iPAQ Networking 10/100 Fast Ethernet USB Adapter

Installation and Setup Guide

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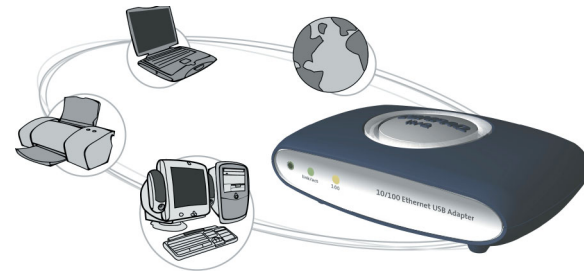
iPAQ Networking 10/100 Fast Ethernet USB Adapter
Installation and Setup Guide
First Edition (June 2001)

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Introduction

Welcome to iPAQ Networking. Thank you for purchasing the new iPAQ Networking 10/100 Fast Ethernet USB Adapter. The Compaq family of iPAQ Networking products will help you simplify your life and connect your world. With iPAQ Networking, you can connect all of your PCs for simultaneous access to files, printers, peripheral devices, and the Internet.

This guide is designed to help you:

> Get acquainted with the features of your new Ethernet USB Adapter

> Install the product correctly

> Locate technical specifications, customer service information, and troubleshooting

> Learn how to use the product on your network

Features and Benefits

The iPAQ Networking 10/100 Fast Ethernet USB Adapter, when used with an Ethernet hub, switch, or router (sold separately), connects your PC to the network through your computer's USB port. The adapter works with desktop or notebook PCs. Key product features and benefits are listed below.

Features	Benefits
High Performance Networking	Your Ethernet USB Adapter works in either 10Mbps or 100Mbps environments. Its Auto Negotiation feature automatically detects the speed of the network and adjusts appropriately. *Note:* While the network may run up to 100 Mbps, 12 Mbps is the maximum speed supported by USB.
Easy to Set Up and Use	iPAQ Networking solutions come with easy-to-follow instructions and intelligent software that guides you through the installation process. You can easily set up your network to share Internet access, share files and printers, or play the latest multi-player PC games.
Advanced Bridging Technology	Even if you have a combination of Ethernet, wireless, or phone line products in your networking environment, the iPAQ networking software has the power to bring them together, or create a bridge, so they operate as one integrated network.
Share Internet Access	iPAQ Networking allows you to share a single Internet account and let more than one computer use it at the same time! Simultaneous Web surfing works with cable and DSL high-speed Internet access as well as with standard dial-up.

Features	Benefits
Printer and Device Sharing	Share devices connected to one computer with other computers on the network, such as printers, scanners, Zip drives, and CD-ROMs.
File Sharing	Move or copy files between all of your networked PCs quickly and easily.
Multi-Player Gaming	Play real-time games with anyone on the network. When you make a move or score points, the other player sees the action on his connected PC.
Digital Music and Picture Sharing	Play digital music easily and view pictures anywhere on your network.

What's in the Box?

> **iPAQ Networking 10/100 Fast Ethernet USB Adapter**. This is the device that links your PC to the network.

> **USB cable**. This is the cable that connects the adapter to your PC.

> **Quick Setup Guide.** Easy-to-follow images and step-by-step instructions help you quickly install the product.

> **iPAQ Networking CD**. This CD contains Internet sharing and networking software, user and troubleshooting guides, and hardware drivers.

> **Warranty card.** This card explains the iPAQ Networking standard warranty.

What Else Do I Need?

To use the iPAQ Networking 10/100 Fast Ethernet USB Adapter, you need a PC with the following components:
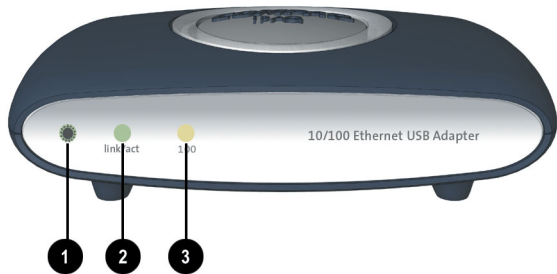
> One available universal serial bus (USB) port

> Intel$^®$ Pentium processor or higher

> At least 24MB RAM

> Microsoft$^®$ Windows$^®$ 98, 98SE, ME, or 2000

Note: This Ethernet USB Adapter provides the hardware you need to install networking capabilities on a single PC. A complete Ethernet network requires a local hub, switch, or router, such as the iPAQ Networking 5 Port 10/100 Fast Ethernet Auto-Sensing Switch, to provide a central connection point for all computers.

Note: You will also need a twisted-pair Ethernet cable with an RJ-45 jack (purchased separately) to connect your computer to the network. This type of cable is commonly available at computer stores. The maximum desired cable length is 100 meters (328 feet). Use Category 3, 4, or 5 cable for connection to 10 Mbps Ethernet, or Category 5 cable for connection to 100 Mbps Fast Ethernet.
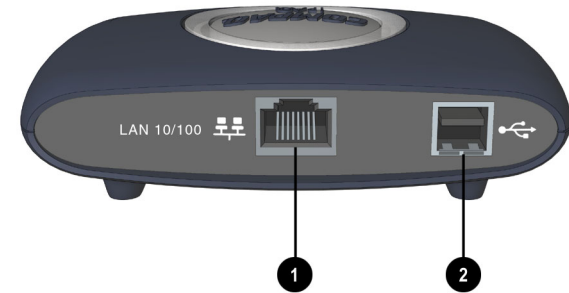
What's in Front?

The LED indicators on the front panel of your Ethernet USB Adapter help you monitor system status.

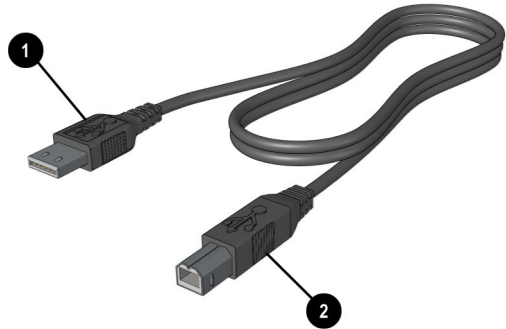|	LED	Status	Description
❶	*Power*	On (green)	Indicates a valid USB power connection.
		Off	Indicates there is no power to the Ethernet USB Adapter.
❷	*Link/Act*	On (green)	Indicates the Ethernet USB Adapter has a valid network connection.
		Flashing green	Indicates data is being transmitted.
❸	*100*	On (amber)	Indicates the Ethernet USB Adapter is connected to a 100Base-TX network
		Off	Indicates the Ethernet USB Adapter is connected to a 10Base-T network.

What's In Back?

The ports on the back panel of your Ethernet USB Adapter help you make connections to your PC and the network.

	Port	Description
❶		The RJ-45 port is where you connect your USB Adapter to a hub, switch, or router. You must purchase a twisted-pair cable separately for this connection.
❷		The USB port is where you connect your USB Adapter to your PC. Use the USB cable provided in the package contents.

USB Cable

Your USB Adapter comes with a USB cable that has two connector ends: one rectangular (Type A ❶) and the other square (Type B ❷).

Installing the Product

Overview

Installing the product involves several steps:

> **Install drivers**

> **Install the Ethernet USB Adapter**

> **Connect the Ethernet USB Adapter to the network**

> **Install iPAQ Networking software**

The following pages contain step-by-step procedures for each item on this checklist.

Installing the Drivers

1. Insert the **iPAQ Networking CD** into the CD-ROM. The iPAQ Networking menu should display automatically.
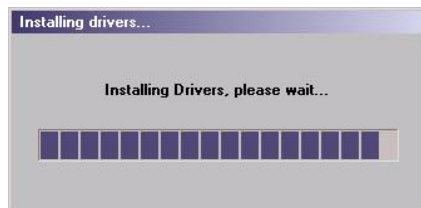

Note: If the menu is not displayed, select the *Start* button and choose *Run*. Type in "*D:\setup.exe*" where "D:\" is the location of your CD ROM drive. Then click *OK* to start the iPAQ Networking menu.

2. Click **Install Drivers** ❶ to start the driver installation software.
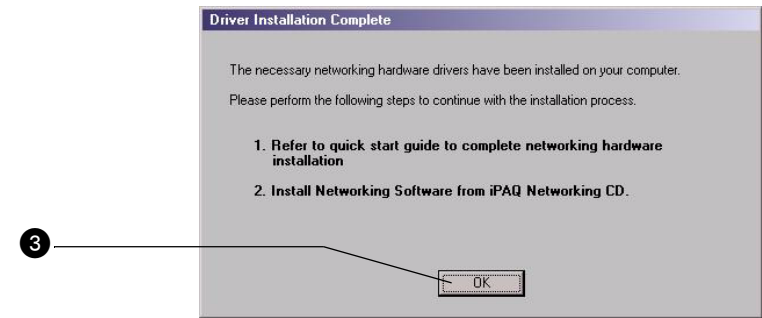
    The opening panel of the Network Driver Installation Utility is displayed.

3. Click **Install Drivers** in this panel to start installing the drivers. ❷
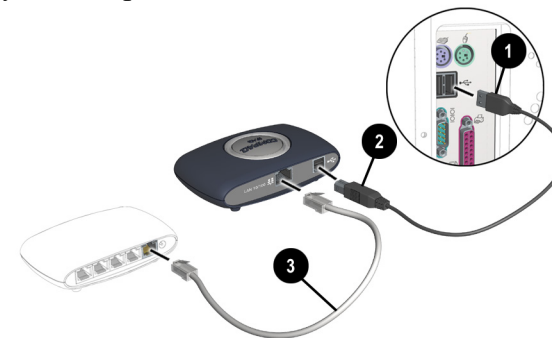   A progress indicator is displayed while the files are being installed.

4. When installation is complete, the Driver Installation Complete window is displayed. Click **OK** ❸ to complete the installation.

Complete the hardware installation before proceeding with software installation.

Installing the Ethernet USB Adapter

The iPAQ Networking 10/100 Fast Ethernet USB Adapter is an external device, so there's no need to install anything inside your computer.

1. Connect the Type-A plug to the USB port on the PC. ❶
2. Connect the Type-B plug to the USB Adapter. ❷

3. Connect one end of the cable to the RJ-45 port on the USB Adapter ❸ and the other end to any available station port on a network hub or switch.

Note: When inserting an RJ-45 plug, be sure the tab on the plug clicks into position to ensure that it is properly seated.

4. Install the product software, including printer sharing, file sharing and Internet connection sharing, using the **Install Software** option on this CD.

Installing the Software

When you are finished installing the drivers and hardware, you are now ready to install the iPAQ Networking software. Please refer to the **Software Documentation** on this CD.

Technical Specifications

Model	HNE-200
Ports	1 USB Type-B RJ-45 for 10BASE-T/100BASE-TX
Standards Conformance	IEEE 802.3x for Auto Negotiation, IEEE 802.3 10BaseT, IEEE 802.3u 100BaseTX, USB Spec v 1.0 and 1.1
Certifications	FCC Part 15B, CE
Access Protocol	CSMA/CD
Driver Support	Microsoft® Windows® 98, 98SE, Millennium, 2000
Cable Wiring (USB port and RJ-45 port)	90T shielded USB cable, maximum length 5 meters (16 feet) 10BASE-T: 100T Category 3,4,5 shielded/unshielded twisted-pair, max length 100 m (328 ft) 100BASE-TX: 100W Category 5 shielded/unshielded twisted-pair, max length 100 m (328 ft)
Access Method USB port	USB Spec v. 1.0 and 1.1 differential and bi-directional, 12 Mbps (high-speed device)
Access Method RJ-45 port	IEEE 802.3x, IEEE 802.3 and IEEE 802.3u CSMA/CD, 10 and 100Mbps baseband, Full/Half Duplex
Input Power	4.75~5.25 VDC, 0.3A max. (Bus powered from USB host controller or hub or switch)
Power Consumption	1.5 Watts maximum (from USB host)
Heat Dissipation	9 BTU/hr

Temperature	0 - 40C / 32 -104F (standard operating)
	-20 - 70C / -4 - 160F (storage)
Humidity	5- 95% non-condensing
LED Indicators	
Power	On (green) indicates a valid USB power connection
	Off indicates there is no power to the Ethernet USB
	Adapter
Link/Act	On (green) indicates the Ethernet USB Adapter has a
	valid network connection
	Flashing green indicates data is being transmitted.
100	On (amber) indicates the Ethernet USB adapter is
	connected to a 100Base-TX network
	Off indicates the Ethernet USB adapter is connected
	to a 10Base-T network

For More Information

All the information you need to get your network up and running is on this CD. To learn more about Compaq's other networking products, or if you need additional information regarding components or technology, the Compaq website **compaq.com/athome** features a variety of resources. Here's where you can find other sources of information:

Registration

You can register your new product online at the Compaq website **compaq.com/register**.

Troubleshooting

If you have problems with your Ethernet USB Adapter, check the **Troubleshooting Guide** on this CD for quick resolution to the most common situations.

Glossary

A **Glossary** on this CD provides a brief list of commonly used technical terms and their definitions.

Technical Support

If you have a networking problem not addressed in the **Troubleshooting Guide** on this CD, Compaq offers technical support online at **compaq.com/consumersupport.** You can also call 888-302-7358.

Regulatory Compliance

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 or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Compaq Computer Corporation may void the user's authority to operate the equipment.

Declaration of Conformity
For Products marked with the FCC logo
United States only

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.

For questions regarding this product, contact:
Compaq Computer Corporation
P. O. Box 692000, Mail Stop 530113
Houston, Texas 77269-2000
Or, call 1-800-652-6672 (1-800-OK COMPAQ)

For questions regarding this FCC declaration, contact:
Compaq Computer Corporation
P. O. Box 692000, Mail Stop 510101
Houston, Texas 77269-2000
Or, call (281) 514-3333

To identify this product, refer to the part, series, or model number found on the product.