

# **TE-16PnP User's Guide**

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## **Trademarks**

Brand and product names used in this guide are trademarks and/or registered trademarks of their respective companies.

## **FCC Certification**

- TE-16PnP FCC Class B ID : KA2APC20001

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. 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 that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables must be used in order to comply with emission limits.

## **Features**

The TE-16PnP cards comply with IEEE 802.3 Ethernet standards and use VLSI components for enhanced reliability. The following are a few of the cards' distinctive features.

- **Easy Installation:** The cards have no physical jumpers or DIP switches. When installed in a PnP computer, configuration is handled entirely by the system with no user intervention. In non-PnP systems, configuration is accomplished through an innovative setup program provided with the TE-16PnP package. In either case, assignment of system resources is handled through software instead of physical jumpers. Once the card is inserted into a slot in your computer, you don't need to remove it to change its settings.
- **Support for 8-bit and 16-bit expansion slots:** The cards can be used in 8-bit (the sort XT-style) or 16-bit (AT-style) expansion slots. The card automatically detects the type of slot being used.
- **Use of NE-2000 Drivers:** The TE-16PnP cards can use the same network drivers as the Novell NE-2000.
- **Setup/Diagnostic program and LEDs:** The TE-16PnP setup/diagnostic program tests all card functions to verify correct operation of the card. The LEDs on the card report network activity.
- **Remote boot function:** The cards can be used on PCs or diskless workstations for remote booting on the network. To use the remote boot function, a remote boot ROM (purchased separately) must be installed on the card.
- **Runs a wide variety of networking software:** The TE-16PnP cards can be used with all popular networking software. A complete list of supported software can be found at the end of this guide in the Specifications section.

## **Quick Installation Guide**

Congratulations on your purchase of a TE-16PnP adapter. With this adapter, you are sure to get the most for your investment -- as result of the rigorous quality-control programs implemented in all our products. Again, congratulations and happy networking!

This guide applies to the following adapters:

<b>Model</b>	<b>Connector</b>	<b>Media</b>
TE-16PnP	BNC, RJ-45	Thin coax, UTP

## **Adapter Installation**

CAUTION: The adapter is packed in a plastic antistatic package to protect it during shipment. To avoid damaging any static-sensitive components, after removal from the package, be sure to reduce any static electricity on your body. You can touch the metal chassis of your computer, and maintain grounding by wearing a wrist strap attached to the chassis.

1. Turn off your computer and then install the adapter into an empty 8 or 16 bit slot.
2. Connect the computer to a network.
3. On non-PnP systems, configure the card by running the card's setup program, TE16PNP.EXE. See Setup Program. After installing and configuring the card (for both non-PnP and PnP systems), you can run the TE-16PnP setup program's diagnostic functions to test the reliability of the configuration.
4. Install the appropriate network software driver. See Supported Network Drivers.

### **Boot ROM Installation (Optional)**

A Boot ROM allows your computer to load the operating system over the network. Among the operating systems that can be loaded are Novell Netware, IBM LAN Server, and MS LAN Manager.

1. Plug in the Boot ROM into the provided socket on the adapter.
2. Enable the Boot ROM function and select its starting address. See Setup Program.

## **Setup Program**

This program comes in a diskette with the adapter package. To run, type the following at the DOS prompt

```
> A:\UTILITY\TE16PNP
```

The main menu appears with the following options:

- Setup Configuration. Lets you specify the connector type, I/O base address, interrupt number, boot ROM starting address, and whether or not to enable the remote boot function. For a list of the various supported settings, see Specifications.
- Run Diagnostics. Lets you perform a diagnostic test on your adapter.

When configuring multiple adapters, ensure to assign a different I/O base address and interrupt number for each. Also, reboot your computer after saving a new configuration to allow the new configuration to be loaded into the system memory.

Note: If data in the EEPROM have been corrupted, setup would not be able to configure the adapter. If this occurs, type the following at the DOS prompt

```
> A:\UTILITY\TE16PNP /I
```

This command restores the data in the EEPROM, thus allowing configuration of the adapter.

## **LED Indicators**

The LED indicators help you monitor the network status. They are arranged in a row and are located on the same side as the connectors(s). The following describes the function of each:

<b>Power/Tx</b>		
<b>Connector</b>	<b>Used State</b>	<b>Description</b>
UTP/BNC	ON	There is power

<b>Link/Rx</b>		
<b>Connector</b>	<b>Used State</b>	<b>Description</b>
UTP/BNC	ON	There is link between port & node

## **Supported Network Drivers**

Before you could use an adapter in a certain networking environment, you need to install first its driver program for that type of environment. Otherwise, the adapter will not operate properly.

- NetWare 2.x, 3.x, 4.x ODI driver (client and server)
- Windows NT / Windows NT Advanced Server
- Windows for Workgroups V.3.11
- Windows 95
- SCO Unix
- NDIS Driver
- Packet Driver
- NBIOS Driver

Aside from the drivers listed above, you may also use the NE2000 drivers on the TE-16PnP. For the installation procedure, see the README file in the driver diskette.

## **Specifications**

- Complies with IEEE 802.3 10Base-2 and 10Base-T Ethernet standards
- Compliant with Plug and Play ISA Specification Version 1.0a
- Card configured through software program (for non-PnP systems)
- Auto detection of 8-bit or 16-bit ISA bus
- Diagnostics program for error tracking on board level
- I/O address: 200h, 220h, 240h, 260h, 280h, 2A0h, 2C0h, 2E0h, 300h\*, 320h, 340h, 360h, 380h, 3A0h, 3C0h, 3E0h
- IRQ: 3\*, 4, 5, 9, 10, 11, 14, 15
- Boot ROM starting address: C0000h, C40000h, C8000h, CC000h, D0000h\*, D4000h, D8000h, DC000h
- Boot ROM size: 8k\*, 16k
- Buffer RAM size: 16K bytes
- Transmission distance:
  - UTP: 100 meters
  - BNC: 185 meters (without repeater), 925 meters (with repeater)
- Addressable users: 1024

( \*: default value)