USB 10/100
Ethernet Adapter
User Manual
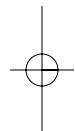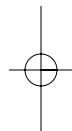
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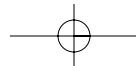
Introduction

Thank you for purchasing the Belkin USB 10/100 Ethernet Adapter. Now you can quickly and easily connect any USB-equipped notebook, portable, or desktop computer to an Ethernet local area network (LAN), xDSL modem, or cable modem. Windows applications that communicate via an Ethernet card will also work with the Belkin USB 10/100 Ethernet Adapter, making it an excellent alternative to internal PCI or PCMCIA cards. The Belkin USB 10/100 Ethernet Adapter configures and sets up just like a network interface card (NIC) without the trouble of opening your computer and installing an add-in card or inserting an expensive PCMCIA card into your laptop. Once configured properly, there is no need to shut down your system to disconnect or reconnect the adapter.

Our adapter conforms to both USB and Ethernet specifications, and functions as a full-speed USB device. The unit requires no external power supply since it is powered directly from the Universal Serial Bus.

The provided software supports Windows 98, Windows 98 SE, Windows Me, and Windows 2000. This manual explains the features and specifications of the adapter and how to properly connect and use the Belkin USB 10/100 Ethernet Adapter hardware and software with your PC and network environment.

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Features

- Instantly connect to any 10Base-T or 100Base-TX network through USB
- Saves desktop and briefcase space for easy mobility
- Plug-and-Play
- Eliminates the need for a NIC (Network Interface Card) or expensive PCMCIA cards
- Requires no hardware installation or jumper settings
- Requires no IRQs or other system resources
- Supports all common protocols: TCP/IP, IPX/SPX, and NetBEUI
- Works with cable modems and xDSL modems and all standard hubs, routers, and other network equipment
- Compatible with Windows 98, 98 SE, Me, and 2000
- Automatically detects network speed: 10Base-T or 100Base-TX
- Requires no external power
- Compatible with USB 1.0 and 1.1 specifications and meets all IEEE Ethernet standards
- Belkin Lifetime Warranty and technical support

Technical Specifications

Package

Dimensions:	4.25" x 3.75" x 1.25"
	(10.8cm x 9.5cm x 3.2cm)
Connector (Ethernet):	RJ45
Connector (USB):	USB-B
Weight:	3.9 oz. (111g)
Power Requirements:	5V DC, 150mA
	(Powered from USB)
Power Consumption:	64mA @ Idle State
	120mA @ 10M Full Duplex
Mode	
	150mA @ 100M Full Duplex
Mode	

Data Transfer Rate

Can exceed 6Mbps (depending on the computer,
operating system, communication protocol, and
network environment)

Environmental Conditions

Operating Range:	32 to 131 °F (0 to 55 °C)
Storage Range:	-4 to 176 °F (-20 to 80 °C)
Humidity:	10 to 90%, non-condensing

LED

Red:	Solid: Indicates power is OK

Technical Specifications (continued)

Standards
- IEEE802.3u 100BASE-TX and IEEE802.3 10BASE-T compliant
- Support for IEEE802.3x flow control

- IEEE802.3u 100BASE-TX and IEEE802.3 10BASE-T compliant
- USB specification 1.0 and 1.1 compliant

Certifications

FCC, Class B

CE Mark

C-Tick

System Requirements
- PC with one free USB Port
- Windows 98, 98 SE, Me, or 2000

Package Includes

- Belkin USB 10/100 Ethernet Adapter
- Belkin USB Device Cable
- Category 5 Ethernet Cable
- Installation Disk
- User Guide

Hardware Installation

A USB cable and network cable are provided for connection of your equipment

Caution: If you choose to use a USB hub, the hub must be externally powered.

In order to use the adapter, you must install drivers in the USB host PC as described in the following sections. In addition, you may need to configure the network parameters. You may need your original Windows CD to complete the installation.

Cable Connections

Figure 2-1 illustrates the provided USB cable connection from the PC (A connector) to the adapter (B connector), and the provided standard Ethernet cable connection from the RJ45 connector on the adapter to an Ethernet port. When prompted in the installation procedure, follow any of the following connections:

Figure 2-1: Basic PC-to-Ethernet Port Connection
An Ethernet port is used to connect the adapter to an Ethernet environment. Such a port might be an Ethernet hub, network wall socket, peripheral device, cable modem, etc.

# Hardware Installation (continued)
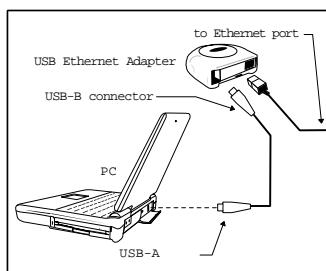
Figure 2-1: Basic PC-to-Ethernet Port Connection

Figures 2-2, 2-3, and 2-4 illustrate sample applications for
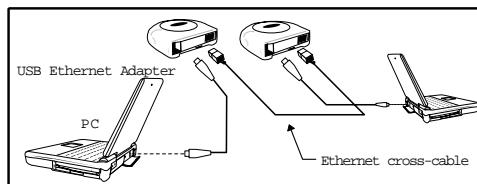

Figure 2-2: PC-to-PC Direct Connections

Note: Use and ethernet cross-cable between the two
         Ethernet adapters for this application. The provided
         Ethernet cable will not function for this purpose.

Hardware Installation (continued)
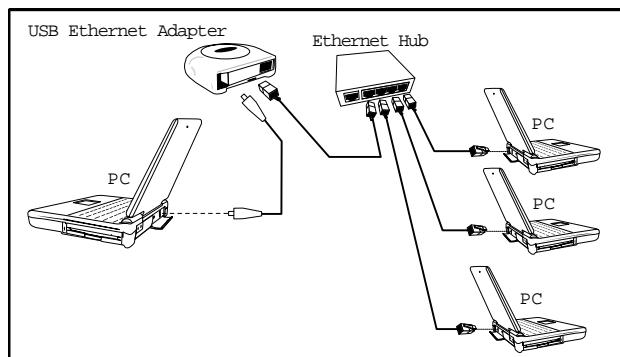
Figure 2-3: PC-to-Ethernet Network Connections
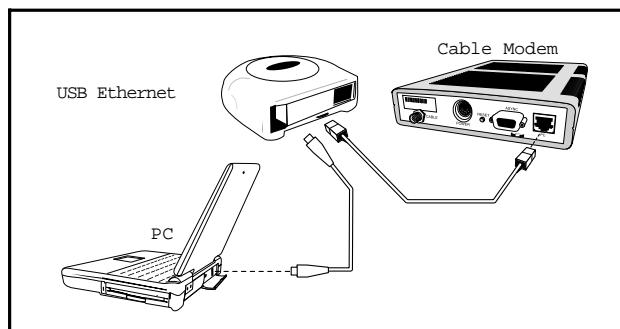
Figure 2-4: PC-to-Cable Modem or xDSL Modem Connections

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Driver Installation

Depending on which operating system you use, the installation procedure will vary slightly. Please find the installation section for your particular operating system for the proper installation sequence.

Note: The drivers shipped with this product are contained on a floppy disk. If your PC is not equipped with a floppy disk drive, you may download the drivers from the Belkin website at: http://www.belkin.com.

Windows® 98/Windows® 98SE

1. Close any Windows applications that may be running on your computer.

2. Insert the Belkin USB 10/100 Ethernet Adapter floppy disk into your floppy drive.

3. Connect the USB cable to your computer and connect the cable to the USB Ethernet Adapter.

4. A window will appear telling you that Windows has detected new hardware. If this window does not appear, contact your PC vendor for assistance.

5. The "Add New Hardware Wizard" will appear on the screen telling you that it has found the "USB Ethernet Adapter". Click "Next".

6. In the Window that appears next, place a checkmark next to "Search for best driver for your device" and click "Next".

7. In the next window, place a checkmark next to "Floppy Disk" and uncheck all other selected locations and click

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Driver Installation (continued)

9. The system may prompt you to insert your Windows 98 CD. If so, insert the CD and select "Next."

10. The "New Hardware Wizard" will now tell you "Windows has finished installing the software that your new hardware device requires". Click "Finish".

11. Windows will now prompt you to restart your computer. Click "Yes" to complete the installation.

Once your computer has restarted, the Belkin USB 10/100 Ethernet Adapter will be active and working. If you are connecting to a cable modem or xDSL modem, follow the directions that came with your modem or from your
Internet provider.

If you are setting up a network, go to the section titled "Specifying TCP/IP Parameters" to configure your adapter.

Windows® Millennium Edition (Me)

1. Close any Windows applications that you may be running on your computer.

2. Insert the Belkin USB 10/100 Ethernet Adapter floppy disk into your floppy drive.

3. Connect the USB cable to your computer and connect the cable to the USB Ethernet Adapter.

4. A window will appear telling you that Windows has

Driver Installation (continued)

5. The "Add New Hardware Wizard" will appear telling you "Windows has found the following hardware: USB Ethernet Adapter". Place a checkmark next to "Automatic search for a better driver (recommended)" and click "Next".

6. The system may prompt you to insert your Windows Me CD. Insert the CD and select "OK".

7. The "Add New Hardware Wizard" will indicate, "Belkin USB Ethernet Adapter" and "Windows has finished installing the hardware device". Click "Finish".

8. Windows will now prompt you to restart your computer. Click "Yes" to complete the installation.

Once your computer has restarted, the Belkin USB 10/100 Ethernet Adapter will be active and working. If you are connecting to a cable modem or xDSL modem, follow the directions that came with your modem or from your Internet provider.

If you are setting up a network, go to the section titled "Specifying TCP/IP Parameters" to configure your adapter.

Windows® 2000

1. Close any Windows applications that you may be running on your computer.

2. Insert the Belkin USB 10/100 Ethernet Adapter floppy disk into your floppy drive.

3. Connect the USB cable to your computer and connect the cable to the USB Ethernet Adapter.

Driver Installation (continued)

4. A window will appear telling you that Windows has
    detected new hardware. If this window does not
    appear, contact your PC vendor for assistance.

5. The "Found New Hardware Wizard" will appear.
    Click "Next".

6. The "Found New Hardware Wizard" will tell you "The
    wizard will complete installation for this device: USB
    Ethernet Adapter". Select "Search for a suitable driver
    for my device (recommended)" and click "Next".

7. In the following window, place a checkmark next to
    "Floppy Disk Drives" and uncheck all other selected
    locations and click "OK".

8. The next window will indicate "The wizard found a
    driver for the following device: USB Ethernet Adapter".
    Click "Next".

9. Next a window will pop up that says "Digital Signature
    Not Found". Click "Yes".

10.   The next window will tell you "Windows has
    finished installing the software for this device". Click
    "Finish" to complete the installation.

Once your computer has restarted, the Belkin USB 10/100
Ethernet Adapter will be active and working. If you are
connecting to a cable modem or xDSL modem, follow the
directions that came with your modem or from your
Internet provider.

If you are setting up a network, go to the section titled

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Specifying TCP/IP Parameters

This configuration procedure is identical to that of other network interfaces, for example, an Ethernet card.

To access and change the networking properties in Windows® 98

1. Select "My Computer" / "Control Panel" / "Network".

2. The Network Configuration window appears. In this window, the USB Ethernet Adapter icon should be visible.

3. To configure TCP/IP settings, select "TCP/IP -> Belkin USB Ethernet Adapter" and click "Properties". To specify an IP address select "Specify an IP address".

Note: If you are connecting to an existing network, please see your system administrator for this information. If you are setting up a new network, we recommend the following:
Suggested IP Address = 194.168.0.X (where "X" is greater than 0 and less than 255).
Suggested Subnet Mask = 255.255.255.0

4. Enter a valid IP Address and Subnet Mask and click "OK".

5. Select the "Identification" tab and verify/modify the computer name and workgroup and click "OK".

You will see the option to restart the computer if you made any changes. Click "Yes" to restart the computer. After the computer starts, the changes you made will take effect.

Specifying TCP/IP Parameters (continued)

To access and change the networking properties
in Windows® M e

1. Select "My Computer" / "Control Panel". If you do not
   see the "Network" icon in the window, click "view all
   Control Panel options" (located on the right side of the
   window).

2. Select "Network" by double-clicking on the "Network"
   icon.

3. The Network Configuration window appears. In this
   window, the USB Ethernet Adapter icon should be
   visible.

4. To configure TCP/IP settings, select "TCP/IP -> Belkin
   USB Ethernet Adapter" and click "Properties". To
   specify an IP address select "Specify an IP address".

Note: If you are connecting to an existing network,
   please   see your system administrator for this
   information.   If you are setting up a new
   network, we   recommend the
   following:
        Suggested IP Address = 194.168.0.X (where
   "X" is   greater than 0 and less than
   255).
        Suggested Subnet Mask = 255.255.255.0

5. Enter a valid IP Address and Subnet Mask and click
   "OK".

6. Select the "Identification" tab and verify/modify the
   computer name and workgroup, and click "OK".

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Specifying TCP/IP Parameters (continued)

To access and change the networking properties
in Windows® 2000

1. Select "My Computer" / "Control Panel" / Network
    and Dial-up Connections".

2. Select "Local Area Connection X" that corresponds to
    the Belkin Ethernet Adapter. If you have more than one
    network interface device, Windows labels them in
    sequential order starting at 1. The Belkin Ethernet
    Adapter should be the latest network device that was
    installed and therefore the latest number.

3. Select "Internet Protocol (TCP/IP)" and click
    "Properties".

4. Select "Use the following IP address".

Note: If you are connecting to an existing network,
    please   see your system administrator for this
    information.   If you are setting up a new
    network, we   recommend the
    following:

        Suggested IP Address = 194.168.0.X (where
    "X" is   greater than 0 and less than
    255).

        Suggested Subnet Mask = 255.255.255.0

5. Enter a valid IP Address and Subnet Mask and click
    "OK".

6. Select "OK" to close the Local Area Connection
    window and finish.

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Information

FCC Statement

DECLARATION OF CONFORMITY WITH FCC RULES FOR
ELECTROMAGNETIC COMPATIBILITY

We, Belkin Components, of 501 West Walnut Street, Compton CA 90220,
declare under our sole responsibility that the product:

F5U122-PC

to which this declaration relates:

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.

CE Declaration of Conformity

We, Belkin Components, declare under our sole responsibility that the F5U122-PC, to
which this declaration relates, is in conformity with Generic Emissions Standard
EN50081-1 and with Generic Immunity Standard EN50082-1 1992.

ICES Statement

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil
numérique de la classe B est conforme à la norme NMB-003 du Canada.

Belkin Components Limited Lifetime Product Warranty

Belkin Components warrants this product against defects in materials and
workmanship for its lifetime. If a defect is discovered, Belkin will, at its option, repair
or replace the product at no charge, provided it is returned during the warranty
period, with transportation charges prepaid, to the authorized Belkin dealer from
whom you purchased the product. Proof of purchase may be required.

This warranty does not apply if the product has been damaged by accident, abuse,
misuse, or misapplication; if the product has been modified without the written
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WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

No Belkin dealer, agent, or employee is authorized to make any modification,
extension, or addition to this warranty.

BELKIN IS NOT RESPONSIBLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL
DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, OR UNDER ANY OTHER
LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOST PROFITS, DOWNTIME,
GOODWILL, DAMAGE TO OR REPROGRAMMING, OR REPRODUCING ANY PROGRAM OR

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