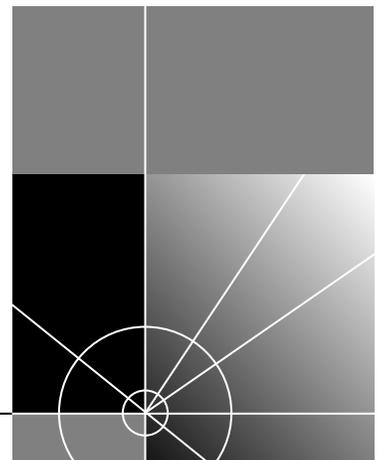




3Com® Megahertz® 10/100 LAN CardBus PC Card User Guide

<http://www.3com.com/>
<http://www.3com.com/productreg>

Part No. 09-0XXX-00X
Published June 2000



3Com Corporation
5400 Bayfront Plaza
Santa Clara, California
95052-8145

Copyright © 2000, 3Com Corporation. All rights reserved. No part of this documentation may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from 3Com Corporation.

3Com Corporation reserves the right to revise this documentation and to make changes in content from time to time without obligation on the part of 3Com Corporation to provide notification of such revision or change.

3Com Corporation provides this documentation without warranty, term, or condition of any kind, either implied or expressed, including, but not limited to, the implied warranties, terms or conditions of merchantability, satisfactory quality, and fitness for a particular purpose. 3Com may make improvements or changes in the product(s) and/or the program(s) described in this documentation at any time.

If there is any software on removable media described in this documentation, it is furnished under a license agreement included with the product as a separate document, in the hard copy documentation, or on the removable media in a directory file named LICENSE.TXT or !LICENSE.TXT. If you are unable to locate a copy, please contact 3Com and a copy will be provided to you.

UNITED STATES GOVERNMENT LEGEND

If you are a United States government agency, then this documentation and the software described herein are provided to you subject to the following:

All technical data and computer software are commercial in nature and developed solely at private expense. Software is delivered as "Commercial Computer Software" as defined in DFARS 252.227-7014 (June 1995) or as a "commercial item" as defined in FAR 2.101(a) and as such is provided with only such rights as are provided in 3Com's standard commercial license for the Software. Technical data is provided with limited rights only as provided in DFAR 252.227-7015 (Nov 1995) or FAR 52.227-14 (June 1987), whichever is applicable. You agree not to remove or deface any portion of any legend provided on any licensed program or documentation contained in, or delivered to you in conjunction with, this User Guide.

Unless otherwise indicated, 3Com registered trademarks are registered in the United States and may or may not be registered in other countries.

3Com, the 3Com logo, and Megahertz are registered trademarks of 3Com Corporation.

Microsoft, Windows, and Windows NT are registered trademarks of Microsoft Corporation.

All other company and product names may be trademarks of the respective companies with which they are associated.

CONTENTS

1 INSTALLING THE PC CARD

- Introduction 5
- User Documentation 6
- Connecting the 3CCFE575CT LAN CardBus PC Card 6
- Connecting the 3CXFE575CT XJACK LAN CardBus PC Card 7
- Connecting the 3C3FE575CT LAN CardBus PC Card 8
- Disconnecting the Cables 9

2 SETUP FOR WINDOWS 2000

- Before You Begin Installation 11
- Setup Procedure 11
- Confirming Installation 12
- Troubleshooting Windows 2000 Installations 12
- Uninstalling the Card 13

3 SETUP FOR WINDOWS 98 AND WINDOWS MILLENNIUM EDITION

- Before You Begin Installation 15
- Setup Procedure 15
- Confirming Installation 16
- Troubleshooting Windows 98 Installations 16
- Uninstalling the Card 17

4 SETUP FOR WINDOWS 95

- Before You Begin Installation 19
- Determining Your Windows 95 Version 19
- Setup Procedures 19
 - Windows 95 Version A 19
 - Windows 95 OSR 2 20
- Confirming Installation 21
- Troubleshooting Windows 95 Installations 22
- Uninstalling the Card 23

5 SETUP FOR WINDOWS NT 4.0

Before You Begin Installation	25
Setup Procedure	25
Setup With No Networking Installed	25
Windows NT With Networking Installed	26
Installing with Softex	27
Confirming Windows NT Installation	28
Troubleshooting Windows NT 4.0 Installations	28
Known Working Configurations	28
Uninstalling the Card	28

6 TROUBLESHOOTING

PC Card LEDs	31
31	
Diagnostics Help Library	33

A PRODUCT SPECIFICATIONS

3CCFE575CT and 3CXFE575CT LAN CardBus PC Cards	35
3C3FE575CT LAN CardBus PC Card	35

B TECHNICAL SUPPORT

Online Technical Services	37
World Wide Web Site	37
3Com Support Web Site	37
3Com Software Library	37
3Com KnowledgeBase	37
Frequently Asked Questions	37
3Com FTP Site	38
Support from Your Network Supplier	38
Support from 3Com	38
Returning Products for Repair	40

REGULATORY COMPLIANCE

1

INSTALLING THE PC CARD

Introduction

The 3Com 10/100 LAN CardBus PC Cards (models 3CCFE575CT, 3CXFE575CT, and 3C3FE575CT) connect a notebook to an Ethernet or Fast Ethernet network. All PC Card models are shown below.



User Documentation

This guide describes PC Card installation and setup for Windows® 2000, Windows 98, Windows Millennium Edition, Windows 95, and Windows NT®.

Access the User Guide for the latest information on the product. (You must first install the User Guide.) You can also obtain information from the README.TXT file in the HELP directory on the *LAN Installation Disk*.

To access the *User Guide* in your browser:

- 1 Open the *Start* menu and select *Programs*.
- 2 Select *3Com PC Card Utilities*.
- 3 Select *3Com FE575C*.
- 4 Select *User_Guide HTML*.

If you do not have a browser installed on your computer, install Internet Explorer from the *Installation CD*. Put the *Installation CD* in the CD-ROM drive (if the Setup program starts automatically, click *Cancel*), use the Explorer to find the *Vinternet Explorer* folder on the CD, and install Internet Explorer from that location.



NOTE: The version of Internet Explorer on the *Installation CD* is English only.

Connecting the 3CCFE575CT LAN CardBus PC Card



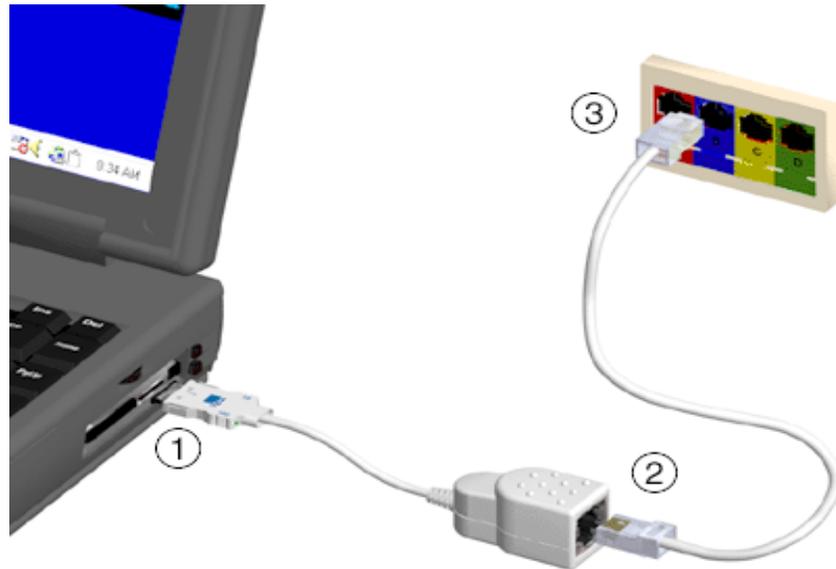
- 1 Remove all PC Cards from your notebook.
- 2 With the power off, insert the LAN CardBus PC Card into the PC Card Slot and slide it all the way in.



CAUTION: Do not force the LAN CardBus PC Card into the slot or you may bend the pins inside the slot. If the CardBus PC Card does not fit in the slot, the notebook only support 16-bit PC cards. A suggested 10/100 16-bit PC Card replacement is the 3CCFE574BT PC Card.

- 3 Connect the PC Card cable to the 3CCFE575CT LAN CardBus PC Card (1).
- 4 Connect the PC Card cable to the network cable (2).

- 5 Connect the network cable to the network port (3).



Now you are ready to install the network driver. Go to the chapter for your notebook operating system in this guide.

Connecting the 3CXFE575CT XJACK LAN CardBus PC Card

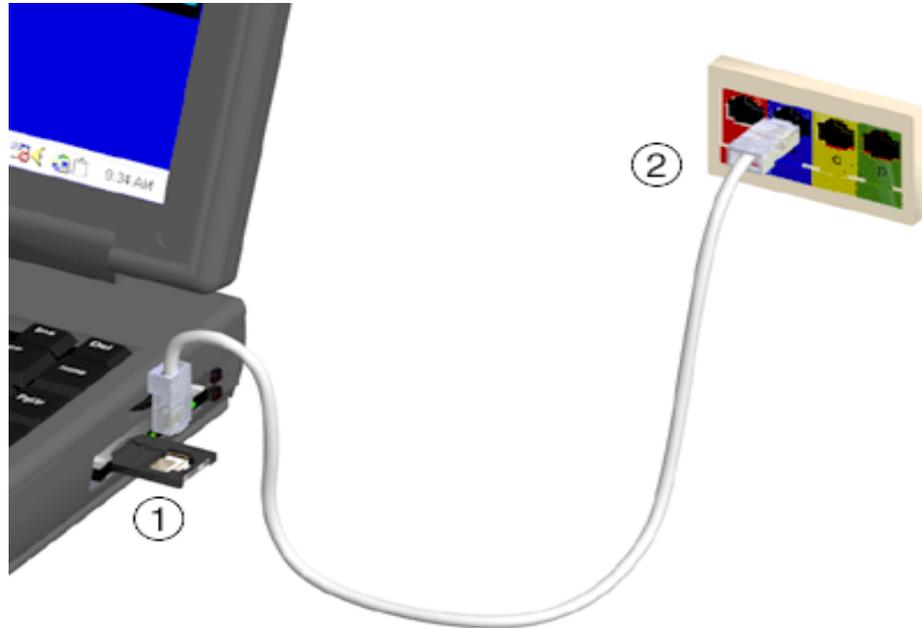


- 1 Remove all PC Cards from your notebook.
- 2 With the power off, insert the XJACK® LAN CardBus PC Card into the PC Card slot and slide it all the way in.



CAUTION: Do not force the LAN CardBus PC Card into the slot or you may bend the pins inside the slot. If the XJACK LAN CardBus PC Card does not fit in the slot, the notebook only support 16-bit PC Cards. A suggested 10//100 16-bit PC Card replacement is the 3CXFE574BT XJACK PC Card.

- 3 Connect the network cable to the XJACK connector on the 3CXFE575CT LAN CardBus PC Card (1).
- 4 Connect the network cable to the network port (2).



Now you are ready to install the network driver. Go to the chapter for your operating system in this guide.

Connecting the 3C3FE575CT LAN CardBus PC Card

- 1 Remove all PC Cards from your notebook.
- 2 With the power off, insert the 3C3FE575CT LAN CardBus PC Card into the PC Card slot and slide it all the way in.



CAUTION: Forcing the card into the slot may bend the pins. If you do not know how to insert cards in your computer, refer to the documentation supplied with your computer on using PC Card (PCMCIA) slots.



- 3 Connect one end of the network cable to the RJ-45 port on the card. This port is indicated on the card with a network icon.
- 4 Connect the other end to the LAN port.



Now you are ready to install the network driver. Go to the chapter for your notebook operating system in this guide.

Disconnecting the Cables

All cables used with the LAN CardBus PC Card lock in place when connected to the card. To release the cables, squeeze the release clip located on the top of the connector.

2

SETUP FOR WINDOWS 2000

Before You Begin Installation

Before you begin installing the network driver software, have the following information ready:

- For Windows 2000 networking, your computer name and workgroup name.
- For your network account, your user name and password.
- For unattended installation, see the \unattendwin2k directory on your *Installation CD*.

Setup Procedure

1 Make sure that the CardBus PC Card is inserted and connected to the network, as described earlier.

2 Turn your notebook computer on.

Windows will detect the card and install drivers provided with Windows 2000. No reboot is required.



NOTE: We recommend that you upgrade to the most current drivers. To do so, complete the remaining steps in this procedure.

3 From the desktop, choose Start/Settings/Control Panel.

4 Double-click on the *System* icon.

5 Select the *Hardware* tab.

6 Click on the *Device Manager* button.

7 Open *Network Adapters*.

8 Double-click on *FE575C-3COM 10/100 LAN CardBus-Fast Ethernet*.

9 Choose the *Driver* tab.

10 Insert the *3Com 10/100 LAN CardBus Installation CD*.

11 Click on the *Update Driver* button.

12 When the Upgrade Device Driver Wizard dialog box appears, click *Next*.

13 If it is not chosen already, choose *Search for suitable driver for my device (recommended)*, and click *Next*.

14 Choose the *CD-ROM drives* search location, and click *Next*.

15 When Windows reports that "The wizard found a driver for the following device," click *Next*.

16 Click *Finish* in the Completing the Upgrade Device Driver Wizard dialog box.

If you are running TCP/IP using DHCP, you will be connected to the network and will not need to reboot your notebook computer. If you are not running the aforementioned configuration, see your network administrator to adjust your network settings.

Confirming Installation

- 1 From the desktop, choose Start/Settings/Control Panel.
- 2 Double-click on the *System* icon. The System Properties box appears, detailing your system setup.
- 3 Choose the *Hardware* tab.
- 4 Click the *Device Manager* button. A list of devices appears, arranged by type.
- 5 Double-click the + sign next to *Network Adapters*. The PC Card name, *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet*, appears, confirming successful installation.
- 6 Double-click on *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet* to display a description of the PC Card and its current status. The device status should indicate "This device is working properly."

Troubleshooting Windows 2000 Installations

Symptom	Solution
Basic troubleshooting, applicable for all problem situations.	<p>Inspect all cables and connections.</p> <p>Check whether your PC Card is fully inserted into the slot.</p> <p>Verify that you have the latest BIOS for your system. If not, check the Web site for your computer and follow the BIOS upgrade instructions.</p> <p>Check for multiple installations of the PC Card.</p> <p>Check whether your system's PCMCIA or CardBus Controller is installed and running properly: go to My Computer/Control Panel/System/Hardware/Device Manager/PCMCIA Card. Verify that the controller is present and shows no errors.</p>
The LAN device is not functional. LED on the connector or PC Card is off or mismatches the real network speed.	<p>Use My Computer/Control Panel/System/Hardware/Device Manager to inspect the status of your PC Card.</p> <p>If you see a red "X", enable the PC Card by checking the appropriate box under Properties.</p> <p>If you see a yellow exclamation mark, click the icon to see what the conflict is. Verify that there are adequate system resources. Free system resources (for example, disable the infrared port), remove and reinstall the PC Card.</p>
Loosing network connection after disconnecting or changing the media speed.	<p>This can occur when using NetWare servers and IPX/SPX protocol. It happens when the frame type is selected automatically. A temporary solution is to reboot after disconnecting and reconnecting the cable in NetWare networks. The permanent solution is to use specific frame types such as 802.2 or 802.3.</p>

Symptom	Solution (continued)
Need to force speed and duplex settings.	<p>In most cases, the automatic settings work fine. However, if you need to force speed or duplex settings to match those of an attached device:</p> <ol style="list-style-type: none">1 Open My Computer/Control Panel/Network and Dial Up Connections.2 Choose <i>Local Area Connection</i>.3 <i>FE575C-3Com 10/100 LAN CardBus-Fast Ethernet</i> should appear in the <i>Connect using:</i> box.4 Press the <i>Configure</i> button.5 From the generated dialog box, choose the <i>Advanced</i> tab.6 Select <i>Network Link Selection</i> and choose the correct speed.

Uninstalling the Card

Sometimes previous or unfinished installations leave problems that affect PC Card operation. If the PC Card installation is unsuccessful for any reason, your best course may be to remove the PC Card and its software and repeat the installation procedures with a fresh installation of the operating system. Possible problems may be indicated if:

- The PC Card is not working.
- Windows 2000 is not detecting the PC Card.
- The system issues a warning tone at startup.

If you are having any of these problems:

- 1 Open Control Panel/System/Device Manager.
- 2 Select the FE575C-3Com 10/100 LAN CardBus-Fast Ethernet components and click *Remove*.
- 3 Remove the PC Card from the PC Card slot.
- 4 Reboot and reinstall the PC Card.

3

SETUP FOR WINDOWS 98 AND WINDOWS MILLENNIUM EDITION

Before You Begin Installation

Before installing the network driver software, have the following information ready:

- For Windows 98 networking, your computer name and workgroup name.
- For your network account, your user name and password.
- For unattended installation, see the \unattend\win98 directory on your *Installation CD*.

Setup Procedure

1 Install the PC Card as described in “Installing the PC Card”.

2 Turn the notebook on.

Windows 98 automatically detects the PC Card, displays a *New Hardware Found* dialog box, and looks for information about the PC Card.

When Windows is ready to configure the new hardware, Windows 98 opens the Add New Hardware Wizard. The dialog box states that Windows will search for new drivers for the PCI Ethernet Controller.

3 Click *Next*.

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

5 Select *Floppy Drives* or *CD*, insert the *LAN Installation Disk* or the *LAN Installation CD*, and click *Next*.

After finding the files on the disk, Windows displays the prompt: Windows driver file for the device: *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet*.

6 Click *Next* to copy the required files.

The Add New Hardware Wizard window states that Windows has finished installing the driver.

7 If prompted, insert the Windows 98 CD. You can specify a location on your hard disk where the Windows 98 files reside. Typically, this location is C:\WINDOWS\OPTIONS\CABS or C:\WINDOWS\CATROOT. Click *OK* to copy the files needed for the Ethernet interface.

Please wait while Windows checks your current network configuration. The required time depends on your settings for network software components.

A dialog box appears stating that Windows has finished installing the software that your new hardware device requires.

8 Click *Finish*.

9 When Windows 98 prompts whether to reboot the computer, remove the *LAN Installation Disk* from the floppy drive and click *Yes*.

Confirming Installation

- 1 Double-click the *My Computer* icon.
- 2 Double-click the *Control Panel* icon.
- 3 Double-click the *System* icon. The System Properties box appears, detailing your system setup.
- 4 Click the *Device Manager* tab. A list of devices appears, arranged by type.
- 5 Click the + sign next to *Network Adapters*. The PC Card name, *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet*, appears, confirming successful installation.
- 6 Double-click *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet* to display a description of the PC Card and its current status. The device status should indicate "This device is working properly."

Troubleshooting Windows 98 Installations

Symptom	Solution
Basic troubleshooting, applicable for all problem situations.	<p>Inspect all cables and connections.</p> <p>Check whether your PC Card is fully inserted into the slot.</p> <p>Verify that you have the latest BIOS for your system. If not, check the Web site for your computer and follow the BIOS upgrade instructions.</p> <p>Check for multiple installations of the PC Card.</p> <p>Check whether your system's PCMCIA or CardBus Controller is installed and running properly: go to My Computer/Control Panel/System/Device Manager/PCMCIA Card. Verify that the controller is present and shows no errors.</p> <p>Open My Computer/Control Panel/PC Card to confirm that the system recognizes your PC Card.</p> <p>In My Computer/Control Panel/Network make sure that you have the correct clients and protocols installed.</p>
The LAN device is not functional. LED on the connector or PC Card is off or mismatches the real network speed.	<p>Use My Computer/Control Panel/System/Device Manager to inspect the status of your PC Card.</p> <p>If you see a red "X", enable the PC Card by checking the appropriate box under Properties.</p> <p>If you see a yellow exclamation mark, click the icon to see what the conflict is. Verify that there are adequate system resources. Free system resources (for example, disable the infrared port), remove and reinstall the PC Card.</p>
Losing network connection after disconnecting or changing the media speed.	<p>This can occur when using NetWare servers and IPX/SPX protocol. It happens when the frame type is selected automatically. A temporary solution is to reboot after disconnecting and reconnecting the cable in NetWare networks. The permanent solution is to use specific frame types such as 802.2 or 802.3.</p>
Need to force speed and duplex settings.	<p>In most cases, the automatic settings work fine. However, if you to need to force speed or duplex settings to match those of an attached device:</p> <ol style="list-style-type: none"> 1. Open My Computer/Control Panel/Network 2. Double click <i>FE575C-3Com 10/100 LAN CardBus-Fast Ethernet</i> 3. Click the Advanced tab. 4. Select Network Link Selection and choose the correct speed.

Uninstalling the Card

Sometimes previous or unfinished installations leave problems that affect PC Card operation. If the PC Card installation is unsuccessful for any reason, your best course may be to remove the PC Card and its software and repeat the installation procedures with a fresh installation of the operating system. Possible problems may be indicated if:

- The PC Card is not working.
- Windows 98 is not detecting the PC Card.
- The system issues a warning tone at startup.

If you are having any of these problems:

- 1** Open Control Panel/System/Device Manager.
- 2** Select the FE575C-3Com 10/100 LAN CardBus-Fast Ethernet components and click *Remove*.
- 3** Remove the PC Card from the PC Card slot.
- 4** Reboot and reinstall the PC Card.

4

SETUP FOR WINDOWS 95

Before You Begin Installation

- Determine which version of Windows 95 is installed on your notebook.
- Obtain the *LAN Installation Disk* that shipped with the PC Card.
- Have your network file server name, your network account user name, and your password ready.
- For unattended installation, see the \unattendwin95 directory on your *Installation CD*.

Determining Your Windows 95 Version

Before setting up the PC Card, you must know which version of Windows 95 is installed on your notebook. Version A, an early version of Windows 95, is still installed on many notebooks. Most newer notebooks, especially those which come with Windows 95 already installed, run OSR 2 (also called version B or version C). These versions of Windows 95 require different files and different setup procedures.

Follow these steps to find out which version of Windows 95 you are running:

- 1 Double-click *My Computer*, double-click *Control Panel*, and then double-click *System* to display the System Properties dialog box.
- 2 Click the *General Tab* to display the Windows 95 version information.
 - Version A is identified as 4.00.950 or 4.00.950a.
 - OSR 2 is identified as 4.00.950b or 4.00.950c.

Setup Procedures

Windows 95 Version A

- 1 Insert the PC Card as described in "Installing the PC Card".
- 2 Turn the notebook on.
- 3 Double-click *My Computer*, *Control Panel*, and then double-click *Add New Hardware*.
- 4 Respond to the "Do you want Windows to search for your new hardware?" prompt by clicking *No*, and then click *Next*.
- 5 Double-click *Network Adapters* on the list that appears.

- 6 In the Select Device window, click *Have Disk*.
- 7 Insert the *LAN Installation Disk* into the floppy drive and click *OK*.
- 8 Select *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet Manual Load* and click *OK* to copy the PC Card files to your notebook.

If you are prompted for the *LAN Installation Disk* during installation, make sure that a: is the designated path. If during installation, the 3Com driver cannot be found, enter a:\ to point Windows to the *LAN Installation Disk*.
- 9 In the new hardware Wizard window, click *Next*.
- 10 If prompted, insert the Windows 95 CD or enter the location on your notebook where the Windows 95 files reside. Typically, this location is C:\WINDOWS\OPTIONS\CABS.

Click *OK* to copy the files needed for the Ethernet interface.

If during installation, the 3Com driver cannot be found, enter a:\ to point Windows to the driver.

Please wait while Windows checks your current network configuration. The required time depends on your settings for network software components.

A dialog box appears stating that Windows has finished installing the software that your new hardware device requires.
- 11 Click *Finish* to complete installation and remove the *LAN Installation Disk*.
- 12 Click yes to reboot the notebook.

When the software restarts, log on to your network using the user name and password.

Windows 95 OSR 2

- 1 Insert the PC Card as described in "Installing the PC Card".
- 2 Turn the notebook on.

The New Hardware Found window appears briefly.

The Update Device Driver Wizard window states that Windows has detected the PCI Ethernet Controller.
- 3 Insert the *LAN Installation Disk* and click *Next* to begin driver installation.

The following message appears:

"Windows found the following updated driver for the device: FE575C-3Com 10/100 LAN CardBus- Fast Ethernet".

- 4 Click Finish to accept the driver.

If you are prompted for the *LAN Installation Disk* during installation, make sure that a: is the designated path. If during installation, the 3Com driver cannot be found, enter a:\ to point Windows to the *LAN Installation Disk*.

If prompted, insert the Windows 95 CD. You can specify a location on your hard disk where the Windows 95 files reside. Typically, this location is C:\WINDOWS\OPTIONS\CABS. Click *OK* to copy the files needed for the Ethernet interface.

Please wait while Windows checks your current network configuration. The required time depends on your settings for network software components. If you are prompted for *Computer name* or *Workgroup name*, enter the appropriate name and click *OK*. If you have difficulties, see your network administrator.

A dialog box appears stating that Windows has finished installing the software that your new hardware device requires.

- 5 When Windows 95 prompts whether to reboot the notebook, remove the *LAN Installation Disk* from the floppy drive and click *Yes*.

Confirming Installation

- 1 Double-click the *My Computer* icon.
- 2 Double-click the *Control Panel* icon.
- 3 Double-click the *System* icon. The System Properties box details your system setup.
- 4 Click the *Device Manager* tab.
- 5 Click the + sign next to *Network Adapters*. The display should show the FE575C-3Com 10/100 LAN CardBus-Fast Ethernet, confirming successful installation.
- 6 Double-click *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet* to display a description of the PC Card and its current status. It should display "This device is working properly."

Troubleshooting Windows 95 Installations

Symptom	Solution
Basic troubleshooting, applicable for all problem situations.	<p>Inspect all cables and connections.</p> <p>Check whether your PC Card is fully inserted into the slot.</p> <p>Verify whether you have the latest BIOS for your system. If not, check the Web site for your notebook and follow the BIOS upgrade instructions.</p> <p>Check for multiple installations of the PC Card.</p> <p>Check whether your system's PCMCIA or CardBus Controller is installed and running properly:</p> <p>Go to My Computer/Control Panel/System/Device Manager/PCMCIA Card. Verify that the controller is present and shows no errors.</p> <p>Open My Computer/Control Panel/PC Card to confirm that the system recognizes your PC Card.</p> <p>In My Computer/Control Panel/Network application, make sure that you have the correct clients and protocols installed.</p>
At installation, Update Device Driver window does not appear.	<p>The PC Card may have already been installed.</p> <p>The PC Card may have been installed as "Other Devices" because of a previous faulty installation.</p> <p>PCMCIA may not be enabled on your system.</p>
The LAN device is not functional. LED on the connector or PC Card is off or mismatches the real network speed.	<p>Use My Computer/Control Panel/System/Device Manager to inspect the status of <i>FE575C-3Com 10/100 LAN CardBus-Fast Ethernet</i>.</p> <p>If you see a red "X", enable the PC Card by checking the appropriate box under Properties.</p> <p>If you see a yellow exclamation mark, click on the icon to see what the conflict is. Verify that there are adequate system resources. Try to free system resources (for example, disable the infrared port), then remove and reinstall the PC Card.</p>
Losing network connection after disconnecting or changing the media speed	<p>This can occur when using NetWare servers and IPX/SPX protocol. It happens when the frame type is selected automatically. A temporary solution is to reboot after disconnecting and reconnecting the cable in NetWare networks. The permanent solution is to use specific frame types such as 802.2 or 802.3.</p>
Need to force speed and duplex settings.	<p>In most cases, the automatic settings work fine. However, if you to need to force speed or duplex settings to match those of an attached device:</p> <ol style="list-style-type: none"> 1. Open My Computer/Control Panel/Network. 2. Double click the <i>FE575C-3Com 10/100 LAN CardBus-Fast Ethernet</i>. 3. Click the Advanced tab. 4. Select Network Link Selection and choose the correct speed.

Uninstalling the Card

Sometimes previous or unfinished installations leave problems that affect PC Card operation. If the PC Card installation is unsuccessful for any reason, your best course may be to remove the PC Card and its software and repeat the installation procedures with a fresh installation of the operating system. Possible problems may be indicated if:

- The PC Card is not working.
- Windows 95 is not detecting the PC Card.
- The system issues a warning tone at startup.

If you are having any of these problems:

- 1** Open Control Panel/System/Device Manager.
- 2** Select the FE575C-3Com 10/100 LAN CardBus-Fast Ethernet components and click *Remove*.
- 3** Remove the PC Card from the PC Card slot.
- 4** Reboot and reinstall the PC Card.

5

SETUP FOR WINDOWS NT 4.0

Before You Begin Installation

The Windows NT setup procedure you use depends on whether networking has already been installed on your notebook.

Before setting up the PC Card, you will need to know:

- Your network file server name, network account user name, and password.
- The protocol used in the Microsoft Windows network (NWLink IPX/SPX compatible transport, TCP/IP protocol, NetBEUI protocol).
- The name of the NT server domain or workgroup to which you belong.
- Your IP address (unless you are using DHCP).
- If you are installing with Card and Services Block software, see the "Installing with Softex" section in this chapter.
- For unattended installation, see the \unattendnt4 directory on your *Installation CD*.

Setup Procedure

Setup With No Networking Installed

- 1 Insert the PC Card as described in "Installing the PC Card".
- 2 Turn the notebook on.
- 3 Double-click *My Computer*, double-click *Control Panel*, double-click *Network*.
- 4 Click *Yes* when the system prompts: "Windows NT Networking is not installed. Do you want to install it now?".
This opens the *Network Setup Wizard*.
If this message does not appear, go to Windows NT 4 with networking installed and follow the instructions.
- 5 Check *Wired to the network* and click *Next*.
- 6 Click *Select from list...* when the system prompts to have setup start searching for a network adapter.
- 7 Click *Have Disk*.
- 8 Insert the *LAN Installation Disk* in the floppy drive or the *LAN Installation CD* in the CD-ROM drive (and enter the path to the drive, for example, d:\) and click *OK*.
- 9 Select *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet* when the Select OEM Option window opens, and click *OK*.

The Network Setup Wizard window appears.

- 10 Click *Next*.
- 11 Place a check mark next to each network protocol required for your site in the Network Protocols list and click *Next*.
- 12 Place a check mark in the box next to each desired service in the Network Services window.
- 13 Select the default settings.
- 14 Click *Next* to install the components you selected.

The message "Windows NT is now ready to install networking" displays.

- 15 Click *Next*.

The Windows NT Setup windows prompts for the location of the Windows NT installation files.

- 16 Enter the path to the Windows NT installation files (for example, d:\i386 on the NT CD) and click *Continue*.

The Windows NT Setup window prompts for the location of the Windows NT installation files again.

- 17 Enter the path to the LAN Installation disk (for example, a:\) or the LAN Installation CD (for example, d:\) and click *Continue*.

- 18 Accept the default settings in the 3Com network Interface dialog box, and click *Continue*.

The default settings work in most instances. However, you may specify network link settings, auto polarity, and IRQ and I/O values. Please see \cd\help\config.txt on the *Installation CD* to determine if there are good configurations for your notebook.

- 19 Enter your IP address if prompted to do so and click *OK*.
- 20 Click *Yes* if you are prompted for DHCP.
- 21 Click *Next* when the Protocol window for enabling or disabling protocols opens.
- 22 Click *Next* to start the network when Windows NT is ready.
- 23 Enter your notebook name and workgroup or domain name when prompted and click *Next*.
- 24 Click *Finish* when the system displays "Networking has been installed on your notebook".
- 25 Remove the *LAN Installation Disk* from the floppy drive or the *LAN Installation CD* from the CD-ROM drive when prompted to reboot the notebook, and click *Yes*.
- 26 Reinstall your service pack if you had service pack installed prior to installing the PC Card.

Windows NT With Networking Installed

- 1 Install the PC Card as described in "Installing the PC Card".
- 2 Turn the notebook on.
- 3 Double-click *My Computer*, double-click *Control Panel*, and double-click *Network*.

- 4** Select the Adapters tab.
The Select Network Adapter window displays.
- 5** Go to the section "Setup With No Networking Installed" in this chapter for instructions if the message "networking is not installed" displays, .
- 6** Click *Have Disk...*
- 7** Insert the *LAN Installation Disk* in the floppy drive and click *OK* or insert the *LAN Installation CD* into the CD-ROM drive (change the path to the drive, for example, d:\) and click *OK*.
- 8** Select *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet* when the Select OEM Option window opens and click *OK*.
- 9** Accept the default settings in the network Settings window and click *Continue*.
- 10** Wait while the files are copied to your notebook.
The default settings work in most instances. However, you may specify network link settings, auto polarity, and IRQ and I/O values. Please see the Working Configurations directory on the Installation CD.
- 11** Click *Close*.
- 12** Enter your IP address if prompted and click *OK*.
- 13** Click *Yes* to the DHCP prompt, if the prompt displays.
- 14** Click *Apply*.
- 15** Click *OK*.
- 16** Remove the *LAN Installation Disk* from the floppy drive or the *LAN Installation CD* from the CD-ROM drive when prompted to reboot the notebook and click *Yes*.

Installing with Softex For OmniBook 4150, 900, and XE2 users, please read the following procedure before installing the 3Com 10/100 LAN CardBus PC Card using Softex Card Executive.

- 1** Make sure the driver diskette is removed from the notebook floppy drive.
- 2** Insert the 3Com 10/100 LAN CardBus PC Card into the PC Card slot.
Card Executive will attempt, but fail, to find the diskette.
- 3** When prompted, select *Install driver provided with PC Card*.
- 4** Type the following path and click *OK*:
a:\softex
The Network Settings window will display.
- 5** Select *Continue*.
The Protocol configuration window will display, depending on the protocol that was chosen.
- 6** Reboot your system when prompted.
The PC Card is now installed.

Confirming Windows NT Installation

The following procedure can be used to confirm any of the NT installations discussed in this chapter.

- 1 Double-click My Computer, double-click Control Panel, and then double-click *Network*.
- 2 Select the Adapters tab.
FE575C-3Com 10/100 LAN CardBus -Fast Ethernet appears on the list.

Troubleshooting Windows NT 4.0 Installations

Symptom	Solution
Basic troubleshooting, applicable for all problem situations.	<p>Inspect all cables and connections.</p> <p>Check whether your PC Card is fully inserted into the slot.</p> <p>Verify whether you have the latest BIOS for your system. If not, check the Web site for your notebook and follow the BIOS upgrade instructions.</p> <p>The event log lists any problems found during system operation. To check the event log for errors, select Programs/Admin Tools/Event Viewer from the Start menu.</p>
Failure after Suspend/Resume.	This usually indicates a power-management problem. Since Windows NT 4.0 does not support power management, we recommend that you disable power management in the BIOS. Make sure you have the latest BIOS for your notebook or upgrade your software from Microsoft.
Card not functioning.	<p>Open Windows NT Diagnostics. From Start menu, select Programs/Admin Tools/Windows NT Diagnostics.</p> <p>Check for resource conflicts and make sure the settings for the PC Card are valid.</p>
Need to force speed and duplex settings.	<p>In most cases, the automatic settings work fine. However, if you need to force speed and duplex settings to match those of an attached device:</p> <ol style="list-style-type: none"> 1. Open Control Panel/Network. 2. Click the Adapters tab. 3. Select Link Settings and specify the desired values.

Known Working Configurations

Please see `\cd\help\config.txt` on the *Installation CD* to determine if there are good configurations for your notebook.

Uninstalling the Card

Sometimes previous or unfinished installations leave problems that affect PC Card operation. If the PC Card installation is unsuccessful for any reason, your best course may be to remove the PC Card and its software and repeat the installation procedures with a fresh installation of the operating system. Possible problems may be indicated if:

- The PC Card is not working.
- Windows NT is not detecting the PC Card.
- The system issues a warning tone at startup.

If you are having any of these problems:

- 1** Remove the PC Card from the PC Card slot.
- 2** Double-click *My Computer*, double-click *Control Panel*, and double-click *Network*.
- 3** Select the Adapters tab.
- 4** Select *FE575C-3Com 10/100 LAN CardBus-Fast Ethernet* and click *Remove*.
- 5** Reboot and reinstall the PC Card.

This procedure removes the PC Card only. If you choose to remove all networking components, remember to use the setup procedure described in “Setup With No Networking Installed” in this chapter.

6

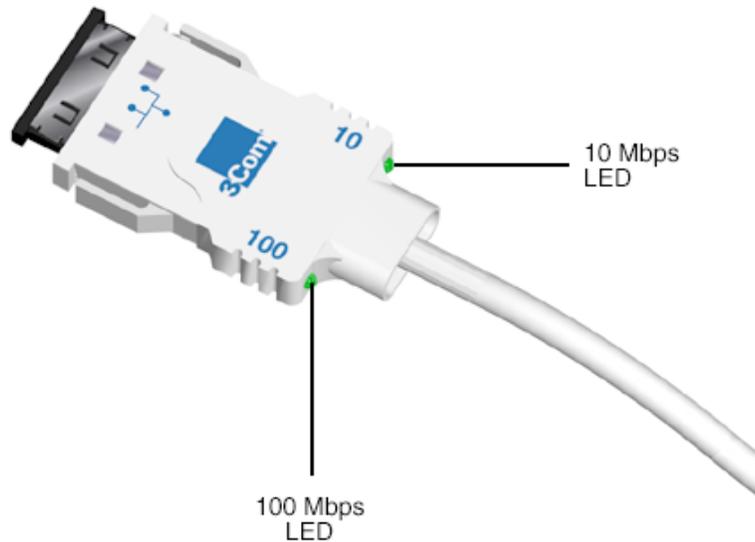
TROUBLESHOOTING

PC Card LEDs

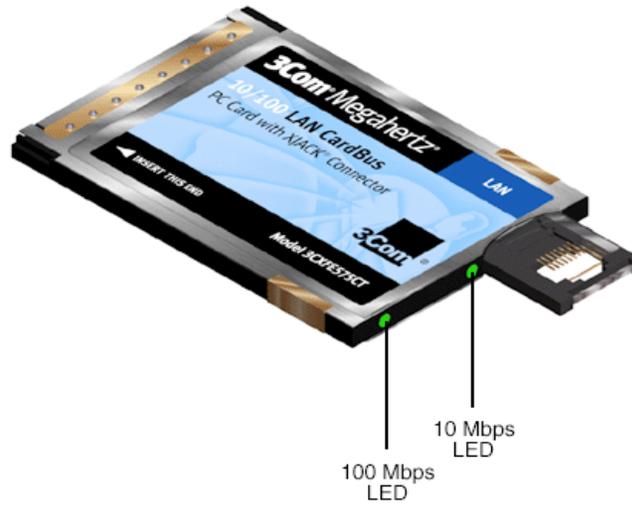
Before the PC Card and cable LEDs can be used for troubleshooting, the PC Card must be connected to the network and the driver must be installed.

The LEDs and LED status for the models 3CCFE575CT and 3CXFE575CT are shown below.

LED	On	Off	Flashing	Both On	Both Off
10 Mbps	Good 10BASE-T connection between PC Card and hub	No connection. (Off when 100 LNK LED is on.)	There may be a problem with your physical connection. Check that all cables are connected securely.	Indicates resource conflict with the NIC and another device in the system.	Indicates one of the following: <ul style="list-style-type: none"> ■ No network connection ■ Drivers not loaded ■ Resource conflict
100 Mbps	Good 100BASE-TX connection between PC Card and hub	No connection. (Off when 10 LNK LED is on.)			



On the 3CXFE575CT card, the LEDs are on the card.



On the 3C3FE575CT card, the connector lights up to indicate network status.

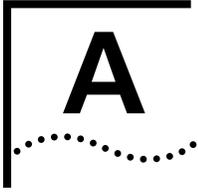
Description	Steady	Flashing	Off
Green 10 Mbps	Good connection	Faulty connection	No connection
Yellow 100 Mbps	Good connection	Faulty connection	No connection



Diagnostics Help Library

You can find more information in the DOS Diagnostics help library. To run diagnostics, insert the *LAN Installation Disk* in your notebook and at the DOS prompt, enter:

```
a:\dosdiag.exe
```

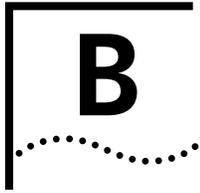
PRODUCT SPECIFICATIONS

3CCFE575CT and 3CXFE575CT LAN CardBus PC Cards

Network Interface	3CCFE575CT and 3CXFE575CT LAN PC Cards	Ethernet IEEE 802.3 10BASE-T Ethernet IEEE 802.3u 100BASE-TX
Physical Dimensions	Length Height Width Weight	3.370 in (85.6 mm) 0.197 in (5.0 mm) 2.126 in (54 mm) 1.056 oz (29.8 g)
Environmental Operating Range	Operating temperature Relative humidity	0 to 55°C (32 to 131°F) 5 to 90% noncondensing
Network Cable Specifications	UTP Cable Requirements	Category 5 cable (100 Mbps) that meets the requirements of EIA/TIA-568 & EIA/TIA TSB-36 (AT&T® type 1061 or equivalent)
Power Requirements	Power Consumption 100BASE-TX 10BASE-T	170 mA @ $\pm 5 V \pm 5\%$ 220 mA maximum 180 mA typical 130 mA maximum 100 mA typical
Certification	FCC	Part 15, Class B

3C3FE575CT LAN CardBus PC Card

Network Interface	3C3FE575CT LAN PC Card	Ethernet IEEE 802.3 10BASE-T Ethernet IEEE 802.3u 100BASE-TX
Physical Dimensions	Length Height Width Weight	3.370 in (85.6 mm) 0.3935 in (10 mm) 2.126 in (54 mm) 1.056 oz (29.8 g)
Environmental Operating Range	Operating temperature Relative humidity	0 to 55°C (32 to 131°F) 5 to 90% noncondensing
Network Cable Specifications	UTP Cable Requirements	Category 5 cable (100 Mbps) that meets the requirements of EIA/TIA-568 & EIA/TIA TSB-36 (AT&T® type 1061 or equivalent)
Power Requirements	Power Consumption 100BASE-TX 10BASE-T	170 mA @ $3.3 V \pm 5\%$ 220 mA maximum 180 mA typical 130 mA maximum 100 mA typical
Certification	FCC	Part 15, Class B



TECHNICAL SUPPORT

Online Technical Services

3Com offers worldwide product support 24 hours a day, 7 days a week, through the following online systems:

- World Wide Web site
- 3Com FTP site

World Wide Web Site

Access the latest networking information on the 3Com Corporation World Wide Web site by entering the URL into your Internet browser:

<http://www.3com.com/>

3Com Support Web Site

For direct access to support information, you can log directly into the support Web page at:

<http://www.support.3com.com/>

The support page provides access to online support information such as technical documentation and software library, as well as support options ranging from technical education to maintenance and professional services.

3Com Software Library

This link takes you directly to the Web site for software downloads (including the latest version of this manual) for all FE575CT-family products.

<http://support.3com.com/infodeli/tools/nic/fe575ct.htm>

3Com KnowledgeBase

For help with specific problems, log into the 3Com KnowledgeBase. The KnowledgeBase contains a list of known problems for specific computer models and suggests ways to solve the problems. The URL is:

<http://knowledgebase.3com.com>

Frequently Asked Questions

This link takes you to the FAQ list for 3Com PC cards.

<http://support.3com.com/infodeli/tools/nic/fe575ct/family.htm>

3Com FTP Site Download drivers, patches, software, and MIBs across the Internet from the 3Com public FTP site.

To connect to the 3Com FTP site, enter the following information into your FTP client:

- Hostname: **ftp.3com.com**
- Username: **anonymous**
- Password: **<your Internet e-mail address>**

You do not need a user name and password with Web browser software such as Netscape Navigator and Internet Explorer. To access the ftp site through your browser, enter the following URL:

ftp://ftp.3com.com/PUB/nic/fe575ct/

Support from Your Network Supplier

If additional assistance is required, contact your network supplier. Many suppliers are authorized 3Com service partners who are qualified to provide a variety of services, including network planning, installation, hardware maintenance, application training, and support services.

When you contact your network supplier for assistance, have the following information ready:

- Product model name, part number, and serial number
- A list of system hardware and software, including revision levels
- Diagnostic error messages
- Details about recent configuration changes, if applicable

Support from 3Com

If you are unable to obtain assistance from the 3Com online technical resources or from your network supplier, 3Com offers technical telephone support services. If you contact 3Com for assistance, have the following information ready:

- Product model name, part number, and serial number
- A description of your computer system hardware and software, including revision levels
- Relevant diagnostic error messages, plus details about recent configuration changes
- Topology of your network, including the type of network device (for example hub or switch) your computer is connected to
- Type of computer you are trying to connect to (for example, NetWare server, NT server or peer-to-peer networking)

Below is a list of worldwide technical telephone support numbers:

Country	Telephone Number
Asia Pacific Rim	
Australia	1 800 678 515
Hong Kong	800 933 486
India	+61 2 9937 5085
Indonesia	001 800 61 009
Japan	0031 61 6439
Malaysia	1800 801 777
New Zealand	0800 446 398
Pakistan	+61 2 9937 5085
Philippines	1235 61 266 2602
P.R. of China	10800 61 00137 or 021 6350
Singapore	1590
S. Korea	800 6161 463
From anywhere in S.	
Korea:	00798 611 2230
From Seoul:	(0)2 3455 6455
Taiwan, R.O.C.	0080 611 261
Thailand	001 800 611 2000
Europe	
From anywhere in Europe, call:	+31 (0)30 6029900 phone +31 (0)30 6029999 fax

From the following European countries, you may use the toll-free numbers:

Country	Telephone Number
Austria	0800 297468
Belgium	0800 71429
Denmark	800 17309
Finland	0800 113153
France	0800 917959
Germany	0800 1821502
Hungary	00800 12813
Ireland	1 800 553117
Israel	1800 9453794
Italy	1678 79489
Netherlands	0800 0227788
Norway	800 11376
Poland	00800 3111206
Portugal	0800 831416
South Africa	0800 995014
Spain	900 983125
Sweden	020 795482
Switzerland	0800 55 3072
U.K.	0800 966197
Latin America	
Argentina	AT&T +800 666 5065
Brazil	0800 13 3266
Chile	1230 020 0645
Colombia	98012 2127
Mexico	01 800 CARE (01 800 2273)
Peru	AT&T +800 666 5065
Puerto Rico	800 666 5065
Venezuela	AT&T +800 666 5065
North America	1-800-527-8677

Returning Products for Repair

Before returning a product to 3Com for repair, first obtain a Return Materials Authorization (RMA) number. Products sent to 3Com without RMA numbers will be returned to the sender unopened, at the sender's expense.

To obtain an RMA number, call or fax:

Country	Telephone Number	Fax Number
Asia, Pacific Rim	+65 543 6500	+65 543 6348
Europe, South Africa, and Middle East	+31 30 6029900	+31 30 6029999
From the following European countries, you may call the toll-free numbers; select option 2 and then option 2:		
Austria	0800 297468	
Belgium	0800 71429	
Denmark	800 17309	
Finland	0800 113153	
France	0800 917959	
Germany	0800 1821502	
Hungary	00800 12813	
Ireland	1800553117	
Israel	1800 9453794	
Italy	1678 79489	
Netherlands	0800 0227788	
Norway	800 11376	
Poland	00800 3111206	
Portugal	0800 831416	
South Africa	0800 995014	
Spain	900 983125	
Sweden	020 795482	
Switzerland	0800 55 3072	
U.K.	0800 966197	
Latin America	1 408 326 2927	
U.S.A. and Canada	1-800-527-8677	1 408 326 7120

REGULATORY COMPLIANCE

3Com Megahertz 10/100 LAN CardBus PC Cards

FCC CLASS B STATEMENT

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.

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, and the Canadian Department of Communications Equipment Standards entitled, "Digital Apparatus," ICES-003. 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 the one which the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

The user may find the following booklet prepared by the Federal Communications Commission helpful: *The Interference Handbook*

This booklet is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 004-000-00345-4.

NOTE: In order to maintain compliance with the limits of a Class B digital device, 3Com requires that you use quality interface cables when connecting to this device. Changes or modifications not expressly approved by 3Com could void the user's authority to operate this equipment. Refer to the manual for specifications on cabling types.

FCC DECLARATION OF CONFORMITY

We declare under our sole responsibility that the

Model:	Description:
3CCFE575CT	3Com 10/100 LAN CardBus PC Card
3CXFE575CT	3Com 10/100 LAN CardBus PC Card
3C3FE575CT	3Com 10/100 LAN CardBus PC Card

to which this declaration relates, is in conformity with the following standards or other normative documents:

- ANSI C63.4-1992 Methods of Measurement
- Federal Communications Commission 47 CFR Part 15, subpart B
15.107 (e) Class B Conducted Limits
15.109 (g) Class B Radiated Emissions Limits

3Com Corporation, 5400 Bayfront Plaza, P.O. Box 58145, Santa Clara, CA 95052-8145

FCC PART 68 STATEMENT

3Com Corporation
Model No: 3C3FEM556 C
Made in U.S.A.

This equipment complies with Part 68 of the Federal Communications Commission (FCC) rules. On the product is a label that contains the FCC registration number and Ringer Equivalence Number (REN) for this device. If requested, this information must be provided to the telephone company.

An FCC compliant telephone cord with a modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is Part 68 compliant. See installation instructions for details.

The Ringer Equivalence Number (REN) is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on a telephone line may result in the devices not ringing in response to an incoming call. In most areas, the sum of REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total REN's, contact the local telephone company.

If this device causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. The telephone company may request that you disconnect the equipment until the problem is resolved.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of this equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

This equipment cannot be used on telephone company provided coin service. Connection to party line service is subject to state tariffs. Contact the state public utility commission or public service commission for information.

When programming and/or making test calls to emergency numbers:

-- **Remain on the line and briefly explain to the dispatcher the reason for the call.**

-- **Perform such activities in the off-peak hours such as early morning or late evenings.**

Note: The United States Telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device to send any message via a telephone fax machine unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. Refer to your fax communication software documentation for details on how to comply with the fax-branding requirement.

If trouble is experienced with this equipment or for repair or warranty information in the U.S. and Canada, please contact your computer manufacturer or reseller.

CANADIAN NOTICE

The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operation, and safety requirements. The Department does not guarantee the equipment will operate to the users' satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the inside wiring associated with a single-line individual service may be extended by means of a certified connector assembly. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make electrical ground connections by themselves, but should contact the appropriate inspection authority or an electrician, as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone line used by the device to prevent overloading. The termination of a line may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all devices does not exceed 100. The Load Number for this device appears on a label on the product.

CE NOTICE

Marking by the symbol CE0560X indicates compliance of this equipment to the EMC Directive 89/336/EEC, the Low Voltage Directive 73/23/EEC amended by 93/68/EEC, and the Telecom Terminal Equipment and Satellite Earth Stations Directive 98/13/EEC. Such marking is indicative that this equipment meets or exceeds the following technical standards:

- EN 55022--Limits and Methods of Measurement of Radio Interference Characteristics of Information Technology Equipment.
- EN 50082-1--Electromagnetic compatibility - Generic immunity standard Part 1: Residential, commercial, and light industrial.
- EN60950 (1992)--Safety of information technology equipment, including electrical business equipment.
- CTR 21 (1998)--Attachment requirements for Pan-European approval for connection to the analog Public Switched Telephone Networks (PSTNs) of TE (excluding TE supporting voice telephony services) in which network addressing, if provided, is by means of Dual Tone Multi Frequency (DTMF) signaling.

WARNING: Although this equipment can use either loop discount (Pulse) or DTMF (Tone) signaling, only the performance of the DTMF (Tone) signaling is subject to regulatory requirements for correct operation. It is therefore strongly recommended that the equipment is set to use DTMF (Tone) signaling for access to public or private emergency services. DTMF signaling also provides faster call set up.

The safety status of the ports on this modem is as follows:

- Line Interface Port TNV
- PCMCIA Bus connector to PC SELV

Note that only SELV ports should be connected to other SELV ports or TNV ports to other TNV ports. Interconnection of ports with different safety status may invalidate the approval. If in doubt about making such a connection, advice should be sought from a competent engineer.

The user should ensure that the power drawn by the modem, together with the host and any auxiliary apparatus drawing power from the host is within the rating of the power supply.

The modem power requirement is: +5V @ ~230mA.

The user should be aware that it is the modem and not the host that is approved.

When the modem is supplied along with a host machine, the modem user instructions must also be supplied. Failure to do so will invalidate the modem approval.

Please consult the supplier or maintainer of the modem, not the network operator, if operational difficulties are experienced.

This equipment has been approved to Council Decision 98/482/EEC-- "CTR 21" for Pan-European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, or itself, give an unconditional assurance of successful operation on every PSTN termination point. In the event of problems, you should contact your equipment supplier in the first instance.

NEW ZEALAND

Not all phones connected to the phone port will respond to incoming ringing. Do not report this as a fault unless the same phone will not respond to ringing when connected to a standard phone socket.

This equipment shall not be set up to make automatic calls to the Telecom 111 Emergency Services.

The grant of a Telepermit for a device in no way indicates Telecom acceptance of responsibility for the correct operation of that device under all operating conditions. In particular, higher speeds at which this modem is capable of operating depend on a specific network implementation which is only one of many ways of delivering high quality voice telephony to customers. Failure to operate should not be reported as a fault to Telecom.

In addition to satisfactory line conditions a modem can only work properly if:

- It is compatible with the modem at the other end of the call and,
- The application using the modem is compatible with the application at the other end of the call – e.g. accessing the Internet requires suitable software in addition to a modem.

This equipment should not be used in a manner which could constitute a nuisance to other Telecom customers.

Some parameters required for compliance with Telecom's PTC Specifications are dependent on the equipment (PC) associated with this modem. The associated equipment shall be set up to operate within the following limits for compliance with Telecom specifications:

There shall be no more than 10 call attempts to the same number within any 30 minute period for a single manual call initiation

The equipment shall go back on-hook for a period of not less than 30 seconds between the end of one call attempt and the beginning of the next.

Automatic calls to different numbers shall be not less than 5 seconds apart.

When used in the Auto-Answer mode, the S0 register must be set with a value between 2 and 5. This ensures:

A person calling your modem will hear a short burst of ringing before the modem answers. This confirms that the call has been successfully switched through the network.

Caller identification information (which occurs between the first and second ring cadence) is not destroyed.

This equipment does not meet Telecom's impedance requirements. Performance limitations may occur when used in conjunction with some parts of the network. Telecom will accept no responsibility should difficulties arise in such circumstances.

The code for Call Waiting disable is *52 on the Telecom New Zealand telephone network.

