



Acer NeWeb Corporation

User Manual for WARPLINK

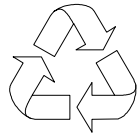
31 May 1999

This document only apply for Model WARPLINK 2401
and WARPLINK 2402 of Acer NeWeb Corporation.
Total pages, including this page, of this document are 20 pages.

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WARPLINK

User Guide



Recycled Paper

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FCC Class B Radio Frequency Interference Statement

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/television technician for help.

Notice 1:

The Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2:

Shielded interface cables, if any, must be used in order to comply with the emission limits.

About this Manual

Purpose

This manual aims to give you all the information you need to install the system housing.

Conventions

The following conventions are used:



NOTE

Gives bits and pieces of additional information related to the current topic.



CAUTION

Suggests precautionary measures to avoid potential hardware or software problems.

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Chapter 1 Introduction

Thank you and Congratulations on your purchase of the Acer NeWeb Warplink. The Warplink is a revolutionary technology that enables two or more PCs, located anywhere in your house or small office to communicate with each other without wires. With Warplink, your PCs can:

- Share your Internet connection
- Share printers and other peripheral devices
- Transfer files between PCs
- Play games between two or more PCs

The Warplink can transmit data through walls of a typical home or small office at a distance of over 150 feet, and at speeds of up to one megabit per second. You can locate you PCs wherever you want without worrying about wires and cables.

Unlike typical LAN, Warplink is easy to install and use. There are no hubs or servers, which means no system administrator. Your PCs will function just as they always did, but with the advantages of wireless connection.

Please read this manual to help you understand how to use the Warplink. It has detailed instructions on how to connect and operate this product. Keep this manual for your future reference.

1.1 Key Features of the Warplink

- PCMCIA, ISA, and PCI interface
- Over 500 feet line of sight and 150 feet range in an office or indoor environment
- Signal that penetrates doors, floors, and walls
- Data Rate of 1 Mbit/second
- Uses a PCMCIA Type 2 slot for notebooks
- Low power consumption — unit can draw power from PCs and notebook computers
- Easy installation and operation
- Compact and lightweight at < 50g

1.2 Parts List

- One PCMCIA card
- One ISA or PCI card
- One SYGATE software
- One driver Compact Disk

Item	Description
PCMCIA Card	One PCMCIA card using radio frequency to communicate from a notebook computer to a PC.
ISA or PCI	One ISA or PCI card using radio frequency to communicate from a PC to a notebook computer
SYGATE Software	Software for multiple PCs sharing one modem, one phone line and one ISP account.
Driver Disk	One CD containing the driver for the hardware.



You can connect an extra desktop PC or notebook computer to your Warlink network by purchasing individual PCMCIA, ISA or PCI cards.

1.3 System Requirements

In order to use the Warlink network, your computers must meet the following minimum system requirements:

Desktop Computers	Notebook Computers
Microsoft Windows 95 or 98	Microsoft Windows 95 or 98
486/66 CPU or better	486/66 CPU or better
8 MB RAM (16 MB recommended)	8 MB RAM (16 MB recommended)
10 MB free hard disk space	10 MB free hard disk space
1 free ISA or PCI card slot	1 free PCMCIA PC card slot
CD-ROM drive	CD-ROM drive

*** Recommend 8MB RAM for Windows 95 environment and 32MB for Windows 98 environment**

Chapter 2 Installation

2.1 Overview

This chapter will teach you how to install the Warplink and perform the necessary setups before use. It is assumed that you already have an existing Internet connection. The Warplink installation will build your wireless LAN connection one computer at a time, starting with your computer that has the Internet connection. It can be a desktop or a notebook computer. On each computer, you will first install the hardware (PCMCIA or ISA/PCI), the driver, and the software (SYGATE)

2.2 Installing the Warplink Hardware

2.2.1 Installing the ISA or PCI card

To install the ISA or PCI card of the Warplink hardware follows the steps below:

1. Turn off the computer and remove the plug from the electrical socket.
2. Open the case of your computer, for more detail please refer to the documentation provided by the computer manufacturer.
3. Touch the chassis of the computer or any metal surface to ground yourself.
4. Locate an empty ISA or PCI slot (depending on the card you have purchased), and remove its slot cover by unscrewing the screw. Keep the screw for later use.
5. Carefully insert the card into the slot and make sure the pins of the card are aligned with the connector pins of the slot.



Do not rock the card because rocking the card might damage it. Press the card straight into the slot. Do not force the card into the slot, if the card will not snap into place, simply pull out the card and try again.

6. Replace the slot cover screw to secure the card in place.
7. Close the computer case and plug the computer into a power socket.
8. Turn on the computer after turning on all the peripheral devices attached to it.

2.2.2 Installing the PCMCIA card

To install the PCMCIA card into a notebook computer, simply plug the card into an empty PCMCIA slot. There is no need to turn off the notebook computer in order to remove or insert a card. If the notebook computer is off, turn it on. [Without installing the Warplink driver and utility properly, the Warplink would not work properly. But please be noticed that the Warplink driver and utility have to be installed. The Warplink driver and utility could be found in the accompanying CD. The installation procedure is in Section 2.3.](#)

Note : 1. Be sure to reserve a empty PCMCIA slot for Warplink

2. Before the Warplink driver and utility are both installed, please do not insert the Warplink into the PCMCIA slot.

2.3 Installing the Warplink driver

When you start up each computer, Windows automatically detects the new hardware you have just installed. Windows will prompt you to provide the driver enabling the computer to communicate with the new hardware. Insert the driver disk provided into the floppy disk drive and direct Windows into the location of the driver disk. Windows will automatically install the driver.

2.3.1 Installing the Warplink driver from CD

1. Insert the driver CD into your CD-ROM drive, then the setup program will be automatically executed.
2. Otherwise, Change the directory to your CD-ROM by choosing 'My computer' and (D:). Click on (D), then the setup program will be executed.
3. Now, you should see the following dialog window popped out.
4. Please wait for the setup completed. After the setup is completed, then you would be asked if you want to install the Warplink Utility.
5. Select 'Yes' to start installing WARPLINK Utility. Select 'No' to exit Setup.
6. If the 'Yes' is selected, the Warplink Utility will be setup.
7. Select 'Next' to setup the directory that you want Warplink utility to be in.
8. Select the Program Folder for Warplink Utility.
9. After selecting your program folder, the Warplink Utility will be installed into your computer immediately.
10. After the Utility is installed, then you would be asked to insert the Warplink card.
11. Please insert your Warplink card now. The setup program and Windows utility will automatically execute the hardware setup. It would take few minutes to finish the hardware setup.
12. Now the Warplink driver and hardware should be installed completed.
13. Once the hardware setup is completed, the computer has to be re-started again before the hardware and driver settings taking effectively.
14. After the computer is restarted, you will be asked to some setups to make your Warplink network working properly.
 - Input your 'Station Name' which is the name shown on the network.
 - Select your PC to be 'Network Host' or 'Network Client'. 'Network Host' will be the one coordinating the network operation properly, only one station could be set as 'Network Host' in a network. 'Network Client' is the client station of the network.

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- Select the 'Netkey' which is the ID of the network. Please be noticed that all of the stations in the same network should have the same 'Netkey'
15. If the setting is not done properly, the setting request will be popped out every ime you start your PC.
16. Now your Warplink should be working properly. If there is any problem regarding the setup, please refer to the 'Troubleshooting' section.

2.4 Installing the Software

To install the SYGATE software, please refer to the installation manual provided with the software for instructions.

2.5 Warplink Utility

The Warplink utility could be used to monitor your network quality and manage your network. The Warplink utility could be run from the Start Menu. There are four sections of the utility.

1. Warplink Status

- The Warplink station name for this PC is shown.
- Warplink station type is shown. (Network Host or Network Client)
- The hopping sequence for this network is shown.
- The Warplink MAC (Media Access Control) address is shown, this follows IEEE standard. You would be able to set it.
- The Station name, station type and hopping sequence could be set in 'Warplink Setting' menu.
- 'Co-ord Quality' – the link quality for this station to 'Network Host'.
- 'Processor Usage' - the Warplink processing power usage. It indicates how busy the Warplink is.

2. MAC Statistics

- MAC status monitor. By this, you will see the wireless link quality.

3. Warplink Setting

- This is used to set up the Warplink station.
- 'Network Host' – the master of the entire network, control the network timing and operation sequence. Only one station could be set as 'Network Host' in a network.
- 'Network Client' – All the non-Network Host stations are Network Client.
- 'Station Name' – the name used for this station. And this is the name will be shown and seen in the Warplink network. Up to 16 characters.

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- 'Network Password' – A network should have a password for identification. All of stations and clients in a network should use the same network password. This is part of network security. Up to 8 characters.
 - 'Hopping Sequence' – The timing sequence for the entire network. The same hopping sequence has to be set for a network to link together. You could choose sequence number from 0 to 77 (for USA). That is 78 sets of hopping sequence.

4. Neighbor List

- All of stations linked to the network will be shown.
- The link quality is that between this station and the other linked station.
- The status is updated every 2 seconds. The 'Re-Fresh' could be clicked to get the status updated whenever you want.

Chapter 3 Specifications

Item	Specifications
Interface	PCMCIA type 2, ISA/PCI
Range	Over 500 feet line of sight or 150 feet in an office and indoor environment
Radio Frequency Technique	Frequency Hopping Spread Spectrum
Receiver Sensitivity	Typically -80dBm
Data Rate	1 Mbit/sec.
MAC Protocol	CSMA/CA
Frequency Band	2.4-2.4835 GHz (ISM Band)
Typical Output Power	+17.5 dBm
Supply Voltage	5V Operation
Supply Current	Standby - 23 mA Receive - 130 mA Transmit - 290 mA
Weight	<50g
Operating Temperature Range	0°C to 55°C
Storage Temperature Range	-20°C to 70°C

Chapter 4 Warranty

Acer NeWeb Corp. (ANC) warrants that if the accompanying product proves to be defective to the original purchaser in material or workmanship within 180 days from the original purchase, ANC will, at its sole discretion, either repair or replace the product without charge.

4.1 Limitation of Liability and Remedies

Acer NeWeb Corp. shall have no liability for any damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which are due to accident, abuse, misuse, neglect, mishandling, faulty installation, misapplication, set-up adjustments, improper operation or maintenance, modification, improper voltage supply or as a result of service or modification not approved by ANC.

There are no express warranties other than those listed above. The warrantor shall not be liable for incidental damages resulting from the use of this product, or arising out of any breach of this warranty. All expressed and implied warranties are limited to the applicable warranty period set forth above. Some states do not allow limitations on how long an implied warranty lasts, therefore the above limitations may not apply to you. This warranty gives you specific legal rights; you may also have other rights that vary from state to state.