



TRENDNET®



User's Guide

TE100-PCIFC
1.01

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Product Overview

Package Contents

When you unpack the product package, you shall find the items listed below. Please inspect the contents, and report any apparent damage or missing items immediately to our authorized reseller.

- **TE100-PCIFC**
- **Multi-Language Quick Installation Guide**
- **CD-ROM (Driver & User's Guide)**

Product Features

- Provide
 - One 100Base-FX port
- fiber connections:
 - SC type multi-mode connector
 - Compliant with IEEE 802.3u 100Base-FX
 - PCI 2.1, 2.2 Specification compliant
- Separate 2K Bytes FIFO for receive and transmit controllers
- Flow Control:
 - Support IEEE 802.3x for full duplex
 - Multiple pause frame XON/XOFF
- ACPI (Advanced Configuration and Power Interface):
 - Support PC99, PC2001 and Net PC hardware system requirements
 - Support PCI Bus Power Management Interface Specification Version 1.0/1.1
 - Support ACPI Specification 1.0
 - Support Network Device Class Power Management Specification Version 1.0a
 - Support Wake-on-LAN magic packet
- MAC Enhancement Function:
 - IEEE 802.1q multiple VLAN with VLAN ID auto insertion/extraction
 - UDP, TCP/IP checksum offload for Ipv4 frames
- Two LEDs: LNK/ACT (link/activity), 100 (100Mbps speed)

Driver Support

The Adapter supports a wide range of drivers for commonly used network operating systems:

- Windows 95 (including OSR2), Windows 98, Windows 98 (including SE), Windows ME, Win2000, Windows 2003, Windows XP, Workgroups 3.11, Windows NT 3.51 and 4.0
- LAN Manager, LANtastic, PC-NFS
- Novell Netware 3.11,3.12, 4.x, 5.x, 6.0, Client 32
- Linux Kernel 2.2.x/2.4.x/2.6.x
- FreeBSD 3.2, 4.0, 4.11, 4.2, 5.x
- SCO UnixWare 7.x/OpenUnix 8, SCO UNIX 5.0

Utilities (Windows only, Vista is not supported)

- NIC Control Set
- Dos Diagnostic Utility

LEDs

① **LNK/ACT** Link/Activity

② **100** 100Mbps

LEDs	Status	Indication
LNK/ACT	Steady	A valid network connection established. LNK stands for LINK.
	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.
	Off	Neither connection nor activity.
100	Steady	100Mbps.
	Off	10Mbps.

Driver/Hardware Installation

Installing Driver/Hardware

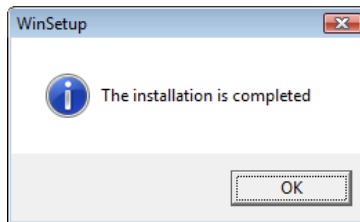
Windows Vista/2003 Server/XP/2000

Step 1: Insert the Drive CD-ROM into your computer's CD-ROM drive.

Step 2: Click **Install Driver**, and then click your operating system.



Step 3: Click OK to finish the installation



Step 5: Turn off the power to the PC.

Step 6: Remove any metal decorations from your hands and wrists.

Step 7: Remove the cover from your PC.

Step 8: Locate an empty, non-shared bus mastering PCI slot and remove the corresponding backplate. Save the screw for use in Step 10.

<Note>

- i. Do not install the TE100-PCIFC in a shared PCI slot. Avoid any PCI slot next to an ISA slot because this is often a shared slot and does not support bus mastering.
- ii. If you are going to install the Remote Wake-Up cable, choose an available PCI slot most close to the 3-pin Remote Wake-Up connector on the PC motherboard.
- iii. If you have problems in identifying a suitable slot, check your PC documentation or ask your system administrator for help.

Step 9: Carefully insert the TE100-PCIFC into the chosen slot and press firmly with proper push to ensure it is fully seated in the slot.

Step 10: Secure the TE100-PCIFC with the screw you saved in step 8.

<Note>

If you wish to use the Remote Wake-Up function, please complete the installation in next section “Connecting the Remote Wake-Up Cable” before proceeding to step 10.

Step 11: Replace the PC cover.

Step 12: Proceed to “Connecting to Your Network” section.

Install the TE100-PCIFC into the PCI slot and screw it onto the backplate.

Windows 98/ME

Step 1: Insert the Drive CD-ROM into your computer's CD-ROM drive. Then click Exit.



Step 2: Turn off the power to the PC.

Step 3: Remove any metal decorations from your hands and wrists.

Step 4: Remove the cover from your PC.

Step 5: Locate an empty, non-shared bus mastering PCI slot and remove the corresponding backplate. Save the screw for use in Step 6.

<Note>

- i. Do not install the TE100-PCIFC in a shared PCI slot. Avoid any PCI slot next to an ISA slot because this is often a shared slot and does not support bus mastering.
- ii. If you are going to install the Remote Wake-Up cable, choose an available PCI slot most close to the 3-pin Remote Wake-Up connector on the PC motherboard.
- iii. If you have problems in identifying a suitable slot, check your PC documentation or ask your system administrator for help.

Step 6: Carefully insert the TE100-PCIFC into the chosen slot and press firmly with proper push to ensure it is fully seated in the slot.

Step 7: Secure the TE100-PCIFC with the screw you saved in step 4.

<Note>

If you wish to use the Remote Wake-Up function, please complete the installation in next section "Connecting the Remote Wake-Up Cable" before proceeding to step 7.

Step 8: Replace the PC cover.

Step 9: Turn the PC on again.

Step 10: When the autorun pop up, click **Install Driver**, and then click your operating system.

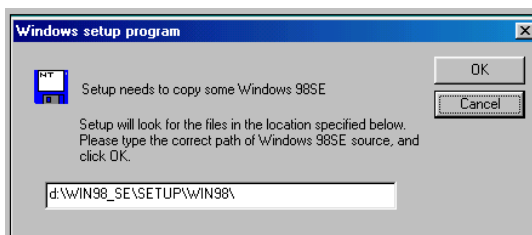


<Note>

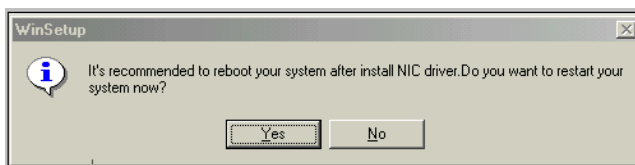
If the autorun did not appear, please go to the disk driver, right click on the explorer. In the **Driver** folder, click the the driver of **Windows 98SE_ME_2K_XP_Srv2003_Vista x86 Edition**, then click **WinSep.exe** to execute the program.

Step 11: Wait until the TE100-PCIFC finishes the installing.

Step 12: If the following screen pop up, insert the Windows 98SE CD-ROM into CD-ROM driver.
(For Windows 98SE only)



Step 13: Click OK to reboot your computer.



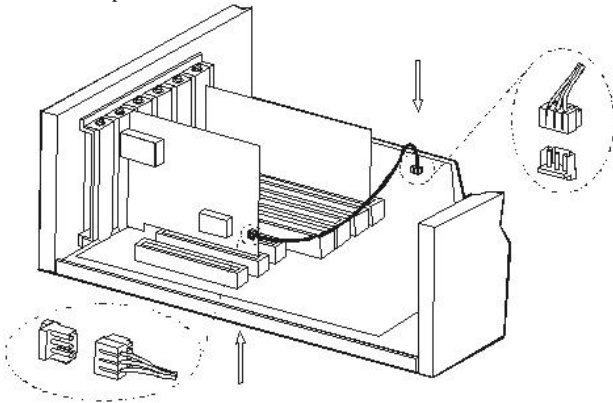
Connecting Remote Wake-Up Cable

The unit support optional Wake-on-Lan magic packet feature. Proceed with the installation only when your PC supports this remote wake-up and you wish to use this function. If your PCI bus supports version 2.2 or higher, there is no Wake-Up cable required. The feature can be enabled without using the cable. For more detail information, please check the User's Guide of your Motherboard.

Wake-on-LAN magic packet

- Step 1:** Make sure the power to the PC is off.
- Step 2:** Check if the TE100-PCIFC is properly installed in a PCI slot.
- Step 3:** Prepare a Remote Wake-Up cable. Connect the cable from TE100-PCIFC to motherboard connector.
- Step 4:** Replace the PC cover.
- Step 5:** Proceed to "Connecting to Your Network" Section.

Connect Remote Wake-Up cable from TE100-PCIFC to motherboard connector.



Plug in Remote Wake-Up cable to connector on Ethernet Adapter.

Connecting to Your Network

Fiber Adapter

This section describes how to connect the Fiber Adapter to a 100 Mbps fiber-based Ethernet network, which contributes to its optimal performance.

<Note>

You must connect the Fiber Adapter to the network before installing the network driver.

Step 1: Remove the protective cover from the TE100-PCIFC fiber connector.

Step 2: Prepare a network cable with corresponding connectors for the two end devices, one end to the Fiber Adapter and the other to a 100Mbps fiber port on the network hub or switch.

Step 3: Connect the network cable to the connector on the Fiber Adapter. This network cable consists of two individual cables: one for 'transmission (TX)', and the other for 'reception (RX)'.

Step 4: Connect the other end of the network cable to a 100Base-FX hub or a switch.

<Note>

- i. Insert the cable that is connected to the transmit (TX) connector on the Fiber Adapter into the receive (RX) connector on the network hub or switch.
- ii. Insert the cable that is connected to the receive (RX) connector on the Fiber Adapter into the transmit (TX) connector on the network hub or switch.

Step 5: When the cable is properly connected to two end devices, turn on the power to the PC.

Step 6: Check the LNK (Link) LED. The LED will come on when the Fiber Adapter is receiving a good link signal from the connected device, a hub or switch.

Cabling Requirements

For connector type, cabling requirements, and maximum segment distance when connecting the TE100-PCIFC to your network, please refer to the following table.

Fiber Connections Type	Wavelength of 1300nm Fiber Optic required	Max. Distance (* full-duplex)
SC	Multi-mode, 62.5/125 μm	2 km

<Note>

The maximum node-to-node network distance is in full-duplex operation.

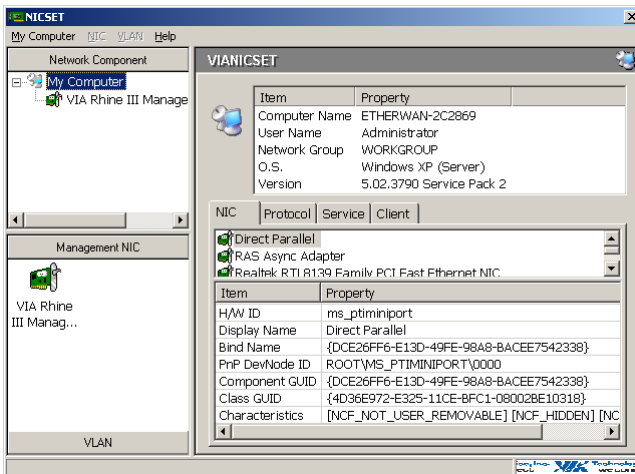
NIC Control Set Utility

The NIC Control Set is a Windows-based application. It provides Network Interface Card information, setting, statistics and diagnostic function. Also, it provides multiple VLAN function.

My Computer

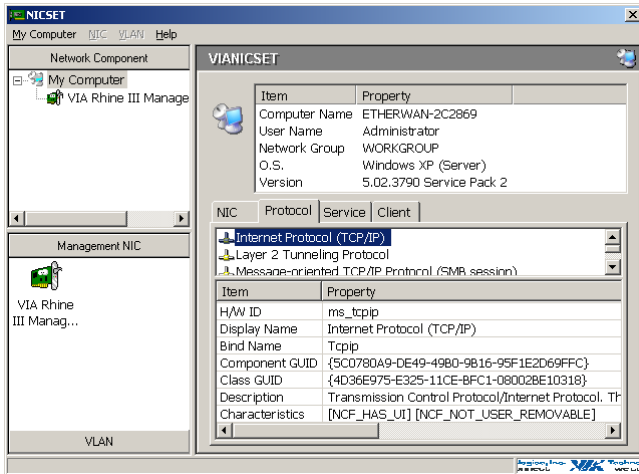
NIC

All NIC drivers are currently installed in this computer.



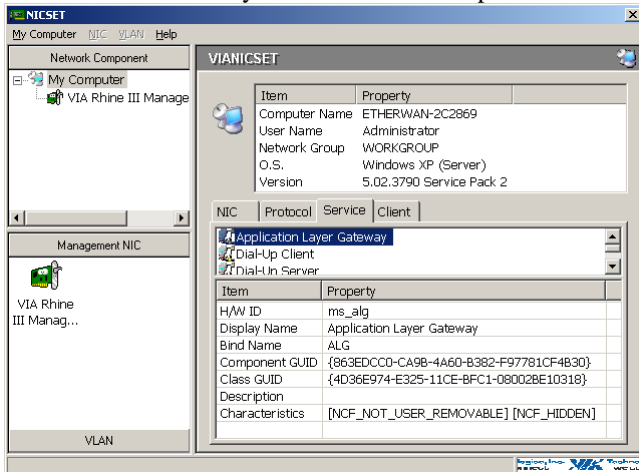
Protocol

All network protocols are currently installed in this computer.



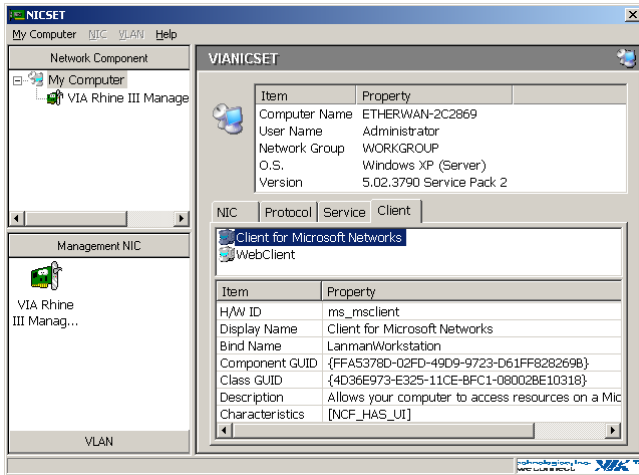
Service

All network services are currently installed in this computer.



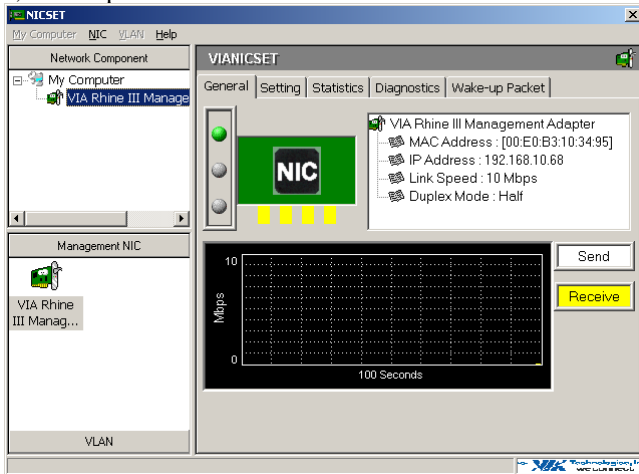
Client

All network clients are currently installed in this computer.



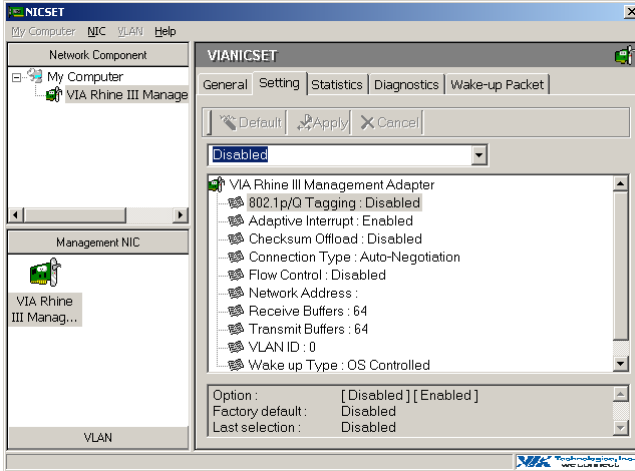
General

Display the basic information of the adapter, such as MAC Address, IP Address, Link Speed, and Duplex Mode.



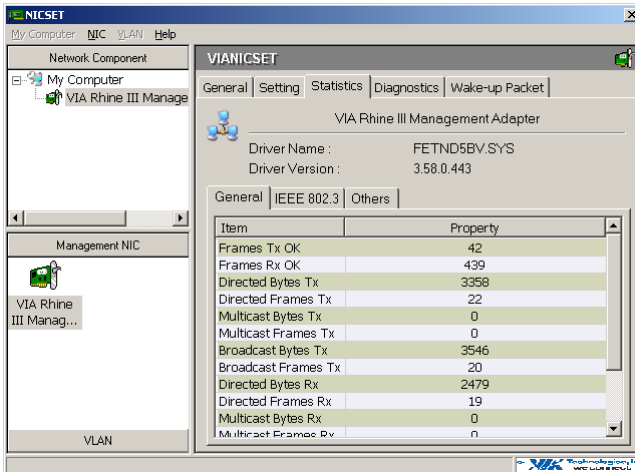
Setting

Display and set the parameters of the adapter by disable & enable the function.



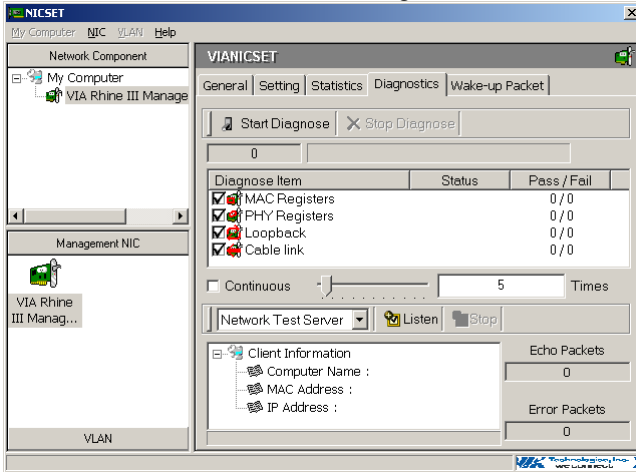
Statistics

Display all the statistics information of the NIC.



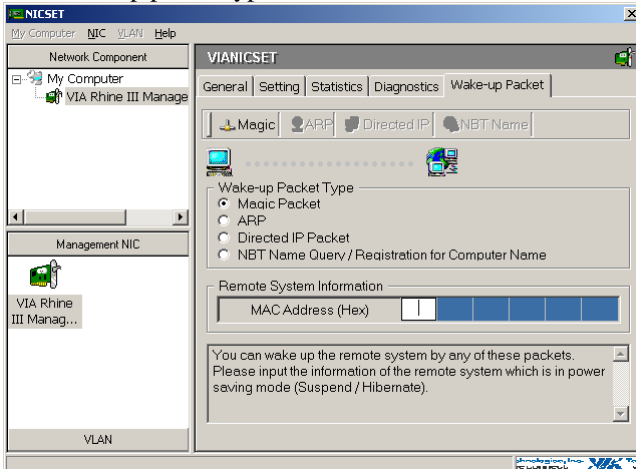
Diagnostics

Diagnose the hardware functionality: MAC Registers, PHY Registers, Loopback and Cable Link. The continuous option can be set as an infinite loop of testing. Please be aware that performing this task will temporarily disable the adapter. Once the adapter has finished the test, it will enable again.



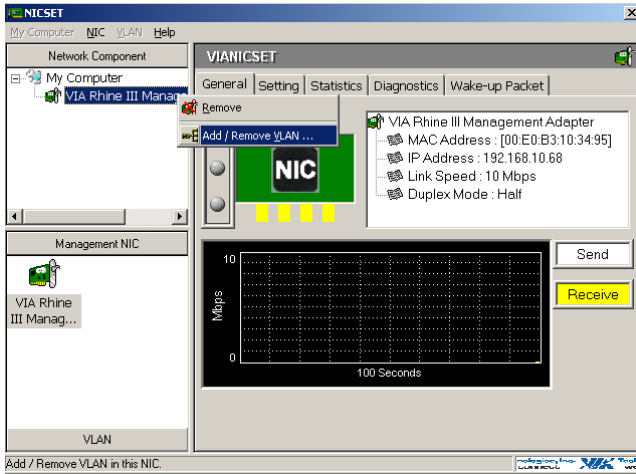
Wake-up Packet

Configure the Wake-up packet type for Wake-On-LAN.



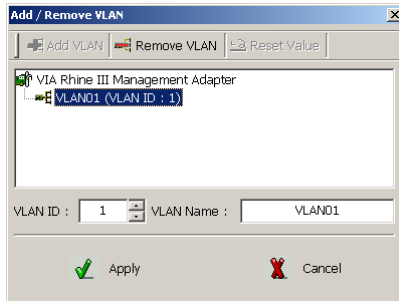
VLAN settings

Add/Remove VLAN



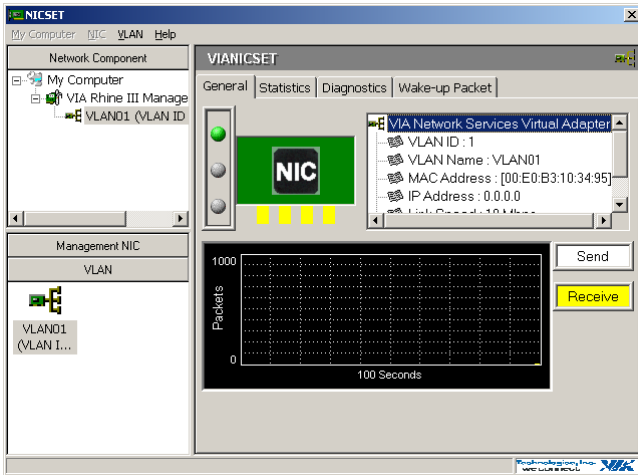
Setting for add/remove VLAN

User should specify VLAN ID and VLAN name in the dialog box.



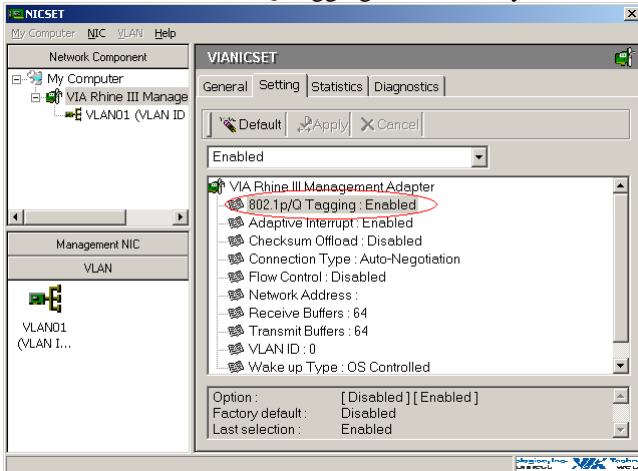
VLAN01 (VLAN ID =1) added

VLAN01 (VID = 1) will be displayed in VLAN area in NIC Control Set.

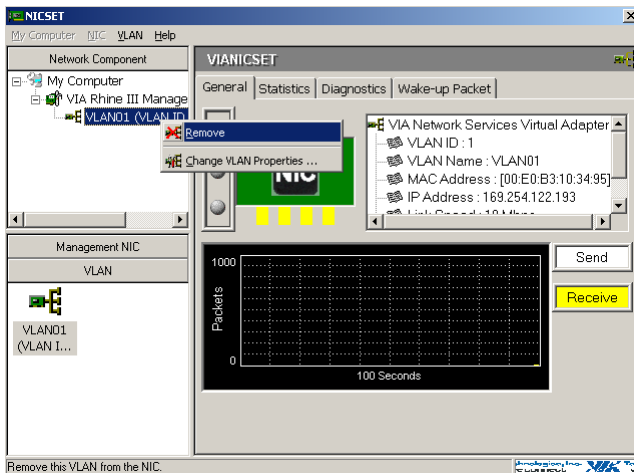


Driver setting changed by NIC Control Set

NIC Control Set will enable 802.1Q Tagging automatically if VLAN is created.



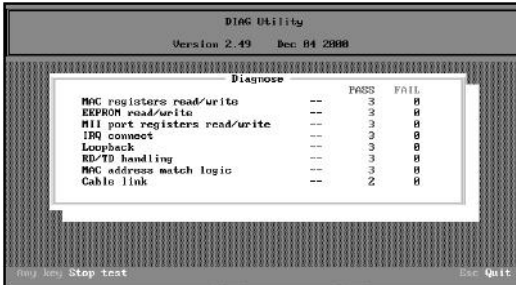
Remove VLAN/Change VLAN property



DOS Diagnostic Utility

DIAG Utility

The DIAG utility is a DOS application run under pure DOS environment. The DIAG utility provide basic functional test for the NIC. The main features are listed below:



Main Menu

- I/O Base Address: I/O base address is assigned by PCI BIOS and cannot be modified.
- Interrupt Output Line: Interrupt is assigned by PCI BIOS and cannot be modified.
- Connection Type: The physical media type currently had connected.
- Boot ROM Size: Select Boot ROM size for 8K, 16K, 32K, 64K/FlashROM or No Boot ROM. Boot ROM base address is assigned by PCI BIOS and cannot be modified.

Functions Key

- F1: Help screen.
- F4: Change boot ROM size.
- F5: Diagnose this network adapter.
- F6: Network test in Master/Slave mode.
- F7: WOL test in Waker/Sleeper mode.
- F8: Change connection type.

Loading Network Drivers

- The TE100-PCIFC is shipped with one software driver enclosed. The following drivers are provided:
 - Windows 98, Windows 98 (including SE), Windows ME, Win2000, Windows XP, Windows 2003 server, Workgroups 3.11, Windows NT 3.51 and 4.0
 - LAN Manager, LANtastic, PC-NFS
 - Novell Netware 3.11,3.12, 4.x, 5.x, 6.0, Client 32
 - Linux Kernel 2.2.x/2.4.x/2.6.x
 - FreeBSD 3.2, 4.0, 4.11, 4.2, 5.x
 - SCO UnixWare 7.x/OpenUnix 8, SCO UNIX 5.0

Find the suitable network driver for the platform that you are using. Carefully read the readme text file for that driver.

Specifications

Standards	IEEE 802.3u 100Base-FX IEEE 802.3x, IEEE 802.1Q, IEEE PCI V2.1, 2.2
Interface	PCI/Multi-Mode SC-type port
Performance	148,810pps for 100Mbps
Data Rate	200Mbps (Full-Duplex)
Cable	62.5/125µm multi-mode SC-type fiber cable, up to 2 km, wavelength 1310nm
LED Indicators	LNK (Link) / ACT (Activity), 100 (100Mbps)
Dimensions	122mm × 117mm (4.8 × 4.6in.)
Net Weight	80g (0.18lb.) approx.
Power Consumption	1W max.
Operating Temperature	0°C to 45°C (32°F to 113°F)
Storage Temperature	-10°C to 70°C (14°F to 158°F)
Humidity	5%-95% non-condensing
Certifications	CE, FCC

Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

TE100-PCIFC – 5 Years Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

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Product Warranty Registration

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