

USER's MANUAL

10 / 100M Fast Ethernet PC Card

(FE1500 Rev.C1)

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INSTRUCTIONS MANUAL FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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.

CAUTION:

To assure continued FCC compliance:

- (1) Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

FCC Label Compliance Statement:

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.

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INTRODUCTION

ABOUT THIS MANUAL

This manual will explain how to install and use your 10/100Mbps dual speeds Fast Ethernet PC Card. The following guideline will help you through the installation process.

How to install the Card and Connect it to network
symbol 224 \f "Wingdings" \s 10→" Chapter 1.
Hardware Installation

How to install the network driver
symbol 224 \f "Wingdings" \s 10→" Chapter 2.
Software Installation

How to do trouble shooting
symbol 224 \f "Wingdings" \s 10→" Chapter 4.
Questions and Answers

Detail Specification
symbol 224 \f "Wingdings" \s 10→" Appendix A
Specifications

SYSTEM REQUIREMENTS

- An IBM compatible notebook computer with 386SX or faster processor
- At least one type II PC Card socket
- Drivers and utilities provided with this product
- PCMCIA release 2.1 compliant Card Services and Socket Services

- 100Base-TX Fast Ethernet or 10BaseT Ethernet connectivity to your local area network.

OPERATING ENVIRONMENT

- Novell Netware 3.x, 4.x
- Microsoft LAN Manager
- Packet Driver Applications
- Microsoft Windows for Workgroups 3.11
- Microsoft Windows 3.1
- Microsoft Windows NT 3.51, NT 4.0
- Windows 95
- Lantastic 6.0
- IBM OS/2 Warp Version 3

CONTENTS IN THE PACKAGE

- Fast Ethernet PC Card Adapter
- Media coupler with single RJ-45 connector for 10BASE-T and 100BASE-TX network.
- 3.5" driver diskette
- User's Manual
- Plastic protection case for base PC Card

HARDWARE INSTALLATION

This chapter describes how to install the dual speeds Fast Ethernet PC Card in your notebook computer and connect it to network. It's referred to "the PC Card" in this manual.

The PC Card could be connected to either 100Mbps Fast Ethernet or 10Mbps Ethernet over unshielded twisted pair (UTP) cable. The PC Card have the ability automatic sensing and operating on either speed without manual reconfiguration.

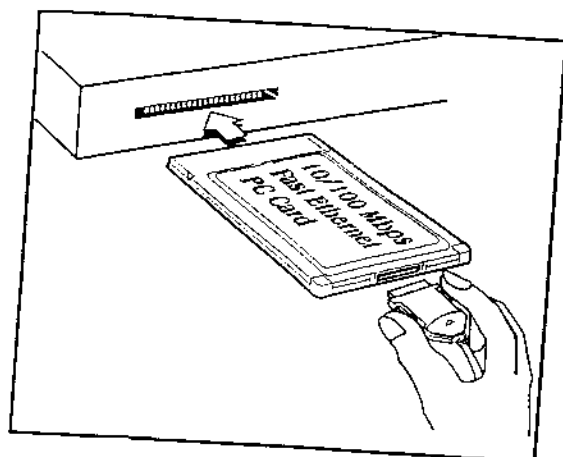
Please refer to **Chapter.3 Software Installation** on how to install network drivers using menu driven installation utility.

Inserting the Dual Speeds Fast Ethernet PC Card

1. Hold the PC Card with wide connector toward the slot and the brand label facing upward.
2. Insert the PC Card and push it firmly into the bottom.
(Please see the figure on the next page for reference)

Removing the Dual Speed Fast Ethernet PC Card

It's quite different for various computer mechanical design. Please refer to the PC Card removal instruction in the document for your



notebook computer.

Connecting and Removing the Cable of Media Coupler to the PC Card

Grasp the PC Card 15-pins connector at the end of the media coupler with the pointing triangle facing upward. Gently insert it into the mating connector on the PC Card until it clicks in place at both sides.

Attention should be paid when removing the 15-pins connector. Please press the both sides of the connectors before dragging out of the PC Card.

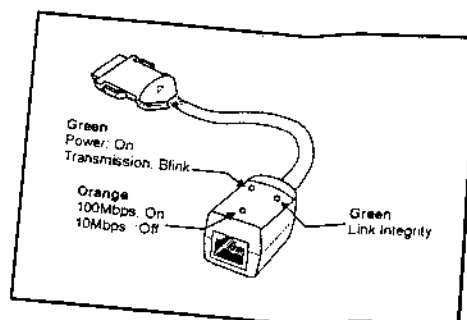
Connecting to the Network

Connect unshielded twisted pair (UTP) cable to the RJ-45 connector of media coupler before loading any network driver.

symbol 108 V "Monotype Sorts" is 6● For operation in the 100Mbps (100Base-TX) Ethernet network, a Category 5 unshielded twisted pair (UTP) cable should be used to connect between media coupler and 100Mbps hub or switch.

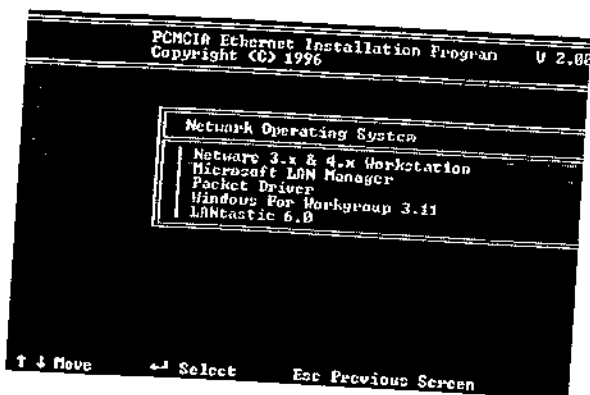
symbol 108 V "Monotype Sorts" is 6● For operation in the 10Mbps (10Base-T) Ethernet network, Category 3, 4 or 5 unshielded twisted pair (UTP) cable could be used to connect between the media coupler and a 10Mbps hub or switch.

LED Indicators



SOFTWARE INSTALLATION

Plug the driver diskette into the floppy drive and set the current drive to the floppy drive. Then run *INSTALL* to install the real mode drivers such as ODI or NDIS 2.x or Packet Drivers into the target disk.



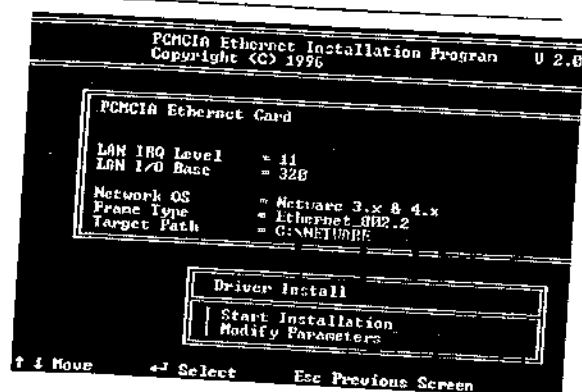
Novell Netware

There are two methods to install the Netware client ODI driver, the menu installation and Netware 3.12 or 4.x Client installation.

Menu Installation

1. Run *INSTALL.EXE* from the root directory of driver diskette.

2. Select *Netware 3.x and 4.x Workstation* item from menu.
3. If current settings are acceptable, select *Start Installation* and go to step 5. Otherwise, select *Modify Parameters* to make settings changed.
4. Move cursor to focus on the setting you want to make change and press <Enter> to select a fit value. When the configurations are set completely, press <Enter> on the **OK** field to exit the screen and go back to step 3.
5. Installation program starts copying related files from diskette to the destination directory and modifies *AUTOEXEC.BAT* and *NET.CFG* under usersymbol 146 of "Parisian BT" as 10's agreement.
6. Now, the installation is completed. Please reboot the computer to make your Netware connection.



If you wanted to install the ODI driver by manual, you may follow the instructions list below.

1. Copy the files LE100ODI.COM and NET.CFG from the path \NETWARE and the file LANEN.EXE from the path \ENABLER in the driver diskette into the Netware client directory containing Novell's LSL.COM, IPXODI.COM and NETx.COM files.
2. Using a text editor to edit the NET.CFG for setting the default frame type. In the Netware server the frame type is set to 802.3 for NW3.11 and 802.2 for NW3.12 and NW4.x. The frame type must be set to the same with the server or the client could not symbol 146 of "Parisian BT" \s 10\ login to the server.

3. Follow Novell's instructions on using ODI programs. You can substitute the LE100ODI.COM whenever a reference is made to the Hardware Specific Module.

4. A typical ODI workstation startup batch file includes:

```
>LANEN /IRQ=dd /IOP=xxx Card Enabler
>LSL ;Link Support Layer Module provided
; by Novell
>LE100ODI ;Hardware Specific Module
>IPXODI ;IPX Protocol Stack Module provided
; by Novell
>NETx ;Shell Support Module provided by
; Novell
>LOGIN
```

Novell Client Installation

1. Run the NetWare Client Install V1.21

-Get the 4 Client disks from the network administrator, or

-Run the \NWCLIENT\INSTALL.EXE in a previous Installation

2. A message appears on the screen asking you whether or not you want the program to perform modifications on your AUTOEXEC.BAT and CONFIG.SYS files.

3. Answer "Yes". The program then modifies your AUTOEXEC.BAT and CONFIG.SYS files accordingly and creates backup copies.

4. The following message appears:

-Install support for MS Windows? (Y/N):

Software installation

5. Answer accordingly and provide a path if necessary.
6. The program displays the following:
 - Configure your workstation for backup by a NetWare server running software such as BACKUP? (Y/N):
7. Answer accordingly and provide a path if necessary.
8. Select a driver for your network board.
9. From the driver list, select **Other Drivers**.
10. Go to the Insert the Driver Disk dialog box and specify the path where the ODI driver and INS files reside. For example: C:\ODI.DOS.
11. Press Enter and select the target ODI driver.
12. Specify the driver's optional settings.
13. Press F10 to save to new configuration.
14. Highlight "Install press here" and press <Enter> to install.

The program copies the necessary files for NetWare Client. Continue the installation procedure to completion. Upon completion, a new NET.CFG file will be created in your DOS directory. Typically, this file contains the following lines:

```
Link Driver LE100ODI
#FRAME Ethernet_802.3
FRAME Ethernet_802.2
:
```

Software

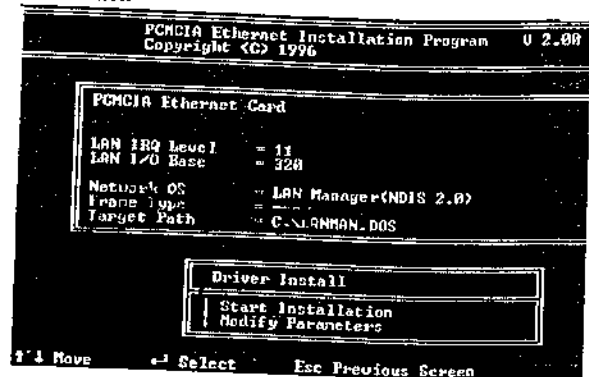
Installation

15. Copy the file LANEN.EXE from the directory \ENABLER in the driver diskette to Netware Client directory.
16. Edit the STARTNET.BAT by a text editor. Add an running LANDEN command at the beginning of the file. An STARTNET.BAT for the ODI workstation performs as the following
 - LANEN /IOP=nnn /IRQ=n
 - Card Enabler
 - SET NWLANGUAGE=ENGLISH
 - Set NetWare 4.X to English language
 - LSL --Link Support Layer Module provided by Novell
 - LE100ODI --Hardware Specific Module
 - IPXODI --IPX Protocol Stack Module provided by Novell
 - VLM --DOS Support Module provided by Novell
 - F: --Change to connected device
 - LOGIN xxx --Login to file server as user xxx
17. Run STARTNET to access the Novell network.

MS LAN Manager

1. View the *README.TXT* on the installation diskette in the \NDIS2 directory. Before installing the drivers, please ensure that the *Microsoft LAN Manager* has been installed in the target path. The installation program will

- check and modify the *PROTOCOL.INI* file for LAN Manager.
2. Run *INSTALL.EXE* from root directory of driver diskette.
3. Select *Microsoft LAN Manager* item on the menu screen.
4. If current settings are acceptable, select *Start Installation* and go to step 6. Otherwise, select *Modify Parameters* to make setting changed.
5. Move cursor to each field you want to make a change and press <Enter> to select a fit value. When the configuration are set completely, press <Enter> on the **OK** field to exit the screen and go back to step 4.
6. Installation program starts to copy related files from driver diskette to the destination directory and modifies *CONFIG.SYS* and *PROTOCOL.INI* under usersymbol 146 \f "Parisian BT" \s 10's agreement.
7. Please reboot the computer to load driver and start LAN Manager in batch.



Example of *PROTOCOL.INI*: used by LAN Manager

```
[PROTMAN]
DRIVERNAME = PROTMANS
DYNAMIC = YES
PRIORITY = NETBEUI

[NETBEUI_XIF]
Drivername = netbeui$
SESSIONS = 6
NCBS = 12
BINDINGS = "LE100NDS_NIF"
LANABASE = 0

[LE100NDS_NIF]
; protocol.ini session for LAN driver.
IOADDRESS = 0x320
INTERRUPT = 11
DRIVERNAME = LE100NDS$
```

Packet Driver

1. Run *INSTALL.EXE* from root directory of driver diskette.
2. Select **Packet Driver** item on the menu screen.
3. If current settings are acceptable, select **Start Installation** and go to step 5. Otherwise, select **Modify Parameters** to make setting changed.
4. Move cursor to focus on the field you want to make a change and press <Enter> to select a fit value. When the configuration are set completely, press <Enter> on the **OK** field to exit the screen and go back to step 3.
5. Installation program starts to copy related files from diskette to the destination directory and modifies *AUTOEXEC.BAT* under usersymbol 146 \f "Parisian BT" \s 10's agreement.
6. Please reboot the computer to load the driver.

Windows for Workgroups 3.11
NDIS3 Driver for Workgroups

1. Run *Windows for Workgroups* and click *Network Setup* icon in Network group.
-

2. In *Network Settings* dialog box, click *Networks...* button to select the network operating system.
 3. In *Networks* dialog box, check the radio button before *Install Microsoft Windows Network* and *No Additional Network*. Press **OK** to go back the *Network Settings* screen.
 4. Click *Drivers...* button to select network driver.
 5. In *Network Drivers* dialog box, press *Add Adapter...* button to enter *Add Network Adapter* dialog box. Select *Unlisted* or *Updated Network Adapter* and press **OK**.
 6. Windows will prompt a *Install Driver* dialog box. In this time, put the driver diskette into floppy drive and press **OK**.
 7. Select the Enhanced mode *NDIS3 for....* string and press **OK**.
 8. Follow Windows instructions to complete the installation and exit Windows.
 9. Run *INSTALL.EXE* from root directory of driver diskette.
 10. Select **Windows for Workgroup** in *Network Operating System* screen.
 11. If current settings are acceptable, select **Start Installation** and go to step 13. Otherwise, select **Modify Parameters** to make settings changed.
-

12. Move cursor to focus on the setting you want to make a change and press <Enter> to select a fit value. When the configuration is accepted, press <Enter> on the **OK** field to exit the screen and go back to step 11.
13. Select **NDIS Server(LAN Manager,...)** as the network server you will attach to and press <Enter> key.
14. Installation program starts to copy related files to the destination directory and modifies AUTOEXEC.BAT and under usersymbol 146 \f "Parisian BT" \s 10's agreement.
15. Please reboot the computer to have the driver take effect.

NDIS2 Driver for Workgroups

1. Run **Windows for Workgroups** and click **Network Setup** icon in **Network** group.
2. In **Network Settings** dialog box, click **Networks...** button to select the network operating system.
3. In **Networks** dialog box, check the radio button before **Install Microsoft Windows Network and No Additional Network**. Press **OK** to go back the **Network Settings** screen.
4. Click **Drivers...** button to select network driver.
5. In **Network Drivers** dialog box, press **Add Adapter...** button to enter **Add Network**

- Adapter** dialog box. Select **Unlisted or Updated Network Adapter** and press **OK**.
6. Windows will prompt a **Install Driver** dialog box. In this time, put the driver diskette into floppy drive and press **OK**.
7. Select the **Real mode NDIS2 for....** string and press **OK**.
8. Follow Windows instructions to complete the installation and exit Windows.
9. Run **INSTALL.EXE** from root directory of driver diskette.
10. Select **Windows for Workgroups** in **Network Operating System** screen.
11. If current settings are acceptable, select **Start Installation** and go to step 13. Otherwise, select **Modify Parameters** to make settings changed.
12. Move cursor to focus on the setting you want to make a change and press <Enter> to select a fit value. When the configuration is set completely, press <Enter> on the **OK** field to exit the screen and go back to step 11.
13. Select **NDIS Server(LAN Manager,...)** as the network server you will attach to and press <Enter> key.
14. Installation program starts to copy related files to the destination directory and modifies AUTOEXEC.BAT under usersymbol 146 \f "Parisian BT" \s 10's agreement.

15. Please reboot the computer to have the driver take effect.

ODI Driver for Workgroups

1. Run *Windows for Workgroups* and click *Network Setup* icon in Network group.
2. In *Network Setup* dialog box, click *Networks...* button to select the network operating system.
3. In *Networks* dialog box, check *Install Microsoft Windows Network and Others*, thereafter select *Novell NetWare (Workstation Shell, 3.X)* or *Novell NetWare (Workstation 4.0 and above)* and press **OK** to enter the screen of *PXODL.COM* and *LSL.COM*.
4. Press **OK** to go back the *Network Setup* screen.
5. Click on *Drivers...* button to select network driver.
6. In *Network Drivers* dialog box, press *Add Adapter...* button to enter *Add Network Adapter* dialog box. Select *Unlisted or Updated Network Adapter* and press **OK**.
7. Windows will prompt a *Install Driver* dialog box. In this time, put the driver diskette into floppy drive and press **OK**.
8. Select the *Netware ODI Driver* string and press **OK**.

Installation

9. Follow Windows instructions to complete the installation and exit Windows.
10. Run *INSTALL.EXE* from root directory of driver diskette.
11. Select *Windows for Workgroups* in Network Operating System screen.
12. If current settings are acceptable, select *Start Installation* and go to step 13. Otherwise, select *Modify Parameters* to make settings changed.
13. Move cursor to focus on the setting you want to make a change and press <Enter> to select a fit value. When the configuration is set completely, press <Enter> on the **OK** field to exit the screen and go back to step 11.
14. Select *Novell Netware Server* as the network server you will attach to and press <Enter> key.
15. Installation program starts to copy related files to the destination directory and modifies *AUTOEXEC.BAT* and *NET.CFG* under usersymbol 146 of "Parisian BT" \s 10's agreement.
16. Please reboot the computer to have the driver take effect.

Windows NT 3.51

1. In Main Group of NT 3.51, open *Control Panel* and click on *Network* icon.

2. In *Network Settings* dialog box, push *Add Adapter...* button. The *Add Network Adapter* dialog box will appear.
3. Choose *<Other> requires disk from manufacturer* from the network adapter card list and press *Continue*.
4. When *Windows NT* prompts for manufacturer disk, insert driver diskette and press *OK* until the *Network Setting Change* dialog box appears.
5. Restart now to have the card take effect.

Windows NT 4.0

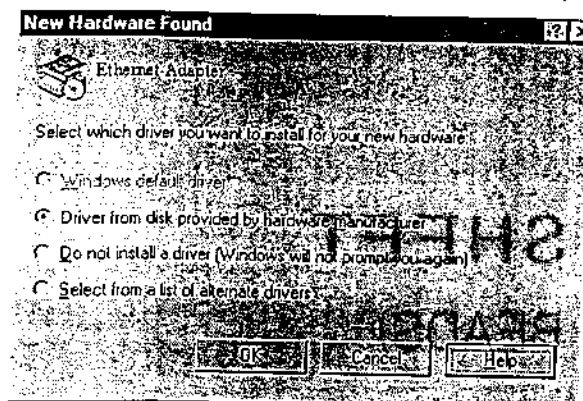
Assumed that the Network Services already installed in the NT 4.0 system.

1. Insert the Fast Ethernet PC Card into any one of PC Card Slots in system.
 2. Power up Windows NT 4.0
 3. Open *My Computer*
 4. Open *Control Panel*
 5. Run the *Network*
 6. Select *Adapters* page
 7. Press *Add* to add network adapter
 8. Press *Have Disk* button
 9. Insert the driver disk into drive A:
 10. Specify the path to "A:\ and press *OK*
-

11. A dialog box will appear to adjust the driver's settings. The resources assignment to the adapter must be unique in the system.
 12. Press *OK* when all setting are completed.
 13. Press *Close* to complete network setting
-

Windows 95 Installation

1. Assumed that the drivers of PC Card slot are well installed. The *System Icon* in the *Control Panel* can report on its functionality. Apart from above mentioned, any questions on this layer need to be taken up with the computer's manufacturer.
 2. Insert the PC Card into the slot. In *New Hardware Found* dialog box, select *Driver from disk provided by hardware manufacturer*.
-



3. Please input the path, *A:* and insert driver diskette. The driver will be installed and you may be asked for the original Windows 95 CD/disks.

4. For the first time installation, please click *Network* icon in *Control Panel* to add Protocols, Client and Service if you needed

5. Reboot the machine and the card will be fully functional.

Artisoft Lantastic 6.0 Installation

1. Install LANTASTIC 6.0 first.
2. Run *INSTALL.EXE* from root directory of driver diskette.
3. Select *LANTASTIC 6.0* in Network Operating System screen.

4. If current settings are acceptable, select *Start Installation* and go to step 6. Otherwise, select *Modify Parameters* to make settings changed.

5. Move cursor to focus on each field you want to make a change and press <Enter> to select a fit value. When the configuration is set completely, press <Enter> on the OK field to exit the screen and go back the step 4.

6. Installation program starts to copy the related files from diskette to the destination directory and modifies CONFIG.SYS, PROTOCOL.INI, and STARTNET.BAT under usersymbol 146 \f "Parisian BT" \s 10's agreement.

7. Please reboot the computer to have the driver take effect.

IBM OS/2 Warp

NDIS2 Driver for OS2 Warp

Before the driver installation, please ensure that the PCMCIA Service was installed and worked properly. If the PCMCIA Service of OS/2 Warp has been enabled already, please jump to portion B for driver installation otherwise please follow the instructions in the following to install the PCMCIA Service.

A. Enable PCMCIA Service of OS/2 Warp

1. In the OS/2 Desktop group, double-click on the *OS/2 System* icon.
2. Double-click on the *System Setup* icon.
3. Double-click on the *Selective Install* icon.
4. Select the *PCMCIA Support* button.
5. Select *PCMCIA* system.

For example : select IBM ThinkPad 750

6. Click *OK*".
7. Click *Install*
8. Select the source drive and directory

For Example D:\OS2IMAGE

9. Click *Install*
10. Click *OK*

B. Install NDIS2 driver for IBM LAN Server 4.0

1. In the OS/2 Desktop group, double-click on the *MPTS* icon.
2. Click on the *Configure* button.
3. Select the *LAN adapters and protocols* option.
4. Click on the *Configure* button.
5. Select the *Other adapters ...*" option.
6. Insert the driver diskette and type the driver

Installation

path:

A:\OS2\NDIS2

Click on the *OK* button.

7. Select *PCMCIA Ethernet Adapter*, and then click on the *Add* button.
8. Select *IBM OS/2 NETBIOS* , and then click on the *Add* button.
9. Click *OK*".
10. Click *Close*".
11. Click *Exit*".
12. Shutdown and restart your system.

ODI Driver for IBM OS/2 Warp

Before the driver installation, please ensure that the PCMCIA Service was installed and worked properly. If the PCMCIA Service of OS/2 Warp has been enabled already, please jump to portion B for driver installation, otherwise please follow instructions in the following to install the PCMCIA Service.

A. Enable PCMCIA Service of OS/2 Warp

1. In the OS/2 Desktop group, double-click on the *OS/2 System* icon.
2. Double-click on the *System Setup* icon.
3. Double-click on the *Selective Install* icon.
4. Select the *PCMCIA Support* button.
5. Select *PCMCIA* system.

For example : select IBM ThinkPad 750

6.Click **OK**".

7.Click **Install**

8.Select the source drive and directory

For Example D:\OS2IMAGE

9.Click **Install**

10.Click **OK**

B. Install Netware Request

1.Insert diskette labeled *WSOS2_1* to diskette drive *A:*

2.Change current drive to *A:*

3.Run **INSTALL.EXE**

4.Select **Installation**

5.Select **Requester on workstation...**

6.Set Target Directory

Assume C:\NETWARE

7.Click **OK**"

8.Select **Edit CONFIG.SYS and Copy All Files...**

9.Click **OK**

10.Insert diskette labeled *WSDRV_1* and Click **OK**

11.Select **NE2000.SYS** driver

Installation

12.Click **Continue** button

13.Insert diskette labeled *WSOS2_1* and Click **OK**

14.Click **Continue** button

15.Select the **SPX Support for OS/2 Sessions**

16.Click **Save** button

17.Click **OK**"

18.Click **Copy**" button

19.Insert diskette labeled *WSOS2_2* and Click **OK**

20.Insert diskette labeled *WSOS2_3* and Click **OK**

21.Insert diskette labeled *OS2UTIL1* and Click **OK**

22.Insert diskette labeled *WSDRV_1* and Click **OK**

Insert diskette labeled *OS2DOC_1* and Click **OK**

24.Insert Fast Ethernet PC Card Ethernet Adapter driver diskette

25.Close Installation window to exit install

26.Copy following driver to C:\NETWARE directory

COPY A:\OS2\ODMLE100ODL.SYS

C:\NETWARE

COPY A:\OS2\ODI\LANEN.OS2

C:\NETWARE

27.EDIT C:\CONFIG.SYS file

28.Delete

DEVICE=C:\NETWARE\NE2000.SYS

For Example

REM -- ODI-Driver Files BEGIN --

REM DEVICE=C:\NETWARE\NE2000.SYS

REM -- ODI-Driver Files END --

29.Add

DEVICE=C:\NETWARE\LANEN.OS2

and

DEVICE=C:\NETWARE\LE100ODI.SYS

For Example

REM -- ODI-Driver Files BEGIN --

DEVICE=C:\NETWARE\LANEN.OS2

DEVICE=C:\NETWARE\LE100ODI.SYS

REM -- ODI-Driver Files END --

30.Save C:\CONFIG.SYS

31.Shutdown and restart your system.

GENERAL INFORMATION

NOTES FOR NDIS DRIVER

The following are examples of partial CONFIG.SYS file and AUTOEXEC.BAT for loading SystemSoft Card Services and NDIS2 driver:

Examples of partial CONFIG.SYS file:

```
DEVICE=C:\CARDSOFT\SS365SL.EXE
DEVICE=C:\CARDSOFT\CS.EXE
DEVICE=C:\CARDSOFT\CSALLOC.EXE
        C:\CARDSOFT\CSALLOC.INI
DEVICE=C:\CARDSOFT\CARDID.EXE
device=c:\lanman.dos\drivers\ethernet\le100\lanen.
exe
device=c:\lanman.dos\drivers\protman.dos
/I:c:\lanman.dos
device=c:\lanman.dos\drivers\ethernet\le100\le100n
ds.dos
```

Examples of partial AUTOEXEC.BAT file:

```
SET PATH=C:\LANMAN.DOS\NETPROG;%PATH%
NET START WORKSTATION
LOAD NETBEUI
```

The Ethernet function configuration information for the DOS NDIS driver is contained in the PROTOCOL.INI file. The section of the PROTOCOL.INI file that contains configuration information for this card must begin with "[LE100NDS2_NIF]". The valid entries in the file are listed below:

[LE100NDS2_NIF]

DRIVERNAME - LE100NDSS

this line must always be present

IOADDRESS - value

where value is one of 32 bytes boundary from 0x200 to 0x3e0.

The leading "0x" for the hex notation is required.

To have Card Services select the address base from it's pool of available address then use a value of 0.

INTERRUPT - value

where values is one of the following interrupts:

3, 4, 5, 7, 9, 10, 11, 12, 15.

To have Card Services select an available interrupt resource then place a value of 0 at this location.

NOTES FOR PACKET DRIVER

The following are examples of partial CONFIG.SYS file for loading *SystemSoft Card Services* and *Packet Driver*:

Examples of partial CONFIG.SYS file:

```
DEVICE=C:\CARDSOFT\SS365SL.EXE
DEVICE=C:\CARDSOFT\CS.EXE
DEVICE=C:\CARDSOFT\CSALLOC.EXE
        C:\CARDSOFT\CSALLOC.INI
```

```
DEVICE=C:\CARDSOFT\CARDID.EXE
```

```
device=c:\tcpip\lanen.exe
```

```
device=c:\tcpip\le100pd.sys
```

**NOTES FOR WINDOWS FOR
WORKGROUPS DRIVER**

The following are examples of partial CONFIG.SYS file and AUTOEXEC.BAT for loading *SystemSoft Card Services* and drivers for *Windows for Workgroups*:

Examples of partial CONFIG.SYS file:

```
DEVICE=C:\CARDSOFT\SS365SL.EXE
DEVICE=C:\CARDSOFT\CS.EXE
DEVICE=C:\CARDSOFT\CSALLOC.EXE
        C:\CARDSOFT\CSALLOC.INI
DEVICE=C:\CARDSOFT\CARDID.EXE
device=c:\wfw311\lanen.exe
DEVICE=C:\WFW311\MFSHLP.SYS
```

Examples of partial AUTOEXEC.BAT file:

```
C:\WFW311\NET START
```

QUESTIONS AND ANSWERS

This chapter provides a number of examples of Questions (Q:), Causes (C:), and Answers (A:). If your LAN is not functioning properly, look up the problem here, or ask your dealer for technical assistance.

Q:The Card Service cannot enable my card.
When I run LANEN the error message show Fail to enable PC card

C:No memory space to map the attribute memory of PCMCIA card.

A:If memory management software e.g. EMM386 has been installed, you have to reserve some area in upper memory (C000:0 -- EFFF:F) for attribute memory of PCMCIA card during enabling the card. Example:
Device=C:\DOS\EMM386.EXE RAM
X=D000-D3FF. Reserve D000 - D3FF for attribute memory.

Q:How can I know the FAST Ethernet PC card has been enabled or not ?

A:1.If the Card Service is installed, you can check by hearing the beep when card insertion.

2.Run LANEN /CHK to check, if the card has been enabled. the resources allocated for the

card are shown as below at the last line of display message.

"IO=xxx IRQ=nn Slot=nn"

Q:How to enable the FAST Ethernet PC card ?

A:1.The Fast Ethernet PC Card can be enabled by the Card Service installed in the laptop directly. The drivers associated with the card in the driver diskette can be run over Card Service directly.

2.In case the Card Service cannot enable the PCMCIA card, you may run LANEN to enable it.

Q:How to make the card work under Systemsoft Card Service ?

There are some procedures have to do for making the card enabled by Cardsoft.

1.Copy across the LE100.CLB file.

Copy FROM

A:\PCMCIA\CARDSOFT\LE100.CLB

TO

C:\CARDSOFT\LE100.CLB

Depends on where the Cardsoft be saved.

2. Edit the CARDID.INI file and add the library LE100.CLB.

Edit C:\CARDSOFT\CARDID.INI

Find the section which starts "[Libraries]", and add the line

CardLib=le100.clb"

before any other "CardLib=" lines.

When the card is inserted it will beep. Use CARDINFO /V to check if the card has been configured correctly.

3. If the card cannot work properly, you may edit CARDID.INI again to change the resources allocation.

In [Common] section you may find the strings as following

```
Lan1Port=300
Lan1IRQ=5
Lan1MemoryBase1=D0
Lan1MemoryBase2=D4
Lan2Port=320
Lan2IRQ=11
Lan2MemoryBase1=D8
Lan2MemoryBase2=DC
```

You may change the Lan1Port or Lan1IRQ to another value (e.g. Lan1Port=320, Lan1IRQ=11) to request Cardsoft allocate the resources you wanted.

4. If the resources cannot allocate properly, you may run \CARDSOFT\CONFIG or edit \CARDSOFT\CSALLOC.INI directly to set the system resources available for allocation. The file content of CSALLOC.INI are listed as below.

```
# The available resources described by the
# "MEM=", "IO=", and "IRQ=" lines
# It may have been altered by the "xINCLUDE"
# and/or "xEXCLUDE" lines below!
# The "MEM=", "IO=" and "IRQ=" lines are
# provided for Read-Only purposes.
```

```
# MEM=D000-DFFF
# IO=100-3F7
# IRQ=5,7,9-C,E-F
```

```
# *** Resource modifications should be made
# below this line. ***
```

```
# RIO=170-177,370-377
# MEMEXCLUDE=C000-CFFF,E000-EFFF
# IOEXCLUDE=3F8-3FF,2F8-2FF
# RQEXCLUDE=3-4,6,13-14
```

You may edit the file to guide the Cardsoft which resources are available in your computer.

Q: How to make the card work under Phoenix Socket/Card Service ?

A: You have to add a card to PCM. If the card has been added, you may use PCM to modify the resources requested for the card.

1. Insert the PC Card into any one of the slots.
2. Execute PCM.EXE that supported by Phoenix PCM
3. Select the right socket by PageUp, PageDown key
4. Choose Configure item by ALT-C.
5. Choose *Add Card to List item* and Enter for first time or choose *Edit Config Parameters* for further edition
6. Set the IO range and IRQ for the card
7. Press Enter key and then save the configuration
8. Exit PCM.EXE by Alt-V and select Exit item
9. Reboot

Q: How to make the card work under Award Socket/Card Service ?

A: You need to run the 'PC Card Control for Windows' program under Windows. If you do not have Windows, edit the CARDWARE.INI file as indicated below.

Before running PC Card Control for Windows, make sure the PC Card is inserted into one of your PC's sockets.

1. Run symbol 145 \f "Parisian BT" \s 10) PC Card Control' for Windowssymbol 146 \f "Parisian BT" \s 10) from the Cardware sub-directory.
2. Press 'OK' buttons on any card detect errors until you get to the main menu.

3. Select the 'Cards' option and choose 'Edit'.
4. Select right Socket and press Enter
If you already have a device in the Defined box called LE100, go to step (11).
5. Select 'New Device' under the 'Defined' devices box.
6. Edit the new device to be named 'LE100'.
7. Select IO range 1 Base(Hex) = 320, Length = 32 (16 bit).
8. Do not alter MEM range 1 or 2.
9. Select IRQ level 11. And OK to make changes.
10. Back on the 'Edit card' screen, highlight the 'LE100' device in the defined devices box.
11. Transfer the LE100 to the 'Associated' box with the 'Include' command.
12. Select OK to complete editing and return to main screen.
13. If the LE100 card is not graphically depicted, choose 'Card' and 'Reconfigure' the socket which contains the LE100 card.

If you still have problems with CARDWARE software try to replace your CARDWARE.INI file with the one supplied on the Ethernet Adapter Drivers Disk.

In DOS mode, you may use PCCARD /D or DOSCARD /D command to check the resources allocated for the card.

Q:The ODI driver is run successfully but fail to login to the Netware server

C:Frame type incompatible with server or Interrupt miss match.

A:1.The default frame type for Netware 3.11 and before is 802.3 but it is changed to 802.2 in Netware 4.x and 3.12. You may check the content of NET.CFG to see if the frame type is acceptable by the server. If the frame type cannot accept by server, please edit NET.CFG to change the frame type at client site or add the frame type can be accepted at sever site.

driver.



SPECIFICATIONS

Network Interface Specifications

symbol 117 \f "Monotype Sorts" \s 6 ♦ 10Mbps Ethernet: IEEE 802.3 standard 10BaseT baseband CSMA/CD local area network.
 symbol 117 \f "Monotype Sorts" \s 6 ♦ 100Mbps Ethernet: IEEE 802.3u standard 100Base-TX baseband CSMA/CD local area network.
 symbol 117 \f "Monotype Sorts" \s 6 ♦ 20/200Mbps full duplex support
 symbol 117 \f "Monotype Sorts" \s 6 ♦ Autonegotiation between all four operation modes.

symbol 117 \f "Monotype Sorts" \s 6 ♦ PCMCIA 2.0/2.1 and PC Card Standard compliant.
 symbol 117 \f "Monotype Sorts" \s 6 ♦ Type II PC Card
 symbol 117 \f "Monotype Sorts" \s 6 ♦ 3.37" x 2.128" x 0.197" (86mm x 54mm x 5.0mm)
 symbol 117 \f "Monotype Sorts" \s 6 ♦ 30g in weight

Host Interface and Physical Specifications

Operating Environments

Novell Netware 3.x, 4.x
 Microsoft LAN Manager
 Packet Driver Applications
 Microsoft Windows for Workgroups 3.11, Windows 3.1
 Microsoft Windows NT 3.51, NT 4.0
 Windows 95
 Lantastic 6.0
 IBM OS/2 Warp Version 3

symbol 117 \f "Monotype Sorts" \s 6 ♦ Normal Operation: +5V DC, 250mA max
 symbol 117 \f "Monotype Sorts" \s 6 ♦ Sleep Mode : +5V DC, 50mA max

Power Requirements:

General Specification

LEDs: Link Integrity, Power / Activity, 10/100Mbps

Enviroments Ranges:

Operating: 32symbol 176 \f "Symbol" \s 9 °}F to 149symbol 176 \f "Symbol" \s 9 °}F (0symbol 176 \f "Symbol" \s 9 °}C to 65symbol 176 \f "Symbol" \s 9 °}C)
 Storage: -4symbol 176 \f "Symbol" \s 9 °}F to 158symbol 176 \f "Symbol" \s 9 °}F (0symbol 176 \f "Symbol" \s 9 °}C to 70symbol 176 \f "Symbol" \s 9 °}C)
 Humidity: 10% - 90% , noncondensing

Certifications: FCC, Part 15, Class B
 CE Mark (EN55022,ClassB, EN50082-1)