

LINKSYS®

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2.4GHz
802.11g

Wireless-G Music Bridge

User Guide



Model No. **WMB54G**



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WARNING: This product contains chemicals, including lead, known to the State of California to cause cancer, and birth defects or other reproductive harm. ***Wash hands after handling.***

How to Use this User Guide

The user guide to the Wireless-G Music Bridge has been designed to make understanding networking with the Wireless-G Music Bridge easier than ever. Look for the following items when reading this User Guide:



This checkmark means there is a note of interest and is something you should pay special attention to while using the Wireless-G Music Bridge.



This exclamation point means there is a caution or warning and is something that could damage your property or the Wireless-G Music Bridge.



This question mark provides you with a reminder about something you might need to do while using the Wireless-G Music Bridge.

In addition to these symbols, there are definitions for technical terms that are presented like this:

word: definition.

Also, each figure (diagram, screenshot, or other image) is provided with a figure number and description, like this:

Figure 0-1: Sample Figure Description

Figure numbers and descriptions can also be found in the "List of Figures" section.

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Chapter 1: Introduction

Welcome

Thank you for choosing the Wireless-G Music Bridge. The Wireless-G Music Bridge allows you to listen to digital music in your living room as well as on your computer.

How does the Music Bridge do all of this? The Linksys Wireless-G Music Bridge lets you bring the digital music streaming to or stored on your computer to your Home Entertainment Center without running cables through the house. Using a wireless connection, the Music Bridge finally frees your digital music collection from those little computer speakers to play in full glory through your stereo or surround sound system.

The Wireless-G Music Bridge sits by your home stereo and connects to it using standard consumer electronics cables. Then it connects to your home network by Wireless-G wireless networking, or if you prefer, it can be connected via standard 10/100 Ethernet cabling. The included software creates a virtual sound system in your PC, which sends the audio output of any application to the Music Bridge and the stereo system. Use your favorite media player to play your music while listening in the comfort of your living room.

Use the instructions in this Guide to help you connect the Wireless-G Music Bridge, set it up, and configure it to bridge your music networks. These instructions should be all you need to get the most out of the Wireless-G Music Bridge.

What's in this Guide?

This user guide covers the steps for setting up and using the Wireless-G Music Bridge.

- **Chapter 1: Introduction**
This chapter describes the Adapter's applications and this User Guide.
- **Chapter 2: Getting to Know the Wireless-G Music Bridge**
This chapter describes the physical features of the Adapter.
- **Chapter 3: Setting up the Wireless-G Music Bridge**
This chapter instructs you on how to use the Bridges's Setup Wizard and configure the Bridge.
- **Chapter 4: Connecting the Wireless-G Music Bridge**
This chapter shows you how to connect the Bridge to your speakers.
- **Chapter 5: Using the Wireless-G Music Bridge Utility**
This chapter shows you how to use the Bridge's Utility.
- **Chapter 6: Configuring the Wireless-G Music Bridge**
This chapter show you how to use the Bridge's Web-based utility.
- **Appendix A: Troubleshooting**
This appendix describes some potential problems and solutions, as well as frequently asked questions, regarding installation and use of the Adapter.
- **Appendix B: Wireless Security**
This appendix discusses security issues regarding wireless networking and measures you can take to help protect your wireless network.
- **Appendix C: Windows Help**
This appendix describes how you can use Windows Help for instructions about networking, such as installing the TCP/IP protocol.
- **Appendix D: Glossary**
This appendix gives a brief glossary of terms frequently used in networking.
- **Appendix E: Specifications**
This appendix provides the Adapter's technical specifications.
- **Appendix F: Warranty Information**
This appendix supplies the Adapter's warranty information.

Wireless-G Music Bridge

- **Appendix G: Regulatory Information**
This appendix supplies the Adapter's regulatory information.
- **Appendix H: Contact Information**
This appendix provides contact information for a variety of Linksys resources, including Technical Support.

Chapter 2: Getting to Know the Wireless Music Bridge

The Back Panel

The Bridge's ports, where all cables are connected, are located on the back panel.



Figure 2-1: Back Panel

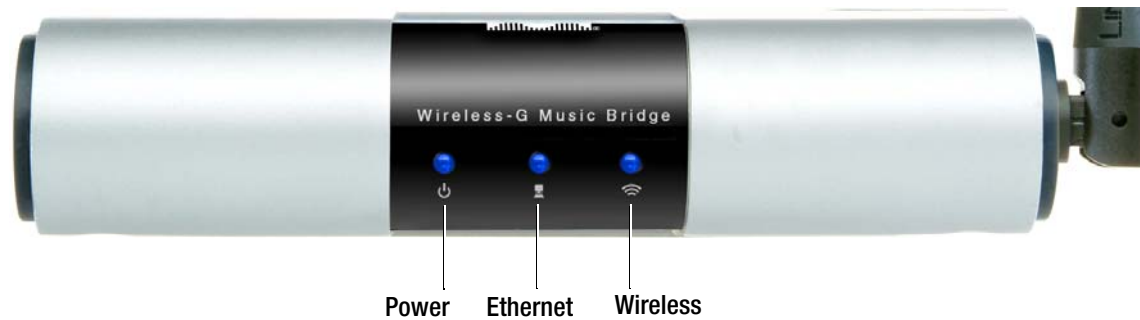
- Audio Out L/R** The **Audio Out** (Left and Right) ports connect to the Audio In (Left and Right) ports of your audio receiver.
- Line Out** The **Line Out** port is where you can connect headphones or portable audio speakers with a headphone jack.
- Coaxial Out** The **Coaxial Out** (Digital Audio) port is where you connect the cable coming from your audio receiver.
- Optical Out** The **Optical Out** (Digital Audio) port is where you connect the cable from the Optical In port of your audio receiver.
- Ethernet** This **Ethernet** port connects to Ethernet network devices, such as a switch or router, if using a wired connection.
- Reset Button** There are two ways to Reset the Bridge's factory defaults. Either press the **Reset Button**, for approximately ten seconds, or restore the defaults from the Password tab in the Bridge's Web-Based Utility.
- Power** The **Power** port is where you will connect the power adapter.



Important: Resetting the Music Bridge will erase all of your settings and replace them with the factory defaults. Do not reset the Bridge if you want to retain these settings.

The Front Panel

The Music Bridge's LEDs, where information about network activity is displayed, are located on the front panel.



Power Blue. The **Power** LED lights up when the Wireless-G Music Bridge is powered on.

Figure 2-2: Front Panel

Ethernet Blue. The **Ethernet** LED serves two purposes. If the LED is continuously lit, the Music Bridge is successfully connected to a device through the Ethernet port. If the LED is flashing, it is an indication of any network activity.

Wireless Blue. The **Wireless** LED lights whenever there is a successful wireless connection.

With these, and many other, Linksys products, your options are limitless. Go to the Linksys website www.linksys.com for more information about products that work with the Music Bridge.

Chapter 3: Setting up the Wireless-G Music Bridge

Starting the Setup Wizard

The Bridge is set up with the Setup Wizard that comes on the CD enclosed with the Bridge. This chapter will guide you through the setup procedure. This Setup Wizard will take you through all the steps necessary to set up and configure the Bridge.

To begin the setup process, insert the Setup Wizard CD into your PC's CD-ROM drive. Setup Wizard's *Welcome* screen should appear on your monitor. If it does not, then click the **Start** button and select **Run**. In the field provided, enter **D:\setup.exe** (if "D" is the letter of your PC's CD-ROM drive).

On the *Welcome* screen, you have the following choices:

Click Here to Start - Click the **Click Here to Start** button to begin the setup.

User Guide - Click the **User Guide** button to open this User Guide.

Exit - Click **Exit** to exit the Setup Wizard.

1. To install the Adapter, click the **Click Here to Start** button on the *Welcome* screen.

2. The License Agreement screen will appear. Read the entire agreement, then click **Next** if you agree to the terms and want to continue the Setup Wizard. Click **Cancel** if you want to cancel the Setup Wizard.



Figure 3-1: Setup Wizard's Welcome Screen

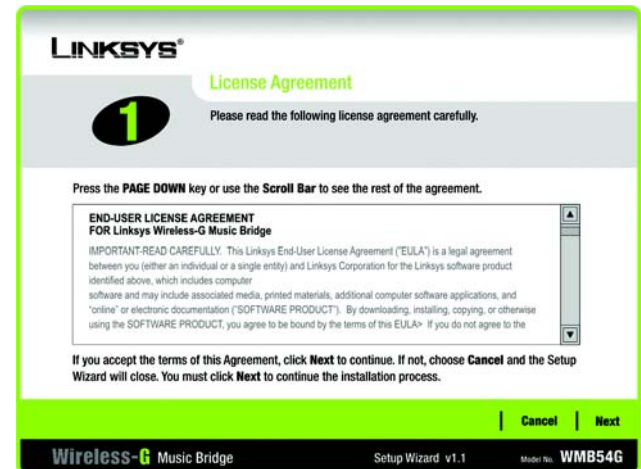


Figure 3-2: License Agreement

Wireless-G Music Bridge

3. The next screen displayed shows how the Bridge should be connected. Connect one end of your supplied Ethernet cable to your PC's Ethernet Port.

Click the **Next** button to continue or **Back** to return to the previous screen.

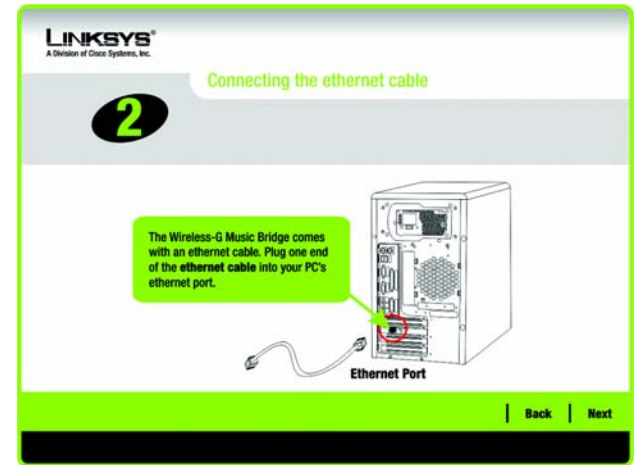


Figure 3-3: Connecting the PC

4. Connect the other end of the Ethernet cable to the Bridge's yellow Ethernet Port.

Click the **Next** button to continue or **Back** to return to the previous screen.

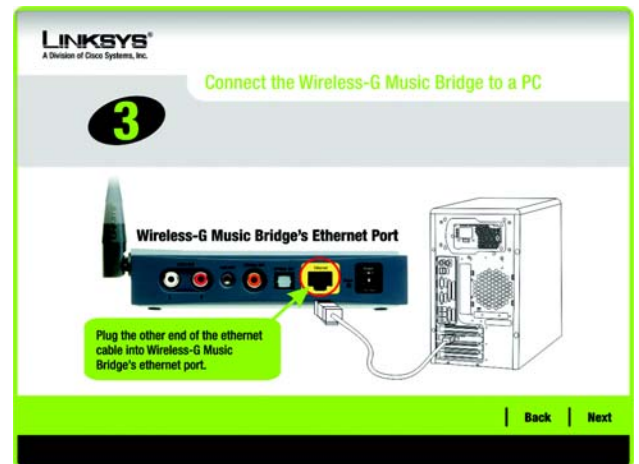


Figure 3-4: Connecting the PC to the Bridge

Wireless-G Music Bridge

- Next, you will connect the power. Connect the power adapter into the Power Port of the Bridge and into an electrical outlet.

Click the **Next** button to continue or **Back** to return to the previous screen.



Figure 3-5: Connecting the Power

- The Power and Ethernet will light up when the cables are all correctly installed. If the LEDs do not light up, recheck the cable connections to the Bridge, PC, and Power.

Click the **Next** button to continue or **Back** to return to the previous screen. Click the **Exit** button to exit the Setup Wizard.



Figure 3-6: LED Status

Wireless-G Music Bridge

- The Setup Wizard will run a search for the Bridge within your network and then display a list along with the status information for the selected Bridge. If this is the only Bridge on your network, it will be the only one displayed. If multiple Bridges are displayed, select the Bridge you want to configure by clicking on it.

Click the **Scan for Music Bridge** button to scan again for the Bridge.

Click the **Next** button to continue or **Back** to return to the previous screen. Click the **Exit** button to exit the Setup Wizard.



Figure 3-7: Select the Bridge

- You will be asked to sign on to the Bridge you have selected. Enter the default password, **admin**, in the field. Then, click **Enter**.

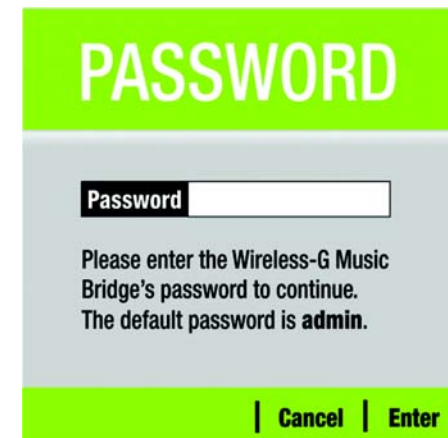


Figure 3-8: Login

Wireless-G Music Bridge

9. You may change the password and the Bridge's name on this screen.

Device Name. The default name for the Bridge will appear in the *Device Name* field. You may change the name by entering a new one in the *Device Name* field. The device name can be up to 19 characters.

Password and Confirm. Enter a new password in the *Password* field, then enter it again in the *Confirm* field. The password must be between 4 to 12 characters.

Security Question and Your Answer. Select a security question and enter an answer in the *Your Answer* field, so you can retrieve your password if you forget it.

Click the **Next** button to continue or **Back** to return to the previous screen.

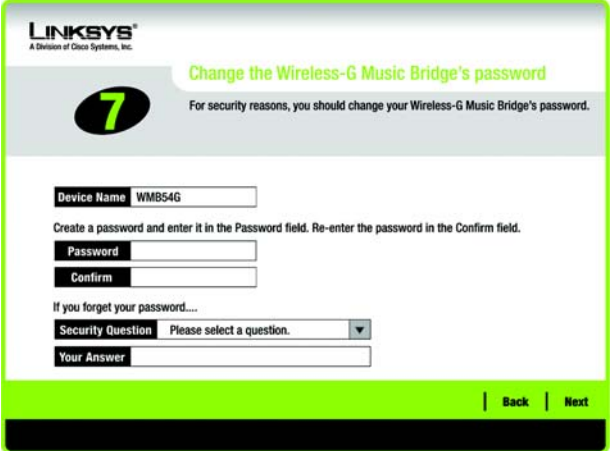


Figure 3-9: Change the Password

Setting Up the Bridge

The next screen to appear will be the *Available Wireless Network* screen.

This screen provides two options for setting up the Bridge.

- **Available Wireless Network. (For most users.)** The networks available to this Bridge will be listed on this screen. You can choose one of these networks and click the **Connect** button to connect to it. Click the **Refresh** button to update the Available Wireless Network list.
- **Manual Setup.** If your network is not listed on this screen, select **Manual Setup** to set up the Bridge manually. This method of setting up the Bridge is intended for Advanced Users only.
- **I only have a wired network.** If you don't have a wireless network, select **I only have a wired network** and continue to step 7.

Click **Back** to return to the previous page.

The setup for each option is described, step by step, under the appropriate heading on the following pages.

Setting Up the Bridge with Available Networks

The *Available Wireless Networks* screen will appear next. The available wireless networks are listed in the table on the center of the screen by wireless network name (SSID). Select the wireless network you wish to connect to and click the **Connect** button. (If you do not see your network listed, you can click the **Refresh** button to bring the list up again.) If the network utilizes wireless security, you will need to configure security on the Bridge. If not, you will be taken directly to the *Congratulations* screen.

1. If wireless security has been enabled on this network, you will see a wireless security screen. If your network utilizes WEP (Wired Equivalent Privacy) encryption, the *WEP Key Needed for Connection* screen will appear. If your network utilizes PSK (Pre-Shared Key) encryption, the *PSK Needed for Connection* screen will appear.

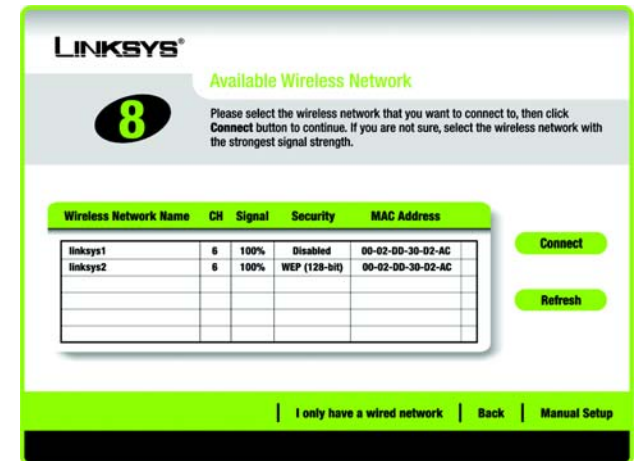


Figure 3-10: Available Wireless Network

wep (wired equivalent privacy): a method of encrypting network data transmitted on a wireless network for greater security.

WEP Key Needed for Connection

Select **64-bit** or **128-bit**.

Then, enter a passphrase or WEP key.

Passphrase - Enter a passphrase in the *Passphrase* field, so a WEP key is automatically generated. The passphrase is case-sensitive and should not be longer than 16 alphanumeric characters. It must match the passphrase of your other wireless network devices and is compatible with Linksys wireless products only. (If you have any non-Linksys wireless products, enter the WEP key manually on those products.)

WEP Key - The WEP key you enter must match the WEP key of your wireless network. For 64-bit encryption, enter exactly 10 hexadecimal characters. For 128-bit encryption, enter exactly 26 hexadecimal characters. Valid hexadecimal characters are “0” to “9” and “A” to “F”.

Then, click **Connect** and proceed to the *Congratulations* screen. To cancel the connection, click **Cancel**.

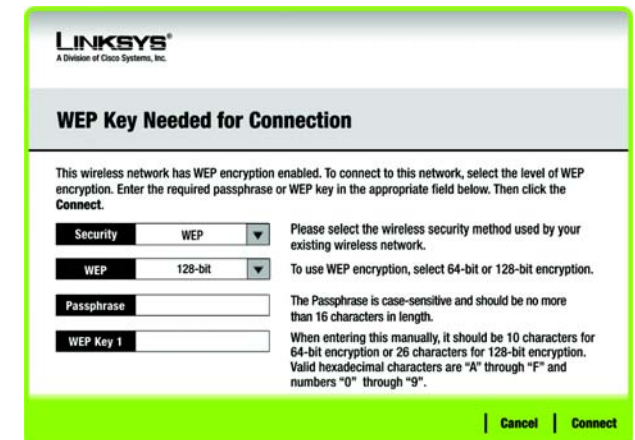


Figure 3-11: WEP Key Needed for Connection

bit: a binary digit.

passphrase: used much like a password, a passphrase simplifies the WEP encryption process by automatically generating the WEP encryption keys for Linksys products.

PSK Needed for Connection

Encryption - Select the type of algorithm you want to use, **TKIP** or **AES**, from the *Encryption* drop-down menu.

Passphrase - Enter a Passphrase, also called a pre-shared key, of 8-63 characters in the *Passphrase* field. .

Then, click **Connect** and proceed to the *Congratulations* screen. To cancel the connection, click **Cancel**.



Figure 3-12: PSK Needed for Connection

2. The *Install the Utility* screen will appear if the Utility is not installed on your PC. The Utility must be installed on your PC for the Wireless-G Music Bridge to work correctly on your network.

Click **Next** to install the Utility. Click **Skip** if you want to install the Utility later.

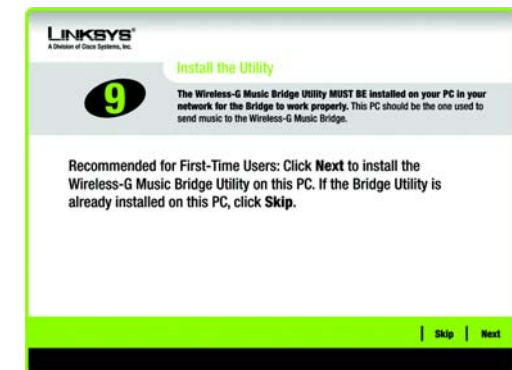


Figure 3-13: Install the Utility

3. After the Bridge has been configured for the network, the *Congratulations* screen will appear. Click **Exit**.

Congratulations! Setup is complete.



Figure 3-14: Congratulations

Setting Up the Bridge with Manual Setup

If your network is not listed with the available networks, click **Manual Setup** on the *Available Wireless Network* screen to set up the Bridge manually.

1. After clicking **Manual Setup**, the *Network Settings* screen will appear. If your network has a router or other DHCP server, click the radio button next to **Obtain network settings automatically (DHCP)**.

If your network does not have a DHCP server, click the radio button next to **Specify network settings**. Enter an IP Address, Subnet Mask, Default Gateway, and DNS addresses appropriate for your network. You must specify the IP Address and Subnet Mask on this screen. If you are unsure about the Default Gateway addresses, leave these fields empty.

IP Address - This IP Address must be unique to your network.

Subnet Mask - The Bridge's Subnet Mask must be the same as your wired network's Subnet Mask.

Default Gateway - Enter the IP address of your network's Gateway here.

Click **Next** to continue, or click **Back** to return to the *Available Wireless Network* screen.

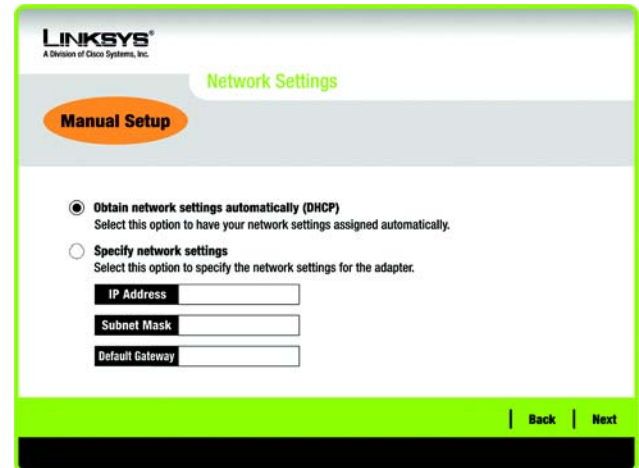


Figure 3-15: Network Settings

2. The *Wireless Mode* screen shows a choice of two wireless modes. Click the **Infrastructure Mode** radio button if you want to connect to a wireless router or access point. Click the **Ad-Hoc Mode** radio button if you want to connect to another wireless device directly without using a wireless router or access point. Then, enter the SSID for your network.

Infrastructure Mode - Use this mode if you want to connect to a wireless router or access point.

Ad-Hoc Mode - Use this mode if you want to connect to another wireless device directly without using a wireless router or access point.

SSID - This is the wireless network name that must be used for all the devices in your wireless network. It is case-sensitive and should be a unique name to help prevent others from entering your network.

Click **Next** to continue or **Back** to return to the previous screen.

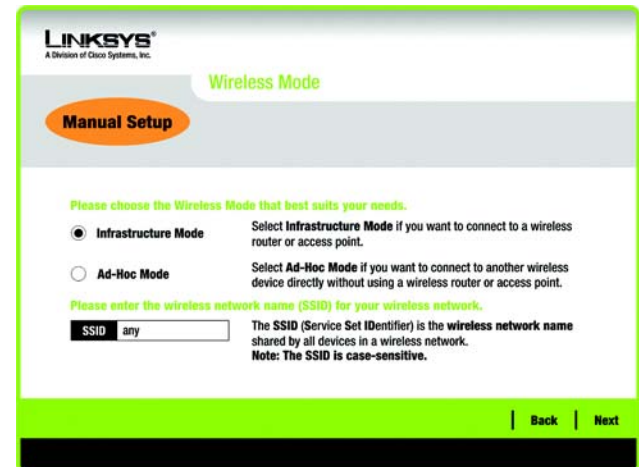


Figure 3-16: Wireless Mode

Wireless-G Music Bridge

- If you chose **Infrastructure Mode**, go to Step 4 now. If you chose **Ad-Hoc Mode**, the *Ad-Hoc Mode Settings* screen will appear.

Select the correct **Channel** for your wireless network. The channel you choose should match the channel set on the other devices in your wireless network. If you are unsure about which channel to use, keep the default setting.

Then, select the **Network Mode** in which your wireless network will operate. In **Mixed**, Wireless-B and Wireless-G devices can both operate on the network, though at a slower speed. In **Wireless-G-Only**, no Wireless-B devices can operate in the network.

Click **Next** to continue or click **Back** to change any settings.

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Ad-Hoc Mode Settings

Manual Setup

Channel 6 ▼ Select the Channel used by all of the devices in your wireless network.

Network Mode Mixed ▼ Select a Network Mode. In **Mixed**, Wireless-B and Wireless-G devices can both access your network. In **Wireless-G Only**, no Wireless-B device can access your network. Note: Mixed Mode networks may experience reductions in speed.

Back Next

Figure 3-17: Ad-Hoc Mode Settings

- The *Wireless Security* screen will appear. This step will configure wireless security.

If your wireless network doesn't use wireless security, select **Disabled** and then click the **Next** button to continue. Proceed to Step 5.

Select **WEP** or **PSK** for the Encryption Method. WEP stands for Wired Equivalent Privacy, PSK stands for Pre-Shared Key, which is a security standard stronger than WEP encryption. If you don't want to use encryption, select **Disabled**.

Then, click the **Next** button to continue or the **Back** button to return to the previous screen.

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Wireless Security

Manual Setup

Security Disabled ▼ Please select the wireless security method used by your existing wireless network.
WEP stands for Wired Equivalent Privacy.
PSK, also known as Pre-Shared Key, is a security standard stronger than WEP encryption.

Back Next

Figure 3-18: Wireless Security

WEP

WEP - To use WEP encryption, select 64-bits or 128-bit characters from the drop-down menu, and enter a passphrase or key.

WEP Key- The WEP key you enter must match the WEP key of your wireless network. If you are using 64-bit WEP encryption, then the key must consist of exactly 10 hexadecimal characters. If you are using 128-bit WEP encryption, then the key must consist of exactly 26 hexadecimal characters. Valid hexadecimal characters are "0" to "9" and "A" to "F".

Passphrase - Instead of manually entering a WEP key, you can enter a passphrase in the Passphrase field, so a WEP key is automatically generated. This case-sensitive passphrase must match the passphrase of your other wireless network devices and is compatible with Linksys wireless products only. (If you have any non-Linksys wireless products, enter the WEP key manually on those products.)

TX Key - The default transmit key number is 1. If your network's access point or wireless router uses transmit key number 2, 3, or 4, select the appropriate number from the *TX Key* drop-down box.

Authentication -The default is set to **Auto**, where it auto-detects for **Shared Key** or **Open** system. Shared Key is when both the sender and the recipient share a WEP key for authentication. Open key is when the sender and the recipient do not share a WEP key for authentication. All points on your network must use the same authentication type.

Click the **Next** button to continue to the *Confirm New Settings* screen or the **Back** button to return to the previous screen.

PSK

PSK offers two encryption methods, TKIP and AES, with dynamic encryption keys. Select **TKIP** or **AES** for encryption. Then enter a Passphrase that is 8-63 characters in length.

Encryption - Select the type of algorithm you want to use, **TKIP** or **AES**, from the *Encryption* drop-down menu.

Passphrase - Enter a Passphrase, also called a pre-shared key, of 8-63 characters in the *Passphrase* field. .

Click the **Next** button to continue or the **Back** button to return to the previous screen.

Figure 3-19: Wireless - WEP

Figure 3-20: Wireless Security - PSK

Wireless-G Music Bridge

- The next screen displays all of the Bridge's settings. If these are correct, click **Next** to continue and finish the setup. If these settings are not correct, click **Back** to change your settings. To exit the setup, click **Exit**.



Figure 3-21: Confirm New Settings

- The *Install the Utility* screen will appear if the Utility is not installed on your PC. The Utility must be installed on your PC for the Wireless-G Music Bridge to work correctly on your network.

Click **Next** to install the Utility. Click **Skip** if you want to install the Utility later.

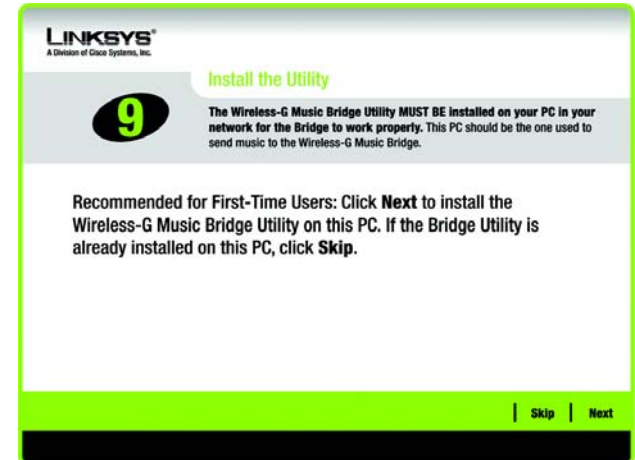


Figure 3-22: Install the Utility

Wireless-G Music Bridge

7. After the software has been successfully installed, the *Congratulations* screen will appear. Click **Exit** to exit the wizard. If you would like to subscribe to Yahoo! Music Unlimited, click **Install Yahoo Music Engine**.

Congratulations! Setup is complete.



Figure 3-23: Congratulations

Chapter 4: Connecting the Wireless-G Music Bridge

Overview

This chapter explains how to connect the Bridge to your home entertainment center's audio receiver or to portable audio speakers. Before starting this chapter, make sure that you have set up and connected the Bridge to your PC, as explained in Chapter 3: Setting up the Wireless-G Music Bridge.



IMPORTANT: Make sure to set up the Bridge before connecting it to your speakers. See Chapter 3: Setting up the Wireless-G Music Bridge.

Connecting to Portable Audio Speakers

To connect the Music Bridge to portable audio speakers, connect the speaker's cable into the Line Out port on the back of the Music Bridge. Connect the power adapter to the Bridge and electrical outlet, if it is not connected.



Figure 4-1: Line Out Cable

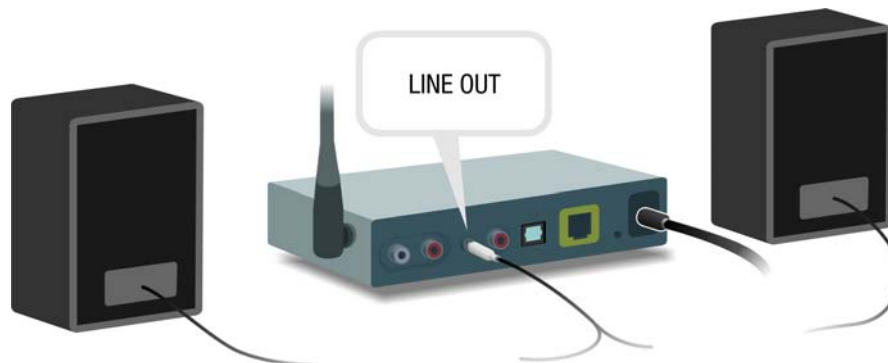


Figure 4-2: Portable Audio Speaker Connection

Connecting to your Audio Receiver

Three connection methods are shown. One uses the standard audio cables supplied with your Wireless-G Music Bridge. The other two methods use digital cables. If you have a digital surround sound system, you will want to use optical digital or digital coaxial cables for better sound quality.

Using Standard Audio RCA Cables

This method uses the supplied analog RCA audio cables. Connect the cable's left and right connectors from the Wireless-G Music Bridge's left and right Audio Out to the audio receiver's left and right Audio In. Connect the power adapter to the Bridge and electrical outlet, if it is not connected.



Figure 4-3: RCA Cable

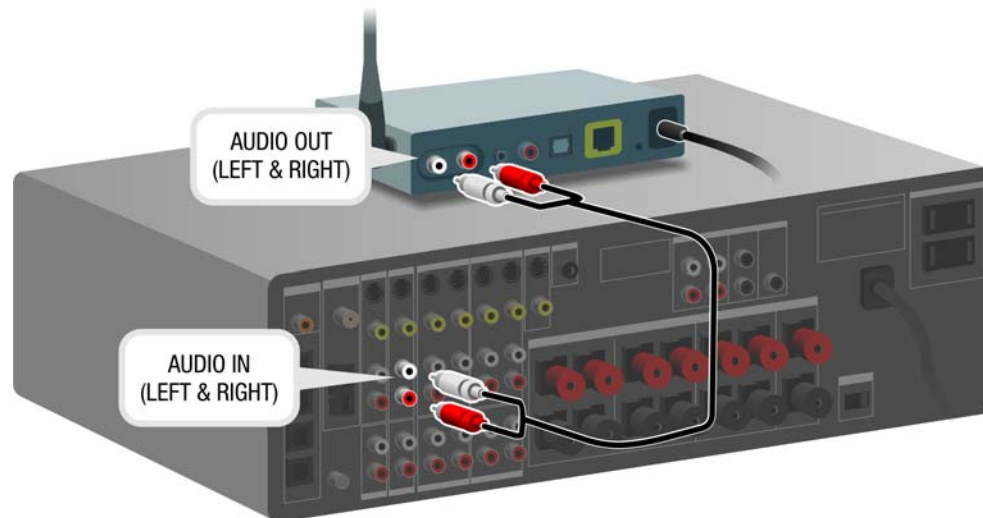


Figure 4-4: RCA Cable Connection

Using Optical Digital Cable

This method uses optical digital cable. Connect the cable's connectors from the Wireless-G Music Bridge's Optical Out to the audio receiver's Optical In. Connect the power adapter to the Bridge and electrical outlet, if it is not connected.



Figure 4-5: Optical Digital Cable

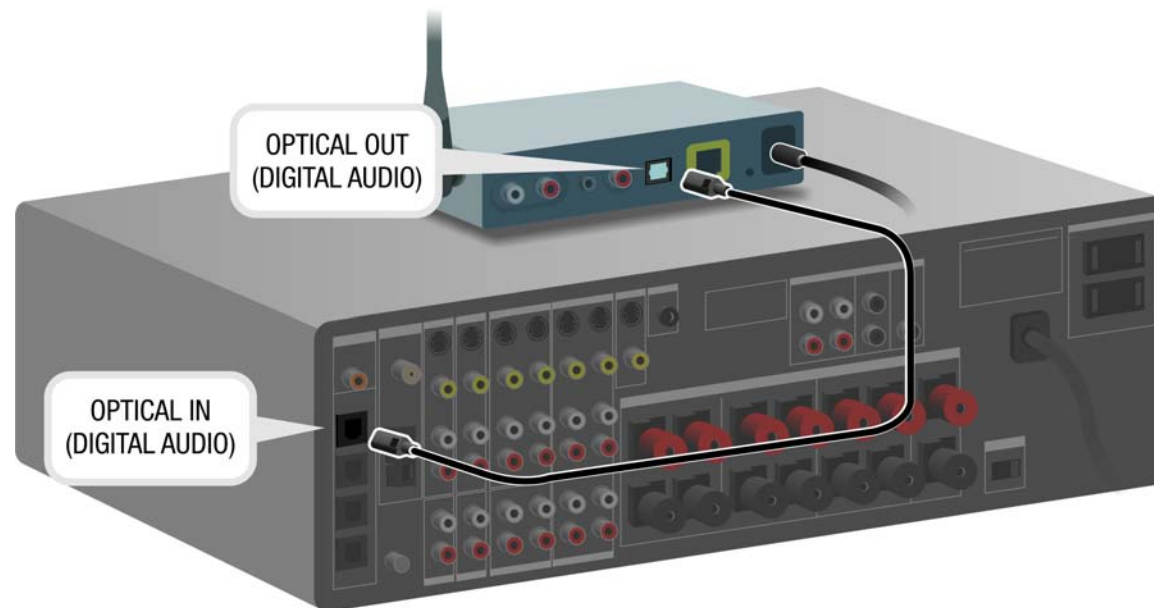


Figure 4-6: Optical Digital Cable Connection

Using Digital Coaxial Cable

This method uses digital coaxial cable. Connect the cable's connectors from the Wireless-G Music Bridge's Coaxial Out to the audio receiver's Coaxial In. Connect the power adapter to the Bridge and electrical outlet, if it is not connected.



Figure 4-7: Digital Coaxial Cable

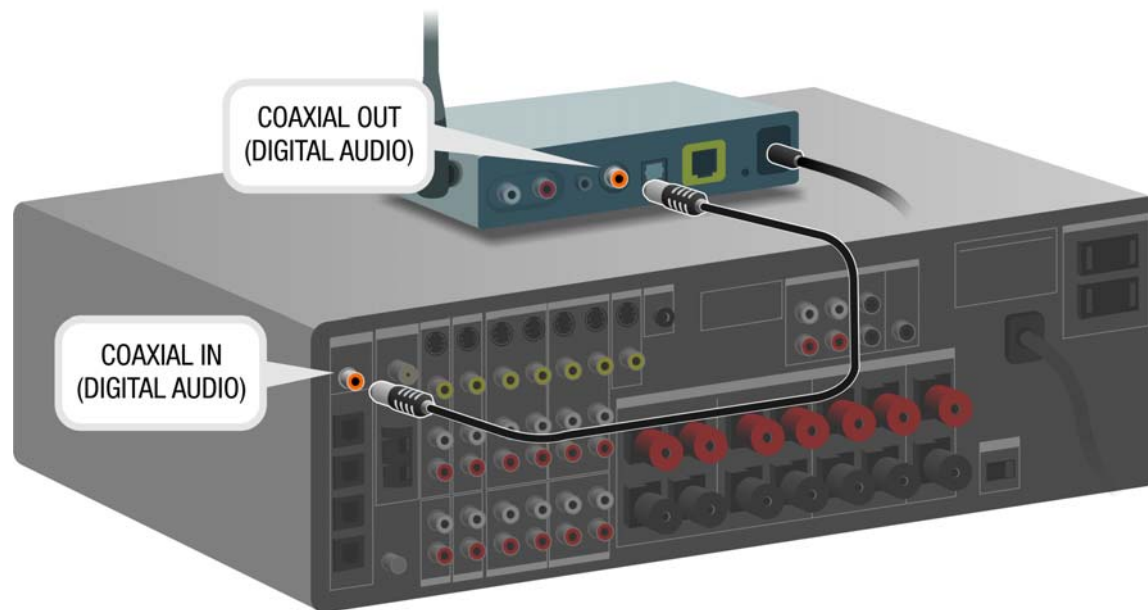


Figure 4-8: Digital Coaxial Cable Connection

Chapter 5: Using the Wireless-G Music Bridge Utility

This chapter explains the use of the Utility. There are three available tabs: Status, Equalizer, and Information. The tabs are explained in the sections, below.

Accessing the Wireless-G Music Bridge Utility

After setting up and connecting the Bridge, the Wireless-G Music Bridge Utility icon will appear in your PC's system tray. **If the Wireless-G Music Bridge Utility is enabled, then the icon will be green. If the Wireless-G Music Bridge Utility is disabled or the Adapter is not connected, then the icon will be gray.**



NOTE: The Wireless-G Music Bridge Utility should only be accessed AFTER connecting the Bridge. For more information on Setting Up and Connecting the Bridge, refer to *Chapter 3: Setting Up and Connecting the Bridge*.

All Tabs

From all tabs, you can adjust your speaker's volume and balance by moving the Volume bar from left to right. You can click the **Mute** button to turn off the sound.

Status Tab

The opening screen of the Wireless-G Music Bridge Utility is the *Status* screen. From this screen, you can connect to the Bridge and listen to music through your media speakers or switch back to your PC's speaker.

To connect to your media speakers through your Music Bridge, select it from the Wireless-G Music Bridge list and click **Connect**. If your Music Bridge isn't displayed, click the **Scan for Music Bridge** button.

To switch from your home entertainment center speakers to your PC's speakers, click the **Connect to PC's Speaker** button.

To switch from the Wireless-G Music Bridge Utility's sound driver to your PC's sound card driver, which allows you to use the PC's sound card driver's advanced features, such as the Windows Volume Control's Microphone Volume Control, click the **Stop Bridge Utility** button. To switch back to the Wireless-G Music Bridge Utility, click the **Start Bridge Utility** button.



Figure 5-1: Utility Icon

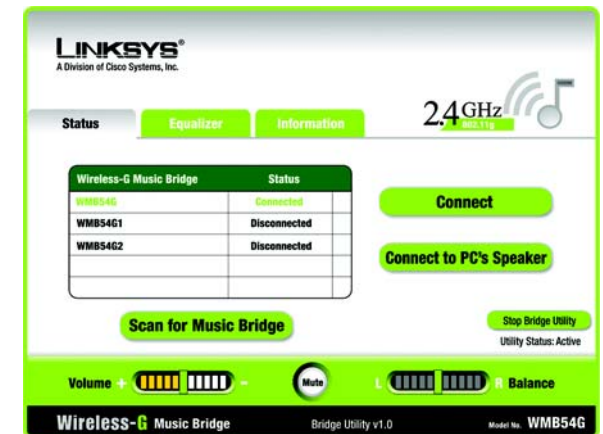


Figure 5-2: Status Tab

Equalizer Tab

The equalizer has presets for most types of music. Just click the button for the type of music you're listening to and the sound will be adjusted accordingly. You can make your own presets by adjusting the bars on the equalizer to your liking, clicking **Save**, then naming the preset when prompted. You can then access your custom presets in the Custom Equalizer drop-down menu.

You can adjust the sound according to the environment

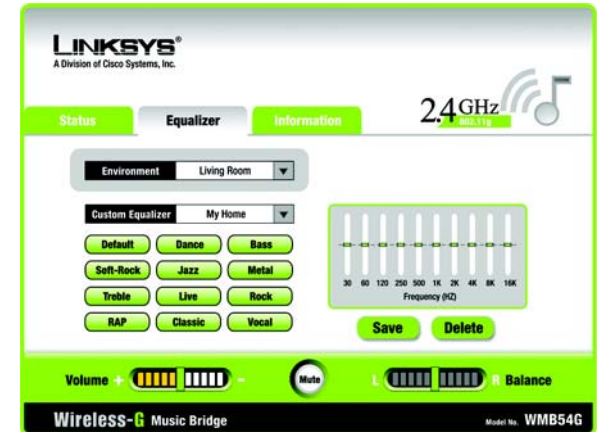


Figure 5-3: Equalizer Tab

Information Tab

This tab will display the Audio Driver Version and Utility Version. You will also be able to enable, by checking, the following three items:

Show the Wireless-G Music Bridge Utility icon in the system tray. If you want to have easy access to the Utility and display the icon in the system tray, check this.

Start the the Wireless-G Music Bridge Utility when I start Windows. If you want the Utility to open when you turn on your PC, check this.

Access is limited to the first PC that uses the utility. If you want to use a different PC, uncheck this item. If you want access limited to one PC, check this.

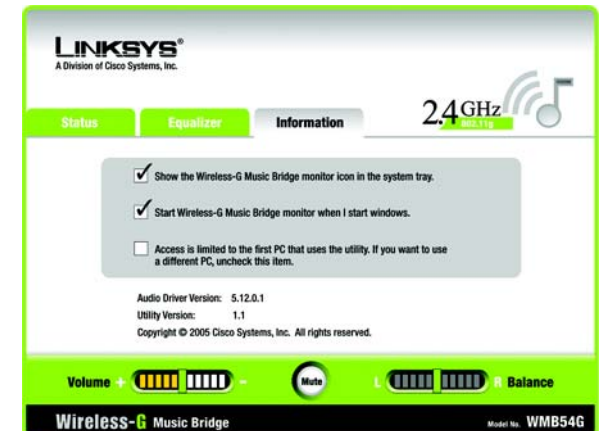


Figure 5-4: Information Tab

Chapter 6: Configuring the Wireless-G Music Bridge

Overview

Linksys recommends using the Setup CD-ROM for first-time installation of the Music Bridge. If you do not wish to run the Setup Wizard on the Setup CD-ROM, then you can use the Web-based Utility to configure the Music Bridge. For advanced users, you may configure the Music Bridge's advanced settings through the Web-based Utility.

Before you can access the Web Utility, you may need to set up a static IP address on your PC. Refer to Windows Help for more information to configure TCP/IP for static addressing. Make sure that after you finish with the Web Utility, that you switch back to the original network setting so your PC will work correctly with your network.

We recommend that you use the following numbering scheme for an IP address:

192.168.1.X In this example, X is a unique, arbitrarily assigned number from 1 to 254. Do not use 210, because it is already assigned to the Bridge. You could use one of these examples:

192.168.1.17

192.168.1.44

In this case, 17 and 44 are arbitrary numbers between 1 and 254.

Your computer will also require a subnet mask. Use this number: 255.255.255.0. The Default Gateway field should be left blank.

This chapter will describe each web page in the Utility and each page's key functions. The utility can be accessed via your web browser through use of a computer connected to the Music Bridge. To access the Web-based Utility, launch Internet Explorer or Netscape Navigator, and enter the Music Bridge's default IP address, **192.168.1.210**, in the *Address* field. Then press **Enter**.

A password request page will appear. (Non-Windows XP users will see a similar screen.) The first time you open the Web-based Utility, use the default password **admin**. (You can set a new password from the Password tab.) Then click the **OK** button.



NOTE: The Wireless-G Music Bridge Utility should only be accessed AFTER connecting the Bridge. For more information on Setting Up and Connecting the Bridge, refer to *Chapter 3: Setting Up and Connecting the Bridge*.



Figure 6-1: Password

The Setup Tab

The first screen that appears displays the Setup tab. This allows you to change the Bridge's general settings.

Change these settings as described here and click the **Apply** button to apply your changes or **Cancel** to cancel your changes. Click the **Help** button if you need more information.

LAN

The Internet Setup section configures the Bridge to your Internet connection. Most of this information can be obtained through your ISP.

Firmware. The Firmware version is displayed here.

Regulatory Domain. The regulatory's domain is displayed here.

Device Name. The name that you want to call your Bridge goes here. You may enter a name up to 19 characters.

MAC Address. The Bridge's MAC Address is displayed here.

Configuration Type.

Choose the configuration type that your network uses.

Automatic Configuration - DHCP. If your network uses a router or other DHCP server and assigns your IP address automatically, select **Automatic Configuration - DHCP**.

Static IP Address. If your network doesn't use a router or other DHCP server and uses a permanent IP address to connect to the Internet, select **Static IP Address**.

IP Address. This is the Bridge's IP address, when seen from the Internet. Your ISP will provide you with the IP Address you need to specify here.

Subnet Mask. This is the Bridge's Subnet Mask, as seen by users on the Internet (including your ISP). Your ISP will provide you with the Subnet Mask.

Default Gateway. Your ISP will provide you with the Gateway Address, which is the ISP server's IP address.

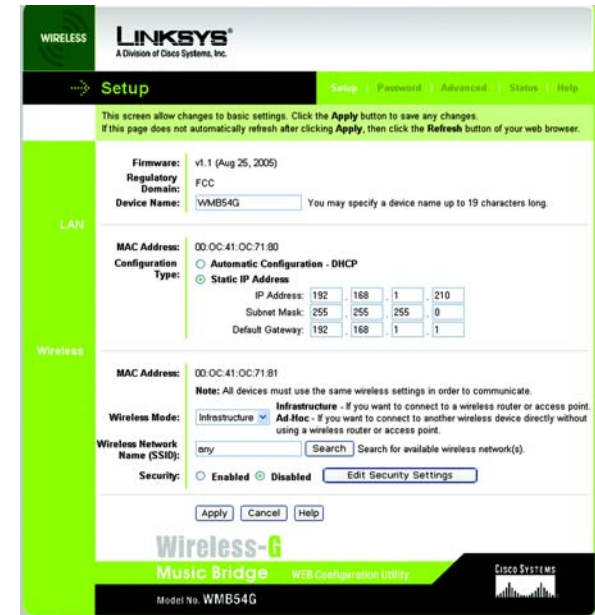


Figure 6-2: Setup - Infrastructure

Wireless

The basic settings for wireless networking are set on this screen.

MAC Address. Your Bridge's MAC Address is displayed here.

Wireless Mode. From this drop-down menu, you can select from Infrastructure or Ad-Hoc mode. If you'll be connecting to a Bridge or access point, select **Infrastructure**. If you'll be connecting directly to another wireless device without using a Bridge or access point, select **Ad-Hoc**. If you're using a wired connection, click **Disabled**.

Channel. (For Ad-Hoc networks only.) Select the appropriate channel from the list provided to correspond with your network settings.

Network Mode. (For Ad-Hoc networks only.) From this drop-down menu, you can select the wireless standards running on your network. If you have both 802.11g and 802.11b devices in your network, keep the default setting, **Mixed**. If you have only 802.11g devices, select **Wireless-G-Only**.

Wireless Network Name (SSID). Enter the network name shared among all devices in your wireless network. If you don't remember the network name or you have more than one network, you may search for the network by clicking the **Search** button.

Security. If you have security enabled on your wireless network, select **Enabled**. If you don't use security on your wireless network, select **Disabled**. To change the security settings on your Bridge, click **Edit Security Settings**.

The Search Tab

If you clicked the Search button to search for your network, this screen will be displayed. Select your network from the list and click **Connect**.

Click **Close** to return to the previous screen. Click **Refresh** to refresh the screen. Click **Help** for more information.

The screenshot shows the 'Setup' page for the Linksys Wireless-G Music Bridge. The 'Wireless' section is active, showing the following settings:

- Firmware:** v1.1 (Aug 25, 2005)
- Regulatory Domain:** FCC
- Device Name:** WMB54G
- MAC Address:** 00:0C:41:0C:71:80
- Configuration Type:** Automatic Configuration - DHCP, Static IP Address
- Static IP Address:** IP Address: 192.168.1.210, Subnet Mask: 255.255.255.0, Default Gateway: 192.168.1.1
- Wireless Mode:** Ad-Hoc
- Channel:** Auto
- Network Mode:** Mixed
- Wireless Network Name (SSID):** any
- Security:** Enabled, Disabled

Figure 6-3: Setup - Ad-Hoc

The screenshot shows the 'Search' page for the Linksys Wireless-G Music Bridge. It displays a table of detected wireless networks:

Wireless Network Name	MAC Address	CH	Security	Signal Strength (%)	
linksys	00:0C:41:0C:71:80	6	WEP (128 bit)	100%	Connect
Home	00:0C:41:0C:71:81	11	Disabled	90%	Connect

Figure 6-4: Search

The Security Tab

Two methods of security are available if your network uses security: WEP and PSK. WEP is a basic encryption method, which is not as secure as PSK (Pre-Shared Key).

WEP

To use WEP encryption, select **40/64 bit (10 hex digits)** or **104/128 bit (26 hex digit)** from the drop-down menu, and enter a passphrase or WEP key.

Passphrase. Instead of manually entering a WEP key, you can enter a passphrase in the Passphrase field, so a WEP key is automatically generated. This case-sensitive passphrase must match the passphrase of your other wireless network devices and is compatible with Linksys wireless products only. (If you have any non-Linksys wireless products, enter the WEP key manually on those products.)

WEP Key. The WEP key you enter must match the WEP key of your wireless network. If you are using 64-bit WEP encryption, then the key must consist of exactly 10 hexadecimal characters. If you are using 128-bit WEP encryption, then the key must consist of exactly 26 hexadecimal characters. Valid hexadecimal characters are “0” to “9” and “A” to “F”.

TX Key. The default transmit key number is 1. If your network’s access point or wireless router uses transmit key number 2, 3, or 4, select the appropriate number from the *TX Key* drop-down box.

Authentication. The default is set to **Auto**, where it auto-detects for **Shared Key** or **Open** system. Shared Key is when both the sender and the recipient share a WEP key for authentication. Open key is when the sender and the recipient do not share a WEP key for authentication. All points on your network must use the same authentication type.

Change these settings as described here and click the **Apply** button to apply your changes or **Cancel** to cancel your changes. Click the **Help** button if you need more information.

PSK (Pre-Shared Key)

PSK (Pre-Shared Key) offers two encryption methods, TKIP and AES, with dynamic encryption keys. Select the type of algorithm, **TKIP** or **AES**. Enter a passphrase of 8-63 characters.

Encryption - Select the type of algorithm you want to use, **TKIP** or **AES**, from the *Encryption* drop-down menu.

Passphrase - Enter a Passphrase, also called a pre-shared key, of 8-63 characters in the *Passphrase* field.



Figure 6-5: Security - WEP



Figure 6-6: Security - PSK (Pre-Shared Key)

Change these settings as described here and click the **Apply** button to apply your changes or **Cancel** to cancel your changes. Click the **Help** button if you need more information.

The Password Tab

Password

You can change the Bridge's password from here. Enter a new password and then type it again in the *Confirm* field to confirm.

Factory Defaults



Important: Resetting the Music Bridge will erase all of your settings and replace them with the factory defaults. Do not reset the Bridge if you want to retain these settings.

If you want to reset the Bridge to its original default settings and lose all of the settings that you have set, you can click the **Restore Factory Defaults** button.

Change these settings as described here and click the **Apply** button to apply your changes or **Cancel** to cancel your changes. Click the **Help** button if you need more information.

The Advanced Tab

This screen is used to configure the advanced settings and should only be used by advanced users.

Transmission Rate. The rate of data transmission should be set depending on the speed of your wireless network. You can select from a range of transmission speeds, or you can select **Auto** to have the Bridge automatically use the fastest possible data rate and enable the Auto-Fallback feature. Auto-Fallback will negotiate the best possible connection speed between the Bridge and a wireless client. The default value is **Auto**.

Fragmentation Threshold. This value specifies the maximum size for a packet before data is fragmented into multiple packets. If you experience a high packet error rate, you may slightly increase the Fragmentation Threshold. Setting the Fragmentation Threshold too low may result in poor network performance. Only minor reduction of the default value is recommended. In most cases, it should remain at its default value of **2346**.

RTS Threshold. Should you encounter inconsistent data flow, only minor reduction of the default value, **2347**, is recommended. If a network packet is smaller than the preset RTS threshold size, the RTS/CTS mechanism will



Figure 6-7: Password



Figure 6-8: Advanced

Wireless-G Music Bridge

not be enabled. The Bridge sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission. The RTS Threshold value should remain at its default value of **2347**.

Change these settings as described here and click the **Apply** button to apply your changes or **Cancel** to cancel your changes. Click the **Help** button if you need more information.

The Status Tab

The Status Tab displays your Bridge's current status and its settings.

The Firmware, Regulatory Domain, Device Name, the local network's MAC Address, Configuration Type, IP Address, Subnet Mask, Default Gateway, will be displayed. The wireless network's MAC Address, SSID, Wireless Mode, Channel, Network Mode, and Security will be displayed.

Firmware. The Bridge's current firmware version is displayed here.

Regulatory Domain. The regulatory's domain is displayed here.

Device Name. This is the specific name for the Bridge that you set on the Setup Tab.

LAN

MAC Address. This is the Bridge's LAN MAC Address.

Configuration Type. This shows the network configuration type used by the Bridge.

IP Address. This shows the Bridge's IP Address, as it appears on your local, Ethernet network.

Subnet Mask. This shows the Bridge's Subnet Mask.

Default Gateway. This shows the Bridge's Default Gateway.

Wireless

MAC Address. This is the Bridge's wireless MAC Address.

Wireless Network Name (SSID). This is the wireless network that the Bridge connects to.

The screenshot shows the Linksys Status page for a Wireless-G Music Bridge. The page is titled 'Status' and includes a navigation menu with 'Setup', 'Password', 'Advanced', 'Status', and 'Help'. A green banner at the top states, 'This screen displays current status and settings. This information is read-only.' The content is organized into two main sections: LAN and Wireless. The LAN section lists: Firmware: v1.1 (Aug 25, 2005), Regulatory Domain: FCC, Device Name: WMB54G, MAC Address: 00:0C:41:0C:71:80, Configuration Type: Static IP Address, IP Address: 192.168.1.210, Subnet Mask: 255.255.255.0, and Default Gateway: 192.168.1.1. The Wireless section lists: MAC Address: 00:0C:41:0C:71:81, Wireless Network Name (SSID): any, Wireless Mode: Infrastructure, Channel: 6, Network Mode: N/A, Security: Disabled, and Status: Connected. At the bottom of the content area are 'Refresh' and 'Help' buttons. The footer of the page includes the 'Wireless-G Music Bridge' logo, 'WEB Configuration Utility', and 'Model No. WMB54G'.

Figure 6-9: Status

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Wireless Mode. This displays the wireless mode, Infrastructure or Ad-Hoc, used by the network.

Channel. This displays the wireless network channel that your Bridge uses.

Wireless Mode. This displays the wireless mode (Mixed, Wireless-G Only) used by the network.

Security. This displays what type of security the Bridge uses.

Status. This displays the status of the connection between the Bridge and the wireless network.

Click the **Refresh** button if you need to refresh the screen. Click the **Help** button if you need more information.

Help Tab

The Help Tab provides Online Resources and Firmware Upgrade.

Online Resources. Links are provided to the Linksys website, Linksys online support, and the Adobe website for downloading a PDF viewer.

Firmware Upgrade. The Music Bridge's firmware is upgraded through the Web-Utility's Help tab. Follow these instructions:

1. Download the firmware from Linksys's website at www.linksys.com.
2. Enter the location of the firmware's file or click the **Browse** button to find the file.
3. Then, click the **Start to Upgrade** button to upgrade the firmware.

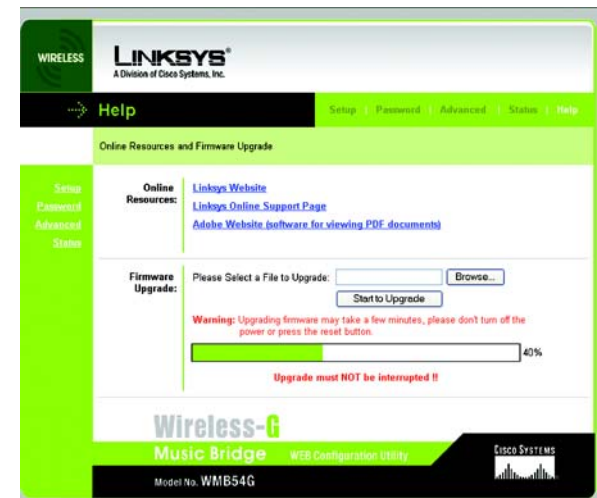


Figure 6-10: Help

Appendix A: Troubleshooting

This appendix consists of two parts: “Common Problems and Solutions” and “Frequently Asked Questions.” This appendix provides solutions to problems that may occur during the installation and operation of this product. Read the description below to solve your problems. If you can't find an answer here, check the Linksys website at www.linksys.com.

Common Problems and Solutions

- 1. The music is coming from PC's speaker and not the speaker that connects to the Music Bridge.**
Open the Music Bridge Utility to connect to the Bridge in order to listen to music from speakers that connect to the Bridge. Refer to Chapter 5: Using the Wireless-G Bridge Music Utility.
- 2. My Wireless Bridge has been connected on the utility, but there is no music coming from the speaker.**
 - Check your audio cable connection.
 - Close, then reopen the player that you are trying to play.
 - Reboot the PC and try again.
- 3. I don't see the Utility icon appear on the system tray.**
You can find the utility software by clicking Start > Programs > Linksys Wireless-G Music Bridge. You can restart the utility from there.
- 4. There is a message that appears that says this bridge had been own by “xxx” and I cannot connect to it.**
On the *Information* tab of the Bridge Utility, uncheck the option, *Access is limited to the first PC that uses the utility. If you want to use a different PC, uncheck this item..*
- 5. Why can't I see my Windows Volume Control's Microphone Volume Control any more?**
On the *Status* tab of the Wireless-G Music Bridge Utility, click the **Stop Bridge Utility** button to switch the Wireless-G Music Bridge Utility's sound driver to your PC's sound card driver, which allows you to use the Windows Volume Control's Microphone Volume Control. To switch back to the Music Bridge, click the **Start Bridge Utility** button.

Frequently Asked Questions

What player I can use with Wireless-G Music Bridge?

You can use most any player you like, such as Yahoo Music Engine or Windows Media Player.

Can I listen to music from more than one Music Bridge at the same time?

No, the Music Bridge utility had been designed to connect to one Music Bridge at a time.

I hear some sound breaks occasionally, what can I do?

- This should not happen in normal cases, but could happen due to some wireless RF interference, especially if there are many nearby wireless devices, such as access points or routers, a microwave oven, Bluetooth device, cordless phone, etc. Keep your Music Bridge away from these devices.
- If you are using an Intel Centrino based laptop or some old WLAN card/dongle, it may have a short period of suspending time for background scanning around every minute. It may also cause the sound streaming break. Please contact your wireless adapter factory to download the latest driver of your WLAN card.

What should I do if I forget all the settings of bridge?

You may reset to the default settings of the bridge by pressing and holding the reset button on the back panel of the Bridge for 10 seconds. After that, you need to re-run the setup wizard to configure it again.

What is my bridge's default IP Address?

The bridge's default IP address is 192.168.1.210.

Why can't I see the Bridge on my Bridge Utility?

- My Bridge has a wired connection to my network.
- Restart the PC and try again.
- Check all the cable connections and power.

My bridge is wirelessly connecting to my network, so why can't I see the Bridge on my Bridge Utility?

- Restart the PC and try again.
- If it's the first time, please return to the setup wizard again and make sure you configure the Bridge properly or move your Bridge closer to your wireless access point and try again.

Appendix B: Wireless Security

Linksys wants to make wireless networking as safe and easy for you as possible. The current generation of Linksys products provide several network security features, but they require specific action on your part for implementation. So, keep the following in mind whenever you are setting up or using your wireless network.

Security Precautions

The following is a complete list of security precautions to take (as shown in this User Guide) (at least steps 1 through 5 should be followed):

1. Change the default SSID.
2. Disable SSID Broadcast.
3. Change the default password for the Administrator account.
4. Enable MAC Address Filtering.
5. Change the SSID periodically.
6. Use the highest encryption algorithm possible. Use WPA if it is available. Please note that this may reduce your network performance.
7. Change the WEP encryption keys periodically.

To ensure network security, steps one through five should be followed, at least.

Security Threats Facing Wireless Networks

Wireless networks are easy to find. Hackers know that in order to join a wireless network, wireless networking products first listen for “beacon messages”. These messages can be easily decrypted and contain much of the network’s information, such as the network’s SSID (Service Set Identifier). Here are the steps you can take:

Change the administrator’s password regularly. With every wireless networking device you use, keep in mind that network settings (SSID, WEP keys, etc.) are stored in its firmware. Your network administrator is the only person who can change network settings. If a hacker gets a hold of the administrator’s password, he, too, can change those settings. So, make it harder for a hacker to get that information. Change the administrator’s password regularly.



Note: Some of these security features are available only through the network router or access point. Refer to the router or access point’s documentation for more information.

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SSID. There are several things to keep in mind about the SSID:

1. Disable Broadcast
2. Make it unique
3. Change it often

Most wireless networking devices will give you the option of broadcasting the SSID. While this option may be more convenient, it allows anyone to log into your wireless network. This includes hackers. So, don't broadcast the SSID.

Wireless networking products come with a default SSID set by the factory. (The Linksys default SSID is "linksys".) Hackers know these defaults and can check these against your network. Change your SSID to something unique and not something related to your company or the networking products you use.

Change your SSID regularly so that any hackers who have gained access to your wireless network will have to start from the beginning in trying to break in.

MAC Addresses. Enable MAC Address filtering. MAC Address filtering will allow you to provide access to only those wireless nodes with certain MAC Addresses. This makes it harder for a hacker to access your network with a random MAC Address.

WEP Encryption. Wired Equivalent Privacy (WEP) is often looked upon as a cure-all for wireless security concerns. This is overstating WEP's ability. Again, this can only provide enough security to make a hacker's job more difficult.

There are several ways that WEP can be maximized:

1. Use the highest level of encryption possible
2. Use "Shared Key" authentication
3. Change your WEP key regularly

WPA. Wi-Fi Protected Access (WPA) is the newest and best available standard in Wi-Fi security. Two modes are available: Pre-Shared Key and RADIUS. Pre-Shared Key gives you a choice of two encryption methods: TKIP (Temporal Key Integrity Protocol), which utilizes a stronger encryption method and incorporates Message Integrity Code (MIC) to provide protection against hackers, and AES (Advanced Encryption System), which utilizes a symmetric 128-Bit block data encryption. RADIUS (Remote Authentication Dial-In User Service) utilizes a RADIUS server for authentication and the use of dynamic TKIP, AES, or WEP.



Important: Always remember that each device in your wireless network **MUST** use the same encryption method and encryption key or your wireless network will not function properly.

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WPA Pre-Shared Key. If you do not have a RADIUS server, select the type of algorithm, TKIP or AES, enter a password in the Pre-Shared key field of 8-64 characters, and enter a Group Key Renewal period time between 0 and 99,999 seconds, which instructs the Router or other device how often it should change the encryption keys.

WPA RADIUS. WPA used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the Router or other device.) First, select the type of WPA algorithm, **TKIP** or **AES**. Enter the RADIUS server's IP Address and port number, along with a key shared between the device and the server. Last, enter a Group Key Renewal period, which instructs the device how often it should change the encryption keys.

RADIUS. WEP used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the Router or other device.) First, enter the RADIUS server's IP Address and port number, along with a key shared between the device and the server. Then, select a WEP key and a level of WEP encryption, and either generate a WEP key through the Passphrase or enter the WEP key manually.

Implementing encryption may have a negative impact on your network's performance, but if you are transmitting sensitive data over your network, encryption should be used.

These security recommendations should help keep your mind at ease while you are enjoying the most flexible and convenient technology Linksys has to offer.

Appendix C: Upgrading Firmware

The Music Bridge's firmware is upgraded through the Web-Utility's Help tab. Follow these instructions:

1. Download the firmware from Linksys's website at www.linksys.com.
2. Enter the location of the firmware's file or click the **Browse** button to find the file.
3. Then, click the **Start to Upgrade** button to upgrade the firmware.



Figure C-1: Upgrade Firmware

Appendix D: Windows Help

All wireless products require Microsoft Windows. Windows is the most used operating system in the world and comes with many features that help make networking easier. These features can be accessed through Windows Help and are described in this appendix.

TCP/IP

Before a computer can communicate within a network, TCP/IP must be enabled. TCP/IP is a set of instructions, or protocol, all PCs follow to communicate over a network. This is true for wireless networks as well. Your PCs will not be able to utilize wireless networking without having TCP/IP enabled. Windows Help provides complete instructions on enabling TCP/IP.

Shared Resources

If you wish to share printers, folder, or files over your network, Windows Help provides complete instructions on utilizing shared resources.

Network Neighborhood/My Network Places

Other PCs on your network will appear under Network Neighborhood or My Network Places (depending upon the version of Windows you're running). Windows Help provides complete instructions on adding PCs to your network.

Appendix E: Glossary

This glossary contains some basic networking terms you may come across when using this product. For more advanced terms, see the complete Linksys glossary at <http://www.linksys.com/glossary>.

Access Point - A device that allows wireless-equipped computers and other devices to communicate with a wired network. Also used to expand the range of a wireless network.

Ad-hoc - A group of wireless devices communicating directly with each other (peer-to-peer) without the use of an access point.

AES (Advanced Encryption Standard) - A security method that uses symmetric 128-bit block data encryption.

Bandwidth - The transmission capacity of a given device or network.

Bit - A binary digit.

Boot - To start a device and cause it to start executing instructions.

Broadband - An always-on, fast Internet connection.

Browser - An application program that provides a way to look at and interact with all the information on the World Wide Web.

Byte - A unit of data that is usually eight bits long

Cable Modem - A device that connects a computer to the cable television network, which in turn connects to the Internet.

Daisy Chain - A method used to connect devices in a series, one after the other.

DDNS (Dynamic Domain Name System) - Allows the hosting of a website, FTP server, or e-mail server with a fixed domain name (e.g., www.xyz.com) and a dynamic IP address.

Default Gateway - A device that forwards Internet traffic from your local area network.

DHCP (Dynamic Host Configuration Protocol) - A networking protocol that allows administrators to assign temporary IP addresses to network computers by "leasing" an IP address to a user for a limited amount of time, instead of assigning permanent IP addresses.

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DMZ (Demilitarized Zone) - Removes the Router's firewall protection from one PC, allowing it to be "seen" from the Internet.

DNS (Domain Name Server) - The IP address of your ISP's server, which translates the names of websites into IP addresses.

Domain - A specific name for a network of computers.

Download - To receive a file transmitted over a network.

DSL (Digital Subscriber Line) - An always-on broadband connection over traditional phone lines.

Dynamic IP Address - A temporary IP address assigned by a DHCP server.

EAP (Extensible Authentication Protocol) - A general authentication protocol used to control network access. Many specific authentication methods work within this framework.

Encryption - Encoding data transmitted in a network.

Ethernet - IEEE standard network protocol that specifies how data is placed on and retrieved from a common transmission medium.

Firewall - A set of related programs located at a network gateway server that protects the resources of a network from users from other networks.

Firmware - The programming code that runs a networking device.

FTP (File Transfer Protocol) - A protocol used to transfer files over a TCP/IP network.

Full Duplex - The ability of a networking device to receive and transmit data simultaneously.

Gateway - A device that interconnects networks with different, incompatible communications protocols.

Half Duplex - Data transmission that can occur in two directions over a single line, but only one direction at a time.

HTTP (HyperText Transport Protocol) - The communications protocol used to connect to servers on the World Wide Web.

Infrastructure - A wireless network that is bridged to a wired network via an access point.

IP (Internet Protocol) - A protocol used to send data over a network.

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IP Address - The address used to identify a computer or device on a network.

IPCONFIG - A Windows 2000 and XP utility that displays the IP address for a particular networking device.

IPSec (Internet Protocol Security) - A VPN protocol used to implement secure exchange of packets at the IP layer.

ISP (Internet Service Provider) - A company that provides access to the Internet.

LAN - The computers and networking products that make up your local network.

MAC (Media Access Control) Address - The unique address that a manufacturer assigns to each networking device.

Mbps (MegaBits Per Second) - One million bits per second; a unit of measurement for data transmission.

NAT (Network Address Translation) - NAT technology translates IP addresses of a local area network to a different IP address for the Internet.

Network - A series of computers or devices connected for the purpose of data sharing, storage, and/or transmission between users.

Packet - A unit of data sent over a network.

Passphrase - Used much like a password, a passphrase simplifies the WEP encryption process by automatically generating the WEP encryption keys for Linksys products.

Ping (Packet Internet Groper) - An Internet utility used to determine whether a particular IP address is online.

POP3 (Post Office Protocol 3) - A standard mail server commonly used on the Internet.

Port - The connection point on a computer or networking device used for plugging in cables or adapters.

Power over Ethernet (PoE) - A technology enabling an Ethernet network cable to deliver both data and power.

PPPoE (Point to Point Protocol over Ethernet) - A type of broadband connection that provides authentication (username and password) in addition to data transport.

PPTP (Point-to-Point Tunneling Protocol) - A VPN protocol that allows the Point to Point Protocol (PPP) to be tunneled through an IP network. This protocol is also used as a type of broadband connection in Europe.

RADIUS (Remote Authentication Dial-In User Service) - A protocol that uses an authentication server to control network access.

Wireless-G Music Bridge

RJ-45 (Registered Jack-45) - An Ethernet connector that holds up to eight wires.

Roaming - The ability to take a wireless device from one access point's range to another without losing the connection.

Router - A networking device that connects multiple networks together.

Server - Any computer whose function in a network is to provide user access to files, printing, communications, and other services.

SMTP (Simple Mail Transfer Protocol) - The standard e-mail protocol on the Internet.

SNMP (Simple Network Management Protocol) - A widely used network monitoring and control protocol.

SPI (Stateful Packet Inspection) Firewall - A technology that inspects incoming packets of information before allowing them to enter the network.

SSID (Service Set Identifier) - Your wireless network's name.

Static IP Address - A fixed address assigned to a computer or device that is connected to a network.

Static Routing - Forwarding data in a network via a fixed path.

Subnet Mask - An address code that determines the size of the network.

Switch - 1. A data switch that connects computing devices to host computers, allowing a large number of devices to share a limited number of ports. 2. A device for making, breaking, or changing the connections in an electrical circuit.

TCP (Transmission Control Protocol) - A network protocol for transmitting data that requires acknowledgement from the recipient of data sent.

TCP/IP (Transmission Control Protocol/Internet Protocol) - A set of instructions PCs use to communicate over a network.

Telnet - A user command and TCP/IP protocol used for accessing remote PCs.

TFTP (Trivial File Transfer Protocol) - A version of the TCP/IP FTP protocol that has no directory or password capability.

Throughput - The amount of data moved successfully from one node to another in a given time period.

Wireless-G Music Bridge

TKIP (Temporal Key Integrity Protocol) - a wireless encryption protocol that provides dynamic encryption keys for each packet transmitted.

Topology - The physical layout of a network.

TX Rate - Transmission Rate.

Upgrade - To replace existing software or firmware with a newer version.

Upload - To transmit a file over a network.

URL (Uniform Resource Locator) - The address of a file located on the Internet.

VPN (Virtual Private Network) - A security measure to protect data as it leaves one network and goes to another over the Internet.

WAN (Wide Area Network)- The Internet.

WEP (Wired Equivalent Privacy) - A method of encrypting network data transmitted on a wireless network for greater security.

WLAN (Wireless Local Area Network) - A group of computers and associated devices that communicate with each other wirelessly.

WPA (Wi-Fi Protected Access) - a wireless security protocol using TKIP (Temporal Key Integrity Protocol) encryption, which can be used in conjunction with a RADIUS server.

Appendix F: Specifications

Standards	IEEE 802.11b, IEEE 802.11g, IEEE 802.3, IEEE 802.3u
Ports/Buttons	One 10/100 RJ-45 Port, Left and Right RCA Audio Output, One Line Out, Coax and Optical Digital Audio Output, One Power Port and One Reset Button
LEDs	Power, Ethernet and Wireless
Transmit Power	802.11g: 13 ± 1 dBm (Typical) 802.11b: 15 ± 1 dBm (Typical)
Receive Sensitivity	11Mbps @ -83dBm (Typical) 54Mbps @ -67dBm (Typical)
Security features	WEP
Dimensions (L x W x H)	5.57" x 5.12" x 3.76" (141.6 mm x 130 mm x 95.5 mm)
Unit Weight	8.11 oz. (0.23 kg)
Power	External, 12V DC, 500 mA
Certifications	FCC
Operating Temp.	0°C to 40°C (32°F to 104°F)
Storage Temp.	-20°C to 70°C (-4°F to 158°F)
Operating Humidity	10% to 85% Non-Condensing
Storage Humidity	5% to 90% Non-Condensing

Appendix G: Warranty Information

LIMITED WARRANTY

Linksys warrants to You that, for a period of three years (the “Warranty Period”), your Linksys Product will be substantially free of defects in materials and workmanship under normal use. Your exclusive remedy and Linksys' entire liability under this warranty will be for Linksys at its option to repair or replace the Product or refund Your purchase price less any rebates. This limited warranty extends only to the original purchaser.

If the Product proves defective during the Warranty Period call Linksys Technical Support in order to obtain a Return Authorization Number, if applicable. BE SURE TO HAVE YOUR PROOF OF PURCHASE ON HAND WHEN CALLING. If You are requested to return the Product, mark the Return Authorization Number clearly on the outside of the package and include a copy of your original proof of purchase. RETURN REQUESTS CANNOT BE PROCESSED WITHOUT PROOF OF PURCHASE. You are responsible for shipping defective Products to Linksys. Linksys pays for UPS Ground shipping from Linksys back to You only. Customers located outside of the United States of America and Canada are responsible for all shipping and handling charges.

ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THE WARRANTY PERIOD. ALL OTHER EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF NON-INFRINGEMENT, ARE DISCLAIMED. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to You. This warranty gives You specific legal rights, and You may also have other rights which vary by jurisdiction.

This warranty does not apply if the Product (a) has been altered, except by Linksys, (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Linksys, or (c) has been subjected to abnormal physical or electrical stress, misuse, negligence, or accident. In addition, due to the continual development of new techniques for intruding upon and attacking networks, Linksys does not warrant that the Product will be free of vulnerability to intrusion or attack.

TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL LINKSYS BE LIABLE FOR ANY LOST DATA, REVENUE OR PROFIT, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, REGARDLESS OF THE THEORY OF LIABILITY (INCLUDING NEGLIGENCE), ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE THE PRODUCT (INCLUDING ANY SOFTWARE), EVEN IF LINKSYS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL LINKSYS' LIABILITY EXCEED THE AMOUNT PAID BY YOU FOR THE PRODUCT. The foregoing limitations will apply even if any warranty or remedy provided under this Agreement fails of its essential purpose. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to You.

Please direct all inquiries to: Linksys, P.O. Box 18558, Irvine, CA 92623.

Appendix H: Regulatory Information

FCC Statement

This product 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 Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

Safety Notices

Caution: To reduce the risk of fire, use only No.26 AWG or larger telecommunication line cord.

Do not use this product near water, for example, in a wet basement or near a swimming pool.

Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

Industry Canada (Canada)

This device complies with Canadian ICES-003 and RSS210 rules.

Cet appareil est conforme aux normes NMB-003 et RSS210 d'Industry Canada.

User Information for Consumer Products Covered by EU Directive 2002/96/EC on Waste Electric and Electronic Equipment (WEEE)

This document contains important information for users with regards to the proper disposal and recycling of Linksys products. Consumers are required to comply with this notice for all electronic products bearing the following symbol:



English

Environmental Information for Customers in the European Union

European Directive 2002/96/EC requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product should be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. For more detailed information about the disposal of your old equipment, please contact your local authorities, waste disposal service, or the shop where you purchased the product.

Ceština/Czech

Informace o ochraně životního prostředí pro zákazníky v zemích Evropské unie

Evropská směrnice 2002/96/ES zakazuje, aby zařízení označené tímto symbolem na produktu anebo na obalu bylo likvidováno s netříděným komunálním odpadem. Tento symbol udává, že daný produkt musí být likvidován odděleně od běžného komunálního odpadu. Odpovídáte za likvidaci tohoto produktu a dalších elektrických a elektronických zařízení prostřednictvím určených sběrných míst stanovených vládou nebo místními úřady. Správná likvidace a recyklace pomáhá předcházet potenciálním negativním dopadům na životní prostředí a lidské zdraví. Podrobnější informace o likvidaci starého vybavení si laskavě vyžádejte od místních úřadů, podniku zabývajícího se likvidací komunálních odpadů nebo obchodu, kde jste produkt zakoupili.

Dansk/Danish

Miljøinformation for kunder i EU

EU-direktiv 2002/96/EF kræver, at udstyr der bærer dette symbol på produktet og/eller emballagen ikke må bortskaffes som usorteret kommunalt affald. Symbolet betyder, at dette produkt skal bortskaffes adskilt fra det almindelige husholdningsaffald. Det er dit ansvar at bortskaffe dette og andet elektrisk og elektronisk udstyr via bestemte indsamlingssteder udpeget af staten eller de lokale myndigheder. Korrekt bortskaffelse og genvinding vil hjælpe med til at undgå mulige skader for miljøet og menneskers sundhed. Kontakt venligst de lokale myndigheder, renovationstjenesten eller den butik, hvor du har købt produktet, angående mere detaljeret information om bortskaffelse af dit gamle udstyr.

Deutsch/German

Umweltinformation für Kunden innerhalb der Europäischen Union

Die Europäische Richtlinie 2002/96/EC verlangt, dass technische Ausrüstung, die direkt am Gerät und/oder an der Verpackung mit diesem Symbol versehen ist nicht zusammen mit unsortiertem Gemeindeabfall entsorgt werden darf. Das Symbol weist darauf hin, dass das Produkt von regulärem Haushaltsmüll getrennt entsorgt werden sollte. Es liegt in Ihrer Verantwortung, dieses Gerät und andere elektrische und elektronische Geräte über die dafür zuständigen und von der Regierung oder örtlichen Behörden dazu bestimmten Sammelstellen zu entsorgen. Ordnungsgemäßes Entsorgen und Recyceln trägt dazu bei, potentielle negative Folgen für Umwelt und die menschliche Gesundheit zu vermeiden. Wenn Sie weitere Informationen zur Entsorgung Ihrer Altgeräte benötigen, wenden Sie sich bitte an die örtlichen Behörden oder städtischen Entsorgungsdienste oder an den Händler, bei dem Sie das Produkt erworben haben.

Eesti/Estonian

Keskkonnaalane informatsioon Euroopa Liidus asuvatele klientidele

Euroopa Liidu direktiivi 2002/96/EÜ nõuete kohaselt on seadmeid, millel on tootel või pakendil käesolev sümbol, keelatud kõrvaldada koos sorteerimata olmejäätmetega. See sümbol näitab, et toode tuleks kõrvaldada eraldi tavalistest olmejäätmevoogudest. Olete kohustatud kõrvaldama käesoleva ja ka muud elektri- ja elektroonikaseadmed riigi või kohalike ametiasutuste poolt ette nähtud kogumispunktide kaudu. Seadmete korrektne kõrvaldamine ja ringlussevõtt aitab vältida võimalikke negatiivseid tagajärgi keskkonnale ning inimeste tervisele. Vanade seadmete kõrvaldamise kohta täpsema informatsiooni saamiseks võtke palun ühendust kohalike ametiasutustega, jäätmekäitlusfirmaga või kauplusega, kust te toote ostsite.

Español/Spanish

Información medioambiental para clientes de la Unión Europea

La Directiva 2002/96/CE de la UE exige que los equipos que lleven este símbolo en el propio aparato y/o en su embalaje no deben eliminarse junto con otros residuos urbanos no seleccionados. El símbolo indica que el producto en cuestión debe separarse de los residuos domésticos convencionales con vistas a su eliminación. Es responsabilidad suya desechar este y cualesquiera otros aparatos eléctricos y electrónicos a través de los puntos de recogida que ponen a su disposición el gobierno y las autoridades locales. Al desechar y reciclar correctamente estos aparatos estará contribuyendo a evitar posibles consecuencias negativas para el medio ambiente y la salud de las personas. Si desea obtener información más detallada sobre la eliminación segura de su aparato usado, consulte a las autoridades locales, al servicio de recogida y eliminación de residuos de su zona o pregunte en la tienda donde adquirió el producto.

Ελληνικά/Greek

Στοιχεία περιβαλλοντικής προστασίας για πελάτες εντός της Ευρωπαϊκής Ένωσης

Η Κοινοτική Οδηγία 2002/96/EC απαιτεί ότι ο εξοπλισμός ο οποίος φέρει αυτό το σύμβολο στο προϊόν και/ή στη συσκευασία του δεν πρέπει να απορρίπτεται μαζί με τα μικτά κοινотικά απορρίμματα. Το σύμβολο υποδεικνύει ότι αυτό το προϊόν θα πρέπει να απορρίπτεται ξεχωριστά από τα συνήθη οικιακά απορρίμματα. Είστε υπεύθυνος για την απόρριψη του παρόντος και άλλου ηλεκτρικού και ηλεκτρονικού εξοπλισμού μέσω των καθορισμένων εγκαταστάσεων συγκέντρωσης απορριμμάτων οι οποίες παρέχονται από το κράτος ή τις αρμόδιες τοπικές αρχές. Η σωστή απόρριψη και ανακύκλωση συμβάλλει στην πρόληψη πιθανών αρνητικών συνεπειών για το περιβάλλον και την υγεία. Για περισσότερες πληροφορίες σχετικά με την απόρριψη του παλιού σας εξοπλισμού, παρακαλώ επικοινωνήστε με τις τοπικές αρχές, τις υπηρεσίες απόρριψης ή το κατάστημα από το οποίο αγοράσατε το προϊόν.

Français/French

Informations environnementales pour les clients de l'Union européenne

La directive européenne 2002/96/CE exige que l'équipement sur lequel est apposé ce symbole sur le produit et/ou son emballage ne soit pas jeté avec les autres ordures ménagères. Ce symbole indique que le produit doit être éliminé dans un circuit distinct de celui pour les déchets des ménages. Il est de votre responsabilité de jeter ce matériel ainsi que tout autre matériel électrique ou électronique par les moyens de collecte indiqués par le gouvernement et les pouvoirs publics des collectivités territoriales. L'élimination et le recyclage en bonne et due forme ont pour but de lutter contre l'impact néfaste potentiel de ce type de produits sur l'environnement et la santé publique. Pour plus d'informations sur le mode d'élimination de votre ancien équipement, veuillez prendre contact avec les pouvoirs publics locaux, le service de traitement des déchets, ou l'endroit où vous avez acheté le produit.

Italiano/Italian

Informazioni relative all'ambiente per i clienti residenti nell'Unione Europea

La direttiva europea 2002/96/EC richiede che le apparecchiature contrassegnate con questo simbolo sul prodotto e/o sull'imballaggio non siano smaltite insieme ai rifiuti urbani non differenziati. Il simbolo indica che questo prodotto non deve essere smaltito insieme ai normali rifiuti domestici. È responsabilità del proprietario smaltire sia questi prodotti sia le altre apparecchiature elettriche ed elettroniche mediante le specifiche strutture di raccolta indicate dal governo o dagli enti pubblici locali. Il corretto smaltimento ed il riciclaggio aiuteranno a prevenire conseguenze potenzialmente negative per l'ambiente e per la salute dell'essere umano. Per ricevere informazioni più dettagliate circa lo smaltimento delle vecchie apparecchiature in Vostro possesso, Vi invitiamo a contattare gli enti pubblici di competenza, il servizio di smaltimento rifiuti o il negozio nel quale avete acquistato il prodotto.

Latviešu valoda/Latvian

Ekoloģiska informācija klientiem Eiropas Savienības jurisdikcijā

Direktīvā 2002/96/EK ir prasība, ka aprīkojumu, kam pievienota zīme uz paša izstrādājuma vai uz tā iesaiņojuma, nedrīkst izmest nešķīrotā veidā kopā ar komunālajiem atkritumiem (tiem, ko rada vietēji iedzīvotāji un uzņēmumi). Šī zīme nozīmē to, ka šī ierīce ir jāizmet atkritumos tā, lai tā nenonāktu kopā ar parastiem majsaimniecības atkritumiem. Jūsu pienākums ir šo un citas elektriskas un elektroniskas ierīces izmest atkritumos, izmantojot īpašus atkritumu savākšanas veidus un līdzekļus, ko nodrošina valsts un pašvaldību iestādes. Ja izmešana atkritumos un pārstrāde tiek veikta pareizi, tad mazinās iespējamais kaitējums dabai un cilvēku veselībai. Sīkākas ziņas par novecojušu aprīkojuma izmešanu atkritumos jūs varat saņemt vietējā pašvaldībā, atkritumu savākšanas dienestā, kā arī veikalā, kur iegādājāties šo izstrādājumu.

Lietuvškai/Lithuanian

Aplinkosaugos informacija, skirta Europos Sąjungos vartotojams

Europos direktyva 2002/96/EC numato, kad įrangos, kuri ir (arba) kurios pakuotė yra pažymėta šiuo simboliu, negalima šalinti kartu su nerūšiuotomis komunalinėmis atliekomis. Šis simbolis rodo, kad gaminį reikia šalinti atskirai nuo bendro buitinių atliekų srauto. Jūs privalote užtikrinti, kad ši ir kita elektros ar elektroninė įranga būtų šalinama per tam tikras nacionalinės ar vietinės valdžios nustatytas atliekų rinkimo sistemas. Tinkamai šalinant ir perdurbant atliekas, bus išvengta galimos žalos aplinkai ir žmonių sveikatai. Daugiau informacijos apie jūsų senos įrangos šalinimą gali pateikti vietinės valdžios institucijos, atliekų šalinimo tarnybos arba parduotuvės, kuriose įsigijote tą gaminį.

Malti/Maltese

Informazzjoni Ambjentali għal Kliġenti fl-Unjoni Ewropea

Id-Direttiva Ewropea 2002/96/KE titlob li t-tagħmir li jkun fih is-simbolu fuq il-prodott u/jew fuq l-ippakkjar ma jstax jintrema ma' skart municiġpali li ma għiex iſseparat. Is-simbolu jindika li dan il-prodott għandu jintrema separatament minn ma' l-iskart domestiku regolari. Hija responsabbiltà tiegħek li tarmi dan it-tagħmir u kull tagħmir iehor ta' l-elettriku u elettroniku permezz ta' faċilitajiet ta' għbir appuntati apposta mill-gvern jew mill-awtoritajiet lokali. Ir-rimi b'mod korrett u r-riciklagg jghin jipprevjeni konsegwenzi negattivi potenzjali għall-ambjent u għas-saħħa tal-bniedem. Għal aktar informazzjoni dettaljata dwar ir-rimi tat-tagħmir antik tiegħek, jekk jogħġbok ikkuntattja lill-awtoritajiet lokali tiegħek, is-servizzi għar-rimi ta' l-iskart, jew il-hanut minn fejn xtrajt il-prodott.

Magyar/Hungarian

Környezetvédelmi információ az európai uniós vásárlók számára

A 2002/96/EC számú európai uniós irányelv megkívánja, hogy azokat a termékeket, amelyekben, és/vagy amelyek csomagolásán az alábbi címke megjelenik, tilos a többi szelektálatlan lakossági hulladékkal együtt kidobni. A címke azt jelöli, hogy az adott termék kidobásakor a szokványos háztartási hulladékelszállítási rendszerektől elkülönített eljárást kell alkalmazni. Az Ön felelőssége, hogy ezt, és más elektromos és elektronikus berendezéseit a kormányzati vagy a helyi hatóságok által kijelölt gyűjtőrendszeren keresztül számolja fel. A megfelelő hulladékfeldolgozás segít a környezetre és az emberi egészségre potenciálisan ártalmas negatív hatások megelőzésében. Ha elavult berendezéseinek felszámolásához további részletes információra van szüksége, kérjük, lépjen kapcsolatba a helyi hatóságokkal, a hulladékfeldolgozási szolgálattal, vagy azzal üzlettel, ahol a terméket vásárolta.

Nederlands/Dutch

Milieu-informatie voor klanten in de Europese Unie

De Europese Richtlijn 2002/96/EC schrijft voor dat apparatuur die is voorzien van dit symbool op het product of de verpakking, niet mag worden ingezameld met niet-gescheiden huishoudelijk afval. Dit symbool geeft aan dat het product apart moet worden ingezameld. U bent zelf verantwoordelijk voor de vernietiging van deze en andere elektrische en elektronische apparatuur via de daarvoor door de landelijke of plaatselijke overheid aangewezen inzamelingskanalen. De juiste vernietiging en recycling van deze apparatuur voorkomt mogelijke negatieve gevolgen voor het milieu en de gezondheid. Voor meer informatie over het vernietigen van uw oude apparatuur neemt u contact op met de plaatselijke autoriteiten of afvalverwerkingsdienst, of met de winkel waar u het product hebt aangeschaft.

Norsk/Norwegian

Miljøinformasjon for kunder i EU

EU-direktiv 2002/96/EF krever at utstyr med følgende symbol avbildet på produktet og/eller pakningen, ikke må kastes sammen med usortert avfall. Symbolet indikerer at dette produktet skal håndteres atskilt fra ordinær avfallsinnsamling for husholdningsavfall. Det er ditt ansvar å kvitte deg med dette produktet og annet elektrisk og elektronisk avfall via egne innsamlingsordninger slik myndighetene eller kommunene bestemmer. Korrekt avfallshåndtering og gjenvinning vil være med på å forhindre mulige negative konsekvenser for miljø og helse. For nærmere informasjon om håndtering av det kasserte utstyret ditt, kan du ta kontakt med kommunen, en innsamlingsstasjon for avfall eller butikken der du kjøpte produktet.

Polski/Polish

Informacja dla klientów w Unii Europejskiej o przepisach dotyczących ochrony środowiska

Dyrektywa Europejska 2002/96/EC wymaga, aby sprzęt oznaczony symbolem znajdującym się na produkcie i/lub jego opakowaniu nie był wyrzucany razem z innymi niesortowanymi odpadami komunalnymi. Symbol ten wskazuje, że produkt nie powinien być usuwany razem ze zwykłymi odpadami z gospodarstw domowych. Na Państwu spoczywa obowiązek wyrzucania tego i innych urządzeń elektrycznych oraz elektronicznych w punktach odbioru wyznaczonych przez władze krajowe lub lokalne. Pozbywanie się sprzętu we właściwy sposób i jego recykling pomogą zapobiec potencjalnie negatywnym konsekwencjom dla środowiska i zdrowia ludzkiego. W celu uzyskania szczegółowych informacji o usuwaniu starego sprzętu, prosimy zwrócić się do lokalnych władz, służb oczyszczania miasta lub sklepu, w którym produkt został nabyty.

Português/Portuguese

Informação ambiental para clientes da União Europeia

A Directiva Europeia 2002/96/CE exige que o equipamento que exibe este símbolo no produto e/ou na sua embalagem não seja eliminado junto com os resíduos municipais não separados. O símbolo indica que este produto deve ser eliminado separadamente dos resíduos domésticos regulares. É da sua responsabilidade eliminar este e qualquer outro equipamento eléctrico e electrónico através dos instalações de recolha designadas pelas autoridades governamentais ou locais. A eliminação e reciclagem correctas ajudarão a prevenir as consequências negativas para o ambiente e para a saúde humana. Para obter informações mais detalhadas sobre a forma de eliminar o seu equipamento antigo, contacte as autoridades locais, os serviços de eliminação de resíduos ou o estabelecimento comercial onde adquiriu o produto.

Slovenčina/Slovak

Informácie o ochrane životného prostredia pre zákazníkov v Európskej únii

Podľa európskej smernice 2002/96/ES zariadenie s týmto symbolom na produkte a/alebo jeho balení nesmie byť likvidované spolu s netriedeným komunálnym odpadom. Symbol znamená, že produkt by sa mal likvidovať oddelene od bežného odpadu z domácností. Je vašou povinnosťou likvidovať toto i ostatné elektrické a elektronické zariadenia prostredníctvom špecializovaných zberných zariadení určených vládou alebo miestnymi orgánmi. Správna likvidácia a recyklácia pomôže zabrániť prípadným negatívnym dopadom na životné prostredie a zdravie ľudí. Ak máte záujem o podrobnejšie informácie o likvidácii starého zariadenia, obráťte sa, prosím, na miestne orgány, organizácie zaoberajúce sa likvidáciou odpadov alebo obchod, v ktorom ste si produkt zakúpili.

Slovenčina/Slovene

Okoljske informacije za stranke v Evropski uniji

Evropska direktiva 2002/96/EC prepoveduje odlaganje opreme, označene s tem simbolom – na izdelku in/ali na embalaži – med običajne, nerazvrščene odpadke. Ta simbol opozarja, da je treba izdelek odvreči ločeno od preostalih gospodinjstvih odpadkov. Vaša odgovornost je, da to in preostalo električno in elektronsko opremo odnesete na posebna zbirališča, ki jih določijo državne ustanove ali lokalna uprava. S pravilnim odlaganjem in recikliranjem boste preprečili morebitne škodljive vplive na okolje in zdravje ljudi. Če želite izvedeti več o odlaganju stare opreme, se obrnite na lokalno upravo, odpad ali trgovino, kjer ste izdelek kupili.

Suomi/Finnish

Ympäristöä koskevia tietoja EU-alueen asiakkaille

EU-direktiivi 2002/96/EY edellyttää, että jos laitteistossa on tämä symboli itse tuotteessa ja/tai sen pakkauksessa, laitteistoa ei saa hävittää lajittelemattoman yhdyskuntajätteen mukana. Symboli merkitsee sitä, että tämä tuote on hävitettävä erillään tavallisesta kotitalousjätteestä. Sinun vastuullasi on hävittää tämä elektroniikkatuote ja muut vastaavat elektroniikkatuotteet viemällä tuote tai tuotteet viranomaisten määräämään keräyspisteeseen. Laitteiston oikea hävittäminen estää mahdolliset kielteiset vaikutukset ympäristöön ja ihmisten terveyteen. Lisätietoja vanhan laitteiston oikeasta hävitystavasta saa paikallisilta viranomaisilta, jätteenhävityspalvelusta tai siitä myymälästä, josta ostit tuotteen.

Svenska/Swedish

Miljöinformation för kunder i Europeiska unionen

Det europeiska direktivet 2002/96/EC kräver att utrustning med denna symbol på produkten och/eller förpackningen inte får kastas med osorterat kommunalt avfall. Symbolen visar att denna produkt bör kastas efter att den avskiljts från vanligt hushållsavfall. Det faller på ditt ansvar att kasta denna och annan elektrisk och elektronisk utrustning på fastställda insamlingsplatser utsedda av regeringen eller lokala myndigheter. Korrekt kassering och återvinning skyddar mot eventuella negativa konsekvenser för miljön och personhälsa. För mer detaljerad information om kassering av din gamla utrustning kontaktar du dina lokala myndigheter, avfallshanteringen eller butiken där du köpte produkten.

For more information, visit www.linksys.com.

Appendix I: Contact Information

Need to contact Linksys?

Visit us online for information on the latest products and updates to your existing products at:

<http://www.linksys.com> or
[ftp.linksys.com](ftp://ftp.linksys.com)

Can't find information about a product you want to buy on the web? Do you want to know more about networking with Linksys products? Give our advice line a call at:
Or fax your request in to:

800-546-5797 (LINKSYS)
949-823-3002

If you experience problems with any Linksys product, you can call us at:
Don't wish to call? You can e-mail us at:

800-326-7114
support@linksys.com

If any Linksys product proves defective during its warranty period, you can call the Linksys Return Merchandise Authorization department for obtaining a Return Authorization Number at:
(Details on Warranty and RMA issues can be found in the Warranty Information section in this Guide.)

949-823-3000