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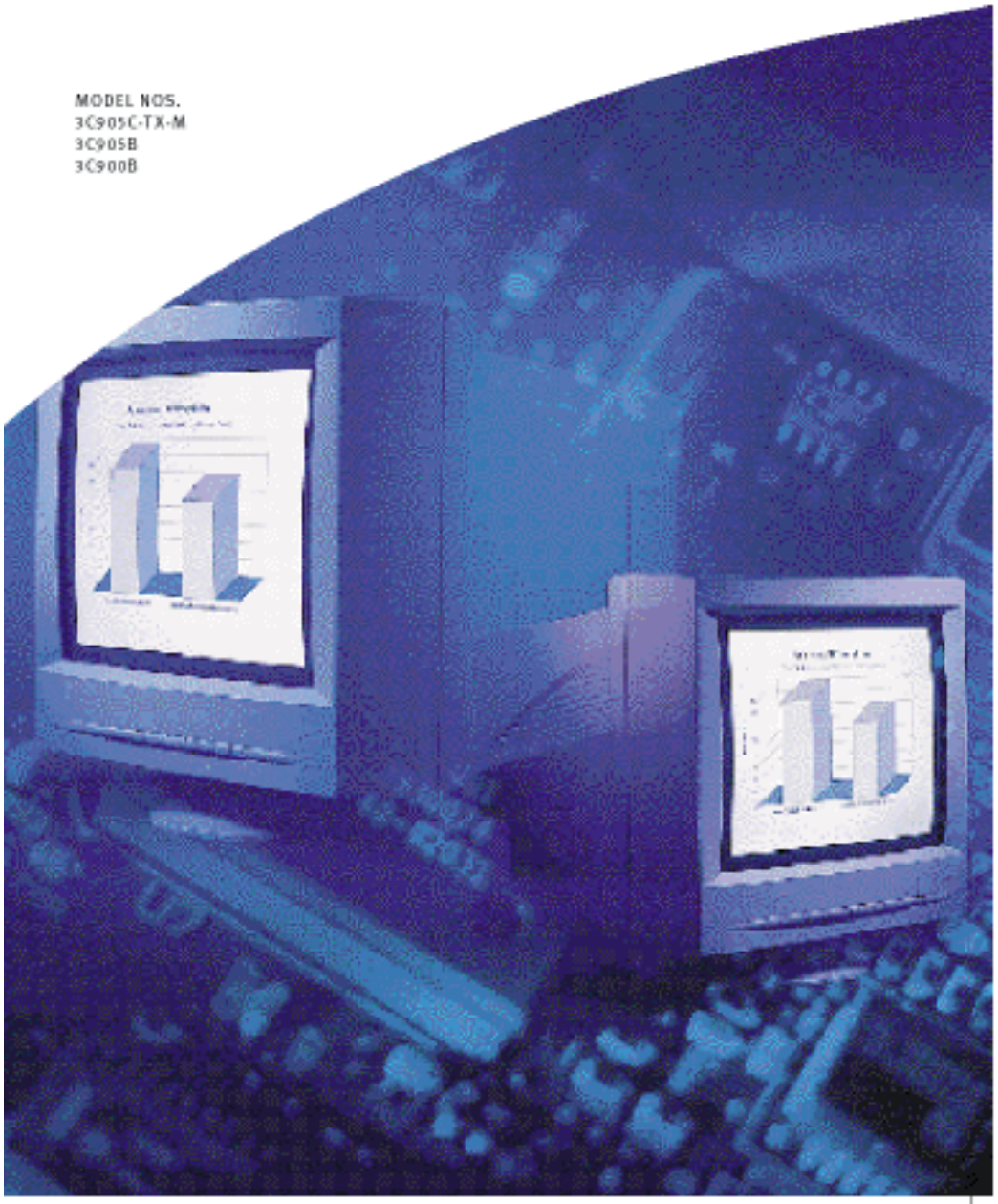
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3Com® EtherLink®

EtherLink PCI Network Interface Cards

Quick Guide

MODEL NOS.
3C905C-TX-M
3C905B
3C900B



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ETHERLINK® PCI NETWORK INTERFACE CARDS QUICK GUIDE

Introduction

This guide explains how to use *EtherCD* 5.x to install the following 3Com® EtherLink® PCI network interface cards (NICs) in a PC running Microsoft Windows 95, Windows 98, or Windows NT 4.0:

NIC	Model Number(s)
EtherLink 10/100 PCI For Complete PC Management	3C905C-TX-M
EtherLink 10/100 PCI	3C905B-TX
	3C905B-TX-M
	3C905B-TX-NM
	3C905B-COMBO
EtherLink 100 PCI Fiber	3C905B-FX
EtherLink 10 PCI Fiber	3C900B-FL
EtherLink 10 PCI	3C900B-TPO
	3C900B-COMBO

For other operating systems, or for more information on the NICs, see the user guide located on the *EtherCD*.

If you are installing a 3C900 or 3C905 NIC in a Windows 98 PC, follow the instructions in the WIN98.TXT file located in Help directory on the EtherCD. *Do not follow the instructions in this quick guide.*

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Obtaining Installation Diskettes

If your PC does not have a CD-ROM drive, you can obtain installation diskettes one of two ways:

- Access a PC that has a CD-ROM drive and create driver installation diskettes from the *EtherCD*.

  See the user guide on the *EtherCD* for instructions.
- Contact 3Com to order installation diskettes for *EtherCD* version 5.1:
  - Toll-free number from the United States and Canada:

    1-877-226-4604
  - Toll number for international calls:

    1-510-226-4604

Accessing Help

If you experience problems installing or using the NIC, access one of the following help resources:

- 3Com Knowledgebase:

  http://knowledgebase.3com.com
- *EtherLink PCI Network Interface Cards User Guide* (located on the *EtherCD*)
- 3Com NIC Help system (installed with the 3Com NIC Diagnostics program for Windows)
- Help text files (located in the HELP directory on the *EtherCD*)

Installation Overview

There are four steps to the NIC installation:

1. **Run the preinstallation program *before* installing the NIC in the PC.**

   The preinstallation program prevents conflicts with the NIC and your operating system. It guides you through the NIC installation and must be run *before* you physically install the NIC in the PC.
2. **Install the NIC in the PC.**
3. **Connect the NIC to the network.**
4. **Install the network driver.**

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Installing Multiple NICs

If you are installing multiple EtherLink PCI NICs in a PC or server, follow the instructions in "Installing Multiple NICs" in the user guide. Do *not* follow the instructions in this quick guide.

Upgrading Windows 95 to Windows 98

If you are upgrading a PC from Windows 95 to Windows 98 that already has an EtherLink PCI NIC installed, follow the instructions in the WIN98.TXT file located in the HELP directory on the *EtherCD*.

Updating the Network Driver

If you already have an EtherLink PCI NIC installed and want to update the network driver, use the *Update NIC Driver* option on the *EtherCD*.

See the user guide on the *EtherCD* for instructions.

Running the Preinstallation Program

Before you physically install the NIC in a PC, run the NIC preinstallation program to properly set up your system environment.

To run the preinstallation program:

1. **Do not install the NIC in the PC.**
2. **Turn on the power to the PC and start Windows.**
3. **Quit any open applications and disable the automatic protection feature of any anti-virus software that may be running.**
4. **Insert the *EtherCD* in the CD-ROM drive.**

   The *EtherCD* Welcome screen appears.

   If the *EtherCD* Welcome screen does not appear, enter the following command from the Run option of the Windows Start menu:

   `d:\installs\setup.exe`

   where d:\ represents the letter name of your CD-ROM drive.
5. **Click *NIC Software*.**
6. **Click *NIC Drivers and Diagnostics*.**

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7 **Click *Install NIC Driver*.**

- To install the network driver and the 3Com NIC Diagnostics program, click *Install with Diagnostic Program.*
- To install the network driver only, click *Install without Diagnostic Program*.

Files are copied. A message box appears when the installation is complete.

8 **Click *OK*.**

9 **Select your operating system to continue the installation.**

The Completing NIC Installation screen appears.

10 **Click *Done*.**

11 **Exit the *EtherCD*, and then shut down Windows.**

12 **Turn off the power to the PC.**

Do not remove the *EtherCD* from the CD-ROM drive.

The next step is to install the NIC in the PC.

Installing the NIC in the PC

To install the NIC in the PC:

1 **Make sure that you have run the preinstallation program, as described in the previous section.**

2 **Remove all jewelry from your hands and wrists. Use only insulated or nonconducting tools.**

3 **Turn off the power to the PC and unplug the power cord.**

4 **Remove the cover from the PC.**

5 **Locate an empty, nonshared bus-mastering PCI slot and remove its slot cover. Save the screw.**

Do not install the NIC in a *shared* PCI slot. Avoid any PCI slot next to an ISA slot. This is often a shared slot and does not support bus mastering.

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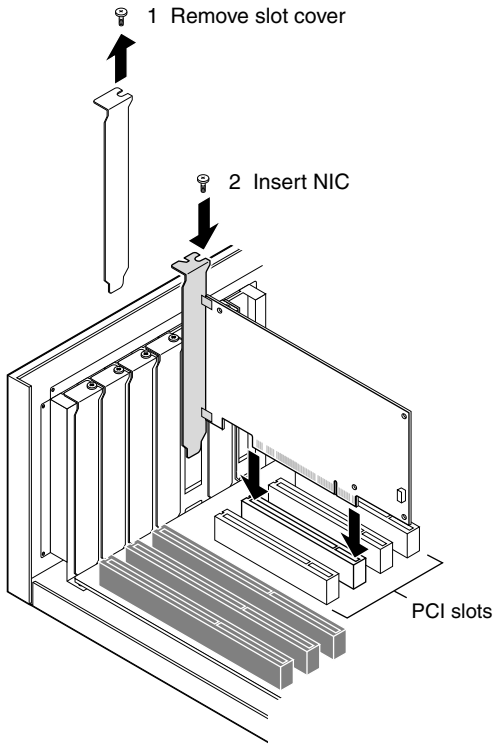
If you are planning to install the Remote Wake-Up cable, choose an empty PCI slot that is close to the matching Remote Wake-Up connector on the PC motherboard. Remote Wake-Up is supported by the following NICs:

- 3C905C-TX-M
- 3C905B-TX
- 3C905B-TX-M
- 3C905B-COMBO
- 3C905B-FX
- 3C900B-FL

If you have a 3C905C-TX-M NIC and your PC is compliant with PCI 2.2, Remote Wake-Up is automatically enabled through the PCI bus. The Remote Wake-Up cable is not required.

6 Carefully insert the NIC in the PCI slot.

Figure 1 Installing the NIC



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7 Secure the NIC with the screw you removed in step 5.

If you want to connect the Remote Wake-Up cable, see "Connecting the Remote Wake-Up Cable" in the user guide to continue the installation. If you do not want to connect the cable, continue with step 8.

8 Replace the PC cover and plug in the power cord.

Do not turn on the power to the PC.

The next step is to connect the NIC to the network.

Connecting the NIC to the Network

Connect the appropriate network cable to the port on the NIC, following the specifications in the table below.

Port	Network Environment	Cable Required	Maximum Cable Length
RJ-45	100 Mbps (100BASE-TX)	Category 5 unshielded twisted-pair	100 m (328 ft)
	10 Mbps (10BASE-T)	Category 3, 4, or 5 unshielded twisted-pair	100 m (328 ft)
AUI	10 Mbps (10BASE5)	10BASE5 thick Ethernet coaxial (10 Mbps only)	500 m (1,640 ft)
BNC	10 Mbps (10BASE2)	10BASE2 thin Ethernet coaxial (10 Mbps only)	185 m (607 ft)
SC	100 Mbps (100BASE-FX)	Long-wavelength fiber-optic (1300 nm): 50 µ/125 µ or 62.5 µ/125 µ multimode fiber	Full-duplex: 2,000 m (6,560 ft) Half-duplex: 412 m (1,351 ft)
ST	10 Mbps (10BASE-FL)	Short-wavelength fiber-optic (850 nm): 50 µ/125 µ or 62.5 µ/125 µ multimode fiber	Full-duplex: 2,000 m (6,560 ft) Half-duplex: 412 m (1,351 ft)

For detailed instructions, see the user guide.

The next step is to install the network driver.

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Installing the Network Driver

This section describes how to install the network driver on a PC running Windows 95, Windows 98, or Windows NT 4.0. For other operating systems, see the user guide on the *EtherCD*.

Before installing the network driver:

- Make sure that you have run the preinstallation program.
- Make sure that the NIC is installed in the PC and that it is connected to the network.
- Make sure you have the Windows installation files (Windows 95/98 only). These files may be on a CD or they may have been copied to your hard drive when Windows was installed on the PC.

Windows 95

To install the network driver:

1 **Turn on the power to the PC.**

Windows 95 detects the NIC. The Insert Disk dialog box appears, prompting you to insert the *EtherCD*.



If the New Hardware Found screen appears or the Update Device Driver Wizard starts, the NIC preinstallation program was not run on the PC. Follow the instructions in the W95NDIS.TXT file located in the Help directory on the EtherCD *to continue the installation.*

2 **Make sure that the *EtherCD* is inserted in the CD-ROM drive.**

3 **Click *OK*.**

The Copying Files dialog box appears.

4 **Open the pull-down menu and select:**

`c:\windows\options\cabs`

5 **Click *OK*.**

Files are copied.

- If this is the first time that networking is being installed on your PC, the Identification tab of the Network screen appears. Go to step 6.
- If networking has already been installed, you are prompted for the Windows 95 CD. Go to step 7.

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6 **In the specified fields of the Identification tab screen, enter the following information, and then click *OK*:**

- **Computer Name**—Identifies the PC on the network for other users. This entry must be a unique name of 15 characters or fewer, containing no spaces.
- **Workgroup**—Identifies the group (for example, your department name) to which your PC belongs. If your PC is connected to a peer-to-peer network, this entry must be exactly the same for all the PCs in your network.
- **Computer Description**—Displays additional details to other users on the network about this PC. For example, you could specify that the PC has a printer attached. Filling in this field is optional.

7 **Remove the *EtherCD* from the CD-ROM drive, insert the Windows 95 CD, and then click *OK*.**

Files are copied. You are prompted to restart the PC.

8 **Remove the Windows 95 CD, and then click *Yes* to restart the PC.**

You must restart the PC to complete the installation.

The installation is complete. Go to "Verifying Successful Installation" later in this guide to confirm that the NIC is properly installed.

After Windows restarts, double-click the Network icon in the Windows Control Panel and make sure that the correct configuration settings are selected for your network environment. Contact your system administrator for assistance.

Windows 98

To install the network driver:

1 **Turn on the power to the PC.**

Windows 98 detects the NIC. The Insert Disk dialog box appears, prompting you to insert the *EtherCD*.

If the Add New Hardware Wizard starts, the NIC preinstallation program was not run on the PC. Follow the instructions in the WIN98.TXT file located in the Help directory on the EtherCD *to continue the installation.*

2 **Make sure that the *EtherCD* is inserted in the CD-ROM drive.**

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3 Click *OK*.

The Insert Disk dialog box appears.

4 Open the pull-down menu and select:

`c:\windows\options\cabs`

5 Click *OK*.

Files are copied.

If you are prompted for the EtherCD, *click* OK, *make sure that the drive letter of the CD-ROM drive (for example, d:\) appears in the dialog box, and then click* OK.

You are prompted for the Windows 98 CD.

6 Remove the *EtherCD*, insert the Windows 98 CD, and then click *OK*.

Files are copied. You are prompted to restart the PC.

7 Remove the Windows 98 CD, and then click *Yes* to restart the PC.

You must restart the PC to complete the installation.

The installation is complete. Go to the next section, "Verifying Successful Installation," to confirm that the NIC is properly installed.

After Windows restarts, double-click the Network icon in the Windows Control Panel and make sure that the correct configuration settings are selected for your network environment. Contact your system administrator for assistance.

Windows NT 4.0

To install the network driver:

1 Turn on the power to the PC.

2 Double-click the My Computer icon, then the Control Panel icon, and then the Network icon.

The Network window appears.

3 Click the Adapters tab.

If networking has not been installed on your PC before, Windows NT asks you if you want to install networking. Click *Yes*. See the WINNT.TXT file located on the *EtherCD* or your Windows NT documentation for instructions.

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4 **Click *Add*.**

The Select Network Adapter dialog box appears.

5 **Click *Have Disk*.**

The Insert Disk dialog box appears.

6 **Insert the *EtherCD* in the CD-ROM drive.**

7 **Make sure that the letter name of your CD-ROM drive (for example, d:\) appears in the entry box, and then click *OK*.**

The Select OEM Option dialog box appears.

8 **Make sure that the 3Com EtherLink PCI NIC is selected, and then click *OK*.**

The Adapters tab of the Network screen appears.

9 **Click *Close*.**

- If the Microsoft TCP/IP Properties screen appears, enter the requested information for your network environment. Refer to your system administrator or the Windows NT documentation for assistance.
- If the Microsoft TCP/IP Properties screen does not appear, the installation is complete.

10 **Click *Yes* to restart the PC.**

The network driver installation is complete. Go to the next section, "Verifying Successful Installation," to confirm that the NIC is properly installed.

Verifying Successful Installation

Follow the steps for your operating system.

Windows 95 and Windows 98

To verify successful NIC installation:

1 **Open the Windows *Start* menu, select *Settings*, and then select *Control Panel*.**

2 **Double-click the System icon, and then select the Device Manager tab.**

3 **Double-click *Network adapters* and make sure that the name of the 3Com EtherLink NIC appears.**

If a red X or a yellow exclamation point (!) appears next to the name of the NIC, the installation was not successful. See the next section for troubleshooting help.

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Windows NT 4.0

To verify successful NIC installation:

1. **Double-click the My Computer icon, then the Control Panel icon, and then the Network icon.**
2. **Select the Adapters tab.**
3. **Make sure that the name of the NIC appears in the list of network adapters.**

   If the name of the NIC does not appear in the list of network adapters, the installation was not successful. See the next section for troubleshooting help.

Troubleshooting the Installation

If you encounter any of the problems or error messages in the table below, follow the steps under the Solution column to resolve the problem.

For additional troubleshooting help, see the user guide on the *EtherCD* or go to the 3Com Knowledgebase:

http://knowledgebase.3com.com

Problem/Error Message	Solution
A red X or a yellow exclamation point (!) appears next to the name of the NIC in the Windows Device Manager. The Network Neighborhood icon does not appear on the Windows desktop. The NIC does not appear in the Network Configuration or Properties window. Error: "This device is not present, not working properly, or does not have all of the driver installed. Code 22" Error: "Windows was unable to locate a driver for this device." Error: "You have selected a plug and play adapter. Please turn off your machine and install the adapter. Then turn on your machine and reinstall."	**1** Open the Windows Network screen and write down your network settings. **2** Insert the *EtherCD* in the CD-ROM drive. **3** Select *NIC Software* on the *EtherCD* Welcome screen. **4** Select *NIC Drivers and Diagnostics*, and then *Installation Utilities*. **5** Select *Clean Up Failed Installation*, and then click *Proceed*. **6** Click *OK* when the Update dialog boxes appear. **7** Exit the *EtherCD*, shut down Windows, and restart the PC. **8** Install the network driver, following the instructions for your operating system under "Installing the Network Driver" earlier in this quick guide.

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