Wireless-B
PCI Adapter

Use this guide to install:

WMP11

User Guide

⚅ LINKSYS®

FCC STATEMENT
This Instant Wireless® Wireless-B PCI Adapter has been tested and complies with the specifications 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 according to 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 is found 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 or devices
• Connect the equipment to an outlet other than the receiver's
• Consult a dealer or an experienced radio/TV technician for assistance

FCC Caution: Any changes or modifications nor expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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.

FCC RF Radiation Exposure Statement
This device and its antenna(s) must operate with a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users must be provided with specific operations for satisfying RF exposure compliance.

WMP11-v4-UG-30530A KL

EC DECLARATION OF CONFORMITY (EUROPE)
Linksys Group declares that the Instant Wireless® Series products included in the Instant Wireless® Series conform to the specifications listed below, following the provisions of the EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC:

- ETS 300-826, 301 489-1 General EMC requirements for Radio equipment.
- EN 609 50 Safety
- ETS 300-328-2 Technical requirements for Radio equipment.

Note: This equipment is intended to be used in all EU and EFTA countries. Outdoor use may be restricted to certain frequencies and/or may require a license for operation. For more details, contact Linksys Corporate Compliance.

Note: Combinations of power levels and antennas resulting in a radiated power level of above 100 mW are considered as not compliant with the above mentioned directive and are not allowed for use within the European community and countries that have adopted the European R&TTE directive 1999/5/EC and/or the CEPT recommendation Rec 70.03. For more details on legal combinations of power levels and antennas, contact Linksys Corporate Compliance.

- Linksys Group™ vakuuttaa täten että Instant Wireless IEEE 802.11 Wireless-B PC Adapter tyyppinen laite on direktiivin 1999/5/EY, direktiivin 89/336/EEC ja direktiivin 73/23/EEC oleellisten vaatimusten ja sitä koskevien näiden direktiivien muiden ehtojen mukainen.
- Linksys Group™ déclare que la carte PC Instant Wireless IEEE 802.11 est conforme aux conditions essentielles et aux dispositions relatives à la directive 1999/5/EC, la directive 89/336/EEC, et à la directive 73/23/EEC.
- Belgique B L'utilisation en extérieur est autorisé sur le canal 11 (2462 MHz), 12 (2467 MHz), et 13 (2472 MHz).
  Dans le cas d'une utilisation privée, à l'extérieur d'un bâtiment, au-dessus d'un espace public, aucun enregistrement n'est nécessaire pour une distance de moins de 300m. Pour une distance supérieure à 300m un enregistrement auprès de l'IBPT est requise. Pour une utilisation publique à l'extérieur de bâtiments, une licence de l'IBPT est requise. Pour les enregistrements et licences, veuillez contacter l'IBPT.
- France F: Bande de fréquence restreinte: seuls les canaux 10, 11, 12, 13 (2457, 2462, 2467, et 2472 MHz respectivement) doivent être utilisés en France. Toute utilisation, qu'elle soit intérieure ou extérieure, est soumise à autorisation. Vous pouvez contacter l'Autorité de Régulation des Télécommuniations (http://www.art-telecom.fr) pour la procédure à suivre.
- France F: Restricted frequency band: only channels 10, 11, 12, 13 (2457, 2462, 2467, and 2472 MHz respectively) may be used in France. License required for every indoor and outdoor installations. Please contact ART for procedure to follow.
- Deutschland D: Anmeldung im Outdoor-Bereich notwending, aber nicht genehmigungspflichtig. Bitte mit Händler die Vorgehensweise abstimmen.
- Germany D: License required for outdoor installations. Check with reseller for procedure to follow.
- Italia I: E' necessaria la concessione ministeriale anche per l'uso interno. Verificare con i rivenditori la procedura da seguire. L'uso per installazione in esterni non e' permessa.
- Italy I: License required for indoor use. Use with outdoor installations not allowed.
- the Netherlands NL License required for outdoor installations. Check with reseller for procedure to follow.
- Nederlands NL Licentie verplicht voor gebruik met buitenantennes. Neem contact op met verkoper voor juiste procedure.

Table of Contents

Chapter 1: Introduction

The Wireless-B PCI Adapter

Connect your desktop computer to a wireless network with the Linksys Wireless-B PCI Adapter. This card installs in an expansion slot of most desktop computers, and comes with a Setup Wizard that walks you through configuring the adapter to your wireless network settings, step by step.

The Wireless-B PCI Adapter lets you put your computer almost anywhere in the building, without the cost and hassle of running cables. Now you don't have to drill holes in your walls and climb through the attic or cellar to get connected to the network. Once you're connected, you can keep in touch with your e-mail, access the Internet, use instant messaging to chat with friends, and share files and other resources such as printers and network storage with other computers on the network.

The Linksys Wireless-B PCI Adapter is fully compliant with the 802.11b wireless network standard, transferring data at up to 11Mbps in the 2.4GHz radio band. And your wireless communications are protected by up to 128-bit encryption, so your data stays secure.

So don't hassle with running cables through your house -- get your desktop connected the easy way with the Linksys Wireless-B PCI Adapter..

Features

• Wireless-B (802.11b) connectivity for your desktop PC
• Data rates up to 11Mbps in the 2.4GHz radio band
• Put your PC wherever you want, with no cabling hassle
• Included Setup Wizard takes you through configuration, step by step
• Free Technical Support—24 Hours a Day, 7 Days a Week, Toll-Free US Calls
• 1-Year Limited Warranty

Chapter 2: Planning Your Wireless Network

Network Topology

A wireless local area network (WLAN) is exactly like a regular local area network (LAN), except that each computer in the WLAN uses a wireless device to connect to the network. Computers in a WLAN share the same frequency channel and SSID, which is an identification name for wireless devices.

Ad-Hoc versus Infrastructure Mode

Unlike wired networks, wireless networks have two different modes in which they may be set up: **infrastructure** and **ad-hoc**. An infrastructure configuration is a WLAN and wired LAN communicating to each other through an access point. An ad-hoc configuration is wireless-equipped computers communicating directly with each other. Choosing between these two modes depends on whether or not the wireless network needs to share data or peripherals with a wired network or not.

If the computers on the wireless network need to be accessed by a wired network or need to share a peripheral, such as a printer, with the wired network computers, the wireless network should be set up in **infrastructure** mode. (See Figure 2-1.) The basis of infrastructure mode centers around an *access point*, which serves
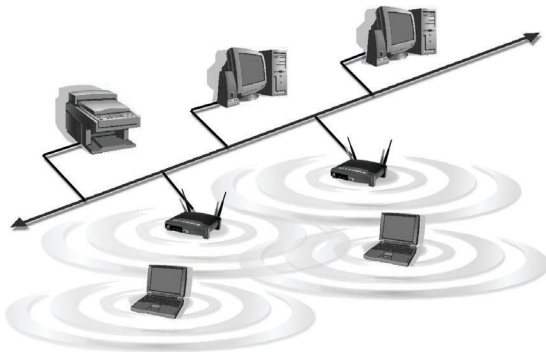

Figure 2-1

as the main point of communications in a wireless network. Access points transmit data to PCs equipped with wireless network cards, which can *roam* within a certain radial range of the access point. Multiple access points can be arranged to work in succession to extend the roaming range, and can be set up to communicate with your Ethernet (wired) hardware as well.

If the wireless network is relatively small and needs to share resources only with the other computers on the wireless network, then the **ad-hoc** mode can be used. (See Figure 2-2.) Ad-hoc mode allows computers equipped with wireless transmitters and receivers to communicate directly with each other, eliminating the need for an access point. The drawback of this mode is that, in Ad-Hoc mode, wireless-equipped computers are not able to communicate with computers on a wired network. And, of course, communication between the wireless-equipped computers is limited by the distance and interference directly between them.

Figure 2-2

Chapter 3: Getting to Know the Wireless-B PCI Adapter

The Wireless-B PCI Adapter's Port and LEDs

The port to connect the Wireless PCI Adapter's Antenna and lights displaying the Adapter's activity are shown in Figure 3-1.

Figure 3-1

Port

Antenna   The Antenna port is where you will connect the Adapter's external antenna.

LED Indicators

Power   *Green*. The **Power** LED lights up when the Adapter is powered on.

Link   *Green*. The **Link** LED blinks when the Adapter is functioning in ad-hoc mode. It is solidly lit when the Adapter is functioning in infrastructure mode.

Chapter 4: Hardware and Driver Installation and Configuration for Windows XP

⚠️ **Windows 98SE, Me, and 2000 users:** Go to Chapter 5: Software Installation and Configuration for Windows 98SE, Me, and 2000.

Overview

After connecting the Wireless-B PCI Adapter to your computer, you will install the driver and configure the Adapter.

Hardware Installation for Windows XP

1. Remove any CDs or disks from their drives, and turn off your desktop PC.

2. Open your PC's case, and locate an available PCI slot on the motherboard. Check with your computer manufacturer for instructions.

3. Slide the Adapter into the PCI slot. Make sure that all of its pins are touching the slot's contacts. You may have to apply a bit of pressure to slide the Adapter all the way in. (See Figure 4-1.)

4. After the Adapter is set firmly in place, secure its fastening tab to your PC's chassis with a mounting screw. Then close your PC's case.
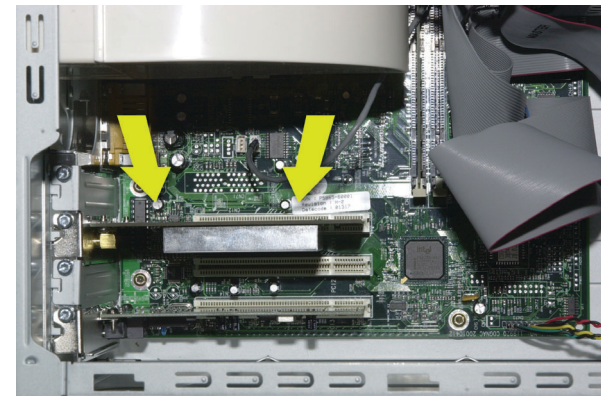

Figure 4-1

5. Attach the external antenna to the Adapter's antenna port, as shown in Figure 4-2.

Figure 4-2

⚠️ **Important:** Make sure the antenna is positioned straight up into the air, at a 90º angle from the Adapter (see Figure 5-2). This will ensure optimum wireless operating range and performance.

6. Power on your desktop PC.

Driver Installation for Windows XP

1. Windows XP will automatically detect the Adapter and Figure 4-3 will appear. Insert the Setup Wizard CD-ROM into your CD-ROM drive. Click the radio button next to **Install the software automatically (Recommended)**. Then click the **Next** button.

⚠️ **Important for Windows XP users:** Do **NOT** run the Wireless-B PCI Adapter Setup Wizard. If the Setup Wizard runs automatically after the Setup Wizard CD-ROM has been inserted, click the **Exit** tab.

Figure 4-3

2. Windows will notify you that the driver has not passed Windows Logo testing (See Figure 4-4.) Click the **Continue Anyway** button.
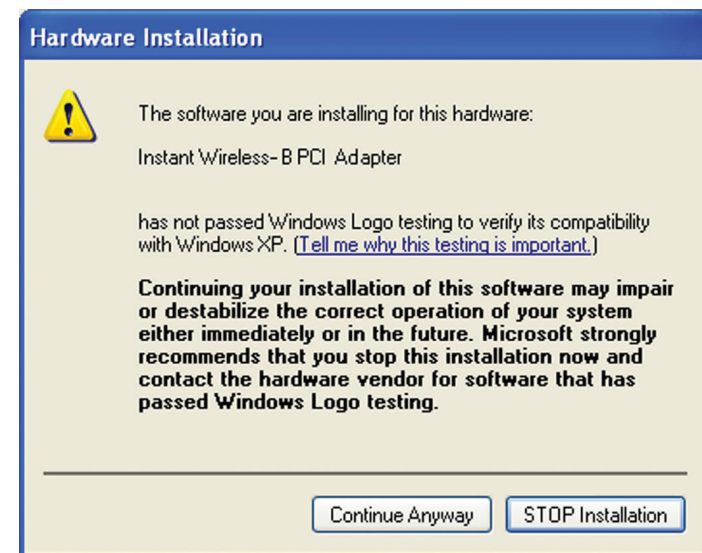

Figure 4-4

3. The screen in Figure 4-5 may appear while the files are being copied.

Figure 4-5

4. After Windows has finished installing the driver, click the **Finish** button from the screen shown in Figure 4-6.
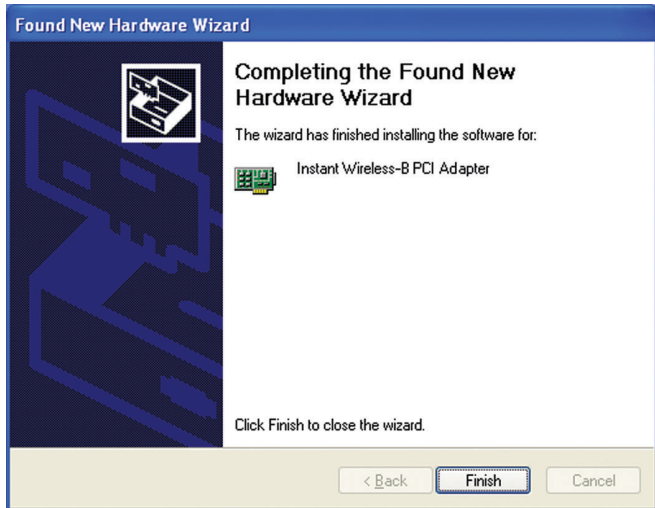

Figure 4-6

The driver installation is complete. To configure the Adapter, proceed to the next section, "Windows XP Wireless Zero Configuration."

Windows XP Wireless Zero Configuration

Important for Windows XP users: Windows XP has a built-in configuration tool. Use the Windows XP Wireless Zero Configuration (in the system tray at the bottom of your screen) to configure the Adapter.

1. After installing the Adapter, the Windows XP Wireless Zero Configuration icon will appear in your computer's system tray (see Figure 4-7). Double-click the icon.
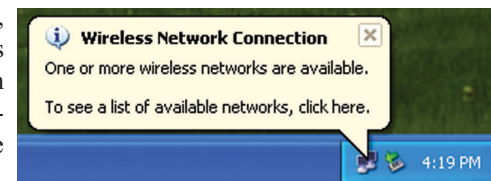

Figure 4-7

Note: Steps 2 and 3 are instructions and screenshots for Windows XP with Service Pack 1 installed. If you have not installed Service Pack 1, select the network you want, and click the **Connect** button. If the network has WEP encryption enabled, enter the WEP key in the *Network key* field, and then click the **Connect** button.

2. The screen that appears will show any available wireless network. Select the network you want.

If this network has WEP encryption enabled, go to step 3. If this network does not have WEP encryption enabled, then the screen in Figure 4-8 will appear. Check the box next to *Allow me to connect to the selected wireless network, even though it is not secure*. Then click the **Connect** button and go to step 4.
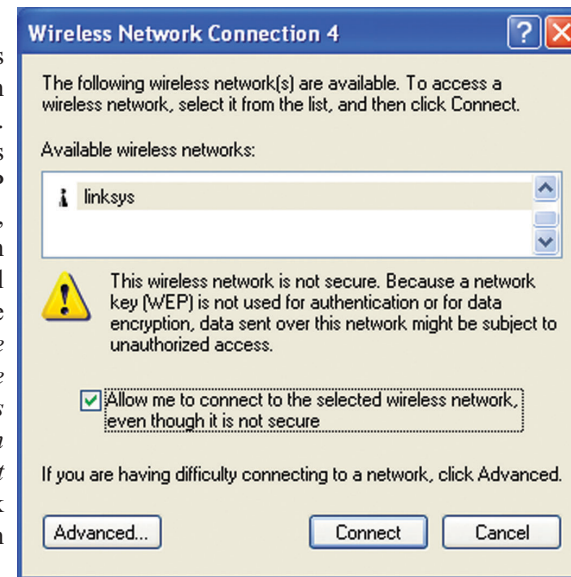

Figure 4-8

3. The screen in Figure 4-9 will appear. Enter the WEP key of your wireless network in the *Network key* field, and re-enter it in the *Confirm network key* field. Click the **Connect** button.

> **Note:** Windows XP does not support the use of a passphrase. Enter the exact WEP key used by your access point.

To find the WEP encryption key settings of the other wireless devices in your network, such as the WAP11 Wireless Access Point, you may use any device's web-based utility to check the WEP encryption screen for the correct key entries. If you are using other manufacturers' access points, refer to their documentation for more information about WEP encryption.
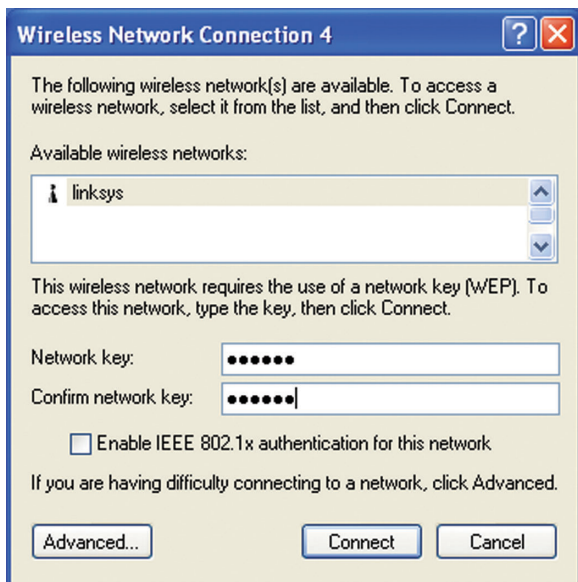
Figure 4-9

4. The screen in Figure 4-10 will appear if your connection is active.

Figure 4-10

For more information about WEP, refer to your access point's user guide, or visit *www.linksys.com*.

For more information about wireless networking on a Windows XP computer, click **Start** and then **Help and Support**. Enter the keyword **wireless** in the field provided, and press the **Enter** key.

Congratulations! The installation of the Wireless-B PCI Adapter is complete.

Chapter 5: Software Installation and Configuration for Windows 98SE, Me, and 2000

The Wireless-B PCI Adapter Setup Wizard will guide you through the installation procedure for Windows 98SE, Me, and 2000. The Setup Wizard will install the WLAN Monitor and Device Driver, as well as configure the Adapter.

> **Important for Windows 98SE, Me, and 2000 users:** You must run the Setup Wizard to install the software before installing the hardware.

Insert the **Setup Wizard CD-ROM** into your CD-ROM drive. The Setup Wizard should run automatically, and Figure 5-1 should appear. If it does not, click the **Start** button and choose **Run**. In the field that appears, enter **D:\setup.exe** (where "D" is the letter of your CD-ROM drive).

Figure 5-1