

Not Recommended for New Installations.

Please contact Technical Support for more information.

PCMCIA Ethernet Adapter Card

Model ETCIACT

Documentation Number ETCIACT0698

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Chapter 1: Model ETCIACT Ethernet Adapter Card

This chapter introduces the ETCIACT Ethernet adapter card and describes the features, unpacking information, and description of the LED indicators.

1.1 Introduction

The ETCIACT allows portable computers with a type II PCMCIA slot to connect to a network. The ETCIACT is software configurable requiring no jumper settings or switches. The card is compatible with Novell's NE2000 and supports the PCMCIA Card Information Structure (CIS). The Adapter Card also supports an Enable program that automatically detects your PC's controller type. The ETCIACT provides for an RJ-45 (UTP) or a BNC (Thinnet) connection. Two LED's (TX, LK) provide network traffic information.



1.2 Features

- No external power required
- Low power consumption
- Allows for "Hot Swap" insertion and removal
- Conforms to PCMCIA release 2.1, JEIDA 4.1
- Compatible with Ethernet II, IEEE 802.3, 10Base2, 10BaseT
- Compatible with Novell's NE2000
- Compatible with type II PCMCIA slot
- Auto-detection of medium type (twisted-pair/coaxial cable)
- Two diagnostic LED's (TX , RX)

1.3 Package Contents

- ETCIACT Ethernet Adapter Card
- BNC connector
- PCMCIA Medium Coupler
- 3.5" driver disk
- This manual

1.4 LED Indicators

- TX LED ON indicates the Adapter is transmitting or receiving data
- LK LED ON indicates data packet received or the link integrity pulse is detected for UTP

1.5 Cable Requirements

- 10Base T: Category 3, 4, and 5 UTP cable can be used. Maximum distance for each UTP cable is approximately 100 meters (328 feet).
- 10Base 2: The connection uses RG-58 A/U thin coaxial cable. Requires a T connector to connect the cable to the BCN port. The last PC in the segment will require a 50-Ohm terminator to be attached to the open arm of the T connector.

1.6 The Driver Disk Contains the Following:

<u>Directory</u>	<u>Contents</u>
README.TXT	This file.
\ENABLE	Enable program.
\NetWare	Novell NetWare ODI driver programs.
\WFW31	Driver (NDIS v2.0) is used for Windows/Workgroup 3.1.
\WFW311	Driver (NDIS v3.0) is used for Windows/Workgroup 3.11.
\WIN95	Installation guide for Windows 95.
\MSLANMAN.DOS	Driver (NDIS v2.0) is used for Microsoft LAN Manager (DOS).
\MSLANMAN.OS2	Driver (NDIS v2.0) is used for Microsoft LAN Manager (OS2).
\PACKET	Packet Driver Program.
\LANTASTI	LANTastic/AI 4.x, 5.x and 6.0 installation guide.
\PCNFS	Driver (NDIS v2.0) is used for PC-NFS 5.1 System.
\PATHWORK	Driver (NDIS v2.0) is used for PATHWORK System.
\VINES	Driver (NDIS v2.0) is used for VINES System.
\NDIS	IBM LAN SERVER v4.0 (DOS LAN Services). IBM LAN SERVER v3.0 (DOS LAN Services).
\WINNT351	Driver (NDIS v3.1) is used for Windows NT 3.51 workstation.

In the ENABLE directory

ECARD.EXE file----- Card enabler/Socket services client for DOS system.
ECARDCS.EXE file ---- Card services client for DOS system.
ECARDHP.EXE file---- Socket services enabler for HP Omnibook 300.
ECARDOS2.OS2 file --- Card enabler/Socket services client for OS2 system.
TMI.CLB file ----- LAN Card library file for Systemsoft 3.1.

The README.TXT file is in the root directory on the drivers disk. Specific drivers are in their own directories. Each directory also contains a text file, which contains the installation for that specific driver. The Enable directory contains the Card Service and Socket Service files.

Chapter 2: Hardware Installation

2.1 To Install the Ethernet Adapter Card:

- a) Turn off the power to your PC.
- b) Insert the ETCIACT adapter card into a type II PCMCIA slot.
Be sure that the ETCIACT card is installed label side up.
Slide the card all the way into the slot.
- c) Connect the media coupler to the card's 15-pin connector.

2.2 To Connect the ETCIACT to a Cable

Adapter	Cable Type	Procedure
ETCIACT	UTP	Plug the cable's UTP connector into the Media connector's jack
ETCIACT	10Base 2	<ol style="list-style-type: none">a) Locate the BNC port on the EN2000 PnP cardb) Locate a T connector on the thin Ethernet cablec) Align the slots on the T connector with the pegs on the BCN portd) Push the T connector in and twist it clockwise until it stops

2.3 Removing the PCMCIA Card

- a) Disconnect the media coupler from its connection to the PCMCIA card
- b) Disconnect the network cable from the media coupler
- c) Remove the card from the PC

NOTE: The PC's PCMCIA Type II slot allows for a "hot swap" of PCMCIA cards. Inserting or removing these cards will not affect the PC even while the PC is on.

Chapter 3: Configuration and Software Installation

This chapter assumes that you have already finished the hardware installation step. If you have not completed this step go to Chapter 2: Hardware Installation.

It is also assumed that when your Operating System was installed that the Card Service support and the Socket Services support were included with the Operating System installation. See section 3.2 for information on installing Card Service and Socket Services support if your system does not already have these installed.

The software installation will depend on your Operating System. If you are installing the network adapter card in a PC with an Operating System other than Windows 95, you can install the device driver from the driver disk supplied with your adapter card. The drivers are organized on the disk in separate subdirectories. For example, Windows for Workgroups 3.10 is found at a:\wfw31 if you are using the "A" drive. Each directory contains a text file to explain the installation of that particular driver.

For Windows 95 do the following:

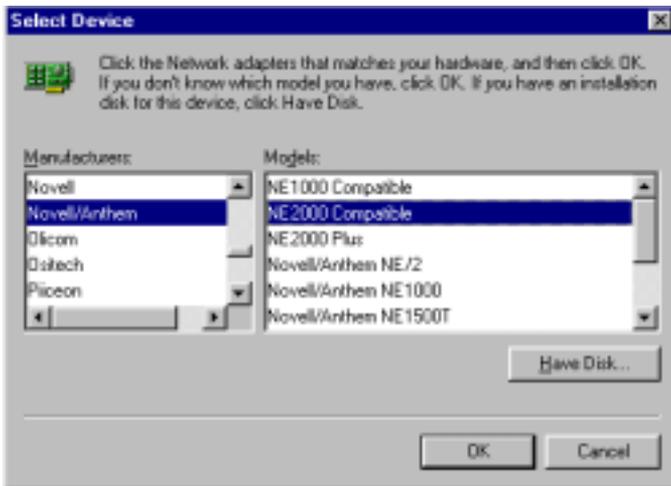
- a) Boot to Windows.
- b) Go to control panel (Start/Settings/Control Panel).
- c) From Control Panel select Add Hardware.
- d) Follow the directions in the dialog boxes.
- e) If the Add Hardware wizard does not recognize the device you will see this dialog box.



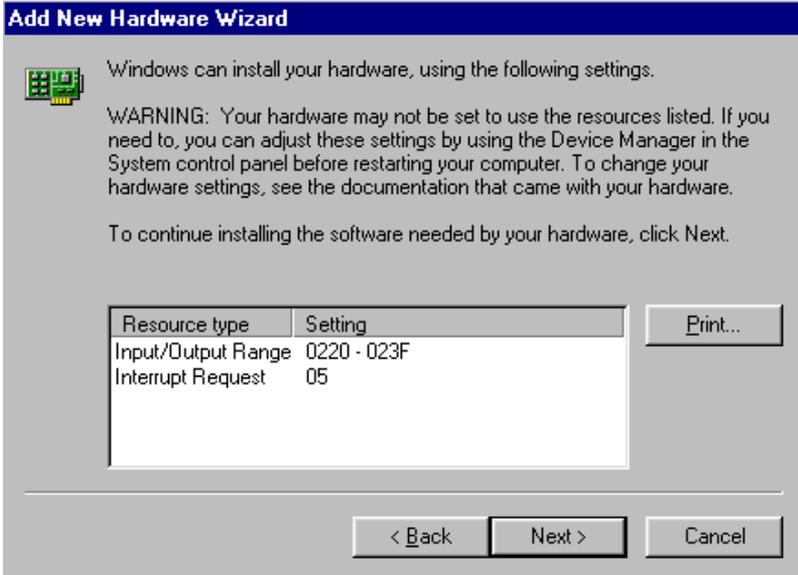
- f) Click on next to install the Network adapter manually.
- g) Select Network adapters.



- h) From the select Device dialog box choose Novell/Anthem from the Manufacturers List and NE2000 compatible as the model.



- i) Click "OK" the next dialog box will show you the I/O address and Interrupt Request.



j) Windows then copies the files and may ask you to insert a Windows disk . Insert the disk and click “OK”.

k) Reboot your PC.

To check the installation go to Control Panel (Start/Settings/Control Panel). Click on the Device Manager tab, click on Adapter, and double click on the adapter that you installed.

3.1 Additional Configuration Information

You may need to configure the adapter card using the configuration utility that came with your PCMCIA drive. If so, use these parameters.

Product Name	Ethernet
Configuration Index	0x20, (0x21, 0x22, 0x23)
I/O Port Address	0x300 (0x320, 0x340, 0x360)
I/O Length/ Size	32 bytes
I/O Bus Width	16 bit
IRQ	3, 4, 5, 9, 10, 12, 15
Memory Windows	Disabled

3.2 Socket Services and Card Services Installation

In most cases the Operating System of your PC came with the PCMCIA Card Service and Socket Service drivers already installed or on a Utility disk. Refer to your PC's manual for specific information.

The following programs are available on the driver disk for installing Card Service and Socket Services. Descriptions and installation instructions can be found in the ENABLE.TXT file.

ECARD.EXE file -----Card enabler/Socket services client for DOS system.
ECARDCS.EXE file ---Card services client for DOS system.
ECARDHP.EXE file ---Socket services enabler for HP Omnibook 300.
ECARDOS2.OS2 file --Card enabler/Socket services client for OS2 system.
TMI.CLB file -----LAN Card library file for Systemsoft 3.1.

3.3 Additional Software Device Driver Information

Before installing the device driver be sure that the Socket Services and the Card Services have been installed. See section 3.2.

Detailed procedures for installing device drivers can be found on the driver disk. Specific drivers are located in their own directory. Each directory contains a text file that describes the installation of that device driver in a particular Operating System. See section 1.6 for a list of device drivers and the directory that they are located.

Chapter 4: Troubleshooting

If the ETCIACT Ethernet adapter card is not working properly try the following:

- a) Check the connections – re-plug the cables and check for any signs of damage or a bad connection
- b) Check the ETCIACT card connection- be sure that the card is oriented properly (label side up)
- c) For a 10Base-T LAN segment – check the Link status LED on your LAN segment's HUB
- d) For BNC LAN segment – check connections and be sure that it is properly terminated (see section 1.5 for cable requirements)
- e) Check that the configuration settings (set in the driver control file, NET.CFG for the ODI driver or PROTOCOL.INI for the NDIS driver) do not conflict with the I/O or IRQ of another device
- f) Check that the proper driver was installed and that it was properly configured (see section 3.3)
- g) If you are using EMM386 as a memory manager you may have to remove the adapter's shared memory space from memory manager control.
- h) Make sure that your system has Card Service and Socket service installed (see section 3.2 and your PC's manual)
- i) If you have another ETCIA adapter card available, install it. If everything works with this card installed then you may have to return your adapter card.