LINKSYS®

A Division of Cisco Systems, Inc.

Wireless-G

IP Phone

User Guide

VoIP
Voice

Model No. **WIP300**

CISCO SYSTEMS

Copyright and Trademarks

Specifications are subject to change without notice. Linksys is a registered trademark or trademark of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries. Copyright © 2006 Cisco Systems, Inc. All rights reserved. Other brands and product names are trademarks or registered trademarks of their respective holders.

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

This User Guide has been designed to make understanding networking with the Wireless-G IP Phone easier than ever. Look for the following items when reading this User Guide:

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

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

This checkmark means there is a note of interest and is something you should pay special attention to while using the IP Phone.

Table of Contents

List of Figures

Chapter 1: Introduction

Welcome

Thank you for choosing the Linksys Wireless-G IP Phone. It will allow you to make phone calls using your broadband connection, whether you're at home or in your office.

How does the IP Phone do this? It connects to your wireless router or access point to receive telephone service through your cable or DSL Internet connection.

But what does all of this mean? Networks are useful tools for sharing Internet access and computer resources and making voice calls using your high-speed Internet connection. You'll be able to make phone calls using the account you set up with your Internet phone service provider while surfing the Internet on your computer. So, networks not only are useful in homes and offices, but also can be fun.

Use the instructions in this User Guide to help you set up and configure the IP Phone after you have created an account with your Internet phone service provider. These instructions should be all you need to get the most out of the Wireless-G IP Phone.

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

What's in This User Guide?

This guide covers installing, configuring, and troubleshooting the Wireless-G IP Phone.

- Chapter 1: Introduction
  Describes the IP Phone's applications and this User Guide.

- Chapter 2: Getting to Know the Wireless-G IP Phone
  Describes the physical features of the IP Phone.

- Chapter 3: Installing and Using the Wireless-G IP Phone
  Explains how to install the IP Phone and use it.

- Chapter 4: Configuring the Wireless-G IP Phone
  Discusses how to configure the IP Phone's settings.

- Appendix A: Troubleshooting
  Describes potential problems and solutions, as well as frequently asked questions, regarding use of the IP Phone.

- Appendix B: Glossary
  Gives a brief glossary of terms frequently used in networking.

- Appendix C: Specifications
  Provides technical specifications for the IP Phone.

- Appendix D: Warranty Information
  Provides warranty information for the IP Phone.

- **Appendix E: Regulatory Information**
  Provides regulatory information regarding the IP Phone.

- **Appendix F: Contact Information**
  Provides contact information for a variety of Linksys resources, including Technical Support.

Chapter 2: Getting to Know the Wireless-G IP Phone

The Bottom Panel

The IP Phone's USB mini-B port is located on the bottom panel of the Phone. Use the USB mini-B port to connect the included AC adapter to the IP Phone to charge its battery.

USB mini-B Port

The Front Panel

The IP Phone's buttons and their functions are described in the table below:

Icon	Button Name	Function
	Softkeys	Press the Soft Keys to select menu items directly above the Soft Keys.
	Navigation Button	Move the Navigation button up or down to scroll through menus and settings. You can also press the Navigation button to select a highlighted menu item or setting.
	Place/Receive Call Button	Press the Place/Receive Call button to make or receive Internet phone calls.
	Power/ End Call Button	Press the Power/End Call button to end and Internet phone call, or press and hold the Power/End Call button for two seconds to Turn the Phone on or off. You can also press the Power/End Call button to quickly exit a menu and return to the Home screen.
	Clear Button	Press the Clear button to erase characters when you are entering information into the Phone. If you need to erase a large number of characters, press and hold the Clear button until all of the characters are erased.
	Numeric Keypad	Press the keys on the Numeric Keypad to enter letters and numbers in the Phone. When entering text, press the keys until the letter you want is displayed on the LCD screen. To switch from entering letters to numbers, press the left Soft Key. (To enter special characters, press the * [Star] or 1 keys until the character is displayed on the LCD screen.)

The Side Panel

The IP Phone's Headset jack is located on the side panel of the Phone. Use it to connect a headset for hands-free operation.

Headset Jack

The Back Panel

The IP Phone's battery compartment is located on the back panel of the IP Phone. For directions on how to insert the battery, refer to "Chapter 3: Installing and Using the Wireless-G IP Phone".

Battery compartment
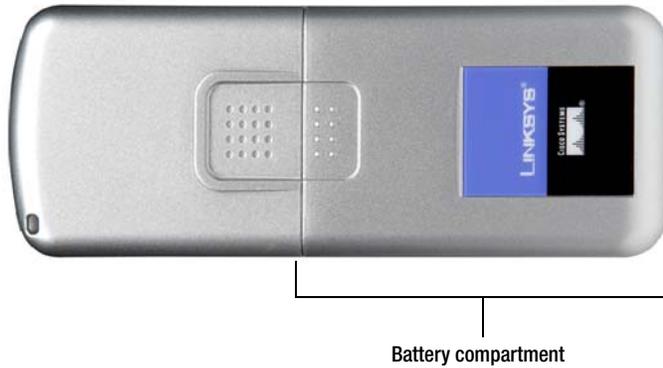
Chapter 3: Installing and Using the Wireless-G IP Phone

Overview

This chapter provides instructions for first-time installation and basic use of the IP Phone. Follow the steps below to get started. Once you have finished configuring the phone you will be able to make and receive Internet phone calls.

Inserting and Charging the Phone's Battery

1. Remove the battery compartment cover by sliding it downwards.

2. Insert the battery with the metal contacts facing the contacts at the bottom of the battery compartment.

3. Replace the battery cover by sliding it upwards until it clicks into place.

Metal Contacts   Battery

Proceed to the next section, "Charging the IP Phone's Battery" on page 10.

Charging the IP Phone's Battery

1. Connect the small end of the included AC power adapter to the USB mini-B port on the bottom of the IP Phone.

USB mini-B port

2. Plug the other end of the adapter into a standard electrical outlet.

   You see a charging indicator on the LCD screen

Note: Allow the battery to charge for eight hours before initial use.

When the Battery charging indicator remains solid blue, the battery is fully charged and ready for use.

When the battery is fully charged, proceed to "Setting up the Wireless-G IP Phone" on page 9.

Setting up the Wireless-G IP Phone

Before you begin, make sure you have an active Internet connection and the account information provided by your Internet phone service provider.

Note: The Phone automatically dims and turns off the LCD display when the Phone is not in use. If this happens while you are configuring the Phone, press any key to turn the display back on and continue configuring the Phone.

1. Press the **Power** button to turn on the Phone.

2. Press the **Menu** Soft Key.

3. Scroll to *Profile*, then press the **Navigation** button to enter the Profile menu.

4. You see a message asking you to create a password. Press the **Navigation** button, then use the numeric keypad to enter a password.

5. When you are finished entering a password, press the **Navigation** button to save it.

Note: After you have created a password, you will need to enter it to access the Profile menu.

6. Scroll to *SIP Account*, then press the **Select** Soft Key to enter the SIP Account menu.

7. Press the **Option** Soft Key, then press the **Select** Soft Key to edit the default SIP account.

8. Highlight each setting your service provider requires you to change, then press the **Select** Soft Key to change the setting.

When you are finished changing a setting, press the **Navigation** button to save your changes.

If you need to change a setting that does not appear on the Edit screen, scroll to *Advanced*, then press the **Select** Soft Key to enter the Advanced menu.

9. Highlight each setting your service provider requires you to change, then press the **Select** Soft Key to change the setting.

When you are finished changing the setting, press the **Navigation** button to save your changes.

10. When you are finished making changes in the advanced settings menu, press the **Back** Soft Key until you return to the *Profile* menu.

11. Highlight *Network Profile*, then press the **Select** Soft key to enter the Network Profile menu.

12. Highlight the network profile that matches the type of security you're using for your wireless network. If you don't have security enabled on your wireless network, highlight *OPEN*.
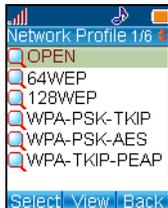
13. Press the **Option** Soft Key to enter the Profile Options menu, then press the **Select** Soft Key to edit the network profile.

14. Highlight *Wireless Settings*, then press the **Select** Soft Key to enter the Wireless Settings menu.

15. Highlight *ESSID*, then press the **Select** Soft Key to enter the ESSID menu.

16. Highlight *Site Survey*, then press the **Navigation** button to scan for your wireless network.

You see a list of wireless networks in range of the Phone. Highlight your wireless network's ESSID name in the list, then press the **Navigation** button to select it. Continue with step 18.
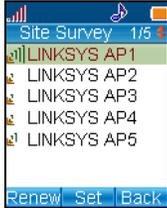
17. If you don't see your wireless network's ESSID name in the list, your wireless network may not be set to broadcast its ESSID name.

   To enter the ESSID name manually, press the **Back** Soft Key to return to the *ESSID* menu, highlight *New ESSID*, then press the **Navigation** button to edit the ESSID name.

When you are finished entering the ESSID name, press the **Navigation** button to save it.

18. Press the **Back** Soft Key until you return to the *Wireless Settings* menu.

19. Highlight *Security*, then press the **Navigation** button to enter the Security menu.

20. Highlight the type of security you have enabled on your wireless network and press the **Navigation** button to select it. Then change the settings to match your wireless network.

If you don't have security enabled on your wireless network, select *OPEN*.

21. When you are finished selecting wireless security settings, press the **Back** Soft Key until you return to the *Edit* menu.

22. Highlight *Account Choice* and press the **Navigation** button to enter the Account Choice menu.

23. Press the **Navigation** button to assign the default SIP account to the current network profile.
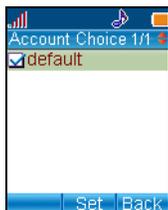
24. Highlight *On*, then press the **Navigation** button to activate the SIP Account.
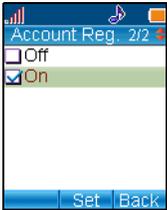
25. Press the **Back** Soft Key until you return to the Phone's home screen.

Installation is complete. Proceed to the next section, "Using the Wireless-G IP Phone."

Using the Wireless-G IP Phone

To make a call, enter the phone number you want to dial, then press the **Call** button. To answer an incoming call, press the **Accept** Soft Key or the **Call** button. When you're on a phone call, you can select the following options:

Hold	Press the **Hold** Soft Key to place a call on hold. To return to the call, press the **Resume** Soft Key.
Mute	Press the **Navigation** button to mute the Phone's microphone. To unmute the Phone's microphone, press the **Navigation** button again.
OnHook	Press the **OnHook** Soft Key to end a call.
Volume	Move the **Navigation** button up or down to adjust the call volume, then press the **Navigation** button to save the new volume level or the **Back** Soft Key to cancel.

For additional information about your Wireless-G IP Phone, proceed to "Chapter 4: Configuring the Wireless-G IP Phone."

Chapter 4: Configuring the Wireless-G IP Phone

Home Screen

The home screen displays a variety of information about the IP Phone. Refer to the table below for a list of icons that appear on the home screen and their meanings:

Icon	Description
	Signal Strength: Indicates the signal strengh of the access point you're IP Phone is connected to.
	Message: Indicates that you have received a new message.
	In Call/Call Forward: Indicates that you are on a call or forwarding a call.
	Network Encryption: Indicates that you are connected to an access point that has encryption enabled.
	SIP Registered/Not Registered: Indicates the status of the IP Phone's connection to a SIP server.
	Ring Mode (Silent/Ring/Vibrate/Ring+Vibrate): Indicates the ring mode that's currently enabled.
	Alarm: Indicates that the alarm you set is going off.
	Battery Level: Indicates the amount of battery power you have remaining.

You can also display a summary of the phone's current status by pressing the **Status** Soft Key.

Main Menu

Press the **Menu** Soft Key on the Phone's home screen to enter the Main menu. Refer to the sections below for information on the options available in the Main menu.

Phonebook

The Phonebook can store and display up to 200 contacts. To view a contact's information, highlight the contact, then press the **Navigation** button. To call the contact, press the **Call** button, then press the **Call** Soft Key. Refer to the table below for a list of options available in the Phonebook:

Option	Description
Search	Search for a contact by name.
Edit	Edit the currently selected contact.
Delete	Delete the currently selected contact.
New	Add a new contact.

Call Log

The IP Phone keeps a list of the calls you've recently missed, dialed, and received. Refer to the table below for a list of options available in the Call Log:

Option	Description
Missed Calls	Displays a list of calls you've recently missed.
Dialed Calls	Displays a list of calls you've recently dialed.
Received Calls	Displays a list of calls you've recently received.
Delete All	Clears all call lists.

To get more information about a call in your call log, highlight the call, then press the **Navigation** button to display date and time information for the call. Refer to the table below for a list of options available in the Missed Calls, Dialed Calls, and Received Calls menus:

Option	Description
Save	Add additional information about a caller and save the contact information to your Phonebook.
Del Record	Delete the current caller from the call log.
Del All Missed/ Dialed/Received	Clear all of the calls in the call list you're viewing.

E-mail

The IP Phone's built-in e-mail client allows you to send and receive messages using your POP3 e-mail account.

Note: Not all e-mail services support POP3. Contact your e-mail service for more information about POP3 settings and support.

Configuring Your Account

1. If necessary, press the **Menu** Soft Key, scroll to *E-mail*, then press the **Navigation** button to enter the E-mail menu.

    If an e-mail account has not been configured, you see the *New* account menu.

2. Enter the information provided by your e-mail service.

3. When you have finished configuring your e-mail account information, press the **Back** Soft Key until you see the *Option* menu.

4. Scroll to *Activate*, press the **Navigation** button, then press the **OK** Soft Key to activate the e-mail account.

5. Press the **Back** Soft Key until you see the *E-mail* menu.

Using the E-mail Client

Refer to the table below for a list of options availbe in the E-mail menu:

Option	Description
Write New	Compose a new e-mail message. Press the **Navigation** button to create a new e-mail message, then enter a subject, the recipients, and content of the message. When you are finished editing your e-mail, select **Send Mail** or **Save To Draft** to save the message to the draft folder.
Receive	Receive new e-mail mesages. To save power, the phone only checks e-mail message when you use the Receive option in the e-mail client.
Inbox	Access e-mail messages you've received. To read a message, highlight the message you want to read, then press the **Navigation** button to view it. When you are viewing a message, you can press the **Option** Soft Key to select the following options: • **Reply:** Allows you to quickly reply to e-mail messages. • **Reply with Log:** Allows you to quickly reply to e-mail messages with a history of the original e-mail. • **Forward:** Allows you to quickly edit and send an e-mail to other contacts or save it as a draft. • **Delete:** Allows you to delete the current message from your Inbox. • **Clear Inbox:** Allows you to delete all of the e-mail messages in your Inbox.
Outbox	View e-mail messages that you've sent. To view information about when an e-mail was sent, highlight e-mail you want information about, then press the **Navigation** button. When you are viewing a sent e-mail message, you can press the **Option** Soft Key to select the following options: • **Edit:** Allows you to quickly edit a sent message and send it to other contacts or save it as a draft. • **Delete:** Allows you to delete the current message from your Outbox. • **Clear Outbox:** Allows you to delete all of the e-mail messages in your Outbox.

Option	Description
Draft	View e-mail messages that you've saved as drafts. To view a draft, highlight the e-mail you want to veiw, then press the **Navigation** button. When you are viewing a draft, you can press the **Option** Soft Key to select the following options: **Edit:** Allows you to quickly edit a sent message and send it to other contacts or save it as a draft. **Delete:** Allows you to delete the current message from your Draft folder. **Clear Draft:** Allows you to delete all of the messages in your Draft folder.
Account Settings	Allows you to activate, edit, and delete your e-mail account settings.

Speed Dial

The Speed Dial menu allows you to assign up to nine phone numbers you frequently call to the number keys on the phone. Follow the steps below to assign a contact to your Speed Dial list.

1. If necessary, press the **Menu** Soft Key, scroll to *Speed Dial*, then press the **Navigation** button to enter the Speed Dial menu.

2. Highlight the number your would like to assign a contact's phone number to.

3. Press the **Option** Soft Key to view the contacts in your Phonebook.

   If you already have a contact assigned to the speed dial location you selected, highlight Phonebook, then press the **Navigation** button.

4. Highlight the contact you want to assign to the speed dial location, then press the **Navigation** button.

   If the contact you selected has more than one phone number stored in your Phonebook, you see another screen with a list of numbers for that contact. Highlight the number you want to assign to the speed dial location, then press the **Navigation** button.

5. Press the **Back** Soft Key until you return to the main *Speed Dial* menu.

Profile

The Profile menu allows you to make changes to your SIP accounts, network profiles, roaming options, profile password, or configure your IP phone using SecureEasySetup. Refer to the sections below for the options available in the Profile menu.

Note: The first time you enter the Profile menu, you will be asked to create a password. Enter a password using the numeric keypad, then press the **Navigation** button to save the password. After you have created a password, you will need to enter it to access the Profile menu.

Network Profile

The Network Profile menu allows you to assign up to six wireless access points for your IP Phone to connect to. To view the details of a profile, press the **Navigation** button. To edit a profile, highlight the network profile you would like to edit, then press the **Option** Soft Key. Refer to table below for a list of options available in the *Profile Options* menu:

Option	Description
Edit	Edit the current network profile.
Rename	Change the current network profile's name.
Delete	Delete the current network profile.
Auto Detect	Enable or disable the current network profile.
Move	Move the current network profile up or down in the network profile list. The IP phone will try to connect to all of the access points, in the order they appear in the network profile list, until it is able to make a connection.

Editing a Network Profile

The Edit menu allows you to edit the currently selected network profile. Refer to the table below for a list of options available in the Edit menu:

Option	Description
Preview	View a summary of the current network profie.
Wireless Settings	Edit wireless network settings. Highlight *Wireless Settings*, then press the **Select** Soft Key to select the following options: • **ESSID:** Allows you to enter your wireless network's ESSID name or perform a site survey to view wireless networks in range of the IP Phone. • **Data Rate:** Allows you to specify the data rate of your wireless network. If you don't know the data rate, select *Auto*. • **Security:** Allows you to select wireless security settings to match your network.
IP Settings	Select from the following IP modes: • **Fixed IP:** Allows you to manually enter IP settings for your network. • **DHCP:** Allows you to use DHCP to acquire IP settings for your network. • **PPPoE:** Allows you to use PPPoE to acquire IP settings for your network.
Account Choice	Assign a SIP account to a network profile.
NAT Settings	Set STUN server options. Press the **Select** Soft Key to select from the following options: • **NAT Solution:** Allows you to enable or disable STUN services. • **NAT Timer:** Allows you to change the interval of time the phone waits between commication sessions with the STUN server. • **STUN Address:** Allows you to enter the address of the STUN server you want the phone to use. • **STUN Port:** Allows you to enter the network port of the STUN.

SIP Account

The SIP Account menu allows you to assign up to six SIP accounts to your IP Phone. To view the details of an account, press the **Navigation** button. To edit a SIP account, highlight the account you would like to edit, press the **Option** Soft Key, then press the **Select** Soft Key to edit the account. Refer to table below for a list of options available in the Edit menu:

Option	Description
Preview	View a summary of the current SIP account.
Phone Number	Enter your Internet phone number.
Auth. ID	Enter your Internet phone service account's authoriztion id.
Auth. Password	Enter your Internet phone service account's authorization password.
SIP Domain	Enter the address of your Intenet phone service provider's SIP domain.
Proxy Address	Enter the address of your Internet phone service provider's proxy server.

Option	Description
Advanced	Make advanced changes to the SIP account. Press the **Select** Soft Key to select from the following advanced options: • **Proxy Port:** Allows you to enter the network port of your Internet phone service provider's proxy server. • **Outbound Address:** Allows you to enter the address of your Internet phone service provider's outbound server. • **Outbound Port:** Allows you to enter the network port of your Intenet phone service's outbound server. • **Local Port:** Allows you to enter the local network port the IP Phone uses. • **Reg. Timer(sec):** Allows you to change the amount of time the IP Phone waits between registration attempts with the SIP server. • **Codec:** Allows you to select Auto, G.711a, G.729a, or G.711u as the codec the phone uses for encoding and decoding audio. • **Pkt Time(ms):** Allows you to change the audio packet size. • **OutBand DTMF:** Allows you to enable or disable out-of-band DTMF.

To rename a SIP account, highlight the account you would like to rename, press the **Option** Soft Key, highlight *Rename*, then press the **Select** Soft Key to rename the SIP account. To delete a SIP account, highlight the account you would like to delete, press the **Select** Soft Key, then press the **OK** Soft Key to delete the SIP account.

Roaming

The Roaming menu allows you to set specific parameters for roaming from one wireless access point to another. Refer to table below for a list of options available in the Roaming menu:

Option	Description
Roam Metric	Specify an RSSI (Received Signal Strength Indication) value to begin a roaming scan.
Roam Delta	Specify the RSSI threshold for target access points to join.
NProbes	Specify the number of probes per channel to send when scanning.
Active Time	Specify the amount of time spent on each channel when scanning.
Home Time	Specify the amount of time spent on the home channel between scans.

Profile Password

The Profile Password menu allows you to change the password used to access the Profile menu. Follow the steps below to change the Profile menu password.

1. If necessary, press the **Menu** Soft Key to enter the Main menu.

2. Scroll to *Profile*, press the **Select** Soft Key, enter your password, then press the **Navigation** button to enter the Profile menu.

3. Scroll to *Profile Password*, then press the **Select** Soft Key.

4. Enter the old password, then press the **Navigation** button.

5. When you see the *New Password* screen, enter a new password for the Profile menu.

6. When you are finished entering the password, press the **Navigation** button to save it.

Secure Setup

The Secure Setup menu allows you to configure your IP Phone's wireless network settings with the push of a button. If you have a Linksys wireless router or access point that supports SecureEasySetup, you can use the Secure Setup feature to quickly and easily configure your IP Phone's wireless network settings. Before you begin, locate the SecureEasySetup or Cisco logo button on the wireless router or access point, then proceed to step 1. If you need help finding the button on your wireless router or access point, refer to the on-screen User Guide included with the wireless router or access point.

1. Press the SecureEasySetup or Cisco logo button on the wireless router or access point.

2. When the SecureEasySetup or Cisco logo begins to flash, press the **Select** Soft Key, then press the **Yes** Soft Key run SecureEasySetup.

Note: You can also press and hold the **Clear** button to quickly access the Secure Setup feature from the IP Phone's home screen. When you see the *Run SES* message appear on the screen, press the **Yes** Soft Key.

3. When you see the *Save Configuration* message appear on the screen, press the **Save** Soft Key.

4. Select the Profile you would like to save the new wireless configuration settings to, then press the **Save** Soft Key.

Settings

Use the Settings menu to make changes to select regional settings, set the date and time, and personalize your phone. Refer to the sections below for the options available in the Settings menu.

Language

The Language menu allows you set the IP Phone's display language. To change the language, highlight the language you would like the phone to use, then press the **Navigation** button to save your setting.

Clock

The Clock menu allows you to set the IP Phone's time and date settings. Refer to the table below for a list of options available in the Clock menu.

Option	Description
Time	Set the time displayed on the IP Phone's home screen.
Date	Set the date displayed on the IP Phone's home screen.
Time Format	Set the time's display format to 12- or 24-Hour format. .
Timezone	Set set your local timezone.
Daylight Savings	Enable or disable automatic Daylight Savings time adjustment.
Network Time	Enable or disable the phone from updating the time from an NTP server.

Alarm Clock

The Alarm Clock allows you to set an alarm to go off at a specified time. You can also set the alarm to go off once, daily, or weekly. Refer to the table below for a list of options available in the Alarm Clock menu.

Option	Description
Alarm Time	Set the time you want the alarm to go off at.
Mode	Set the alarm to go off once, daily, or weekly.

Call Settings

The Call Settings menu allows you to change all call related settings on the IP Phone. Refer to the table below for a list of options availabe in the Call Settings menu.

Option	Description
Call Waiting	Enable or disable call waiting.
Call Forward	Make changes to call forwarding settings. Press the **Select** Soft Key to select from the following call forwarding options: • **Forward Number:** Allows you to enter a number to forward calls to. • **Forward All:** Allows you to forward all calls. • **No Answer:** Allows you to forward missed calls. • **Busy:** Allows you to forward calls when your phone is busy. • **Cancel All:** Allows you to cancel all call forwarding options.
Block Caller ID	Enable or disable caller id blocking.
Refuse Private	Block incoming calls from callers with a private caller id.
Beep Notification	Enable or disable the Beep Notification feature. When this feature is enabled, the phone will beep every 50 seconds so that you can keep track of how long you've been on a call.
Hold Transfer	Select *SIP* or *DTMF* Flash as the method used for transferring calls.
Regional Tone	Set the Regional tone setting to *North America* or *Japan*.

Speed Dial

The Speed Dial menu allows you to change the way the phone's speed dial function works. You can select *Disable* to disable speed dial, *Ask* to see a confirmation screen before the phone dials a contact, or *Dial* to immediately dial a contact.

Sound Settings

The Sound Settings menu allows you to change the IP Phone's speaker volume, ringer settings, and warning tones. Refer to the table below for a list of options available in the Sound Setting menu.

Option	Description
Speaker Volume	Set the IP Phone's speaker volume.
Ring Tone	Set the IP Phone's ring tone and volume. Press the **Select** Soft Key to select from the following options. • **Melody:** Allows you to set the IP Phone's ring tone. • **Ring Volume:** Allows you to adjust the IP Phone's ringer volume.
Ring Mode	Set the IP Phone's ring mode to *Silent*, *Ring*, *Vibrate*, or *Ring + Vibrate*.
Warning Tone	Enable or disable the IP Phone's warning tones, such as low battery.

Display Settings

The Display Settings menu allows you to customize the IP Phone's display. Refer to the table below for a list of options available in the Display Settings menu.

Option	Description
Wallpaper	Change the picture displayed on the home screen.
Greeting	Change the message displayed on the home screen.
LCD Off Time	Change the amount of time it takes for the IP Phone to turn off its LCD when the phone is not in use.
LCD Brightness	Change the brightness of the LCD screen.
Config. Tip	Enable or disable configuration tips.

Keypad

The Keypad menu allows you to customize the IP Phone's keypad settings. Refer to the table below for a list of options available in the Keypad menu.

Option	Description
Keypad Lock	Lock the IP Phone's keypad. To unlock the keypad, press the **Left** Soft Key then press the * (Star) key.
Key Tone	Enable or disable the IP Phone's key tones.
Key Backlight	Enable or disable the IP Phone's key backlight.

Tools

Use the Tools menu to view information about your IP Phone and network status. Refer to the sections below for the options available in the Tools menu.

Option	Description
Signal Quality	View signal status information for the wireless access point you're connected to.
Site Survey	Perform a site survey of all the wireless access points in range of the IP Phone.
Statistics	View the IP Phone's network and codec statistics. Press the **Select** Soft Key to select from the following options: • **IP Statistics:** Allows you to view network packets statistics. • **RTP/RTCP:** Allows you to view Real-Time Transport Protocol (RTP) and Real Time Control Protocol (RTCP) statistics. • **Encoding:** Allows you to view encoding statistics. • **Decoding:** Allows you to view decoding statistics.
Battery	View the IP Phone's battery status.
Ping	Ping an IP address or domain.
Version	View the IP Phone's software version information.
Upgrade	Upgrade the IP Phone's firmware.
Back to Default	Reset all of the IP Phone's settings back to their factory defaults.
Restart	Soft reset the IP Phone.

Chapter 5: Using the Web-based Utility

Overview

For your convenience, you can use the Web-based utility on your PC to view, change or edit the most commonly used features of your IP Phone.

> **Note:** Your phone must be set to its home screen to use the Web-based utility. You can make choices from either the phone or the PC, but not both at the same time. If your phone is not on the home screen, the message: *Phone Cfg file locked by: xxxxxx* will display on the PC when you select an option.

How to Access the Web-based Utility

1. To start, you will need the IP phone's IP address. From the phone's home screen press the Status soft key. The next screen will display the Phone Status. Item 2 is the IP address. Note the address. If you use a Static IP, the address will stay the same. If you use a DHCP, the IP address may change every time you turn on the phone.

2. On a computer that is connected to the same network as the phone, launch any Internet browser. In the Address field, enter *http://IP address* where the IP address is the WiFi Phone's IP address that you obtained in step 1. Press **Enter.**

3. You will see the Wi-Fi Phone login screen. Enter the IP Phone's Username and Password. Click **Submit**. You will log in to the Status screen and can select any of the tabs to add or change phone setting information.

   The default User Name is admin and the Admin password is "admin", but may change if you have an ITSP.

> **Note:** To make a selection or confirm an entry, you must click on the option at the bottom of the screen. Pressing the Enter key will not confirm your selection(s).

Status

Click on the Status tab to view the IP phone's IP Address, Mac address, ESSID and BSSID.

Figure 5-1: Wireless Network Status screen

Phonebook

The Phonebook can store and display up to 200 contacts. Use this option to add, edit or delete a contact.

1. Click on the Phonebook tab. To add a contact, click **New**. The *Phone Book Edit* screen will display. On this screen, you can enter the contact's name, e-mail address and up to 5 numbers for each contact. To customize a ring tone for this contact, select one of the options from the Ring Tone drop down menu. You can choose to make any or all of these numbers part of your 9 Speed Dial entries. In addition, you can select the phone number entry type from the Type Choice drop down menu.   Your options are Generic, Mobile, Office, Home or FAX. The appropriate icon will display when you view the phonebook entry on your Wi-Fi phone.

Figure 5-2: Phone Book Edit screen

2. To Save your entry information, click **Save Settings**. You can also choose to **Delete** an entry or **Cancel Settings** that you have not yet saved. If your IP phone is on, the new Contact information will display immediately and can be edited either in the Phone or on the PC.

After you select Save Settings, you will see "Settings Saved Successfully" at the top of the screen,. You can then click on the Phonebook tab to add another entry, or select a different tab.

E-mail

The IP Phone's built-in e-mail client allows you to send and receive messages using your POP3 e-mail account.

Click on the E-mail tab. You can choose to Configure a new e-mail contact, Remove an existing contact, or make a contact Active. To Configure a new account, select Configure from the E-mail Account List. The next screen displays Account Setting, where you can enter your Account Name, Your Name and your Mail Address. The POP3 Setting allows you to enter the POP3 information, including Address, Port, User ID and Password. The SMTP Setting allows you to enter the SMTP information for this account, including Address, Port, User ID and Password. The Advanced Setting option allows you to enter your Reply Address and signature information. You can also choose to Reserve Mail, which keeps a copy of your new mail on the remote POP3 server. Click on Save Settings to add this entry to your E-Mail Account List.

Figure 5-3: E-mail screen

Network Profile

The Network Profile menu allows you to assign up to six wireless access points for your IP Phone connection. Click on the Network tab to see the Network Profile List. This list shows the six accounts, including the one that is Active. Only one account at a time can be active. You can use the blue arrow to move an option down the list, or the red arrow to move an option up the list. Click on **Go** to confirm (Commit) the change.

You can Configure, Remove or Turn Off any of these accounts. Click Configure. For the Wireless Network Settings, Enter the Profile Name, ESSID and select the Data rate. For IP Settings, you can select DHCP, Fixed IP or PPPoE. For the NAT Settings you can Disable the NAT Solution or select STUN server options. You can select the type of Security Settings you want to use, including OPEN, or one of several WEP or WPA options. You can then choose the Key Index placement (1 to 4) and the Key information. You can choose the Certification Settings, including CA Cert., User Cert and Private Key. These can be uploaded. SIP Account Settings can be selected on this screen. Choosing Go will take you to the SIP screen to Configure or Remove these accounts.
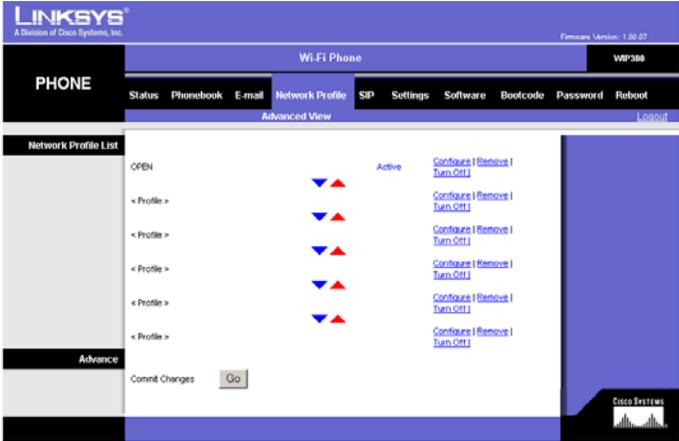
Figure 5-4: Network Profile screen

SIP

You can use SIP to Configure or Remove the SIP Account Settings. You can assign up to six SIP accounts to your IP Phone. To view the SIP settings, select the SIP tab. You will see the Account List. This list shows the configured accounts and which ones are active. To edit a SIP account, click on Configure. You can add, change or edit the Internet phone service Account Name, Phone Number, Authentication ID, Authentication Password, SIP Domain, Local Port, Proxy Address, Proxy Port, Outbound Address, Outbound Port and Register Timer (in seconds). You can also select Codec options, Pkt (Packet) Time (in milliseconds) and the Out of Band DTMF. To remove a SIP account, click on Remove. Click on **Save Settings** to confirm your choices.
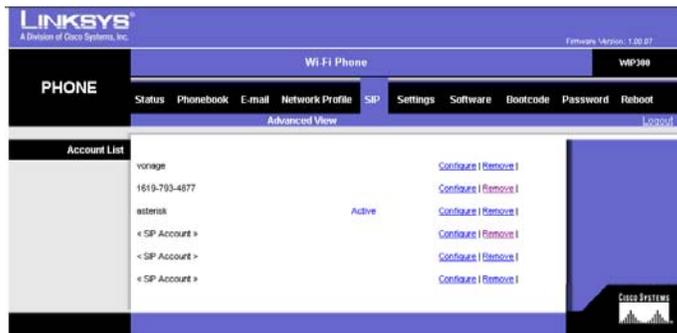
Figure 5-5: SIP screen

Settings

Click the Settings tab to make changes to Call, Sound and Display Settings and the Clock. Refer to the table below for a list of options in the Settings Menu.

Figure 5-6: Settings screen

Option	Description
Call Waiting	Check to enable Call Waiting, uncheck to disable
Forward Number	Enter a phone number or IP address to forward your calls to
Forward All	Check to send all incoming calls to the Forward Number
No Answer	Check to send calls to Forward Number when there is no answer on the IP phone
Block Caller ID	Select On to block caller id's that you previously set up in the IP phone menu
Refuse Private	Select On to refuse calls that display Private Call as the User ID
Busy	Check to forward calls when your phone is busy
Beep Notification	Enable or disable the Beep Notification feature. When this feature is enabled, the phone will beep every 50 seconds so that you can keep track of how long you've been on a call.
Hold Transfer	Select *SIP* or *DTMF Flash* as the method used for transferring calls
Regional Tone	Set the Regional tone setting to *North America* or *Japan*

Sound Settings

Click the Sound Settings tab to change the IP Phone's speaker volume, ringer settings, and warning tones. Refer to the table below for a list of options available in the Sound Settings menu.

Option	Description
Speaker Volume	Set the IP Phone's speaker volume
Melody	Choose one of the available ring tone melodies
Ring Volume	Set the IP Phone's ring volume
Ring Mode	Set the IP Phone's ring mode to *Silent*, *Ring*, *Vibrate*, or *Ring + Vibrate*
Warning Tone	Check to enable the IP Phone's warning tones, such as low battery

Display Settings

Click the Display Settings tab to customize the IP Phone's display. Refer to the table below for a list of options available in the Display Settings menu.

Option	Description
LCD Off Time	Change the amount of time it takes for the IP Phone to turn off its LCD when the phone is not in use.
Wallpaper	Change the picture displayed on the home screen.

Clock

Click the Clock tab to set the IP Phone's time and date settings. Refer to the table below for a list of options available in the Clock menu.

Option	Description
Daylight Savings	Check to enable or uncheck to disable automatic Daylight Savings time adjustment
Timezone	Set your local timezone
Network Time	Enable or disable the phone from updating the time from an NTP server
Network Time Server	Select the server for time settings
New Network Time Server	Enter a name for a secondary time server, in the event the Network Time Server is not available

Software

Select the Software tab. You can view the Software Information for your Wi-Fi phone. Click on **Upgrade** to confirm the settings, or click on **Cancel Settings** if you do not want to upgrade.

Figure 5-7: Software screen

Software Information

Option	Description
Active	View the Active software application
Inactive	View the Inactive software application
New Image	Select a New software Image by typing in the address, or selecting it by clicking on Choose

Bootcode

Select the Bootcode tab. You can view the Current Version of the Wi-Fi phone's Bootcode Information. You can update the Bootcode Image by entering the Bootcode Image information, selecting it by clicking on Choose. Click on **Upgrade** to confirm the settings, or select Cancel Settings if you do not want to upgrade.

Figure 5-8: Bootcode screen

Bootcode Information

Option	Description
Current Version	View the Current Version of the bootcode
Bootcode Image	Select a New bootcode Image by typing in the address, or selecting it by clicking on Choose

Password

This screen allows you to change the password information of the Wi-Fi phone. Select the Password tab. Enter the new Username and/or Password for the IP Phone.   Select Save Settings to immediately change the password, or select Cancel Settings to cancel.

Figure 5-9: Password screen

Reboot

If you need to reboot your phone you can do so with this option. Select the Reboot tab. Click **Go** to Reboot the phone. Your saved information will not be lost.

Figure 5-10: Reboot screen

Appendix A: Troubleshooting

This appendix provides solutions to problems that may occur during the installation and operation of the Wireless-G IP Phone. Read the description below to solve your problems. If you can't find an answer here, check the website of your Internet phone service provider or the Linksys website at *www.linksys.com/international*.

Common Problems and Solutions

1. **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:
   - Follow these instructions to reboot your cable or DSL modem, IP Phone, 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 IP Phone by pressing and holding down the Power On/Off button for two seconds.
     4. Wait 30 seconds, and then power on your cable or DSL modem by plugging its power adapter into an electrical outlet.
     5. Wait 30 seconds. Power on the router by plugging its power adapter into an electrical outlet.
     6. Wait 10 seconds. Power on the IP Phone by pressing and holding down the Power On/Off button for two seconds.
     7. Reboot one of your networked computers, and check for an active Internet connection.
     8. Pick up the IP Phone and try your call again.
   - Set up port forwarding on your router. You must specify that four port ranges be forwarded to the IP address of the IP Phone. These four port ranges are as follows: 5060-5061 (UDP), 53-53 (UDP), 69-69 (UDP), and 10000-20000 (UDP).

     If you have a non-Linksys router, refer to its documentation for instructions.

If you have a Linksys router, then follow these instructions:

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.
3. A login screen will appear. 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, and then click the **Port Range Forwarding** tab.
5. For each port range you must specify, enter a different name in the *Application* field. Then enter the number or range of external port(s) used by the IP Phone.
6. Select the protocol you will be using, **UDP**.
7. Enter the IP address of the IP Phone. For example, if the IP Phone'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 IP Phone.

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

9. Check the **Enable** option for the port services you want to use.
10. When you have completed the configuration, click the **Save Settings** button.

2. **When I'm on a telephone call, words are dropped intermittently.**
   Go through this checklist until your problem is solved:
   - Are you using a wireless router and cordless phone? If so, the router and cordless phone may be using the same frequency and 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 any Internet telephone call. For example, if you are running a file sharing program, files may be uploading in the background even though you are not downloading any files, so make sure you exit the program before you make an Internet phone call.
   - 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 service account at your Internet phone service provider's website, and reduce the bandwidth requirements for your service. For more information, refer to your Internet phone service provider's website.
   - There may be too many wireless routers or access points in your location using the same broadcast channel. Try changing the channel that your wireless router or access point uses; refer to the documentation of your router or access point for instructions.

3. **The IP Phone does not ring, and my calls automatically go to voicemail.**
   Go through this checklist until your problem is solved:
   - Check the ringer volume on the IP Phone, and make sure it is set to an audible level.
   - Follow these instructions to reboot your cable or DSL modem, IP Phone, 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 IP Phone by pressing and holding down the Power On/Off button for two seconds.
     4. Wait 30 seconds, and then power on your cable or DSL modem by plugging its power adapter into an electrical outlet.
     5. Wait 30 seconds. Power on the router by plugging its power adapter into an electrical outlet.

6. Wait 10 seconds. Power on the IP Phone by pressing and holding down the Power On/Off button for two seconds.

7. Reboot one of your networked computers, and check for an active Internet connection.

• Set up port forwarding on your router. You must specify that four port ranges be forwarded to the IP address of the IP Phone. These four port ranges are as follows: 5060-5061 (UDP), 53-53 (UDP), 69-69 (UDP), and 10000-20000 (UDP).

Note: By default, the IP Phone uses a dynamic IP address assigned by your router. For port forwarding, you may need to assign a static IP address to the IP Phone. Contact your Internet phone service provider for assistance.

If you have a non-Linksys router, refer to its documentation for instructions. If you have a Linksys router, then follow these instructions:

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.

3. A login screen will appear. 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, and then click the **Port Range Forwarding** tab.

5. For each port range you must specify, enter a different name in the *Application* field. Then enter the number or range of external port(s) used by the IP Phone.

6. Select the protocol you will be using, **UDP**.

7. Enter the IP address of the IP Phone. For example, if the IP Phone'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 IP Phone.

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

9. Check the **Enable** option for the port services you want to use.
10. When you have completed the configuration, click the **Save Settings** button.

4. *The power LED does not light up.*
   Go through this checklist until your problem is solved:
   • Remove the IP Phone's battery from its compartment. Wait five seconds while the IP Phone resets itself. Insert the battery and power on the IP Phone.
   • You may be using the wrong power adapter. Make sure the power adapter you are using is the one included with the IP Phone.

Frequently Asked Questions

Can I make calls if my Internet connection is down?
No. Your high-speed Internet connection must be active when you make Internet phone calls.

Can I use the IP Phone to make a call and browse the Internet at the same time?
No. The IP Phone supports either calling or web browsing, not both at the same time. However, you can make calls with the IP Phone while browsing the Internet on your computer. Please note that your web browsing may affect the quality of your telephone call, depending on the amount of upstream data traffic passing through your Internet connection.

Can I receive calls while my network is down?
You cannot directly receive calls while your network is down. However, your Internet phone service account may allow you to forward calls to a different telephone number, such as a cellular phone number. For more information, visit the website of your Internet phone service provider.

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.

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.

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

DHCP (**D**ynamic **H**ost **C**onfiguration **P**rotocol) - 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.

DMZ (**De**militarized **Z**one) - Removes the Router's firewall protection from one PC, allowing it to be "seen" from the Internet.

DNS (**D**omain **N**ame **S**erver) - 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 (**D**igital **S**ubscriber **L**ine) - An always-on broadband connection over traditional phone lines.

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

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.

Firmware - The programming code that runs a networking device.

FTP (**F**ile **T**ransfer **P**rotocol) - 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 (**H**yper**T**ext **T**ransport **P**rotocol) - 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 (**I**nternet **P**rotocol) - A protocol used to send data over a network.

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

ISP (**I**nternet **S**ervice **P**rovider) - A company that provides access to the Internet.

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

MAC (**M**edia **A**ccess **C**ontrol) **Address** - The unique address that a manufacturer assigns to each networking device.

Mbps (**M**ega**B**its **P**er **S**econd) - One million bits per second; a unit of measurement for data transmission.

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.

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

RJ-45 (**R**egistered **J**ack**-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.

SSID (**S**ervice **S**et **ID**entifier) - 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 (**T**ransmission **C**ontrol **P**rotocol) - A network protocol for transmitting data that requires acknowledgement from the recipient of data sent.

TCP/IP (**T**ransmission **C**ontrol **P**rotocol/**I**nternet **P**rotocol) - 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 (**T**rivial **F**ile **T**ransfer **P**rotocol) - 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.

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 (**U**niform **R**esource **L**ocator) - The address of a file located on the Internet.

WAN (**W**ide **A**rea **N**etwork)- The Internet.

WEP (**W**ired **E**quivalent **P**rivacy) - A method of encrypting network data transmitted on a wireless network for greater security.

WLAN (**W**ireless **L**ocal **A**rea **N**etwork) - A group of computers and associated devices that communicate with each other wirelessly.

Appendix C: Specifications

Model	WIP330
Standards	802.11b, 802.11g
Channels	11 Channels (US, Canada), 13 Channels (Europe)
Transmit Power	12 dBm for 802.11b and 802.11g @ Normal Temp Range
External Interface	One Mini USB 1.1 Port, One Stereo Ear Phone Jack
Display	2.2 inch (55.9 mm) (240 x 320 pixels)
Network Protocols	TCP/IP
Security	WEP (64/128), WPA-PSK Encryption
QoS	ToS
Voice Protocols	SIP v2 Session Initiation Protocol (RFC3261), SDP (RFC2327)
Voice Codecs	G.711 u/A-law, G.729a/b

DTMF Transmission	In-band, Out-band (RFC2833)
Voice Quality	Acoustic Echo Cancellation Jitter Buffer Control Comfortable Noise Generation Packet Loss Concealment
Dimensions (W x H x D)	1.84" x 5.32" x 0.74" (46.7 mm x 135.2 mm x 18.8 mm)
Unit Weight	4.20 oz. (0.12 kg)
Power	3.7V, 1250mAh Lithium Battery, 5V, 1A AC Adapter
Certifications	FCC, cUL, CE
Operating Temp.	32ºF to 113ºF (0ºC to 45ºC)
Storage Temp.	-4ºF to 131ºF (-20ºC to 55ºC)
Operating Humidity	10% to 85% Relative Humidity, Non-Condensing
Storage Humidity	10% to 95% Non-Condensing

Appendix D: Warranty Information

LIMITED WARRANTY

Your Internet phone 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 Internet phone service provider's entire liability under this warranty will be for Your Internet phone 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 Internet phone service provider Technical Support in order to obtain a Return Authorization Number, if applicable. If You are requested to return the Product, mark the Return Authorization Number clearly on the outside of the package. You are responsible for shipping defective Products to Your Internet phone service provider.

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 Internet phone service provider, (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Your Internet phone 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 Internet phone 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 INTERNET PHONE 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 Internet phone service provider HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL Your Internet phone service provider' 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 contact your Internet phone service provider regarding the warranty for the Product.

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

This device complies with Industry Canada ICES-003 and RSS210 rules.

IC Statement

Operation is subject to the following two conditions:
1.   This device may not cause interference and
2.   This device must accept any interference, including interference that may cause undesired operation of the device.

Règlement d'Industry Canada

Les conditions de fonctionnement sont sujettes à deux conditions:
1.   Ce périphérique ne doit pas causer d'interférence et
2.   Ce périphérique doit accepter toute interférence, y compris les interférences pouvant perturber le bon fonctionnement de ce périphérique

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 Haushaltmüll 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.

Ξλληνικά/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 κοινοτικά 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 nešķirotā 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 novecojuša 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 perdirbant 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 Klijenti 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 jistax jintrema ma' skart muniċipali li ma ġiex 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 ieħor ta' l-elettriku u elettroniku permezz ta' faċilitajiet ta' ġbir appuntati apposta mill-gvern jew mill-awtoritajiet lokali. Ir-rimi b'mod korrett u r-riċiklaġġ jgħin 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-ħanut 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, amelyeken, 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 gyűjtőredszereken 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 gospodinjskih 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

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: 800-546-5797 (LINKSYS)
Or fax your request in to: 949-823-3002

If you experience problems with any Linksys product,
you can call us at: 800-326-7114
Don't wish to call? You can e-mail us at: support@linksys.com

www.linksys.com