

LINKSYS®

A Division of Cisco Systems, Inc.



Analog Telephone Adapter

with 2 FXS Ports

User Guide

Voip
Voice

Model No. **SPA2002**

CISCO SYSTEMS



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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 Guide

Your guide to the Phone Adapter has been designed to make understanding networking with the Phone Adapter 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 Phone Adapter.



This exclamation point means there is a caution or warning and is something that could damage your property or the Phone Adapter.



This question mark provides you with a reminder about something you might need to do while using the Phone Adapter.

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 Linksys Phone Adapter with 2 FXS ports. This Phone Adapter will allow you to make phone or fax calls using your broadband connection.

How does the Phone Adapter do this? Plug the Phone Adapter into your network router or gateway, then connect your phones or fax machines to the Phone Adapter. Each of the Phone Adapter's two telephone jacks operate independently, with separate Internet phone services and phone numbers, so you can have up to two Internet phone lines delivered through your cable or DSL Internet connection.

What does all of this mean? Networks are useful tools for sharing Internet access and computer resources. The Phone Adapter allows your phones or fax machines to take advantage of and share your high-speed Internet connection. You can even make phone calls while you're surfing the Internet (Internet phone services required). Networks are not only useful in homes and offices, they also can be fun too.

Refer to the instructions in the *Quick Installation* or this *User Guide* to help you connect the Phone Adapter after you have set up an account with your Internet phone service provider. The instructions in this *User Guide* will help you get the most out of your Phone Adapter.



NOTE: For information about your Internet phone service, refer to the materials provided by your Internet phone service provider.

What's in this Guide?

This *User Guide* covers the steps for installing the Phone Adapter.

- **Chapter 1: Introduction**
Describes the Phone Adapter's applications and the contents of this *User Guide*.
- **Chapter 2: Getting to Know the Phone Adapter**
Describes the physical features of the Phone Adapter.
- **Chapter 3: Connecting the Phone Adapter**
Explains how to connect the Phone Adapter to your network and phones (or fax machines).
- **Chapter 4: Using the Phone Adapter's Interactive Voice Response Menu**
Explains how to configure the Phone Adapter's network settings using the Interactive Voice Response Menu.
- **Appendix A: Troubleshooting**
Describes potential problems and solutions regarding use of the Phone Adapter.
- **Appendix B: Glossary**
Gives brief descriptions of terms frequently used in networking.
- **Appendix C: Specifications**
Provides technical specifications for the Phone Adapter.
- **Appendix D: Warranty Information**
Provides warranty information for the Phone Adapter.
- **Appendix E: Regulatory Information**
Provides regulatory information regarding the Phone Adapter.
- **Appendix F: Contact Information**
Provides contact information for a variety of Linksys resources, including Technical Support.

Chapter 2: Getting to Know the Phone Adapter

Back Panel Ports and LEDs

The Phone Adapter's ports and LEDs are located on the back panel.

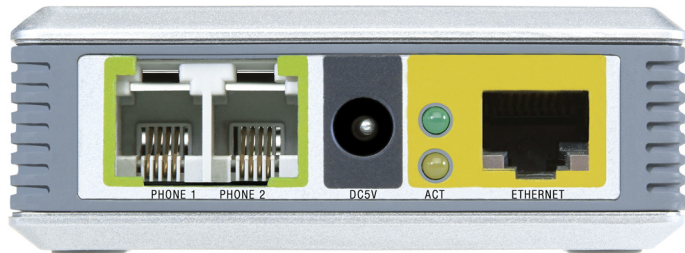


Figure 2-1: Back Panel

PHONE 1 Port The **PHONE 1** port (for your primary Internet phone line) allows you to connect your telephone to the Phone Adapter using an RJ-11 telephone cable (not included).

PHONE 2 Port If you have a second Internet phone service account, use the **PHONE 2** port to connect a second telephone (or fax machine) to the Phone Adapter using an RJ-11 telephone cable (not included).



NOTE: The Phone ports do not carry any voltage.

ETHERNET Port The **ETHERNET** port allows you to connect the Phone Adapter to your router or gateway using a Category 5 (or better) Ethernet network cable.

POWER Port The **POWER** port is where you connect the included power adapter.

STATUS LED The **STATUS** LED remains solid green when the Phone Adapter is powered on and ready. It flashes green when the Phone Adapter is booting up, undergoing a self-test, or performing a firmware upgrade.

ACT LED The **ACT** LED remains solid yellow when the Phone Adapter is connected to your network through the Ethernet port. It flashes yellow when data is being sent or received through the Ethernet port.

Chapter 3: Connecting the Phone Adapter

Overview

This chapter explains how to connect the Phone Adapter to your network and telephones or fax machines. Shown below is a connection diagram displaying a typical setup.

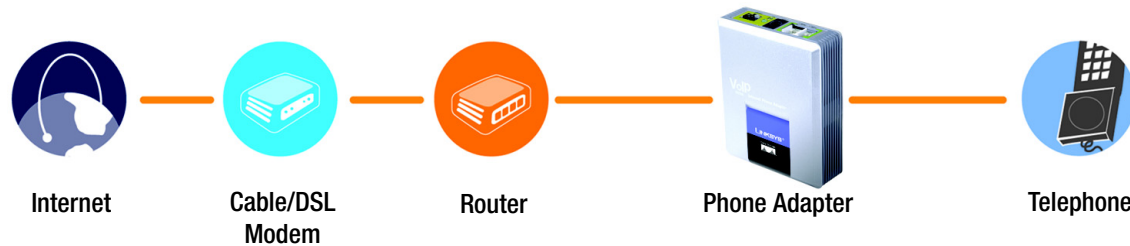


Figure 3-1: Connection Diagram of a Typical Setup

Connecting the Phone Adapter

If you already have an account set up with your Internet phone service provider, then proceed to step 1.

If you do not have an account set up with your Internet phone service provider, then go to your provider's website and sign up for service. After you have set up an account, proceed to step 1.

1. Using a telephone cable, connect your telephone to the PHONE 1 port of the Phone Adapter.
2. If you have a second Internet phone service account, connect another telephone or a fax machine to the PHONE 2 port of the Phone Adapter.



IMPORTANT: The Phone Adapter includes a ringer (ring signal generator), which is a source of hazardous voltage. When the ringer is activated by an incoming call, do not touch the Phone port wires, the wires of a cable connected to either of the Phone ports, or the internal circuitry of the Phone Adapter.



IMPORTANT: Do not connect either of the Phone ports to a telephone wall jack. Make sure you only connect a telephone or fax machine to either of the Phone ports. Otherwise, the Phone Adapter or the telephone wiring in your home or office may be damaged.



Figure 3-2: Connect the RJ-11 Telephone Cable

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3. Connect the included Ethernet network cable to the ETHERNET port of the Phone Adapter.

Connect the other end to one of the Ethernet ports on your router or gateway.

4. Connect the included power adapter to the POWER port on the back panel of the Phone Adapter.

Connect the other end to a standard electrical outlet.

5. The Status and Act LEDs will be solidly lit when the Phone Adapter is ready for use.

6. Follow the instructions provided by your Internet phone service provider.

If you need to manually configure the Phone Adapter's network settings, you can use the telephone connected to the Phone Adapter. See "Chapter 4: Using the Phone Adapter's Interactive Voice Response Menu" for instructions.

The installation of the Phone Adapter is complete. Now you can pick up your phone and make calls.



Figure 3-3: Connect the Ethernet Network Cable



Figure 3-4: Connect the Power Adapter

Chapter 4: Using the Phone Adapter's Interactive Voice Response Menu

Overview

You may need to manually configure the Phone Adapter by entering the settings provided by your Internet phone service provider. This chapter explains how to use the Interactive Voice Response Menu to configure the Phone Adapter's network settings. You will use the phone's keypad to enter your commands and select choices, and the Phone Adapter will respond with voice responses.



NOTE: If your Internet phone service provider sent you the Phone Adapter, then it may be pre-configured for you, and you do not need to change any settings. Refer to the instructions provided by your service provider for more information.

Accessing the Interactive Voice Response Menu

1. Use a telephone connected to the PHONE 1 or PHONE 2 port of the Phone Adapter.
2. Press the * (star) key four times.
3. Wait until you hear "Configuration menu. Please enter option followed by the # (pound) key or hang up to exit."
4. Refer to the table on page 7 for a list of actions, commands, menu choices, and descriptions. After you select an option, press the # (pound) key. To exit the menu, hang up the telephone.

Using the Interactive Voice Response Menu

When entering values, such as an IP address, you may exit without saving your changes by press the * (star) key twice within half a second. Otherwise, the * (star) key will be treated as a decimal point or dot.

After entering a value, such as an IP address, press the # (pound) key to indicate you have finished your selection. To save the new setting, press the 1 key. To review the new setting, press the 2 key. To re-enter the new setting, press the 3 key. To cancel your entry and return to the main menu, press the * (star) key.

For example, to enter the IP address *191.168.1.105* using your telephone’s keypad, press: **191*168*1*105**. When you are finished, press the # (pound) key, then press the 1 key to save the IP address. To cancel your entry and return to the main menu, press the * (star) key.

If the menu is inactive for more than one minute, the Phone Adapter will automatically exit the Interactive Voice Response Menu. To re-enter the menu, press the * (star) key four times.

The settings you have saved will take effect when you hang up the telephone. The Phone Adapter may reboot at this time.

Interactive Voice Response Menu

| Action | Command (press these keys on the telephone) | Choices | Description |
|---------------------------------------|---|---------|--|
| Enter Interactive Voice Response Menu | **** | — | Use this command to enter the Interactive Voice Response Menu. Do not press any other keys until you hear, “Configuration menu. Please enter option followed by the # (pound) key or hang up to exit.” |
| Check DHCP | 100 | — | Use this command to find out if DHCP has been enabled or disabled. If it is enabled, the Phone Adapter will be assigned an IP address automatically by your network router or gateway. If it is disabled, then the Phone Adapter will need to use a static IP address. |

Interactive Voice Response Menu

| Action | Command (press these keys on the telephone) | Choices | Description |
|--|--|---|--|
| Enable/Disable DHCP | 101 | Enter 1 to enable Enter 0 to disable | Enable or disable the Phone Adapter's DHCP feature. If your network router assigns IP addresses, enter 1 , otherwise, enter 0 . |
| Check IP Address | 110 | — | Use this command to check the current IP address of the Phone Adapter. |
| Set Static IP Address | 111 | Enter the IP address using the numbers on your telephone keypad. Use the * (star) key to enter a decimal point. | To set a static IP address, the DHCP feature must be disabled. If the DHCP feature is enabled, you will hear, "Invalid Option," if you try to set a static IP address. |
| Check Network Mask (or Subnet Mask) | 120 | — | Use this command to check the current network mask of the Phone Adapter. |
| Set Network Mask (or Subnet Mask) | 121 | Enter the network mask using numbers on your telephone keypad. Use the * (star) key to enter a decimal point. | To set the network mask, the DHCP feature must be disabled. If the DHCP feature is enabled, you will hear, "Invalid Option," if you try to set the network mask. |
| Check Static Gateway IP Address | 130 | — | Use this command to check the current gateway IP address of the Phone Adapter. |
| Set Static Gateway IP Address | 131 | Enter the IP address using numbers on your telephone keypad. Use the * (star) key to enter a decimal point. | To set a static gateway IP address, the DHCP feature must be disabled. If the DHCP feature is enabled, you will hear, "Invalid Option," if you try to set a static gateway IP address. |

Interactive Voice Response Menu

| Action | Command (press these keys on the telephone) | Choices | Description |
|---|--|---|--|
| Check MAC Address | 140 | — | Use this command to check the current MAC address of the Phone Adapter in hexadecimal string format. |
| Check Firmware Version | 150 | — | Use this command to check the current version number of the firmware currently installed on the Phone Adapter. |
| Enable/Disable Web-based Utility of Phone Adapter | 7932 | Enter 1 to enable Enter 0 to disable | <p>This feature is password protected by your Internet phone service provider. (The Web-based Utility is disabled by default because you will not need to use it unless instructed to do so by your service provider.)</p> <p>If you have been provided a password, see “Entering a Password.”</p> |
| Manual Reboot | 732668 | — | After you hear, “Option successful,” hang up the phone. The Phone Adapter will automatically reboot. |

Interactive Voice Response Menu

| Action | Command (press these keys on the telephone) | Choices | Description |
|---------------|--|---|---|
| Factory Reset | 73738 | Enter 1 to confirm Enter * (star) to cancel | <p>This feature is password protected by your Internet phone service provider. (You will not need to reset the Phone Adapter to its factory default settings unless instructed to do so by your service provider.)</p> <p>If you have been provided a password, see “Entering a Password.”</p> <p>After you have entered your password, the Phone Adapter will request confirmation. After confirmation, you will hear, “Option successful.” Hang up the phone. The Phone Adapter will reboot and all settings will be reset to their factory default settings.</p> |

Entering a Password

You will be prompted to enter a password if you want to enable the Web-based Utility or reset the Phone Adapter to its factory default settings. To enter a password, use the phone's keypad, and follow the appropriate instructions.

- To enter A, B, C, a, b, or c — press the **2** key.
- To enter D, E, F, d, e, or f — press the **3** key.
- To enter G, H, I, g, h, or i — press the **4** key.
- To enter J, K, L, j, k, or l — press the **5** key.
- To enter M, N, O, m, n, or o — press the **6** key.
- To enter P, Q, R, S, o, q, r, or s — press the **7** key.
- To enter T, U, V, t, u, or v — press the **8** key.
- To enter W, X, Y, Z, w, x, y, or z — press the **9** key.
- To enter all other characters, press the **0** key.



NOTE: These bulleted instructions above only apply when you are entering a password. Pressing a number at all other times selects only a number, not a letter or punctuation mark.

For example, to enter the password *phone@321* by keypad, press: **746630321**. When you are finished, press the # (pound) key. To cancel your entry and return to the main menu, press the * (star) key.

Configuring the Settings for Your Internet Phone Service

If you want to change the settings for your Internet phone service, visit your Internet phone service provider's website and make configuration changes online. For more information, refer to the instructions provided by your Internet phone service provider.

Appendix A: Troubleshooting

This appendix provides solutions to problems you may experience when installing and using the Phone Adapter. Read the descriptions below to solve your problems. If you can't find an answer here, check your Internet phone service provider's website or the Linksys website at www.linksys.com.

Common Problems and Solutions

1. *I don't hear a dial tone.*

Go through this checklist until your problem is solved:

- Make sure the telephone is plugged into the correct port, PHONE 1 or PHONE 2. (You should use the Phone 2 port only if you have more than one Internet telephone service account.)
- Make sure the yellow ACT LED on the back panel of the Phone Adapter is lit. If it is not lit, check your router and network connection to the Internet.
- Make sure the green STATUS LED on the back panel of the Phone Adapter is lit, then pick up the telephone; you should now have a dial tone.
- Follow these instructions to reboot your cable or DSL modem, Phone Adapter, and router:
 1. Power off your cable or DSL modem by unplugging its power adapter.
 2. Power off the router by unplugging its power adapter.
 3. Power off the Phone Adapter by unplugging its power adapter.
 4. Wait two minutes, then power on your cable or DSL modem by plugging its power adapter into an electrical outlet.
 5. Wait two minutes, then power on the router by plugging its power adapter into an electrical outlet.
 6. Wait five minutes, then power on the Phone Adapter by plugging its power adapter into an electrical outlet.
 7. Reboot one of your networked computers, and check to see if you have an active Internet connection.
 8. Pick up the telephone. You should now have a dial tone.
- Set up port forwarding on your router. You must specify that ports 5060-5061 (UDP), 53-53 (UDP), 69-69 (UDP), and 10000-20000 (UDP) are forwarded to the IP address of the Phone Adapter.

Before you set up port forwarding on your router, change two of the Phone Adapter's settings using its Interactive Voice Response Menu. First, disable its DHCP feature, then assign a static IP address to the Phone Adapter. See "Chapter 4: Using the Interactive Voice Response Menu" for instructions.

If you have a non-Linksys router, refer to your router's documentation for instructions.

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If you have a Linksys router, follow the instructions below:

1. On one of your networked computers, open your web browser.
2. Access the Router's Web-based Utility by going to **http://192.168.1.1** or the IP address of the Router. You see the login screen.
3. Leave the *User Name* field blank, enter the Router's password (the default is **admin**) in the *Password* field, then click the **OK** button.
4. Click the **Applications & Gaming** tab, then click the **Port Range Forwarding** tab.
5. For each port range, enter a different name in the *Application* field. Then enter the number or range of external port(s) used by the Phone Adapter.
6. Select **UDP** as the protocol you will be using.
7. Enter the IP address of the Phone Adapter. For example, if the Phone Adapter's IP address is 192.168.1.100, you would enter 100 in the field provided.
8. Repeat steps 5-7 until you have entered all four port ranges for the Phone Adapter.

| Application | Start and End | Protocol | IP Address | Enable |
|------------------|----------------|----------|-------------------------------|--------|
| Internet phone 1 | 5060 to 5061 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 2 | 53 to 53 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 3 | 69 to 69 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 4 | 10000 to 20000 | UDP | (IP address of Phone Adapter) | X |

9. Click the **Enable** checkbox for each port service you want to use.
10. When you are finished configuring Port Range Forwarding, click the **Save Settings** button.

2. When I make a telephone call, the call doesn't go through; instead, I hear a fast busy signal.

Go through this checklist until your problem is solved:

- Pick up your phone and dial 1 + area code + phone number. Some Internet phone services require that you dial 1 and the area code for all calls, even local ones.
- Follow these instructions to reboot your cable or DSL modem, Phone Adapter, and router:
 1. Power off your cable or DSL modem by unplugging its power adapter.
 2. Power off the router by unplugging its power adapter.
 3. Power off the Phone Adapter by unplugging its power adapter.
 4. Wait two minutes, then power on your cable or DSL modem by plugging its power adapter into an electrical outlet.
 5. Wait two minutes, then power on the router by plugging its power adapter into an electrical outlet.
 6. Wait five minutes, then power on the Phone Adapter by plugging its power adapter into an electrical outlet.
 7. Reboot one of your networked computers, and check to see if you have an active Internet connection.
 8. Pick up the telephone. You should now have a dial tone.
- Set up port forwarding on your router. You must specify that ports 5060-5061 (UDP), 53-53 (UDP), 69-69 (UDP), and 10000-20000 (UDP) are forwarded to the IP address of the Phone Adapter.

Before you set up port forwarding on your router, change two of the Phone Adapter's settings using its Interactive Voice Response Menu. First, disable its DHCP feature, then assign a static IP address to the Phone Adapter. See "Chapter 4: Using the Interactive Voice Response Menu" for instructions.

If you have a non-Linksys router, refer to your router's documentation for instructions.

If you have a Linksys router, follow the instructions below:

1. On one of your networked computers, open your web browser.
2. Access the Router's Web-based Utility by going to <http://192.168.1.1> or the IP address of the Router. You see the login screen.
3. Leave the *User Name* field blank, enter the Router's password (the default is **admin**) in the *Password* field, then click the **OK** button.
4. Click the **Applications & Gaming** tab, then click the **Port Range Forwarding** tab.
5. For each port range, enter a different name in the *Application* field. Then enter the number or range of external port(s) used by the Phone Adapter.
6. Select **UDP** as the protocol you will be using.
7. Enter the IP address of the Phone Adapter. For example, if the Phone Adapter's IP address is 192.168.1.100, you would enter 100 in the field provided.

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8. Repeat steps 5-7 until you have entered all four port ranges for the Phone Adapter.

| Application | Start and End | Protocol | IP Address | Enable |
|------------------|----------------|----------|-------------------------------|--------|
| Internet phone 1 | 5060 to 5061 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 2 | 53 to 53 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 3 | 69 to 69 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 4 | 10000 to 20000 | UDP | (IP address of Phone Adapter) | X |

9. Click the **Enable** checkbox for each port service you want to use.

10. When you are finished configuring Port Range Forwarding, click the **Save Settings** button.

3. *When I'm on a telephone call, words are dropped intermittently.*

Go through this checklist until your problem is solved:

- If you're using a wireless router and a cordless phone, they may be using the same frequency and may interfere with each other. Move the cordless phone farther away from the router.
- There may be heavy network activity, particularly if you are running a server or using a file sharing program. Try to limit network or Internet activity during Internet telephone calls. For example, if you are running a file sharing program, file may be uploaded in the background even though you are not downloading any file, so make sure you exit the program before making Internet phone calls.
- There may not be enough bandwidth available for your Internet phone call. You may want to test your bandwidth using one of the bandwidth tests available online. If necessary, access your Internet phone service account and reduce the bandwidth requirements for your service. For more information, refer to your service provider's website.

4. My telephone does not ring, and my calls automatically go to voicemail.

Go through this checklist until your problem is solved:

- Make sure the telephone is plugged into the correct port, PHONE 1 or PHONE 2. (You should use the Phone 2 port only if you have more than one Internet telephone service account.)
- Make sure the ringer volume on your telephone is set to an audible level.
- Follow these instructions to reboot your cable or DSL modem, Phone Adapter, and router:
 1. Power off your cable or DSL modem by unplugging its power adapter.
 2. Power off the router by unplugging its power adapter.
 3. Power off the Phone Adapter by unplugging its power adapter.
 4. Wait two minutes, then power on your cable or DSL modem by plugging its power adapter into an electrical outlet.
 5. Wait two minutes, then power on the router by plugging its power adapter into an electrical outlet.
 6. Wait five minutes, then power on the Phone Adapter by plugging its power adapter into an electrical outlet.
 7. Reboot one of your networked computers, and check to see if you have an active Internet connection.
- Set up port forwarding on your router. You must specify that ports 5060-5061 (UDP), 53-53 (UDP), 69-69 (UDP), and 10000-20000 (UDP) are forwarded to the IP address of the Phone Adapter.

Before you set up port forwarding on your router, change two of the Phone Adapter's settings using its Interactive Voice Response Menu. First, disable its DHCP feature, then assign a static IP address to the Phone Adapter. See "Chapter 4: Using the Interactive Voice Response Menu" for instructions.

If you have a non-Linksys router, refer to your router's documentation for instructions.

If you have a Linksys router, follow the instructions below:

1. On one of your networked computers, open your web browser.
2. Access the Router's Web-based Utility by going to <http://192.168.1.1> or the IP address of the Router. You see the login screen.
3. Leave the *User Name* field blank, enter the Router's password (the default is **admin**) in the *Password* field, then click the **OK** button.
4. Click the **Applications & Gaming** tab, then click the **Port Range Forwarding** tab.
5. For each port range, enter a different name in the *Application* field. Then enter the number or range of external port(s) used by the Phone Adapter.
6. Select **UDP** as the protocol you will be using.
7. Enter the IP address of the Phone Adapter. For example, if the Phone Adapter's IP address is 192.168.1.100, you would enter 100 in the field provided.

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8. Repeat steps 5-7 until you have entered all four port ranges for the Phone Adapter.

| Application | Start and End | Protocol | IP Address | Enable |
|------------------|----------------|----------|-------------------------------|--------|
| Internet phone 1 | 5060 to 5061 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 2 | 53 to 53 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 3 | 69 to 69 | UDP | (IP address of Phone Adapter) | X |
| Internet phone 4 | 10000 to 20000 | UDP | (IP address of Phone Adapter) | X |

9. Click the **Enable** checkbox for each port service you want to use.

10. When you are finished configuring Port Range Forwarding, click the **Save Settings** button.

5. *The STATUS LED does not light up.*

Go through this checklist until your problem is solved:

- Check the cable connecting the Phone Adapter to your router.
- Make sure your network has an active Internet connection. If it does not, follow these instructions to reboot your cable or DSL modem, Phone Adapter, and router:
 1. Power off your cable or DSL modem by unplugging its power adapter.
 2. Power off the router by unplugging its power adapter.
 3. Power off the Phone Adapter by unplugging its power adapter.
 4. Wait two minutes, then power on your cable or DSL modem by plugging its power adapter into an electrical outlet.
 5. Wait two minutes, then power on the router by plugging its power adapter into an electrical outlet.
 6. Wait five minutes, then power on the Phone Adapter by plugging its power adapter into an electrical outlet.
 7. Reboot one of your networked computers, and check to see if you have an active Internet connection.

Frequently Asked Questions

How do I make a phone call?

Pick up your phone and dial a phone number. Some Internet phone service providers require you to dial 1 and then the area code for all calls, even local ones.

Can I make calls if my Internet connection is down?

No. Your high-speed Internet connection must be active when you make Internet phone or fax calls.

Can I make calls while I'm browsing the Internet?

Yes. You can make Internet phone or fax calls while browsing the Internet, however, upstream data traffic passing through your Internet connection may affect the quality of your telephone call.

Appendix B: 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.

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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.

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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 C: Specifications

| | |
|-----------------------------------|--|
| Model | SPA2002 |
| Standards | SIP v2 Session Initiation Protocol v2 (RFC 3261, 3262, 3263, 3264) |
| Voice Codecs | G.729 A, G.711 a-law, G.711 μ -law, G.726, G.723.1 |
| Ports | Power, Ethernet, Phone 1, Phone 2 |
| Cabling Type | CAT 5 (RJ45) for Ethernet Port and RJ11 for Phone Ports |
| LEDs | Status, Act |
| Maximum Ringer Load | 3 REN |
| Ring Frequency | 10-40 Hz |
| FXS Port Impedance | Eight Configurable Settings Including North America 600 ohms, European CTR21 |
| Ring Voltage | 40-55 Vrms Configurable |
| Security Features | Password Protected Administration |
| Dimensions (W x H x D) | 3.11" x 1.12" x 3.79" (78.99 mm x 28.45 mm x 96.27 mm) |
| Unit Weight | 3.17 oz. (0.9 kg) |
| Power | 5 V DC, 2.0 A |
| Certifications | FCC, CE Mark, A-Tick/C-Tick |
| Operating Temp. | 41°~113°F (5°~45°C) |

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| | |
|---------------------------|-------------------------------|
| Storage Temp. | -13°~185°F (-25°~85°C) |
| Operating Humidity | 10~90% Non-Condensing |
| Storage Humidity | 10~90% Non-Condensing |

Appendix D: Warranty Information

LIMITED WARRANTY

Your service provider warrants to You that, for a period of one year (the “Warranty Period”), your Linksys Product will be substantially free of defects in materials and workmanship under normal use. Your exclusive remedy and your service provider’s entire liability under this warranty will be for your service provider 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 your service provider’s 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 your service provider. Your service provider pays for UPS Ground shipping from your service provider 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 your service provider, (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by your service provider, 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, your service provider 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 YOUR SERVICE PROVIDER 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 YOUR SERVICE PROVIDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL YOUR SERVICE PROVIDER’S 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

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exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to You.

Please direct all inquiries to your service provider.

Appendix E: 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 Part 68 Statement

This equipment complies with Part 68 of the FCC Rules. A label is attached to the equipment that contains, among other information, its FCC registration number and ringer equivalence number. If requested, this information must be provided to the telephone company.

This equipment uses the following USOC Jack: RJ-11.

An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack, which is FCC Part 68 compliant. Connection to the telephone network should be made by using the standard modular telephone jack.

The REN is useful to determine the quantity of devices that may be connected to the telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of RENs should not exceed 5. To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

If this equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

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The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

In the event this equipment should fail to operate properly, disconnect the unit from the telephone line. Try using another FCC approved device in the same telephone jack. If the trouble persists, call the telephone company repair service bureau. If the trouble does not persist and appears to be with this unit, disconnect the unit from the telephone line and discontinue use of the unit until it is repaired. Please note that the telephone company may ask that you disconnect the equipment from the telephone network until the problem has been corrected or until you are sure that the equipment is not malfunctioning. The user must use the accessories and cables supplied by the manufacturer to get optimum performance from the product.

No repairs may be done by the customer. If trouble is experienced with this equipment, please contact your authorized support provider for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you remove the equipment from the network until the problem is resolved. This equipment cannot be used on telephone company provided coin service. Connection to Party Line Service is subject to state tariffs.

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 rule.

Cet appareil est conforme à la norme NMB-003 d'Industry Canada.

Analog Telephone Adapter with 2 FXS Ports

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

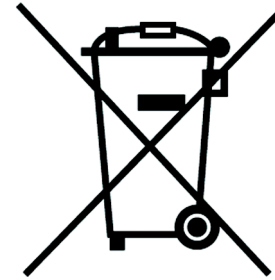
Environmental Information for Customers in the European Union

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 mājsaimniecības 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, amelyekeken, 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 gospodinskih 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 F: 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 your Phone Adapter product proves defective during its warranty period, you can contact your service provider to obtain a Return Authorization Number. (Details on Warranty and RMA issues can be found in the "Warranty Information" section in this Guide.)