EXHIBIT C

User Manual

SOHOware™

SOHOware™ Fast

Auto 10/100 PCI Fast Ethernet Adapter

Installation Guide

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FCC WARNING

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:

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

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment. This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation

Introduction

The NDC SOHOware™ Fast Auto 10/100 PCI Fast Ethernet Adapter supports 10Mbps and 100Mbps data transmission speeds and offers a full-duplex function allowing 20/200Mbps on compatible hubs.

The adapter features auto-detection/negotiation of network speeds. When connected to a 10Base-T hub the adapter will function as a 10Mbps Ethernet adapter. If connected to a 100Base-TX Fast Ethernet hub the adapter functions at 100Mbps. On a hub that supports full-duplex, the speed will be doubled to 20Mbps/200Mbps.

Hassle-free installation is achieved by conforming to the Plug-and-Play standard. Just plug in the adapter and hardware setup is done automatically.

SOHOware™ Fast is supplied with drivers for all popular network operating systems including: Windows 95/98/NT, WFW, NDIS driver for Microsoft LAN Manager, ODI Driver for NetWare 3.x, 4.x,5.x, SCO UNIX, and a Packet Driver for TCP/IP.

Two LED indicators provide convenient analysis of network and adapter functions.

Features

- Complies with IEEE 802.3 CSMA/CD, 10Base-T and 100Base-TX standards
- Supports IEEE 802.3x frame based flow control in full duplex mode
- 32-bit PCI Local Bus Mastering for high performance and low CPU utilization
- Full-duplex doubles performance to 20Mbps/200Mbps
- Single RJ-45 connector for 10Mbps and 100Mbps networks
- Auto-detects/negotiates network speed
- Built-in FIFO buffers
- Auto-sets IRQ and I/O address
- Supports early interrupt on transmit for increased performance
- Diagnostic software, network driver installation utility, and network drivers on the diskette
- Two color-coded status LEDs indicate network Link, Data Transmission/Reception, and 10 or 100Mbps data speed

What You Get

The package should contain the following items:

- One SOHOware™ Fast Auto 10/100 PCI Fast Ethernet Adapter
- One 3.5 inch diskette containing:
  - Device drivers for popular network operating systems
  - Driver support files
  - Diagnostic program
- This Installation Guide
- Registration card (or go to http://www.sohoware.com for on-line registration)

  Register to receive free:
  - Warranty protection
  - Information on upcoming product releases and special product offers
  - Technical support

What You Need

To install the SOHOware™ Fast Ethernet PCI Adapter you need the following:

- A computer with an available PCI slot
- Windows 95, 98, or NT CD-ROM for copying network related files during installation

Getting Started

Hardware Installation

Before handling the adapter, discharge static electricity from your body by touching a grounded part of your computer chassis. Then follow the steps below to install the SOHOware™ Fast Adapter into your computer:

step1. Power off the PC and remove the cover

Turn off the computer and all peripherals. Follow the instructions in your PC User's guide to remove the cover (**Figure 1**)

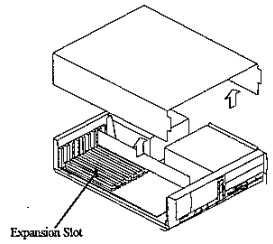

Figure 1. Removing the Computer Cover

step2. Insert and secure the adapter

Select any available PCI slot and remove the slot cover. Carefully install the adapter into the expansion slot by firmly pressing it into the slot until the adapter is snugly seated. Fasten the retaining bracket with the screw from the slot cover (**Figure 2**)

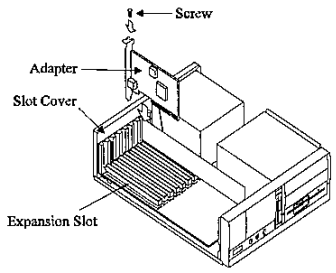

Figure 2. Inserting the Adapter

step3. Replace the PC cover

Replace the computer's cover (**Figure 3**)

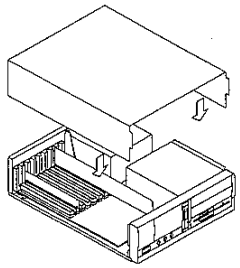

Figure 3. Replacing the Computer Cover

step4. Connect your PC to the network

Plug one end of the twisted-pair cable into the RJ-45 connector on the adapter and the other into a 10 or 100Mbps Ethernet hub or switch (**Figure 4**)

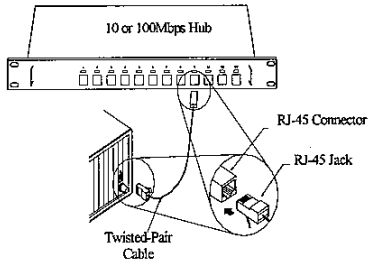

Figure 4. Connecting to a Network

step5. Restart the computer

Software Installation

Before the SOHOware Auto 10/100 PCI Fast Ethernet Adapter can communicate with the network, you have to install the network driver.

SOHOware™ adapters are fully compatible with popular, off-the-shelf Network Operating Systems (NOS) such as Windows 95/98/NT, Novell NetWare etc. You should use the network driver supplied on the software diskette that is compatible with your Network Operating System. A RELEASE.TXT file under the root directory lists information on all the available network drivers. The network driver for each Network Operating System is under a separate directory. The same driver is compatible with both 10Mbps and 100Mbps networks.

For installation in Windows 95 see the following section. For Windows 98, go to page 9. For Windows NT 4.0 go to page 12.

For Windows 95

As the installation method for the Windows 95 versions is slightly different you should begin by identifying your version.

Right-click ***My Computer*** and click ***Properties***. The *System Properties* screen will open (**Figure 5**).

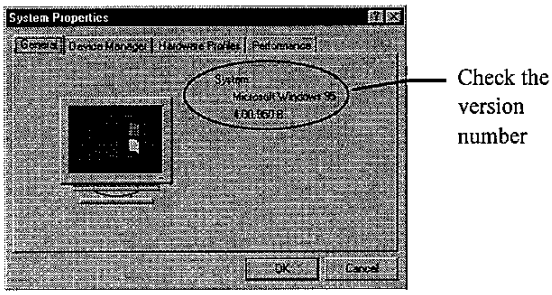

Figure 5. System Properties

On the *General* card you will find the Windows 95 version number:

If you are using Windows 95 Version A, (4.00.950 or 4.00.950a) follow the steps below. For Windows 95 Version B (4.00.950 B) or later, go to page 7.

If You Are Running Windows 95 Version A

step1. Turn on the power and start the Windows 95 operating system

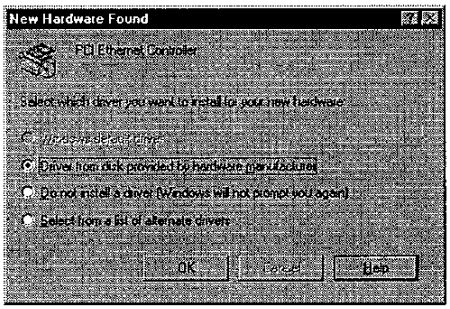

Figure 6. New Hardware Found

step2. Windows 95 will detect the SOHOware Fast adapter and the *New Hardware Found* dialog box will open (**Figure 6**)

step3. Choose *"Driver from disk provided by hardware manufacturer"* and click ***OK***. The *Install From Disk* dialog box will open

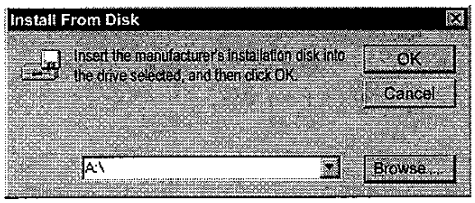

Figure 7. Install From Disk

step4. Insert the driver diskette into drive A: (or B:). Type A:\ (or B:\) and click ***OK*** **(Figure 7)**

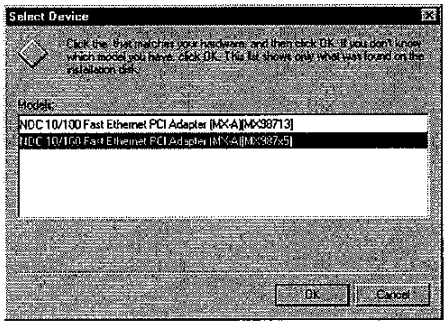

Figure 8. Select Device

step5. Choose the second option and click ***OK***

step6. Depending on your current installation of Windows 95, the setup program may ask you to insert the Windows 95 CD-ROM (**Figure 9**).

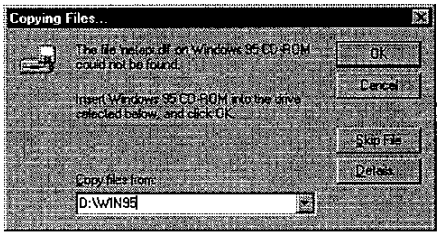

Figure 9. Copying Files

step7. Type in the location of your Windows 95 source files (CD-ROM or your hard disk) and click ***OK***

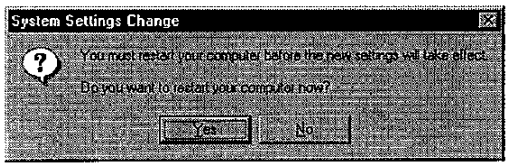

Figure 10. System Settings Change

step8. The *System Settings Change* dialog box will ask you if you want to restart your computer (**Figure 10**). Remove the floppy disk and click ***Yes***

If You Are Running Windows 95 Version B

step1. Turn on the power and start the windows 95 operating system

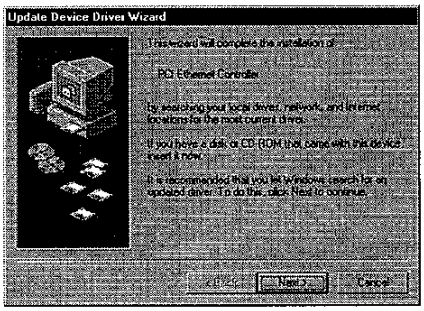

Figure 11. Update Device Driver Wizard-1

step2. Windows 95 will detect the SOHOware™ Fast adapter and the *Update Device Driver Wizard* will open (**Figure 11**)

step3. Insert the driver disk and click ***Next***

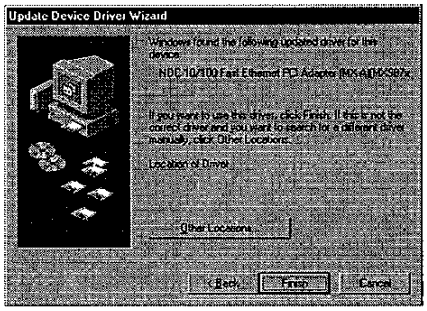

Figure 12. Update Device Driver Wizard-2

step4. The *Update Device Driver* Wizard will indicate that Windows 95 found the SOHOware™ Fast driver on the floppy diskette. Click ***Finish*** **(Figure 12)**

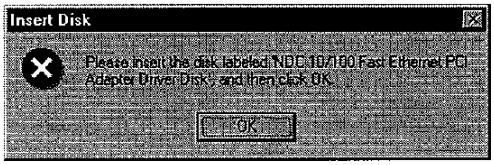

Figure 13. Insert Disk

Note: The setup program may again ask you to insert the disk **(Figure 13).** *Click* ***OK.*** Type "A:\" in the *Copy files from* field. *Click* ***OK*** **(Figure 14)**

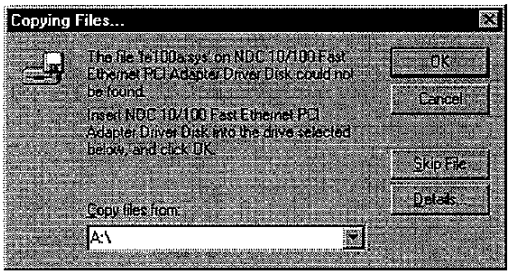

Figure 14. Copying Files

Figure 15. Insert Disk

Note: Depending on your current installation of Windows 95, the setup program may ask you to insert the Windows 95 CD-ROM **(Figure 15).** *Type in the location of your Windows 95 source files (CD-ROM or your hard disk) and click* ***OK***

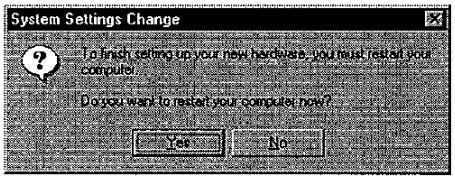

Figure 16. System Settings Change

step7. The *System Settings Change* dialog box will ask you if you want to restart your computer (**Figure 16**). Remove the floppy disk from the floppy drive and click ***Yes***

For Windows 98

step1. Turn on the power and start the Windows 98 operating system

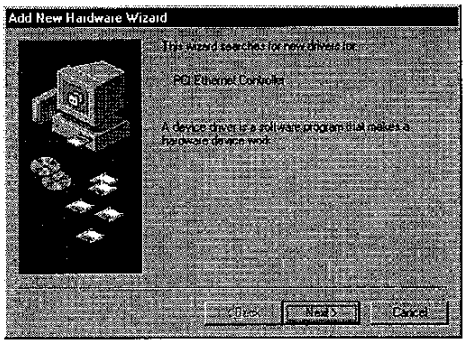

Figure 17. Add New Hardware Wizard-1

step2. Windows 98 will detect the SOHOware Fast Adapter and the *Add New Hardware Wizard* dialog box will open. Click ***Next***

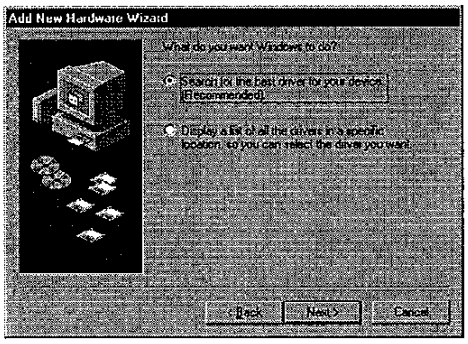

Figure 18. Add New Hardware Wizard-2

step3. Select *"Search for the best driver for your device"* and click ***Next***

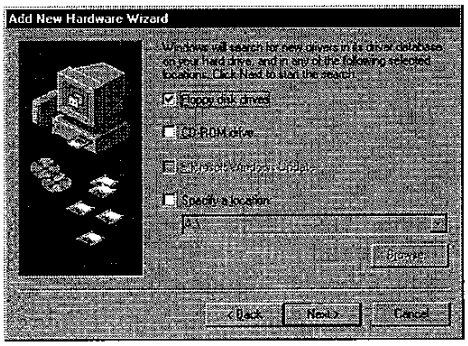

Figure 19. Add New Hardware Wizard-3

step4. Insert the driver diskette into drive A: (or B:). Check *"Floppy disk drivers"*. Click ***Next***

Figure 20. Add New Hardware Wizard-4

step5. The *Add New Hardware Wizard* will indicate that Windows 98 found the SOHOware Fast driver. Click ***Next***

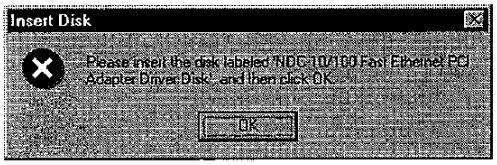

Figure 21. Insert Disk

Note: The setup program may again ask you to insert the disk **(Figure 21).** *Click* ***OK.*** Type "A:\" in the *Copy files from* field. *Click* ***OK*** **(Figure 22)**

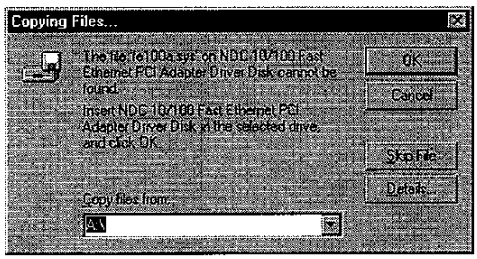

Figure 22. Copying Files

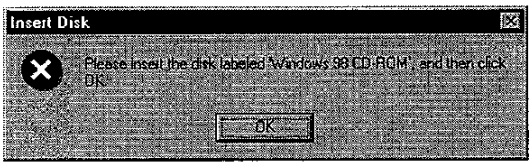

Figure 23. Insert Disk

Note: Depending on your current installation of Windows 98, the setup program may ask you to insert the Windows 98 CD-ROM. Type in the location of your Windows 98 source files (CD-ROM or your hard disk) and click ***OK***

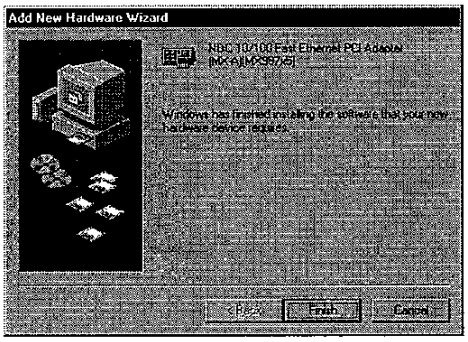

Figure 24. Add New Hardware Wizard-5

step6. Click ***Finish*** to close the *Add New Hardware Wizard*

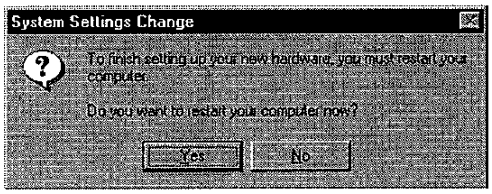

Figure 25. System Settings Change

step7. The system will ask you to restart your computer. Remove the floppy disk from the floppy drive and click ***Yes*** to complete the installation **(Figure 25)**

For Windows NT 4.0

step1. Double-click ***My Computer***, double-click ***Control Panel***

step2. Double-click the ***Network*** icon to open the *Network* window. Select the *Adapters* card (see **Figure 26**)

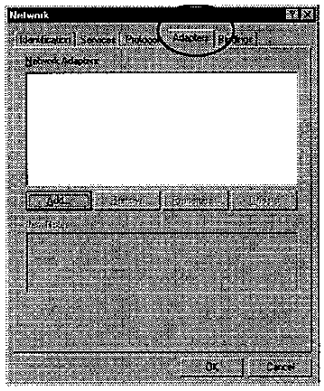

Figure 26. Network

*Note: If you have not installed Windows NT Networking on your computer before, a message will appear: **Windows NT Networking is not installed. Do you want to install it now?** If the message appears, click **Yes** to start the Network Setup Wizard. Check the **Wired to the network** option, then click **Next**. Click on **Select from list...** to select a network adapter, and then go to step 4*

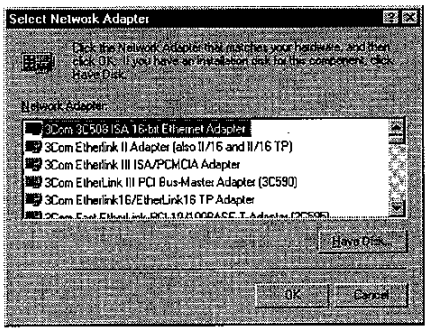

Figure 27. Select Network Adapter

step3. Click ***Add.*** The *Select Network Adapter* box will open (**Figure 27**)
step4. Click ***Have disk***

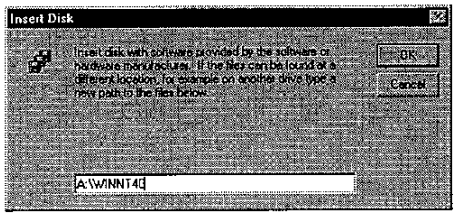

Figure 28. Insert Disk

step5. Insert the driver diskette into drive A: (or B:) and then type A:\WINNT40 (or B:\WINNT40) as in **Figure 28**

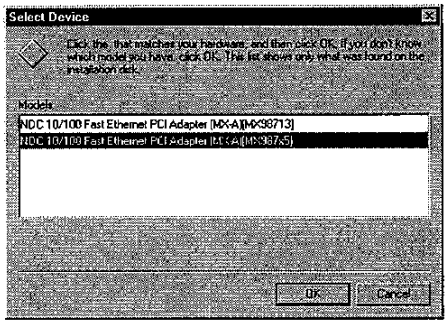

Figure 29. Select OEM Option

step6. Click ***OK***. The *Select Device* dialog box will open (**Figure 29**). Select the second choice and click ***OK***

step7. The *Input Ethernet ID* box will open (**Figure 30**)

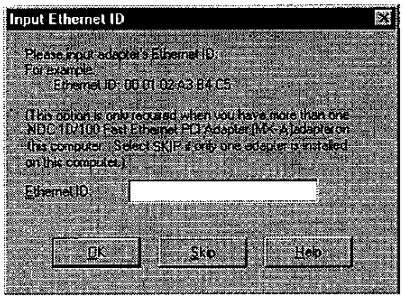

Figure 30. Input Ethernet ID

step8. If you want to install more than one SOHOware™ Fast adapter into this machine, input an ID number in the same format as shown in **Figure 30** and click ***OK***. If there is only one adapter to be installed in this machine click ***Skip***

step9. The Connection Type dialog box will open (**Figure 31**) with a setting of "AutoSense"

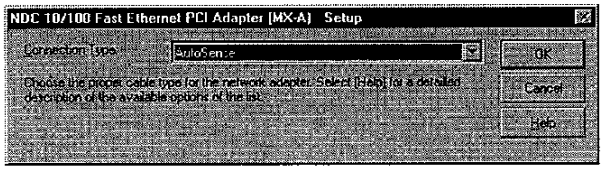

Figure 31. NDC 10/100 Fast Ethernet PCI Adapter (MX-A) Setup

step10. Keep this setting unless you have a particular need to change it. Click ***Help*** if you want more details. Click ***OK***

step11. The "*NDC 10/100 Fast Ethernet PCI Adapter (MX-A)*" will now be shown on the *Adapters* card in the *Network* configuration box (**Figure 32**)

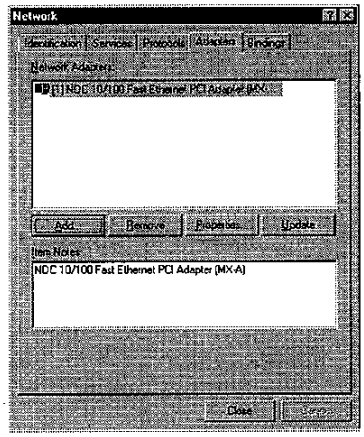

Figure 32. Network

step12. Click ***Close***

step13. The *System Settings Change* dialog box will ask you if you want to restart your computer. Remove the floppy disk from the floppy drive and click ***Yes*** to complete the installation

Uninstalling the SOHOware Fast Ethernet Adapter

Removing the Card

Follow the instructions below to remove the card:

step1. Remove the network cable from its connection to the SOHOware card
step2. Remove the card from the PCI slot

Uninstalling the Adapter from Windows 95/98

1. The installation fails or is interrupted by unknown factors. If this happens the *NDC 10/100 FAST ETHERNET PCI ADAPTER (MX-A)* will be marked with an exclamation mark "!" in *Device Manager*. Uninstall the adapter using Method 1 and then restart your computer
2. You want to remove the device. Follow Method 2

If the Installation Fails

Method 1.

To completely remove the adapter and driver from your system you will need to physically remove the adapter (with the system powered off). The removal procedure is the reverse of the procedure on page 3. Remove it and then proceed as follows:

step1. Double-click ***My Computer***. Double-click ***Control Panel***
step2. In *Control Panel*, double-click the ***System*** icon to open the *System Properties* window. Select the *Device Manager* card

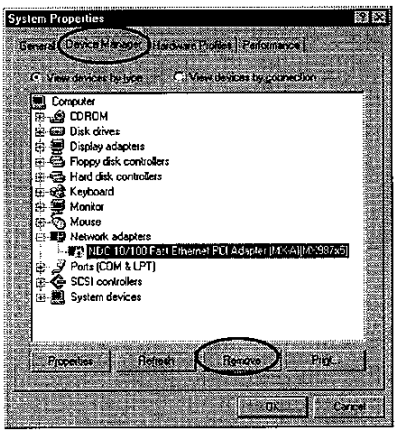

Figure 33. System Properties

step3. Double-click ***Network adapters***, or click the "+" symbol to the left of *Network adapters*

step4. Select *"NDC 10/100 FAST ETHERNET PCI ADAPTER (MX-A)"* and click the ***Remove*** button. Confirm the device removal and click ***OK*** to reboot the PC

If You Want to Remove the Adapter and Driver for Other Reasons

Method 2.

To completely remove the adapter and driver from your system you will need to physically remove the adapter. The removal procedure is the reverse of the hardware installation procedure on page 3. Remove the adapter and then proceed as follows:

step1. Double-click ***My Computer***. Double-click ***Control Panel***

step2. Double-click the ***Network*** icon to open the *Network* window

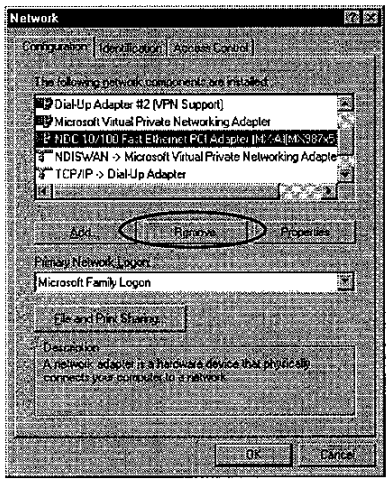

Figure 34. Network Configuration

step3. Select *"NDC 10/100 FAST ETHERNET PCI ADAPTER (MX-A)"* from the network component list and click the ***Remove*** button. Then click ***OK*** to reboot the PC

Uninstalling the Adapter from Windows NT 4.0

step1. Double-click ***My Computer***. Double-click ***Control Panel***

step2. Double-click the ***Network*** icon to open the *Network* window

step3. On the *Adapters* tab, select *"NDC 10/100 Fast Ethernet PCI Adapter"* and click the ***Remove*** button

step4. A warning box will open. Click ***Yes*** to continue the component removal

step5. Click ***OK*** to reboot the PC

LEDs

The LEDs (**Figure 35**) provide "at-a-glance" network monitoring and are useful for diagnostic and installation purposes.

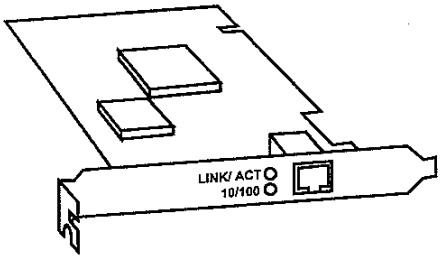

Figure 35. LED Indicators

The functions of the LEDs are:

LED	Function	
LINK/ACT LED (Green)	The LINK/ACT LED indicates whether or not the adapter has made a link to the network and the network data transmission/reception status	When the LED is unlit, the adapter is not connected to the network or the link is not OK. When lit, it indicates correct link integrity. When blinking, there is network data traffic flowing on the network
10/100 LED (Yellow)	The 10/100 LED indicates whether the adapter is working in a 10Mbps or 100Mbps environment	When the LED is unlit, the line speed is 10Mbps. When lit, the line speed is 100Mbps

Troubleshooting

Should you experience a problem with the adapter, first make sure the appropriate driver is loaded, the proper cable is connected to the adapter port, and the hub complies with the adapter specification (10Base-T or 100Base-TX). The LEDs section (page 19) will provide a guide to where a problem may lie.

Possible Windows 95 Installation Problems

Problem	Possible Cause	Action to Take
Windows 95 could not find the adapter	Adapter not properly seated in the expansion slot	Remove and reinsert the adapter making sure it is fully home
	The driver has been loaded before but not removed	Remove the previous adapter driver (see page 9). Reboot the PC
Adapter not functioning correctly	The driver has been loaded before but not removed	Remove the previous driver(s) and adapter (see Uninstalling the SOHOware™ Fast Adapter, page 9) and reinstall
	The adapter did not install correctly	Remove the adapter and driver and reinstall

Support from Your Network Supplier

If additional assistance is required, call your SOHOware supplier for help. Have the following information ready before you make the call.

1. LED status
2. A list of the product hardware (including revision levels) and, if possible, a brief description of the network structure
3. Details of recent configuration changes, if applicable
4. The serial number of your SOHOware product

Support from NDC

If you are unable to receive support from your SOHOware supplier, technical support is available from NDC. Contact your nearest NDC sales office.

USA

Telephone	:	1-408-7300888
Toll-Free (US only)	:	800-632-1118
FAX	:	1-408-7300889
E-mail	:	support@ndclan.com

Europe and Asia Pacific

Telephone	:	886-3-5783966
FAX	:	886-3-5777989
E-mail	:	techsupt@ndc.com.tw

Technical Specifications

Standards Compliance	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3x Flow Control PCI 2.2 Local Bus Specification
Electromagnetic Standards Compliance	FCC Class B. CE-Mark EN55022 Class B (CISPR 22 Class B)
Transmission Rate	10Mbps (20Mbps Full-Duplex) 100Mbps (200Mbps Full-Duplex)
Bus Supported	32-bit PCI Bus Mastering
Connection Interface	Single RJ-45 connector for both 10Base-T and 100Base-TX
LED Indicators	Two LEDs indicate Link/Data Transmission/Data Reception, 10Mbps or 100Mbps operation
I/O address	Assigned by system
IRQ Line	Assigned by system
Cable	For 10Base-T: Category 3,4,5, UTP cable. 100m (328 ft.) per segment maximum. For 100Base-TX: Category 5 UTP cable. 100m (328 ft.) per segment maximum.
Software Support	ODI driver for NetWare 3.x, 4.x, 5.x, NDIS driver for Microsoft Windows 95 and Windows 98, Windows NT, LAN Manager, WFW, SCO UNIX, and Packet driver for TCP/IP, etc.
Power Consumption	5V/150 mA
Dimensions	120 x 45 mm (4.72 x 1.77 in.)
Operating Temperature	0 to 55° C (32 to 131°F)
Humidity	10% to 90%, (non-condensing)
Warranty	Lifetime Limited Warranty

NDC Warranty

Hardware

NDC (NDC Communications, Inc.) warrants its products to be free of defects in workmanship and materials, under normal use and service, from the date of purchase from NDC or its Authorized Reseller, and for the period of time specified in the documentation supplied with each product.

Should a product fail to be in good working order during the applicable warranty period, NDC will, at its option and expense, repair or replace it, or deliver to the purchaser an equivalent product or part at no additional charge except as set forth below. Repair parts and replacement products are furnished on an exchange basis and will be either reconditioned or new. All replaced products and parts will become the property of NDC. Any replaced or repaired product or part has a ninety (90) day warranty or the remainder of the initial warranty period, whichever is longer.

NDC shall not be liable under this warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by the purchaser's, or any third party's, misuse, neglect, improper installation or testing, unauthorized attempt to repair or modify, or any other cause beyond the range of the intended use, or by accident, fire, lightning, or other hazard.

Software

Software and documentation materials are supplied "as is" without warranty as to their performance, merchantability, or fitness for any particular purpose. However, the diskette media containing the software are covered by a 90-day warranty that protects the purchaser against failure within that period.

Limited Warranty Service Procedures

Any product (1) received in error, (2) in a defective or non-functioning condition, or (3) exhibiting a defect under normal working conditions, may be returned to NDC by following these steps:
You must prepare:

- dated proof of purchase
- product model number & quantity
- product serial number
- precise reason for return
- your name/address/e-mail address/telephone/fax

1. Inform the distributor or retailer
2. Ship the product back to the distributor/retailer with prepaid freight. The purchaser must pay the shipping freight from the distributor/retailer to NDC. Any package sent C.O.D. (Cash On Delivery) will be refused
3. Charges: Usually RMA (Returned Material Authorization) items will be returned to the purchaser via Air Mail, prepaid by NDC. If returned by another carrier, the purchaser will pay the difference. A return freight and handling fee will be charged to the purchaser if NDC determines that there was "No Problem Found" or that the damage was caused by the user

Warning

NDC is not responsible for the integrity of any data on storage equipment (hard drives, tape drives, floppy diskettes, etc.). We strongly recommend that our customers backup their data before sending such equipment in for diagnosis or repair.

Services after Warranty Period

After the warranty period expires, all products may be repaired for a reasonable service charge. The shipping charges to and from the NDC facility will be borne by the purchaser.

Return for Credit

In the case of a DOA (Dead on Arrival) or a shipping error, a return for credit will automatically be applied to the purchaser's account, unless otherwise requested.

Limitation of Liability

All expressed and implied warranties of a product's merchantability, or of its fitness for a particular purpose, are limited in duration to the applicable period as set forth in this limited warranty, and no warranty will be considered valid after its expiration date.

If this product does not function as warranted, your sole remedy shall be repair or replacement as provided for above. In no case shall NDC be liable for any incidental, consequential, special, or indirect damages resulting from loss of data, loss of profits, or loss of use, even if NDC or an authorized NDC distributor/dealer has been advised of the possibility of such damages, or for any claim by any other party.

EC DECLARATION OF CONFORMITY

For the following equipment:

Product Name : **Auto 10/100 PCI Fast Ethernet Adapter**

Model Number : **SFA110A**

Produced by:

Manufacturer's Name : **NATIONAL DATACOMM CORPORATION**

Manufacturer's Address : **2F, NO. 28, INDUSTRY EAST 9TH ROAD SCIENCE PARK, HSIN-CHU TAIWAN, R.O.C.**

is hereby confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility (89/ 336/ EEC). The product meets or exceeds the following EMC standards:

Generic STD	:	**EN 50081-1:1992**
		EN 50082-1:1992
Product Family STD	:	**EN 55022: 1987 / CISPR: 1996**
Basic STD	:	**EN 61000-4-2: 1995 / IEC 1000-4-2**
		IEC 801-3
		EN61000-4-4: 1995 / IEC 1000-4-4

The manufacturer/importer is responsible for this declaration:

Company Name : **NDC (EUROPE) CO. LTD**

Company Address : **1, EARLSFORT CENTRE, HATCH STREET, DUBLIN 2, IRELAND**

Person authorized to make this declaration:

Name : **CHIN-TU WU**

Position/Title : **MANAGING DIRECTOR**

Date _____ Legal Signature _____