Accton
Making Partnership Work

USB Ethernet Adapter
Quick Installation Guide

Introduction

Accton's USB family of products offers a convenient and cost-effective means of bringing straight-forward peripheral connectivity to the desktop based on the Universal Serial Bus (USB). These products feature true plug-and-play connection of PC peripherals "outside the box" and mark a significant advance in desktop cable management. Using a USB Ethernet adapter, USB hub, USB serial converter, and other products under development, you can simplify PC connections in the home, office or on the road.

The Universal Serial Bus is designed to replace the current serial, parallel, and other port types used on a PC with a single universal interface. Many types of devices can be plugged into a single PC USB interface. However, conventional devices without a USB interface require a USB converter. And to attach more than one device, you will also need a USB hub such as Accton's USB204A.

USB uses a unique cable and connector system. The "upstream" side of the cable ("A" side) connects to a USB hub or PC; and the "downstream" side ("B" side) connects to USB devices or to another hub's B side. The USB220-EC Ethernet Adapter has a "B" side connector on one side and an RJ-45 Ethernet connector (10BASE-T) on the other side. This USB Ethernet Adapter allows you to connect to a 10BASE-T LAN (10 Mbps) using the new USB interface.

The ports on the USB220-EC are shown below:

Face   **USB Port**

RJ-45 Port

Package Checklist

Accton's USB220-EC includes:

- 1 USB220-EC
- 1 registration card (please return)
- 1 driver diskette
- 1 user guide
- 1 USB cable

System Requirements

The USB220-EC requires the following basic host PC features to operate:

- A host PC that supports the Universal Serial Bus
- 16MB of RAM
- Windows 95 (OSR 2.x), 98, or 2000

You also need to provide the following items:

- 1 standard twisted-pair Ethernet cable
- A 10Mbps Ethernet LAN

Installation

Warning: Please view the README.TXT file on the Ethernet Adapter driver diskette for product related information.

Install the driver as described below:

Windows 95

1. Connect the Type-A plug into the USB port on the computer.
2. Insert the Driver Software Diskette.
3. Double-click on My Computer.
4. Double-click on 3-1/2 Floppy (A:).
5. Double-click on Win95/Setup.exe.
6. When prompted, connect the Type-B plug into the adapter.
7. You will observe several loading status windows.
8. If prompted to insert the Windows 95 CD-ROM, do so and click OK.
9. When prompted to restart the computer, remove the diskette and click Yes.

Windows 98

1. Connect the Type-A plug into the USB port on the computer.
2. Connect the Type-B plug into the adapter.
3. Connect the adapter to the Ethernet network.
4. The New Hardware Wizard displays.
5. When prompted for the installation medium, check Floppy Disk Drive and insert the Driver Software Diskette.
6. Follow displayed instructions.
7. You will observe several loading status windows.
8. When prompted to restart the computer, remove the diskette and click Yes.

When the installation process is complete, remove the diskette from your drive and follow the instructions for restarting your PC. After rebooting your system, the USB Ethernet Adapter will appear to the system as a normal Ethernet network adapter card. For the LED definitions, see "LED functions" below.

Note: If the Wizard does not appear when you plug in the Ethernet Adapter, please view the section "Is USB correctly installed" in the README.TXT file on the Ethernet Adapter driver diskette.

Power Requirements

USB devices can be either self-powered or bus-powered. A device which has no power connector is bus-powered, and derives its operating power from the USB connection directly. The Ethernet Adapter is bus-powered – all you need to do is plug it into a PC or USB hub (such as Accton's USB204A).
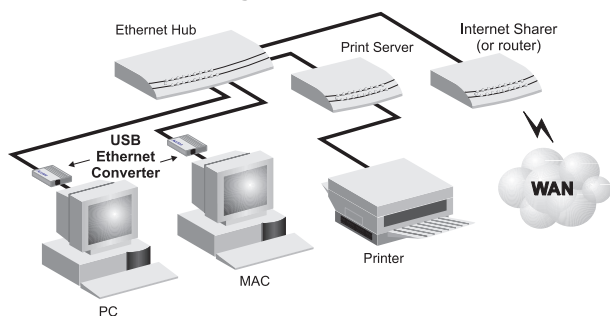
LED Functions

The Ethernet Adapter contains two LED's on the side panel of the RJ-45 connector. The left Green LED is LINK and the right Orange LED is Receive/Transmit activity. The operational status of the adapter is indicated by the LED conditions listed below.

Link	Activity	Indication
ON	ON	Power ON - LED's light initially for 3 seconds.
Flashing	Flashing	Adapter is connected to the computer but not configured.
ON	OFF	Normal operation, no network activity.
ON	ON	Normal operation, network activity.
OFF	OFF	No network connection to the RJ-45 socket.
OFF	ON	Failed self-diagnostics at start-up.
Always Flashing	Always Flashing	Ethernet configuration problem. Check all cabling.

USB Application Diagram

4

EMI Warning

FCC Class B Certification

Accton Technology Corporation
Model Numbers: *USB220-EC*
FCC ID: *HED1045USB*

This device complies with Part 15 of the FCC Rules. Operation is subject to the following 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 the one which the receiver is connected to
· Consult the dealer or an experienced radio/TV technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Attach unshielded or shielded Category 3, 4 or 5 twisted-pair cable to the RJ-45 port, and shielded USB cable to the USB port.

Note: In order to maintain compliance with the limits of a Class B digital device, Accton requires that you use a quality interface cable when connecting to this device. Changes or modifications not expressly approved by Accton could void the user's authority to operate this equipment. Suggested cable type is 90Ω USB cable for the USB port, and 100Ω shielded or unshielded Cat. 3, 4 or 5 twisted-pair cable.

Canadian Standards Association (CSA) Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communciations.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numérques", NMB-003 édictée par le ministère des Communications.

VCCI Class B Compliance (Japan)

この装置は、情報処理装置等電波障害自主規制協議会（ＶＣＣＩ）の基準
に基づくクラスＢ情報技術装置です。この装置は、家庭環境で使用すること
を目的としていますが、この装置がラジオやテレビジョン受信機に近接して
使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

EN55022 Declaration of Conformance

This is to certify that the Accton USB220-SC is shielded against the generation of radio interference in accordance with the application of Council Directive 89/336/EEC, Article 4a. Conformity is declared by the application of EN55022:1987 Class B (CISPR 22:1985/BS 6527:1988).

CE Mark Declaration of Conformance

This is to certify that this product complies with ISO/IEC Guide 22 and EN45014. It conforms to the following specifications:

EMC:	EN55022(1988)/CISPR-22(1985)	class B
	IEC 1000-4-2(1995)	4kV CD, 8kV AD
	IEC 1000-4-3(1995)	3V/m
	IEC 1000-4-4(1995)	1kV - (power line)
	IEC 1000-4-6(1995)	3Vrms

This product complies with the requirements of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC.

Product Specifications

Standards Conformance	USB Specification 1.0 (for USB low-power device)
System Requirements	A PC that supports the Universal Serial Bus (Windows 98)
	Also requires device driver (included)
Ports	1 USB B-Type receptacle for downstream (device) connections
	RJ-45 Ethernet port for 10BASE-T, 10Mbps connections
Cable Wiring	USB port: 90Ω shielded USB cable, 5 m (16 ft) max. length
	Ethernet port: 100Ω Category 3,4,5 shielded/unshielded
	twisted-pair with max length of 100 m (328 ft)
Access Method	12 Mbps full speed on USB side, and up to 8 Mbps on
	Ethernet side
Dimensions	25.3 x 55.4 x 67.8 mm (1.0 x 2.18 x 2.67 in)
Weight	50 g (1.76 oz)
Input Power	4.25~5.25 VDC, 0.5A max.
	(bus powered from USB host controller or hub)
Power Consumption	2.65 Watts maximum (from USB host)
Heat Dissipation	9.04 BTU/hr
Environmental	
Temperature	0°C - 40°C / 32°F -104°F (Standard Operating)
	-20°C - 70°C / -4°F - 160°F (Storage)
Humidity	5- 95% (Noncondensing)
Certification	
CE Mark	EN50081-1, EN55022 Class B
	EN50082-1, IEC 1000-4-2/3/4/6
Emissions	FCC Class B, VCCI Class B, CISPR Class B

Warranty

Accton warrants to the original owner that the product delivered in this package will be free from defects in material and workmanship for the lifetime of the product. For the warranty to apply, you must register your purchase by returning the registration card indicating the date of purchase and including proof of purchase. There will be a minimal charge to replace consumable components, such as fuses, power transformers, and mechanical cooling devices. The warranty does not cover the product if it is damaged in the process of being installed. Accton recommends that you have the company from whom you purchased this product install it.

THE ABOVE WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY ARISING OUT OF ANY PROPOSAL, SPECIFICATION OR SAMPLE. ACCTON SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. ACCTON NEITHER ASSUMES NOR AUTHORIZES ANY PERSON TO ASSUME FOR IT ANY OTHER LIABILITY.

Copyright

Accton

Accton is a trademark of Accton Technology Corporation. Other trademarks or brand names mentioned herein are trademarks or registered trademarks of their respective companies.