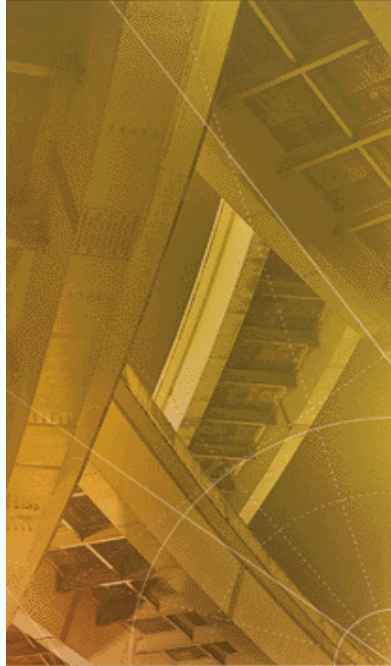
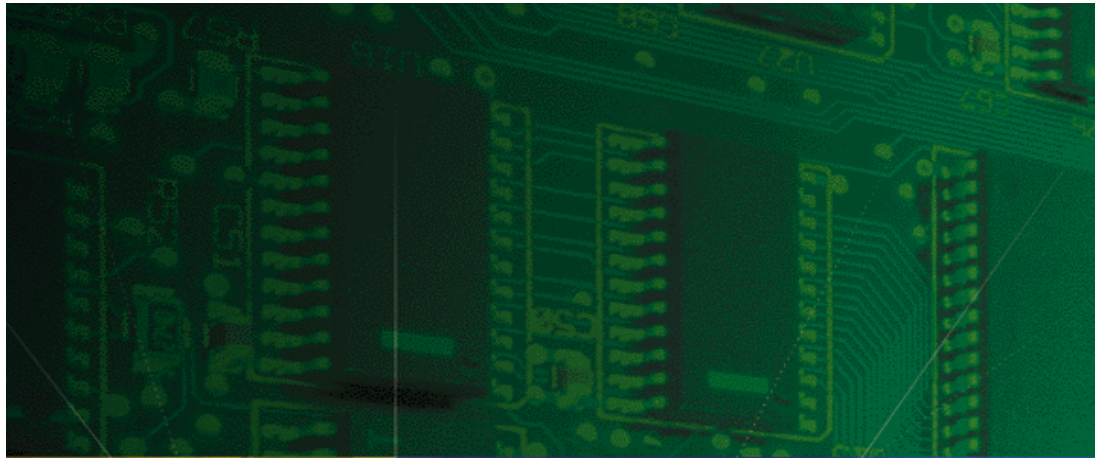




PCI Dual V.35 10/100 Ethernet PCI

Network Interface Card
Getting Started Guide



Part No. 1.024.1959-01

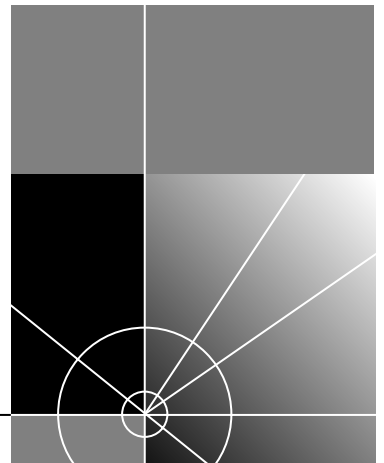


Dual V.35 10/100 Ethernet PCI

Network Interface Card Getting Started Guide

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

Part No. 1.024.1959-01



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

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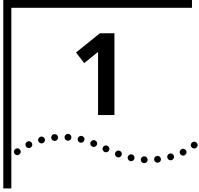
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OVERVIEW

This chapter provides an overview of:

- Contacting 3Com
- Document conventions
- Product description
- Product compatibility

Contacting 3Com

Call the appropriate toll free number listed below for technical support.



For European countries that do not have a toll free number listed, call +31 30 602 9900.

Country	Toll Free Number	Country	Toll Free Number
Austria	06 607468	Netherlands	0800 0227788
Belgium	0800 71429	Norway	800 11376
Canada	1800 2318770	Poland	00800 3111206
Denmark	800 17309	Portugal	0800 831416
Finland	0800 113153	South Africa	0800 995014
France	0800 917959	Spain	900 983125
Germany	0800 1821502	Sweden	020 795482
Hungary	00800 12813	Switzerland	0800 553072
Ireland	1800 553117	UK	0800 966197
Israel	0800 9453794	United States	1800 2318770
Italy	1678 79489	All Other Locations (Outside Europe)	1847 7976600

Refer to the Total Control Hub Documentation CD-ROM for more information regarding product warranty.



For information about Customer Service, including support, training, contracts, and documentation, visit our website at <http://totalservice.3com.com>

Document Conventions

These tables list conventions used throughout this guide.

Icon	Notice Type	Description
	Information note	Information that contains important features or instructions.
	Caution	Information to alert you to potential damage to a program, system, or device.
	Warning	Information to alert you to potential personal injury or fatality. May also alert you to potential electrical hazard.
	ESD	Information to alert you to take proper grounding precautions before handling a product.

Convention	Description
Text represented as a screen display	This <code>typeface</code> represents displays that appear on your terminal screen, for example: <code>Netlogin:</code>
Text represented as commands	This typeface represents commands that you enter for example: <code>setenv TCMHOME directory</code> <i>This guide always gives the full form of a command in uppercase and lowercase letters. However, you can abbreviate commands by entering only the uppercase letters and the appropriate value. Commands are not case-sensitive.</i>
Text represented as menu or sub-menu names .	This typeface represents all menu and sub-menu names within procedures, for example: On the File menu, click New .

Product Description

The Dual V.35 10/100 Ethernet (Peripheral Component Interface) PCI Network Interface Card (NIC) provides the following ports for connecting a Network Application Card (NAC) in the 3Com Total Control Enterprise Network Hub chassis to your network:

- Two high speed, ITU-T compliant V.35 interfaces, both software configurable to handle V.35 or V.11 traffic
- One auto-negotiating 10/100 Mbps Ethernet interface equipped with link and status LEDs

In addition to these ports, the NIC also features an RS-232 port capable of data transfer rates up to 115 Kbps for connecting to the NAC's command line interface (CLI) or user interface (UI) console.

Product Compatibility

The Dual V.35 10/100 Ethernet PCI NIC is compatible with the VPN Gateway NAC, and the HiPer ARC NAC.

2

INSTALLATION

This chapter contains Dual V.35 10/100 Ethernet Peripheral Component Interface (PCI) Network Interface Card (NIC) installation information.

Installation Tools

To install this NIC in the Total Control chassis, you need a #2 Phillips and flat-head screwdriver.

Installation Procedure

To install this NIC:



ESD: To reduce the risk of electrostatic discharge (ESD), take proper grounding precautions before handling the NIC.



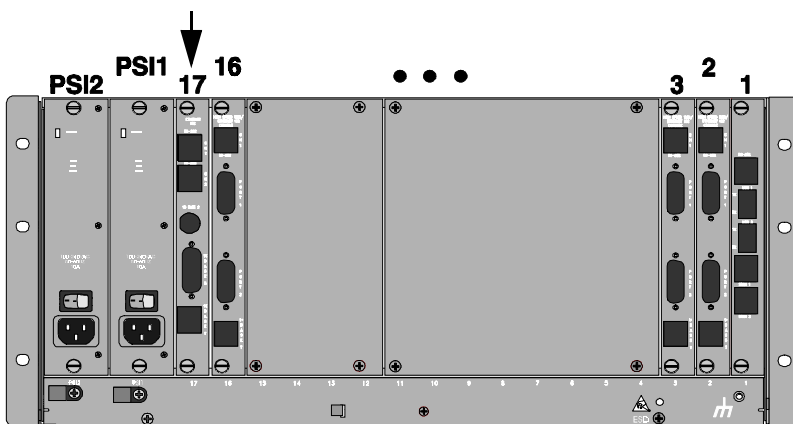
Install the NIC with or without power applied to the chassis.

- 1 Select a slot at the rear of the Total Control chassis for installing the NIC.

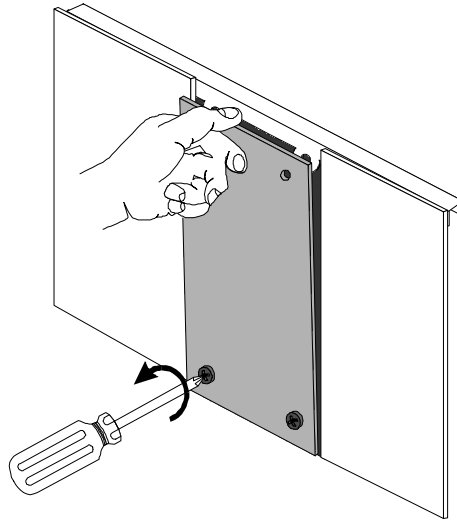
Install this NIC in the slot: 1–17



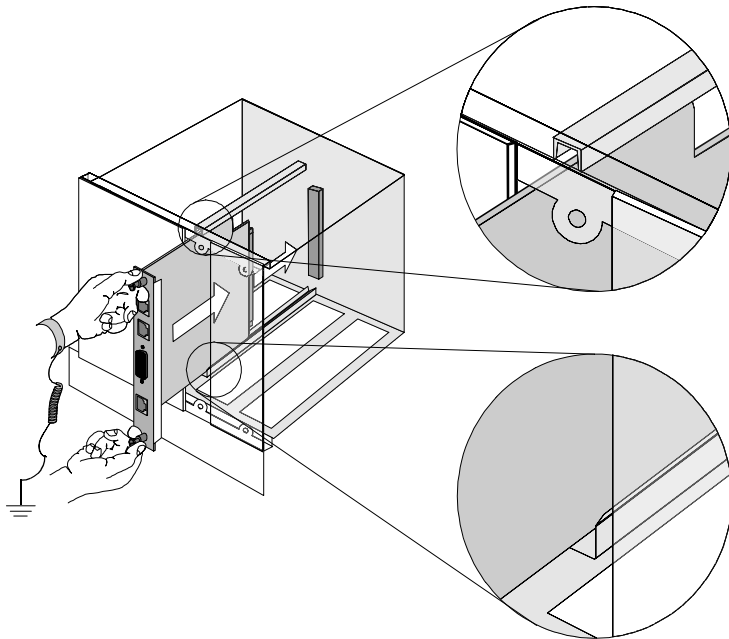
For managed chassis, slot 17 is reserved for the Network Management Card (NMC) NIC.



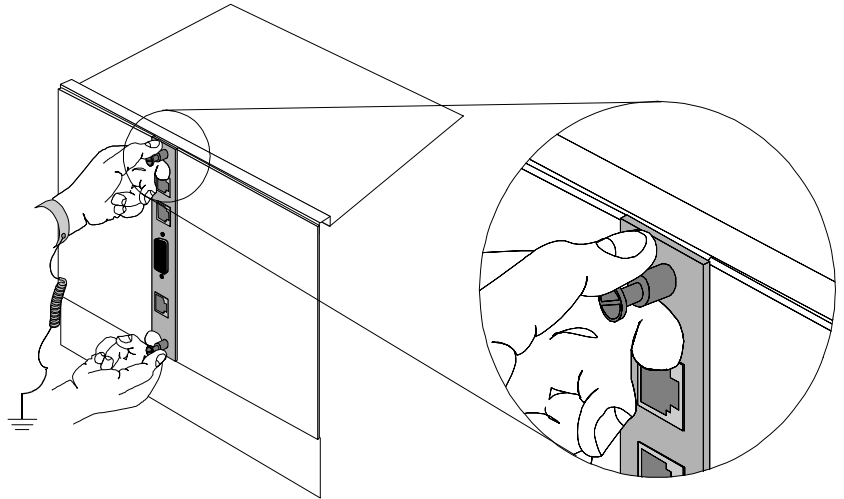
- 2 Use a #2 Phillips screwdriver to remove the safety panel covering this slot.



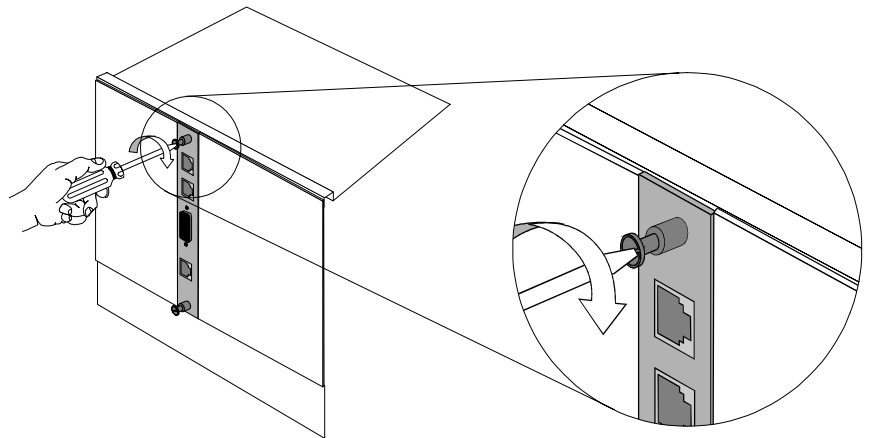
- 3 Insert the NIC between the slot's upper and lower card guides.



- Slide the NIC into the chassis, until the front of the NIC is flush with the chassis.



- Use a flat-head screwdriver to tighten the screws on the front panel.



- Cover any unused chassis slots with safety panels.
- Install the Network Application Card (NAC) corresponding to this NIC. Refer to the NAC's Getting Started Guide for more information.

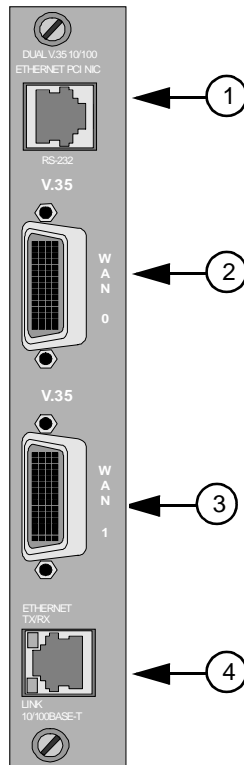
3

NETWORK INTERFACE CARD CABLING

This chapter provides information about the physical interfaces of the Dual V.35 10/100 Ethernet Peripheral Component Interface (PCI) Network Interface Card (NIC) and instructions for accessing the corresponding Network Application Card (NAC) through the user interface (UI).

Physical Interfaces

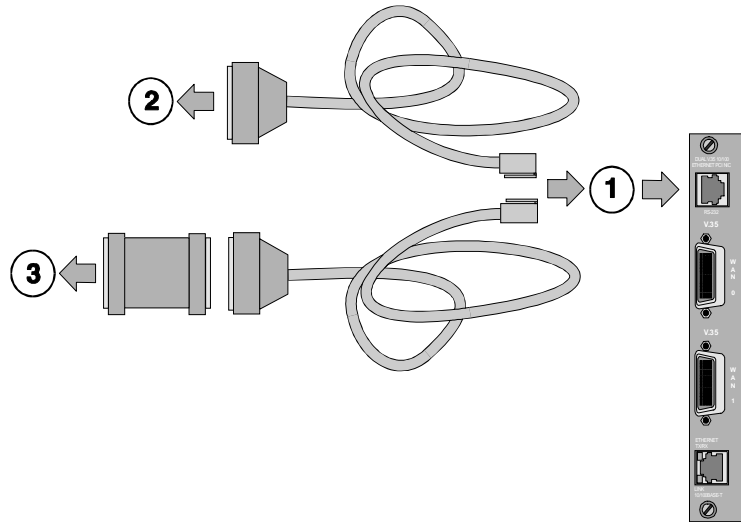
The Dual V.35 10/100 Ethernet PCI NIC has the following physical interfaces:



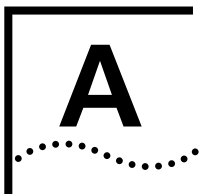
Callout Number	Interface Description
1	RS-232 — RJ-45 DTE port Used to access its corresponding NAC's user interface (UI) Console. This port's speed is determined by DIP switch settings on the NAC.
2	V.35 WAN 0 — High Density 60 pin V.35/V.11 port This is the primary V.35 port.
3	V.35 WAN 1 — High Density 60 pin V.35/V.11 port This is the secondary V.35 port
4	Ethernet — RJ-45 10/100Base-T Ethernet port Features TX/RX and Link LEDs. Refer to the <i>Trouble Clearing</i> section for LED details.

Accessing the User Interface

To access the UI of the corresponding NAC, connect the following cables to the NIC's console port.



Callout Number	Description
1	RJ-45 connector to NIC's console port
2	DB-25 male connector to modem for remote operations
3	DB-25 female-to-female null modem adapter to PC or terminal COM port



TECHNICAL SPECIFICATIONS

Certification

-
- | | |
|------------|--|
| EMC | <ul style="list-style-type: none">■ CISPR 22, Class B, Radiated and Line Conducted■ FCC Pat 15, Class A, Radiated and Line Conducted■ VDE 0878■ EN 55022 EMI■ EN 55022, Electrostatic Discharge■ EN 55022, Immunity (Susceptibility), Radiated and Line Conducted |
|------------|--|

-
- | | |
|---------------|---|
| Safety | <ul style="list-style-type: none">■ UL 1950■ CSA approved C22.2 No. 0.7; C22.2 No. 225-M 1986; CSA 950■ IEC 950, IEC 380■ EN 41003, EN 60950 |
|---------------|---|

-
- | | |
|--------------|---|
| Telco | <ul style="list-style-type: none">■ FCC 68■ IC CS-03 |
|--------------|---|
-

Regulatory Compliance Statements

United States

FCC Part 15 Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Interface Specifications

RS-232 Serial Port

Electrical Specification:	RS-232-C (EIA/TIA-232-E standard)
Connector:	RJ-45, 8 position modular jack
Configuration:	Data Terminal Equipment (DTE)
Transmission Method:	Unbalanced RS-232
Transmission Rate:	115Kbps maximum

V.35 Interface Ports

Electrical Specification:	V.35/V.11 (Sipex SP504 Multi-Mode Serial Transceiver)
Connector:	60 pin high density Wan Port
Configuration:	Data Terminal Equipment (DTE)
Transmission Rate:	32 Mbps maximum

Ethernet 10Base-T/100 Base-TX Port

Data Transfer Rate	10/100 Mbps Auto-negotiated
Connector	8-position modular jack, Stewart 88-360808 or equivalent
Accessing Scheme	CSMA/CD (Carrier Sense Multiple Access with Collision Detection)
Topology	Star Wired Hub (using multiport repeater)
Maximum Nodes	Limited only by repeater used
Transmission medium	Unshielded Twisted Pair (UTP) cable type CAT3 or CAT5 (CAT5 recommended) for 10Base-T applications, CAT5 for 100Base-TX
Network Lobe Distance	100 meters (328 ft.) suggested maximum (Longer cabling can be used at the expense of reduced receiver squelch levels)

Current Draw +5.2 VDC @ 900mA typical maximum



Typical maximum refers to the maximum current draw under most typical configurations.

Environment

Shipping and Storage

Temperature: -25 to 75° C, -13 to 167° F

Relative Humidity: 0 to 100%, Non-condensing

Operating

Temperature 0 to 40° C, 32 to 104° F

Relative Humidity: 0 to 95%, Non-condensing

Physical Dimensions

	Inches	Centimeters
Length:	5.30	13.46
Width:	.79	2.00
Height:	6.90	17.53



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

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