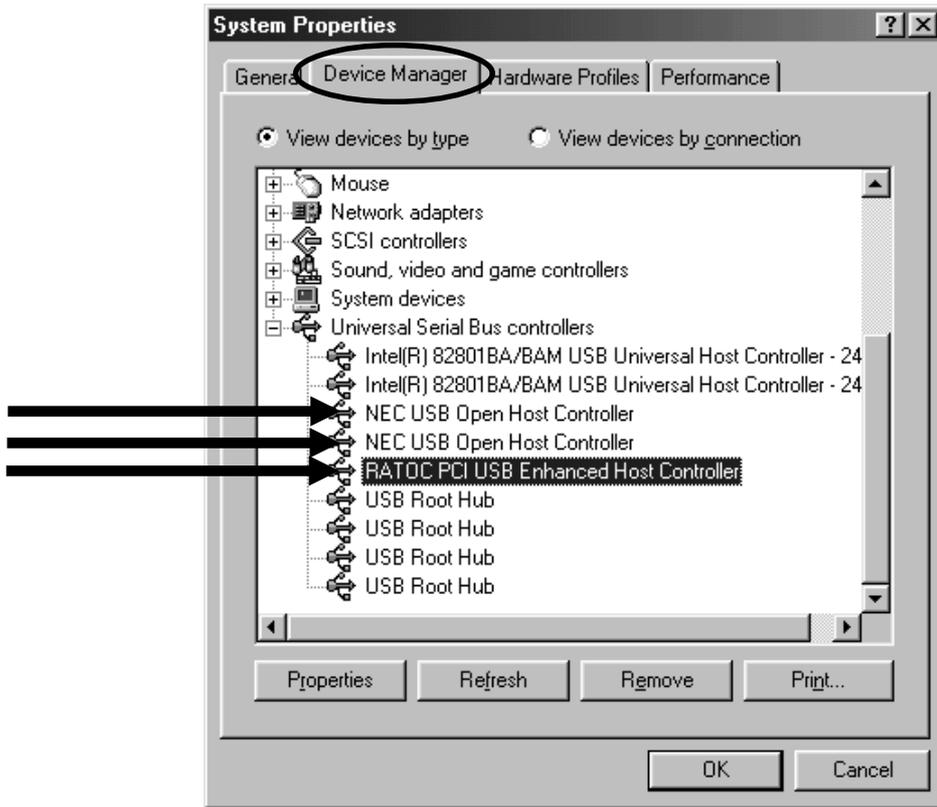


12. Click **[Finish]**.



13. Restart your PC.
You have now finished installing the driver.

14. To verify that the driver is installed correctly, right-click on **[My Computer]**, select **[System Properties]**, and then select the **[Device Manager]** tab.
- If you can find two **[NEC USB Open Host Controller]** strings and a **[RATOC PCI USB Enhanced Host Controller]** string under the **[Universal Serial Bus Controllers]**, the driver is installed correctly.



3-3. Installing the driver(Windows 2000)

Before you install the driver, make sure Windows 2000 Service Pack2 or later is already installed . To verify Service Pack2 or later is installed, right-click on **[My Computer]**, and then select **[System Properties]**.If you can find a “Service Pack” string as shown below, Service Pack is already installed in your system.

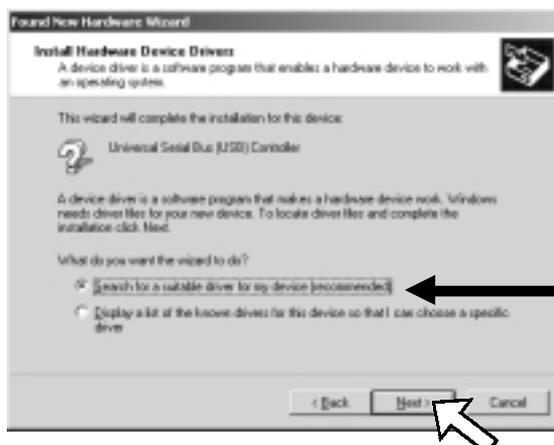


After verifying Service Pack2 or later is installed, follow the steps:

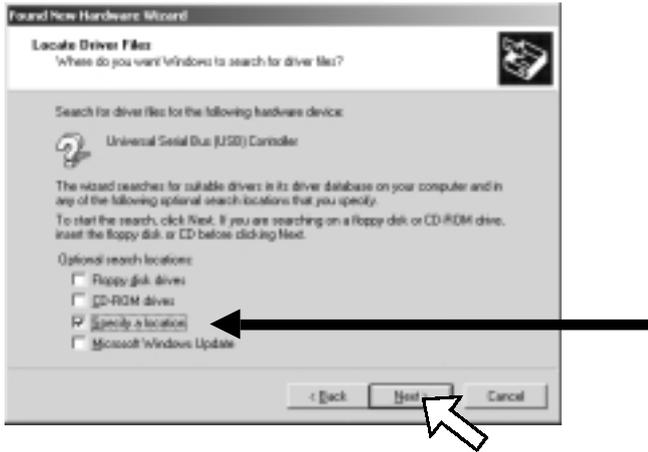
1. When you start your PC after installing the PCIU2, the following Hardware Wizard will appear. Insert the PCIU2 CD-ROM into the CD-ROM drive and click **[Next]**.



2. Select **[Search for a suitable driver for my device(recommended)]** and click **[Next]**.



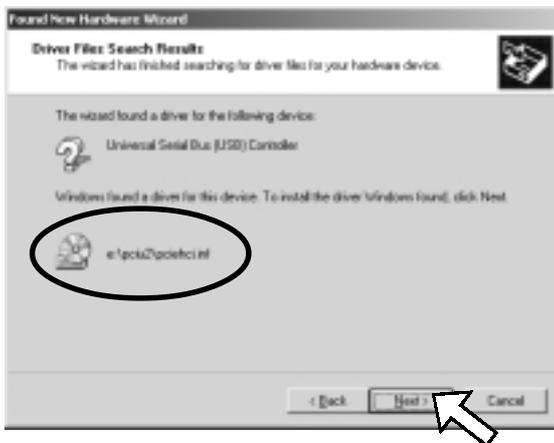
3. Select **[Specify a location]** and click **[Next]**.



4. The following dialog box will appear. Type in **[E:\PCIU2]** and click **[OK]**.
(E means your CD-ROM drive letter. If your CD-ROM is "D", you have to type in **[D:\PCIU2]**.)



5. Make sure Windows found the **PCIEHCI.INF** file in the **PCIU2** folder in the CD-ROM drive. Then, click **[Next]**.

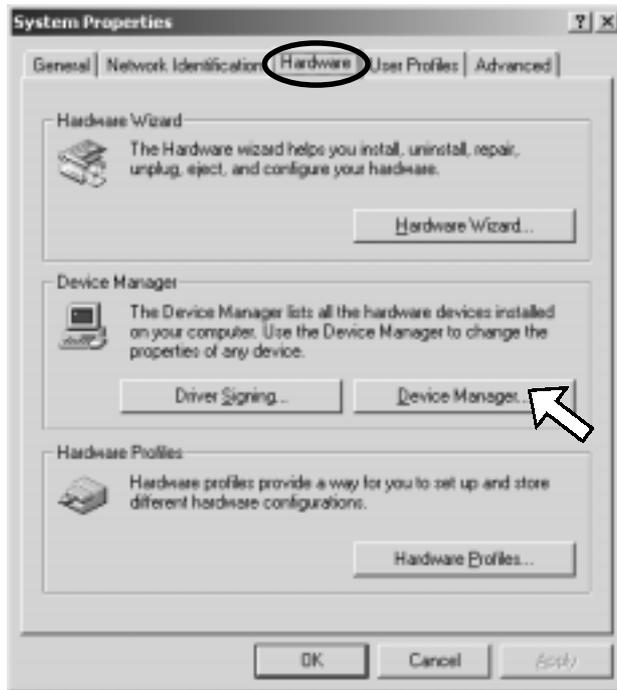


6. Click **[Finish]**.

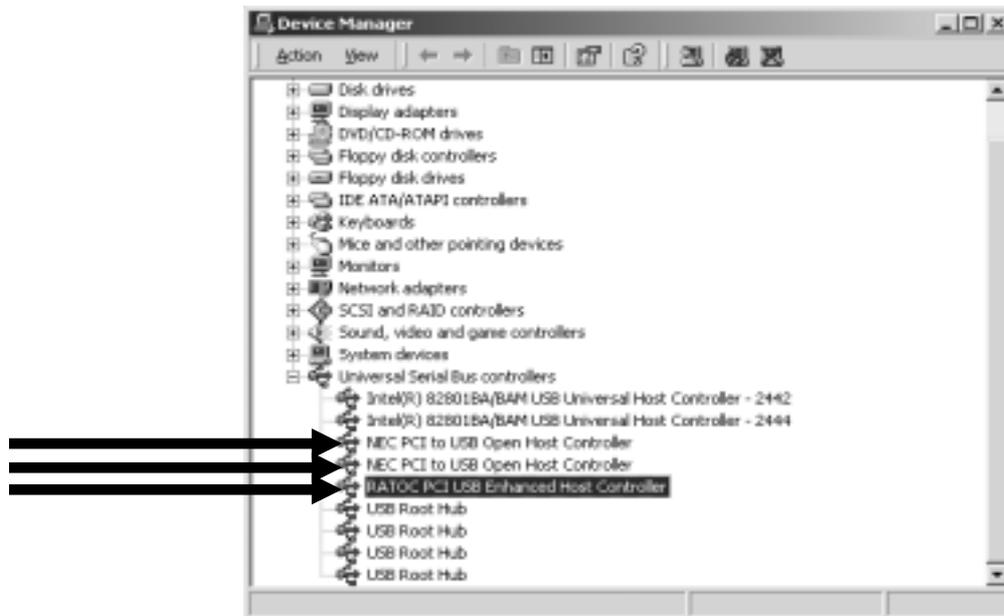


7. Restart your PC.
You have now finished installing the driver.

8. To verify that the driver is installed correctly, right-click on **[My Computer]**, select **[System Properties]**, and then select the **[Hardware]** tab. Then, click the **[Device Manager]** button.



If you can find two **[NEC PCI to USB Open Host Controller]** strings and a **[RATOC PCI USB Enhanced Host Controller]** string under the **[Universal Serial Bus Controllers]**, the driver is installed correctly.



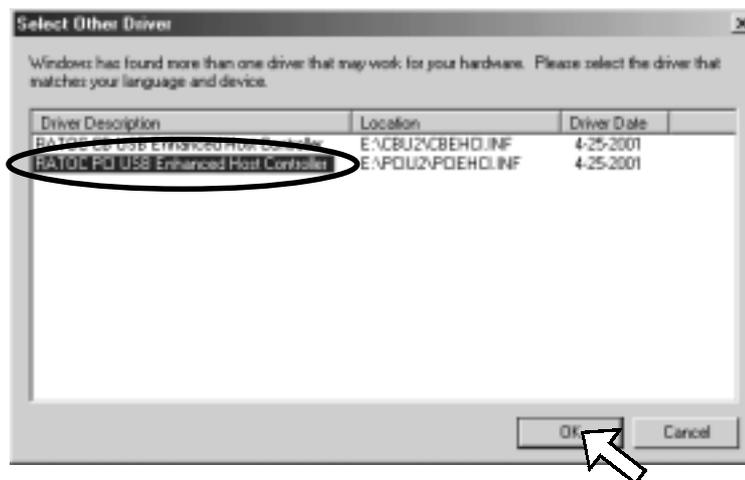
3-4. Installing the driver(Windows Me)

When you use Windows Me, follow the steps to install the driver.

1. When you start your PC after installing the PCIU2, the following Hardware Wizard will appear. Insert the PCIU2 CD-ROM into the CD-ROM drive and select [**Automatic search for a better driver(Recommended)**] and click [**Next**].



2. Select [**RATOC PCI USB Enhanced Host Controller**] and click [**OK**].

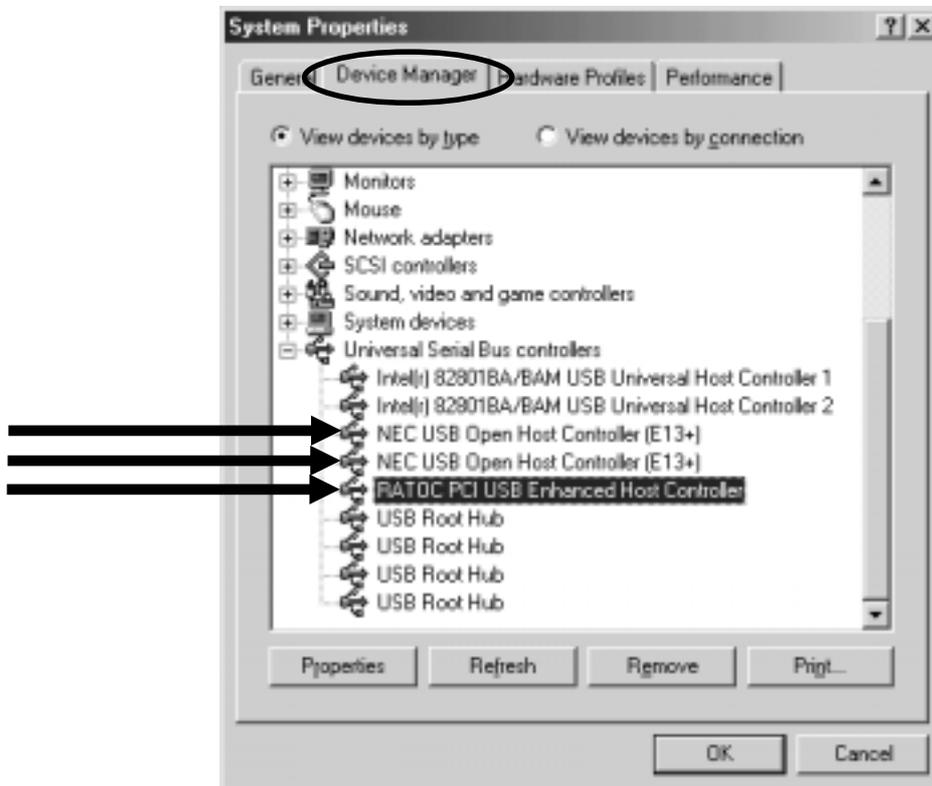


3. Click [**Finish**].



4. Restart your PC.
You have now finished installing the driver.

5. To verify that the driver is installed correctly, right-click on **[My Computer]**, select **[System Properties]**, and then select the **[Device Manager]** tab. If you can find two **[NEC USB Open Host Controller]** strings and a **[RATOC PCI USB Enhanced Host Controller]** string under the **[Universal Serial Bus controllers]**, the driver is installed correctly.



NOTE

You may find the [RATOC PCI USB Enhanced Host Controller] string with green ? marks. But this doesn't affect the performance of this PCIU2 board.

4. Registration and Tech-support

4-1. How to Register

We highly recommend to register yourself as our customer through our on-line registration.

1. On the Internet, access our site (<http://www.ratocsystems.com/english/>)
2. Follow window menu guide to register.
3. Fill out and submit the registration form.

4-2. Software Update and Support

-Driver Update-

The latest driver or utility software are subject to change for improvement or bug fix.

You can download the latest version from our web site.

(<http://www.ratocsystems.com/english/>)

-Technical Support-

You can get a Tech support from RATOOC at the following.

(Open Monday - Friday, 9:30A.M. to 5:00P.M(PST))

RATOOC Systems International,Inc. Tech support

Address: 1933 O'Toole Avenue Suite A109

SanJose, CA 95131, U.S.A.

Phone : (408)955-9400

Fax : (408)955-9402

E-mail : int-support@rexpccard.co.jp

Web : <http://www.ratocsystems.com/english/>

NOTE:

Please include the following information to help us to assist you in the event of a problem:

- Our product name, serial number, and product description
- Host Computer Name, OS version
- Driver version

5. Options

Option is available (sold separately) at the web site:

1. <http://www.ratocsystems.com/english/>

2. <http://www.firewireshop.com>

-USB2-01 (USB2.0 cable(3 feet))

If you have any questions about the option, contact to:

RATOC Systems International, Inc. Tech Support

TEL : (408)955-9400

FAX: (408)955-9402

E-mail: int-support@rexpccard.co.jp

6. Specifications

Model	Name	PCIU2
Board	Type	USB2.0 PCI Host Board
PCI Bus transfer		32bitPCI Bus Master(PCI Local Bus 2.2 compliant)
USB data transfer rate		480/12/1.5 Mbps(HS/FS auto-detection)
E n v i r o n m e n t		Operating temperature0°C/32°F - 55°C/131°F Relative humidity 20% - 80% (noncondensing)
USB connector		USB 2.0 Type A x 2port
USB port current		500mA at each port(MAX.)
Optional connector		J4 connector to be used for an optional front bay

Appendix

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Changes

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Regulatory Compliance Statements

I) FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- (1) Reorient or relocate the receiving antenna.
- (2) Increase the separation between the equipment and receiver.
- (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- (4) Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance may result in this unit not complying with FCC Rules Part 15.

II) European Union Compliance Statement

This device complies with EN55022 Class B/EN55024.