

NETLINE™ PC CARD

User's Guide



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CONTENTS

Chapter 1 - Introduction	5
Features	6
Chapter 2 - Installation	7
Installing the hardware	8
Installing the software	10
Windows 98	10
Windows 95	11
Windows 2000	12
Windows NT 4.0	13
Connecting to the network	14
Chapter 3 - Operation	15
NetLINE Card LEDs	16
Diagnostic utility	17
Chapter 4 - Farallon Technical Support	19
Appendix.....	21
Specifications	21
Regulatory notices	22
Warranty	25

CHAPTER 1

Introduction

The Farallon NetLINE PC Card serves as an Ethernet adapter for any Windows compatible computer with a PCMCIA slot. The adapter provides an RJ-45 port to connect to a 10Base-T Ethernet network or other Ethernet device such as a hub, cable modem or DSL modem.

The card is fully compliant with IEEE Ethernet standards and PCMCIA Type II specifications. It supports Windows 95, Windows 98, Windows 2000 and Windows NT 4.0.

Please make sure that the following items are included in your Farallon package:

- NetLINE PC Card (with connector cable)
- Farallon diskette
- this user's guide

FEATURES

- Complies with IEEE 802.3 10Base-T Ethernet standards.
- Complies with 16-bit PCMCIA specifications.
- Provides LED indicators for Power, Link and Activity.
- Operates with Windows NT 4.0, Windows 95/98 and Windows 2000.

CHAPTER 2

Installation

Your NetLINE PC Card can be installed in three simple steps:

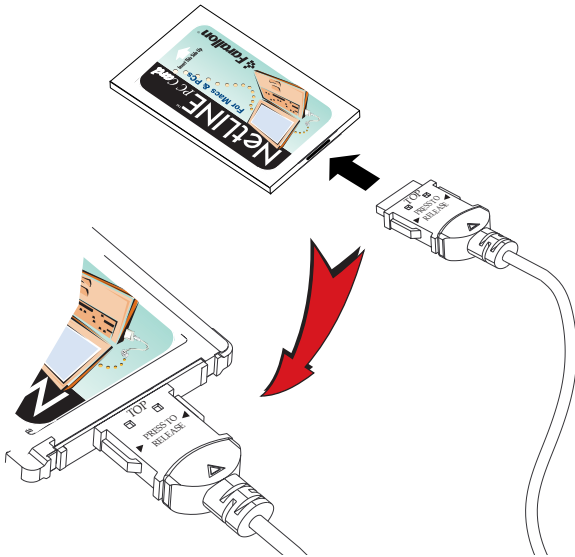
- Installing the hardware
- Installing the software
- Connecting to the network

Install the adapter hardware and software, and then connect your computer to your Ethernet network using twisted pair Ethernet cable (category 3 or better) with a RJ-45 connector.

INSTALLING THE HARDWARE

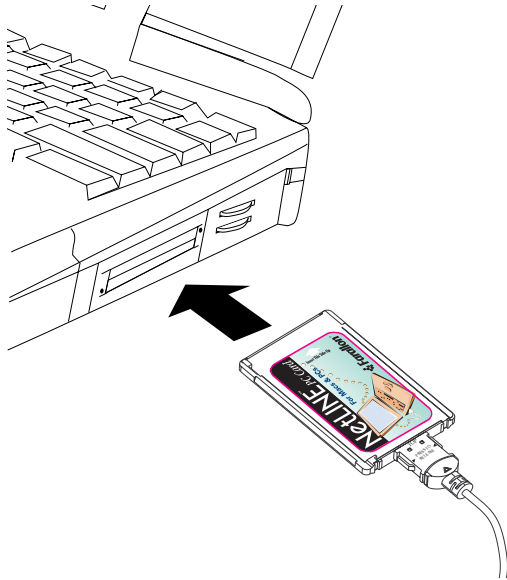
Begin installation by connecting the card. Then insert the card in the computer's PC card slot.

1. Hold the PC card and connector so that the arrow is facing up.
2. Insert the flat end of the connector into the end of the PC card until you hear a small click.



CAUTION: Use care when detaching the connector from the PC Card. Pulling the connector from the card without squeezing the sides may cause severe damage to the card and connector and may void your warranty. Do not pull the PC card out of the PC card slot by pulling on the connector cable.

3. Slide the card into your computer's PC card slot until it is firmly seated.



INSTALLING THE SOFTWARE

After you insert your NetLINE PC Card into your computer's PC card slot, the Windows Found New Hardware Wizard will appear. See the following pages for software installation instructions for:

- Windows 98
- Windows 95
- Windows 2000
- Windows NT 4.0

After you have installed the driver, connect the card to your Ethernet network. See "Connecting to the network" on page 14.

WINDOWS 98

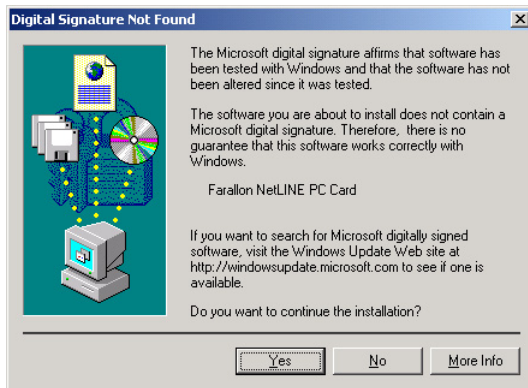
1. The Add New Hardware Wizard appears and searches for device drivers for the **Farallon NetLINE PC Card**. Click the **Next** button.
2. Select **Search for the best driver for your device** and click **Next**.
3. Insert the Farallon Windows diskette into your computer. Type **A:** in the "Specify a location" box and click **Next**.
4. When the Wizard locates **NETEP16.inf**, click **Next**.
5. If prompted to locate **Ep16.sys**, type **A:\Win98** in the "Copy files from" box. Then click **OK**.
6. If prompted for the Win98 CD, copy the necessary files from the CD ROM drive of your computer.
7. Click **Finish** and **Yes** to restart your computer.

WINDOWS 95

1. After the New Hardware Found message appears, the Update Device Driver Wizard will open. In the Update Device Driver Wizard window, click the **Next** button.
2. Insert the Farallon Windows disk into your computer, and click **Next**.
3. Click **Other Locations**, then **Browse**, and select the **A:** folder on the Farallon disk.
4. When the Wizard finds **Farallon NetLINE PC Card**, click **Finish**.
5. Follow the on-screen instructions as the Wizard copies files from the Farallon disk and from your Windows 95 CD or disks.
6. If prompted for Win95 CD, copy the necessary files from the CD ROM drive of your computer. If prompted for the **Ep16.sys** file, change the directory to the Win95 folder on the Farallon disk (**A:/Win95**).
7. When the installation is complete, restart your computer.
8. Your Network Control Panel should have the following network components installed for basic peer to peer networking and Internet access:
 - Client for Microsoft Networks
 - Farallon NetLINE PC Card
 - NetBEUI
 - TCP/IP
 - File and printer sharing for Microsoft Networks.
9. If you need to add any of the components, click the **Add** button, select the needed Protocol and add it.

WINDOWS 2000

1. The Add New Hardware Wizard will open and the Update Device Driver Wizard will begin. Click **Next**.
2. Insert the Farallon Windows diskette into your disk drive and click **Next**.
3. Select the **A:** folder on the Farallon disk.
4. When the Wizard finds the driver, a message may appear indicating that the driver does not have the Windows 2000 digital signature. Click **Yes** to continue. The driver is designed to work with Windows 2000 and is fully compatible with the Windows 2000 operating system.



5. If prompted, restart your computer.

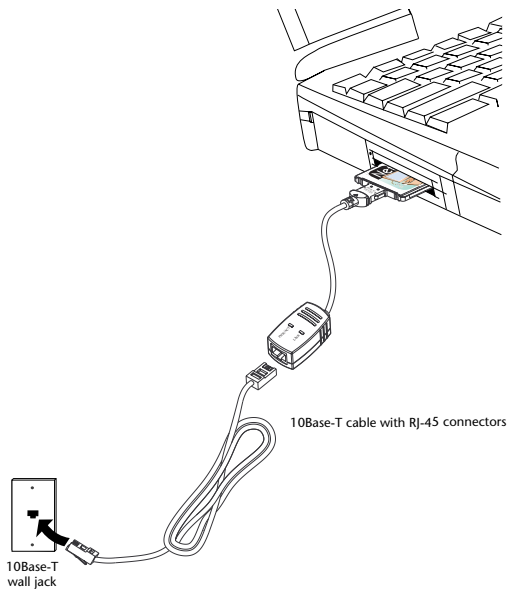
WINDOWS NT 4.0

1. Double-click **My Computer**, then **Control Panel**, then **Network**.
2. In the Network window, click the **Adapters** tab.
3. Click the **Add** button.
4. In the Select Network Adapters window, click the **Have Disk** button.
5. Insert the Farallon Windows diskette and type **A:**.
6. In the Select OEM Option window, select **Farallon NetLINE PC Card** and click **OK**.
7. When prompted, select an available IRQ and I/O. Check WinNT Diagnostics for available resources.
8. When the Bus Location Windows opens, select:
 - Type: **PCMCIA**
 - Number: **0**
9. Enter your TCP/IP information when prompted.
10. Click the **Close** button and **Restart** your computer.

CONNECTING TO THE NETWORK

After the NetLINE PC Card is installed in your computer, the next step is to connect it to your network.

1. Connect one end of a twisted pair Ethernet cable to the card's RJ-45 port and the other end to your hub, wall jack, cable or DSL modem.



CHAPTER 3

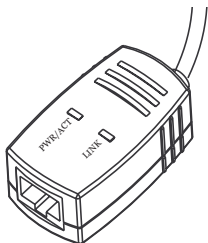
Operation

For proper card operation, verify the following:

- The Link LED is lit (see the next page for adapter LEDs).
- The cable connection is secure, and the correct cable type is being used.
- The driver software is installed.
- The card is correctly installed in a PCMCIA slot.

NETLINE CARD LEDs

The NetLINE Card LEDs on the end of the adapter cable can give you information about link status and network activity. After the card and driver are properly installed, the LEDs will become active.



Link: When the LED is lit green, the card has link at 10Mbps.

If the Link LED is not on, and you have a network cable connected to the card, it may indicate one of the following:

- The network cable is not properly connected or is faulty.
- No 10Base-T device is connected at the other end of the cable.
- The network cable exceeds 100 meters.
- The card is not connected properly.
- You are using a straight-through 10Base-T cable to connect directly to another workstation without a hub.
- You are using a cross-over cable to connect to a hub.

Power/Activity: A flashing green light indicates that network data is being transmitted or received by the card.

If the light is off, the adapter cable is not receiving power.

DIAGNOSTIC UTILITY

Use the Diagnostic Utility included on the Farallon diskette as a troubleshooting tool.

1. Boot to MS DOS. (If you are using Win98/2000, use a Win95 startup disk.)
2. Insert the Farallon diskette in your computer's disk drive.
3. Type **ep16diag** and **Enter**.
4. Select **Adapter Basic Diagnostics** and **Enter**.
5. Make sure all of the listed test items pass, including:
 - Current I/O Base Address
 - EEPROM
 - LAN Setup Registers
 - Memory
 - LAN Controller Functions
 - Loopback Mode Testing
6. If any items fail, try another card and connection to see if the problem is system related. If the other card passes, the problem may be related to the NetLINE PC Card.

CHAPTER 4

Farallon Technical Support

Farallon is committed to providing its customers with reliable products and excellent technical support.

Please look in this user's guide for possible solutions to any problems you come across, and be sure to read any paper release notes or electronic "Read Me" files that you receive from Farallon.

If you contact us by telephone, please be at the site of the problem, prepared to reproduce it and to try some troubleshooting steps. If you have any questions, concerns, or suggestions, please contact us:

Phone: (510) 346-8001
Phone support hours are 7:00 am to 4:30 pm PST.

Fax: (510) 346-8116

Mail: Farallon Customer Service
3089 Teagarden St.
San Leandro, California 94577-5720 USA

Email: info@farallon.com

FARALLON INTERNET INFORMATION RESOURCES

Please visit our website at www.farallon.com for Farallon product information, support resources and home networking information.

OUTSIDE OF THE UNITED STATES AND CANADA

If you are not located in the United States or Canada, you can get service locally by contacting your nearest Farallon reseller or distributor. For a worldwide list of our distributors, see our Internet information resources or contact Farallon directly.

APPENDIX

SPECIFICATIONS

Bus Interface	16-bit PC Card standard
Network Interface Standard	IEEE 802.3 10Base-T
Data rate	10Mbps
Connectors	68-pin connector to PCMCIA Type II slot 15-pin flat connector to media coupler
LEDs	Power/Activity, Link (10Base-T)
Data Transfer Rate	10Mbps
Cable	Unshielded twisted pair RJ-45 Max length 100 meters
Environment	Operating Temperature: 0°C to 55°C Operating Humidity: 10% to 80% RH
Regulatory	FCC Class B, CE Class B, VCCI Class B

REGULATORY NOTICES

FCC COMPLIANCE STATEMENT



FCC Rules and Regulations - Part 15. This product has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Installed correctly, it probably will not interfere with radio or TV reception. However, we do not guarantee the absence of interference.

This product generates and uses energy of about the same frequency as radio and TV broadcasts. Installed incorrectly, it may interfere with reception of radio and TV broadcasts. If you suspect this product is causing interference, turn your computer on and off while the radio or TV is showing interference. If the interference disappears when you turn the computer off and reappears when you turn the computer on, something in the computer is causing interference. To reduce interference, try these suggestions:

- Change the direction of the radio or TV antenna.
- Move the computer, radio or TV. For example, if the computer is to the right of the TV, move it to the left of the TV. Or move them farther apart.
- Plug the computer into a different electrical outlet than the radio or TV.
- Ensure that all expansion slots (on the back or side of the computer) are covered. Also ensure that all metal retaining brackets are tightly attached to the computer.

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.

CAUTION: If the device is changed or modified without permission from Farallon, the user may void his or her authority to operate the equipment.

CE MARK



This equipment conforms to the European Community CE Mark standard for the design and manufacturing of information technology equipment. This standard covers a broad area of product design, including RF emissions and immunity from electrical disturbances.

Warning: In a domestic environment this equipment may cause radio interference, in which case the user may be required to take adequate measures. Adequate measures include increasing the physical distance between this product and other electrical devices.



VCCI CERTIFICATION

This equipment conforms to VCCI Class B.

注意

この装置は、情報処理装置等電波障害自主規制協議会 (VCCI) の基準に基づく第一種情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

WARRANTY

LIMITED WARRANTY AND LIMITATION OF REMEDIES

Farallon warrants to you, the end user, that the accompanying Farallon hardware product, which may include third party products or technology (the "Product") will be free from defects in materials and workmanship under normal use for three years after the date of purchase. This warranty will expire ninety (90) days from date of purchase on all software, whether "stand-alone" or delivered as part of a hardware product. Farallon's entire liability and your sole remedy under this warranty during the warranty period is that Farallon shall, at its option, either repair the Product or refund the original purchase price of the Product.

In order to make a claim under this warranty you must comply with the following procedure:

1. Contact Farallon Customer Service within the warranty period to obtain a Return Materials Authorization ("RMA") number.
2. Return the defective Product and proof of purchase, shipping prepaid, to Farallon with the RMA number prominently displayed on the outside of the package.

If you are located outside of the United States or Canada, please contact your dealer in order to arrange for warranty service.

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