



# Wireless-G

IP Phone





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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 Wireless-G IP Phone has been designed to make understanding networking with the 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.

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

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

word: definition.

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

Figure 0-1: Sample Figure Description

WIP330-UG-51027NC JL

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# **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 are at home, in your office, or at a public hotspot.

How does the IP Phone do this? It connects to your wireless router or gateway, so telephone service is delivered through your cable or DSL Internet connection. You can also surf the Internet with its built-in web browser and backlit. full-color screen.

But what does all of this mean? Networks are useful tools for sharing Internet access and computer resources. Your voice calls can share your high-speed Internet connection. You will be able to make phone calls using the account you set up with your Internet phone service provider, even while you're 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 connect the IP Phone after you have set up 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.

#### What's in This User Guide?

This guide covers the steps for installing the Wireless-G IP Phone.

Chapter 1: Introduction
 This chapter describes the IP Phone's applications and this User Guide.

ip (internet protocol): a protocol used to send data over a network.

network: a series of computers or devices connected for the purpose of data sharing, storage, and/or transmission between users.



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

- Chapter 2: Getting to Know the Wireless-G IP Phone
   This chapter describes the physical features of the IP Phone.
- Chapter 3: Installing and Using the Wireless-G IP Phone
   This chapter explains how to install the IP Phone and use it.
- Chapter 4: Configuring the Wireless-G IP Phone
   This chapter discusses how to configure the IP Phone's settings.
- Appendix A: Troubleshooting
   This appendix describes some potential problems and solutions, as well as frequently asked questions, regarding use of the IP Phone.
- Appendix B: Glossary
   This appendix gives a brief glossary of terms frequently used in networking.
- Appendix C: Specifications
   This appendix provides the technical specifications for the IP Phone.
- Appendix D: Warranty Information
   This appendix supplies the warranty information for the IP Phone.
- Appendix E: Regulatory Information
   This appendix supplies the regulatory information regarding the IP Phone.
- Appendix F: Contact Information
   This appendix 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 headset jack and USB port are located on the bottom panel.



Figure 2-1: Bottom Panel

Headset Jack This jack allows you to connect a headset.

USB Port The USB port allows you to attach the included power adapter.

## **The Front and Side Panels**

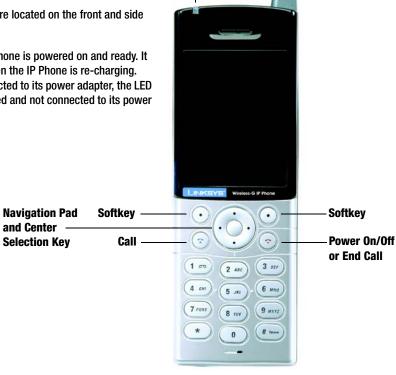
The power LED is located at the top of the IP Phone, while its buttons are located on the front and side panels.

Power LED

Blue/Purple. The LED lights up blue when the IP Phone is powered on and ready. It flashes, alternating between blue and purple, when the IP Phone is re-charging. When the IP Phone is fully charged and still connected to its power adapter, the LED will be a solid purple. When the IP Phone is charged and not connected to its power adapter, the LED will be a solid blue.

The buttons of the IP Phone are described in this table.

Icon	Button Name	Function
	Softkey	Selects the appropriate action shown on the left- or right- hand side of the screen
	Navigation Pad and Center Selection Key	Lets you navigate menus and select your choices  Controls cursor for its web browser
•	Call	Uses Internet phone line



**Power LED** 

Figure 2-2: Front Panel

Icon	Button Name	Function
•	Power On/Off or End Call	Press and hold this button for two seconds to power the IP Phone on or off.  Ends the call or exits the current menu
0	Speakerphone	Switches to speakerphone (The speaker is located on the back of the IP Phone)
•	Volume	Raises or lowers the volume

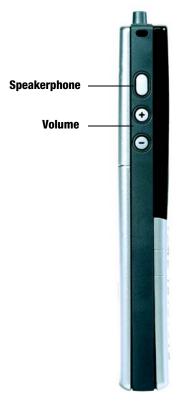


Figure 2-3: Side Panel

## **The Back Panel**

The IP Phone's speaker (for the speakerphone feature) and battery compartment are located on the back panel of the IP Phone. (The speaker is controlled by the speakerphone button on the side panel. For directions on how to insert the battery, refer to "Chapter 3: Installing and Using the Wireless-G IP Phone."

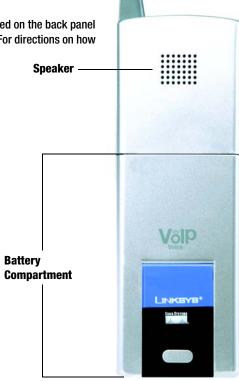


Figure 2-4: Back Panel

# **Chapter 3: Installing and Using the Wireless-G IP Phone**

#### **Overview**

This chapter provides instructions for first-time installation and use of the IP Phone. You will insert the battery into the IP Phone and then set it up for your wireless network and Internet phone service. Then you will be able to make and receive Internet phone calls.

# **Inserting the Battery into the Wireless-G IP Phone**

To insert the battery, follow these instructions:

- Remove the cover of the battery compartment. Push down on the button and slide the cover downward.
- Insert the battery. Make sure the metal contacts of the battery line up with the metal contacts of the battery compartment.
- 3. Insert the door and slide it upward until it snaps into place.

Proceed to the next section, "Powering on the Wireless-G IP Phone."



Figure 3-1: Press the Button



Figure 3-2: Insert the Battery

# **Powering on the Wireless-G IP Phone**

Make sure you have the account information, including necessary IP Phone settings, supplied by your Internet phone service provider. 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, then go to the website of your Internet phone service provider and sign up for service. After you have set up an account, proceed to step 1.

- Make sure you have the account information, including necessary IP Phone settings, supplied by your Internet phone service provider.
- 2. Plug the USB mini-B connector of the included power adapter into the USB mini-B port of the IP Phone. Then connect the power adapter to a standard electrical outlet.



Figure 3-3: Connect the Power

Wireless-G IP Phone **Power LED** 3. The power LED will flash, alternating between blue and purple. For the initial charge, allow the battery to charge for at least 10 hours, so the battery will have a full charge, which is indicated by a solidly lit Power LED. This maximizes battery performance and life. When the battery is fully charged, proceed to "Setting up the Wireless-G IP Phone." Softkey -**Navigation Pad Softkey** and Center Power On/Off **Selection Key** Call or End Call 3 055 4 GH1 6 MNO 9 wxyz

Figure 3-4: Front Panel

# **Setting up the Wireless-G IP Phone**

Before you begin, make sure your network has an active Internet connection.

- 1. Press and hold the **Power On/Off** button for two seconds.
- 2. The IP Phone will boot up and automatically scan for wireless networks.

A list of wireless networks will be displayed and show their wireless network names (also known as Service Set Identifier or SSID), security status (a lock indicates wireless security), and signal strength, which is indicated by a bar graph.

Scroll through the network choices, and press the center selection key (in the middle of the navigation pad) to select the wireless network you want to use.

If the network you want is not shown, select **Rescan** for a new scan.



**NOTE:** Press the left softkey to make a selection, and press the right softkey to return to the previous menu. Use the navigation pad to scroll through menu choices.



Figure 3-5: Scan for Wireless Networks



Figure 3-6: Select Wireless Network

4. The IP Phone will automatically connect to the network you have selected.

If security is enabled on the selected network, a new screen will appear. Using the navigation pad, select the appropriate transmit key number and then move to the WEP Key field. Enter the network's WEP key. Select **Exit** to save your changes, or select **Clear** to delete a character or number.



Figure 3-7: Connect to Wireless Network



Figure 3-8: Enter WEP Key (for Secured Networks)

You will be notified when the IP Phone has connected to the network, and a checkmark will appear next to the name of the network.

Select Exit.



Figure 3-9: Successful Connection

6. The standby screen will appear. Select Menu.



Figure 3-10: Select Menu

Phone Settings will be highlighted. Navigate the menu choices, and then select SIP Settings. (SIP stands for Session Initiation Protocol.)



Figure 3-11: Select SIP Settings

8. A list of SIP settings will be displayed. For the Proxy IP setting, select Edit.



**NOTE:** The Proxy IP address and other information should have been supplied by your Internet phone service provider. If you do not have this information, contact your Internet phone service provider.

9. Enter the Proxy IP address in the new window, and then select Save.



Figure 3-12: Edit Proxy IP



Figure 3-13: Save Proxy IP

- 10. Scroll down to Proxy Port, and select Edit.
- 11. Enter the Proxy Port number address in the new window, and then select Save.

- 12. Scroll down to Register Proxy IP, and select Edit.
- 13. Enter the Register Proxy IP address in the new window, and then select Save.



Figure 3-14: Save Proxy Port



Figure 3-15: Save Register Proxy IP

Proxy IP
66.35.222.58
Proxy Port
5060

Clear

Figure 3-16: Save Register Proxy Port

Exit



Figure 3-17: Save Outbound Proxy IP

- 14. Scroll down to Register Proxy Port, and select Edit.
- 15. Enter the Register Proxy Port number in the new window, and then select **Save**.

- 16. Scroll down to Outbound Proxy IP, and select Edit.
- 17. Enter the Outbound Proxy IP address in the new window, and then select Save.

- 18. Scroll down to Outbound Proxy Port, and select Edit.
- 19. Enter the Outbound Proxy Port number in the new window, and then select Save.

20. If your Internet phone service provider did not provide an Expire Time setting, then keep the default setting, **3600** seconds, and proceed to step 20.

If your Internet phone service provider provided an Expire Time setting, then scroll down to Expire Time, and select **Edit**.

21. Enter the Expire Time in the new window, and then select Save.



Figure 3-18: Edit Outbound Proxy Port



Figure 3-19: Save Expire Time

- 22. Scroll down to Phone Number, and select Edit.
- 23. Enter the Phone Number you will use for Internet phone calls, and then select Save.

- 24. Scroll down to User Name, and select Edit.
- 25. Enter the User Name in the new window, and then select Save.



Figure 3-20: Save Phone Number



Figure 3-21: Save User Name

- 26. Scroll down to Password, and select Edit.
- 27. Enter the Password, and then select Save.

28. On the SIP Settings screen, select Save.



Figure 3-22: Save Password



Figure 3-23: Save SIP Settings

29. Select Return to return to the standby screen.

30. The standby screen will indicate that the IP Phone is ready to make or receive phone calls.

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



Figure 3-24: Return to Standby Screen



Figure 3-25: Standby Screen

# **Using the Wireless-G IP Phone**

To make a call, enter the phone number you want to call. Then press the **Call** button. When you are on a phone call, select **Option** to see a list of menu choices. Select **HangUp** to end the call.

To change the volume, use the + and - buttons on the side panel of the IP Phone. To switch to speakerphone, press the speakerphone button, which is located above the volume buttons.

## LineOption

When you are on a call, you have several options available. Press the left softkey to make a selection, and press the right softkey to return to the previous menu. Use the navigation pad to scroll through menu choices.

HangUp. To end the call, select HangUp.

Mute. To mute the call, select Mute. Then select UnMute when you are ready to talk.

Hold. To put a call on hold, select Hold. Then select UnHold when you are ready to return to this call.

Line-2. When you want to switch back and forth between two separate conversations, use the Line-2 feature. When you are on your first call, select Line-2 to switch to a second line. A new window will appear. Enter the phone number of the second call, and then press the Call button. The current call will be put on hold, and you will be switched to the second call. Select Switch to switch back to the first call.

Transfer. There are two types of transfer features available. Use the Transfer feature when you want to introduce the caller you are transferring. Use the Blind TFR (Transfer) feature when you want to transfer the caller without introduction. When you are on your call, select **Transfer**. A new window will appear. Enter the phone number to which you want to transfer the call, and then press the **Call** button. When the second call is answered, speak to the answering party and select **Transfer**. Then hang up.



Figure 3-26: Call Connected



Figure 3-27: Line Options

Ready 2005/09/09 FRI 19495551239 End Call 16265551239 Calling

Figure 3-28: Second Call

**Blind TFR.** For a blind transfer, select **Blind TFR.** Dial the number to which you want to transfer the call. Select **Blind TFR** again. Then hang up. When you are on your call, select **Blind TFR.** A new window will appear. Enter the phone number to which you want to transfer the call, and then press the **Call** button. Then hang up.

**Conference**. When you are on your call, select **Conference**. A new window will appear. Enter the phone number of the second call, and then press the **Call** button. When the second call is answered, select **Conference**.

## **Second Incoming Call**

When you have a second call coming in, you can select **Option** to see a list of menu choices. Select **HangUp** to end the call.

For more information about the buttons on the IP Phone, refer to "Chapter 2: Getting to Know the Wireless-G IP Phone."

For instructions on how to check your voicemail, contact your Internet phone service provider.

To configure additional settings, proceed to "Chapter 4: Configuring the Wireless-G IP Phone."

# **Chapter 4: Configuring the Wireless-G IP Phone**

# **Instructions for Configuring the Wireless-G IP Phone**

Follow these instructions to configure the IP Phone's settings. You will use these buttons to navigate menus and select your choices.

Icon	Button Name	Function
	Softkey	Press the left or right softkey to select the appropriate action shown on the left- or right-hand side of the screen.
(· )	Navigation Pad and Center Selection Key	To navigate menus and control the cursor for the web browser, use the navigation pad.
		Use the center selection key to make menu choices.
(*)	Power On/Off or End Call	To exit a menu without making changes, press this button.



Figure 4-1: Front Panel of IP Phone

Wireless-G IP Phone

## **Status Information**

The standby screen will display a variety of information about the IP Phone.

# Wireless Signal Strength

At the top of the screen, the icon on the left indicates wireless signal strength.

## **Time Display**

The current time is shown. To change this time and its format, analog or digital, use the main menu.

#### Status of the IP Phone

This indicates whether the IP Phone is ready to make and receive calls.

## **Date Display**

The date display gives you the current date. You can change this date using the main menu.

## **Battery Strength**

The icon on the right of the screen indicates battery strength of the IP Phone.

#### **Wireless Network Name**

The screen displays the name of the wireless network used by the IP Phone.





**Battery** 

Strength

Figure 4-2: Standby Screen

#### Internet Phone Number

The Internet phone number of the IP Phone is shown.

#### Menu

Press the left softkey button to view the main menu. Its choices will be described in further details below.

#### Phonebook

Press the right softkey to access the Phonebook. This can also be accessed through the main menu.

# **Settings of the Wireless-G IP Phone**

You will have nine menu choices: Call Log, Phone Book, Call Option, Network Settings, Phone Settings, Wireless, SIP Settings, Web Site, and Information.



**NOTE:** Press the left softkey to make a selection, and press the right softkey to return to the previous menu. Use the navigation pad to scroll through menu choices.



Figure 4-3: Standby Screen



Figure 4-4: Main Menu

#### Call Log

Scroll through these choices and press the left softkey to make a selection. Select **Return** to return to the previous menu.

**Missed**. A list of missed calls will be displayed. Select **Delete** to delete a call. Select **Return** to return to the previous menu.

**Received**. A list of received calls will be displayed. Select **Delete** to delete a call. Select **Return** to return to the previous menu.

**Dialed**. A list of dialed calls will be displayed. Select **Delete** to delete a call. Select **Return** to return to the previous menu.

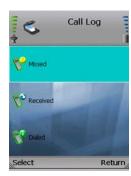


Figure 4-5: Call Log

#### Phone Book

You will see a list of contacts (when you have contacts in the Phone Book). Select **Option** to see menu choices. Select **Return** to return to the previous menu.



Figure 4-6: Select Phone Book

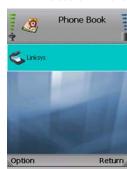


Figure 4-7: Phone Book

#### Option

You have these choices: Edit (available when you have contacts in the Phone Book), Add, Delete (available when you have contacts in the Phone Book), and Mem Usage. Select **Return** to return to the previous menu.

Edit. Select Edit to edit a contact's information: Name, Home Number, Office Number, Mobile Number, SIP-Home Number, SIP-Office Number, SIP-Mobile Number. For each setting, select Edit. Enter the appropriate information in the new window. Select Save to save the new information, or select Clear to delete a character or number on-screen. After you have finished your edits, select Save to return to the *Phone Book* screen.



Figure 4-8: Phone Book Options

Add. Select Add to add a new contact. Scroll through the different settings: Name, Home Number, Office Number, Mobile Number, SIP-Home Number, SIP-Office Number, SIP-Mobile Number. For each setting, select Edit. Enter the appropriate information in the new window. Select Save to save the new information, or select Clear to delete a character or number on-screen. After you have entered all of the new contact information, select Save to return to the *Phone Book* screen.

**Delete.** To delete a contact, scroll down the entries until the contact is highlighted. Select **Option** and then select **Delete.** Then you will be automatically returned to the *Phone Book* screen.

**Mem Usage**. Select **Mem Usage** to find out how much memory has been used. The total number of phone book entries available and number of entries used will be displayed. Select **Exit** to return to the *Phone Book* screen.



Figure 4-9: Add Person



Figure 4-10: Enter Name

#### **Call Option**

To forward calls, select **Forwarding**. Select **Return** to return to the previous menu.

#### **Forwarding**

Scroll through these choices and press the left softkey to make a selection. Select **Save** to return to the *Call Option* screen.

Unconditional. If you want to forward all calls, select **Edit**. Enter the new number in the new window. Select **Save** to save the new number, or select **Clear** to delete a number on-screen.

**Busy.** If you want calls forwarded when the IP Phone is busy, select **Edit**. Enter the new number in the new window. Select **Save** to save the new number, or select **Clear** to delete a number on-screen.

**No Answer**. If you want calls forwarded when you do not answer the IP Phone, select **Edit**. Enter the new number in the new window. Select **Save** to save the new number, or select **Clear** to delete a number on-screen.



Figure 4-11: Select Call Option

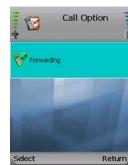


Figure 4-12: Call Option



Figure 4-13: Forwarding

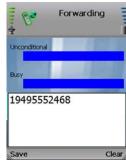


Figure 4-14: Enter Phone Number

#### **Network Settings**

You have two IP Modes available, DHCP and Fixed IP. In most cases, you should keep the default setting, **DHCP**, if your network router or gateway will assign IP addresses to the IP Phone. If you want to assign a static IP address to the IP Phone, select **Fixed IP**. To change the IP Mode, select **Edit**. The on-screen choices will change depending on which IP Mode is selected. Select **Save** to return to the previous menu.

#### DHCP

If DHCP is selected as the IP Mode, the screen will show these settings, Primary DNS and Secondary DNS.

**Primary DNS**. To add or change the Primary DNS address, select **Edit**. Enter the new DNS IP address in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Secondary DNS**. To add or change the Secondary DNS address, select **Edit**. Enter the new DNS IP address in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.



ip address: the address used to identify a computer or device on a network.

Figure 4-15: Select Network Settings



Figure 4-16: Network Settings - DHCP



Figure 4-17: Enter DNS IP Address

#### Fixed IP

If Fixed IP is selected as the IP Mode, the screen will show these settings: IP Address, Subnet Mask, Default Gateway, Primary DNS, and Secondary DNS.

IP Address. To add or change the IP Address, select Edit. Enter the new IP Address in the new window. Select Save to save the new setting, or select Clear to delete a number on-screen.

**Subnet Mask.** To add or change the Subnet Mask, select **Edit**. Enter the new Subnet Mask in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Default Gateway.** To add or change the Default Gateway, select **Edit.** Enter the new IP address of the Default Gateway in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Primary DNS**. To add or change the Primary DNS address, select **Edit**. Enter the new DNS IP address in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Secondary DNS**. To add or change the Secondary DNS address, select **Edit**. Enter the new DNS IP address in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.



Figure 4-18: Network Settings - Fixed IP



Figure 4-19: Enter IP Address



Figure 4-20: Select Subnet Mask



Figure 4-21: Enter Subnet Mask

# **Phone Settings**

You can customize the settings of the IP Phone. You have these choices: Ring Option, Keypad Tone, Wallpaper, Date & Time, Language, Power, and Upgrade. Select **Return** to return to the previous menu.

# **Ring Option**

Scroll through these choices and press the left softkey to make a selection. Select **Return** to return to the *Phone Settings* screen.

**Ring Types**. There are five different ring types. The selected ring type is indicated by the <\*> symbol. Scroll through these choices to hear the actual ring style. Highlight the ring type you want to select, and then select **Settings** to save your change. Select **Exit** to return to the *Ring Option* menu without changing the ring type.

**Ring Tones**. There are seven ring tones. The selected ring tone is indicated by the <\*> symbol. Scroll through these choices to hear the actual ring tone. Highlight the ring tone you want to select, and then select **Settings** to save your change. Select **Exit** to return to the *Ring Option* menu without changing the ring tone.

**Ring Volume**. There are five ring volume levels. The selected ring volume level is indicated by the <\*> symbol. Scroll through these choices to hear the actual ring volume level. Highlight the ring volume level you want to select, and then select **Settings** to save your change. Select **Exit** to return to the *Ring Option* menu without changing the ring volume level.



Figure 4-22: Select Phone Settings



Figure 4-23: Phone Settings



Figure 4-24: Ring Options



Figure 4-25: Ring Types

# **Keypad Tone**

To hear the actual keypad tone, scroll through these choices: Off, Soft, and Loud. The selected keypad tone is indicated by the <\*> symbol. Highlight the keypad tone you want to select, and then select **Settings** to save your change. Select **Exit** to return to the *Ring Option* menu without changing the keypad tone.

# Wallpaper

To see the different wallpaper choices, highlight the wallpaper you want to select, and then select **Preview**. Click **Exit** to return to the *Wallpaper* menu. The selected wallpaper is indicated by the <\*> symbol. Highlight the wallpaper you want to select, and then press the center selection key (in the middle of the navigation pad) to save your change. Select **Exit** to return to the *Ring Option* menu without changing the wallpaper.



Figure 4-26: Keypad Tone



Figure 4-27: Wallpaper

#### Date & Time

You have six choices: Date, Clock, Time Format, Clock Type, Time Zone, and NTP Server. Select **Exit** to return to the previous menu.

**Date**. Press the left softkey to select the Date setting. A new window will be displayed. Make your changes, and then select **Save**. Select **Exit** to return to the *Date & Time* screen without changing the date.

**Clock**. Press the left softkey to select the Clock setting. A new window will be displayed. Make your changes, and then select **Save**. Select **Exit** to return to the *Date & Time* screen without changing the time.

**Time Format.** There are two formats available, 12-Hours and 24-Hours. To change the format, highlight **Time Format**, and press the left softkey.

**Clock Type.** There are two types available, Analog and Digital. To change the format, highlight **Clock Type**, and press the left softkey.





Figure 4-28: Change Date

Figure 4-29: Change Clock



Figure 4-30: Change Time Format



Figure 4-31: Change Clock Type

**Time Zone.** Press the left softkey to select the Time Zone setting. A list of multiple time zones will be displayed. The selected time zone is indicated by the <\*> symbol. Scroll through these choices, and highlight the time zone. Then select **Settings** to save your change. Select **Exit** to return to the *Ring Option* menu without changing the time zone.

NTP Server. Press the left softkey to select the NTP Server setting. A new window will be displayed.

Enter the URL of the NTP Server. Select Save to save the new URL, or select Clear to delete a

Time Format

12-Hours

Clock Type

Analog

Time Zones

(GMT-08:00) Padfic Time (US &...

NTP Server

TIME.NIST.GOV

Select Exit

Time Zones
2005/01/01 SAT

<\*> (GMT-08:00) Paofic Time (US & Ca...
(GMT-07:00) Mountain Time (US & C...
(GMT-07:00) Chihuahua, La Paz, Maz...
(GMT-06:00) Central Time (US & Can...
(GMT-06:00) Saskatchewan
Settings Exit

Figure 4-32: Select Time Zone

Figure 4-33: Change Time Zone



Figure 4-34: Select NTP Server



Figure 4-35: Enter Name of NTP Server

character or number on-screen.

# Language

The selected language is indicated by the <\*> symbol. Highlight the language you want to select, and then press the left softkey to save your change. Select **Exit** to return to the *Phone Settings* menu without changing the language.

### Power

You have two Power Saving settings available, On and Off. In most cases, keep the default setting, **On**, to enable the screensaver and reduce the IP Phone's power consumption. If you want to keep the IP Phone's screen lit, select **Settings**. Select **Exit** to return to the *Phone Settings* menu without changing the Power Saving setting.



Figure 4-36: Select Language



Figure 4-37: Language



Figure 4-38: Change Power Saving

https://210.243.128.138/L01

101 ima.bin

# Upgrade

The IP Phone is pre-configured with the correct Download URL and OS Image File entries.

Plug the USB mini-B connector of the included power adapter into the USB mini-B port of the IP Phone. Then connect the power adapter to a standard electrical outlet.

Select **Upgrade** to start upgrading the IP Phone's firmware, or select **Return** to cancel the upgrade and return to the *Phone Settings* menu.



**NOTE:** If the upgrade is interrupted, the IP Phone will revert to its old firmware, and you can attempt the upgrade again.

When the upgrade is complete, the IP Phone will automatically power itself off. Wait five seconds, and then power on the IP Phone.



Figure 4-39: Select Figure 4-40: Upgrade
Upgrade

OS Image File



Figure 4-41: Upgrade in Progress



Figure 4-42: Upgrade Successful

## Wireless

You have two choices, Set Wi-Fi and Profiles. If you want to scan for wireless networks in your local area, select **Set Wi-Fi**. If you want to configure configuration profiles for different network setups, select **Profiles**. Press the left softkey to make a selection. Select **Return** to return to the previous menu.

#### Set Wi-Fi

After you have selected Set Wi-Fi, the IP Phone will scan the local area for wireless access points or routers.

A list of wireless networks will be displayed and show their wireless network names, security status (a lock indicates wireless security), and signal strength, which is indicated by a bar graph.

Scroll through the network choices, and press the center selection key (in the middle of the navigation pad) to select the wireless network you want to use.

If the network you want is not shown, select **Rescan** for a new scan.



Figure 4-43: Wireless



Figure 4-44: Scanning for Wireless Networks



Figure 4-45: List of Wireless Networks

The IP Phone will automatically connect to the network you have selected.

If security is enabled on the selected network, a new screen will appear. Using the navigation pad, select the appropriate transmit key number and then move to the *WEP Key* field. Enter the network's WEP key. Select **Exit** to save your changes, or select **Clear** to delete a character or number.

You will be notified when the IP Phone has connected to the network, and a checkmark will appear next to the name of the network.

Select **Exit** to return to the *Wireless* menu.



Figure 4-46: Connecting to Wireless Network



Figure 4-47: Enter WEP Key (for Secured Network)



Figure 4-48: Connected to Wireless Network

#### **Profiles**

You will see a list of profiles (when you have profiles already configured). Select **Option** to see menu choices. Select **Exit** to return to the previous menu.

### Option

You have these choices: Edit (available when you have at least one existing profile), Add, Delete (available when you have at least one existing profile), and Go Down/Up (available when you have more than one profile). The Edit and Add options configure the same settings. The Edit option is used for changing existing profiles, while the Add option is used for creating new profiles. Select **Return** to return to the previous menu.

**Edit**. Select **Edit** to edit a profile's information: SSID (wireless network name), Wireless Mode, Authentication Mode, Key Index, and WEP Key. Scroll through these choices, and select **Edit** to change a setting.

**SSID.** To enter the SSID, select **Edit**. Enter the new SSID in the new window. Select **Save** to save the new SSID, or select **Clear** to delete a character or number on-screen.

Wireless Mode. You have a choice of Infrastructure and Ad hoc modes. To change the Wireless Mode, select Edit.

**Authentication Mode**. You have a choice of Open System, Auto Switch, and Share Key. To change the Authentication Mode, select **Edit**. A new window will open. Scroll through the modes, and select the appropriate mode. Select **Save** to save the new Authentication Mode, or select **Exit** to return to the *Edit Profile* menu without changing the Authentication Mode.

**Key Index**. For the index of transmit keys, you have a choice of 1-4. To specify which WEP key the IP Phone will use, select **Edit**. A new window will open. Scroll through the numbers, and select the appropriate



Figure 4-49: Wi-Fi Profiles

**ssid** (service set identifier): your wireless network's name.

ad-hoc: a group of wireless devices communicating directly to each other (peer-to-peer) without the use of an access point.

infrastructure: a wireless network that is bridged to a wired network via an access point. transmit key number. Select **Save** to save the new transmit key number, or select **Exit** to return to the Edit Profile menu without changing the number.

WEP Key. To enter the WEP Key, select Edit. Enter the new WEP Key in the new window. Select Save to save the new WEP Key, or select Clear to delete a character or number on-screen.

Select **Save** to save the new settings and return to the *Wi-Fi Profiles* screen.

Add. Select Add to create a profile and enter its information: SSID (wireless network name), Wireless Mode, Authentication Mode, Key Index, and WEP Key, Scroll through these choices, and select Edit to change a setting.

SSID. To enter the SSID, select Edit. Enter the new SSID in the new window. Select Save to save the new SSID, or select **Clear** to delete a character or number on-screen.

Wireless Mode. You have a choice of Infrastructure and Ad hoc modes. To change the Wireless Mode, select Edit.

Authentication Mode. You have a choice of Open System, Auto Switch, and Share Key. To change the Authentication Mode, select Edit. A new window will open. Scroll through the modes, and select the appropriate mode. Select Save to save the new Authentication Mode, or select **Exit** to return to the *Add Profile* menu without changing the Authentication Mode.



Add Profile SSID Save Clear

Figure 4-50: Select SSID



Figure 4-51: Enter SSID



Figure 4-52: Change Wireless Mode



Figure 4-53: Change **Authentication Mode** 

**Key Index**. For the index of transmit keys, you have a choice of 1-4. To specify which WEP key the IP Phone will use, select **Edit**. A new window will open. Scroll through the numbers, and select the appropriate transmit key number. Select **Save** to save the new transmit key number, or select **Exit** to return to the *Add Profile* menu without changing the number.

**WEP Key**. To enter the WEP Key, select **Edit**. Enter the new WEP Key in the new window. Select **Save** to save the new WEP Key, or select **Clear** to delete a character or number on-screen.

Select Save to save the new settings and return to the Wi-Fi Profiles screen.

**Delete.** To delete a profile, scroll down the entries until the profile is highlighted. Select **Option** and then select **Delete.** Then you will be automatically returned to the *Wi-Fi Profiles* screen.

**Go Down/Up**. You can rearrange the order of the profiles on your list. To move a profile, scroll through the entries until the profile is highlighted. Select **Option** and then select **Go Down** or **Go Up** to move the entry. Then you will be automatically returned to the *Wi-Fi Profiles* screen.



Figure 4-54: Change Transmit Key



Figure 4-55: Edit WEP Key



Figure 4-56: Enter WEP Key



Figure 4-57: Profile Added

# **SIP Settings**

SIP settings are used to configure your Internet phone service. The necessary setup information is supplied by your Internet phone service provider. If you do not have this information, contact your Internet phone service provider before you make any changes. Select **Save** to return to the previous menu.

**Proxy IP.** To add or change the Proxy IP address, select **Edit**. Enter the new Proxy IP address in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Proxy Port.** To add or change the Proxy Port number, select **Edit.** Enter the new Proxy Port number in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number onscreen.

Register Proxy IP. To add or change the Register Proxy IP address, select Edit. Enter the new Register Proxy IP address in the new window. Select Save to save the new setting, or select Clear to delete a number on-screen.

Register Proxy Port. To add or change the Register Proxy Port number, select Edit. Enter the new Register Proxy Port number in the new window. Select Save to save the new setting, or select Clear to delete a number on-screen.





Figure 4-58: Edit Proxy IP Figure 4-59: Save Proxy IP



Figure 4-60: Save Register Proxy IP



Figure 4-61: Save Register Proxy Port

**Outbound Proxy IP.** To add or change the Outbound Proxy IP address, select **Edit**. Enter the new Outbound Proxy IP address in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Outbound Proxy Port**. To add or change the Outbound Proxy Port number, select **Edit**. Enter the new Outbound Proxy Port number in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Expire Time**. If your Internet phone service provider did not provide an Expire Time setting, then keep the default setting, **3600** seconds. If your Internet phone service provider provided an Expire Time setting, then scroll down to Expire Time, and select **Edit**. Enter the Expire Time in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Phone Number**. To add or change the Phone Number you will use for Internet phone calls, select **Edit**. Enter the new Phone Number in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.



Figure 4-62: Save Outbound Proxy IP



Figure 4-63: Edit
Outbound Proxy Port



Figure 4-64: Save Expire
Time



Figure 4-65: Save Phone Number

**User Name**. To add or change the User Name, select **Edit**. Enter the new User Name in the new window. Select **Save** to save the new setting, or select **Clear** to delete a character or number on-screen.

**Password**. To add or change the Password, select **Edit**. Enter the new Password in the new window. Select **Save** to save the new setting, or select **Clear** to delete a character or number on-screen.

**DNS Server**. To add or change the IP address of the DNS Server, select **Edit**. Enter the new DNS Server IP address in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

**Payload Type.** G.711a, G.729, and G.7111u are the three Payload Types available. They are listed in order of preference. To change the order of preference, select **Edit** until the appropriate order of preference is displayed on-screen.

**Packet Time**. You have two Packet Time lengths available, Small and Large. To change the time period, select **Edit** until the appropriate Packet Time is displayed on-screen.

**DTMF Relay**. You can enable or disable the DTMF Relay feature. To enable or disable the feature, select **Edit**.

**UDP Port**. To add or change the UDP Port number, select **Edit**. Enter the new UDP Port number in the new window. Select **Save** to save the new setting, or select **Clear** to delete a number on-screen.

RTP Port. To add or change the RTP Port number, select Edit. Enter the new RTP Port number in the new window. Select Save to save the new setting, or select Clear to delete a number on-screen.



Figure 4-66: Save User Name



Figure 4-68: Save DNS Server



Figure 4-67: Save Password



Figure 4-69: Change Payload Type

#### Web Site

A list of web sites will be shown. Scroll through these choices and press the left softkey to make a selection. Select **Return** to return to the previous menu.

When the web site is displayed, use the navigation pad to control cursor. Press the center selection key to select menu choices and highlight items. Select **Exit** to return to the previous menu.

To visit a different website, select the current web address in the *Address* field. Begin entering the new web address, and a new window will automatically appear. When you have finished entering the new web address, select **Save**.

To change how the cursor works, select **Option**. If your cursor uses the Click feature, the Drag & Drop feature will be available. If your cursor uses the Drag & Drop feature, the Click feature will be available. Press the left softkey to select the new cursor feature, or select **Return** to return to the website.



Figure 4-70: Web Site



Figure 4-71: Visit Web Site



Figure 4-72: Enter New Web Address



Figure 4-73: Select Drag & Drop

# Information

The status information of the IP Phone and its software is displayed on this read-only screen. Scroll through the settings to view them. Select **Exit** to return to the previous menu.

Phone Number. Displayed here is the Phone Number of the IP Phone.

IP Address. Displayed here is the IP Address of the IP Phone.

**Wireless AP.** Displayed here is the name of the wireless network used by the IP Phone. (This is also known as the SSID.)

MAC Address. Displayed here is the MAC Address of the IP Phone.

**eBoot Version**. Displayed here is the version number of the eBoot software.

**Image Version**. Displayed here is the version number of the image software.

**SIP Version**. Displayed here is the version number of the SIP software.

**UI Version**. Displayed here is the version number of the UI (User Interface) software.



Figure 4-74: Information

# **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 <a href="https://www.linksys.com/international">www.linksys.com/international</a>.

# **Common Problems and Solutions**

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

Go through this checklist until your problem is solved:

- Check your router and network connection to the Internet.
- Follow these instructions to reboot your cable or DSL modem, IP Phone, and router:
  - 1. Power off your 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 two minutes. Power on your modem by plugging its power adapter into an electrical outlet.
  - 5. Wait two minutes. Power on the router by plugging its power adapter into an electrical outlet.
  - Wait five minutes. 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. You should now have a dial tone.
- 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.
- Access the Router's Web-based Utility by going to http://192.168.1.1 or the IP address of the Router.
- 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.
- 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)	Х
Internet phone 2	53 to 53	UDP	(IP address of IP Phone)	Х
Internet phone 3	69 to 69	UDP	(IP address of IP Phone)	Х
Internet phone 4	10000 to 20000	UDP	(IP address of IP Phone)	Х

- 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.

# 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 two minutes, and then power on your cable or DSL modem by plugging its power adapter into an electrical outlet.
  - Wait two minutes, and then power on the router by plugging its power adapter into an electrical outlet.
  - Wait five minutes. 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 handset or telephone. You should now have a dial tone.
- 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.
- Access the Router's Web-based Utility by going to http://192.168.1.1 or the IP address of the Router.
- 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.
- 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)	Х
Internet phone 2	53 to 53	UDP	(IP address of IP Phone)	Х
Internet phone 3	69 to 69	UDP	(IP address of IP Phone)	Х
Internet phone 4	10000 to 20000	UDP	(IP address of IP Phone)	Х

- 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.

## 3. 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.

#### 4. 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.
  - Wait two minutes, and then power on your cable or DSL modem by plugging its power adapter into an electrical outlet.
  - Wait two minutes, and then power on the router by plugging its power adapter into an electrical outlet.
  - Wait five minutes. 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.
- Access the Router's Web-based Utility by going to http://192.168.1.1 or the IP address of the Router.
- 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.
- 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)	Х
Internet phone 2	53 to 53	UDP	(IP address of IP Phone)	Х
Internet phone 3	69 to 69	UDP	(IP address of IP Phone)	Х
Internet phone 4	10000 to 20000	UDP	(IP address of IP Phone)	Х

- 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.

## 5. The power LED does not light up.

Go through this checklist until your problem is solved:

- Unplug the power adapter from the IP Phone. Wait five seconds. Re-connect the power adapter.
- 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 make calls while I'm browsing the Internet?

Yes. You can make Internet phone or fax calls while browsing the Internet. However, 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** (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.

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.

**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 (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.

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

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.

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 (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.

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.

**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.

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.

# **Appendix C: Specifications**

Model WIP330

Standards 802.11b, 802.11g

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

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DTMF Transmission In-band, Out-band (RFC2833)

Voice Quality Acoustic Echo Cancellation

**Jitter Buffer Control** 

Comfortable Noise Generation Packet Loss Concealment

Dimensions 1.84" x 5.32" x 0.74"

(W x H x D) (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. 32°F to 113°F (0°C to 45°C)

Storage Temp. -4°F to 131°F (-20°C to 55°C)

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.

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# **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 and receiver.
- · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

#### IMPORTANT NOTE:

**FCC Radiation Exposure Statement:** 

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment has been SAR-evaluated. The Maximum average SAR(1g) test value is 0.303 W/kg.

Linksys declares that WIP 330 ( FCC ID: Q87-WIP330) is limited in CH1~CH11 for 2.4 GHz by specified firmware controlled in U.S.A.

## 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
- 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/ΕC 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.

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#### 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 I-ippakkjar ma jistax jintrema ma' skart municipali li ma ģiex isseparat. Is-simbolu jindika li dan il-prodott għandu jintrema separatament minn ma' I-iskart domestiku regolari. Hija responsabbiltà tiegħek li tarmi dan it-tagħmir u kull tagħmir ieħor ta' I-elettriku u elettroniku permezz ta' facilitajiet ta' ġbir appuntati apposta mill-gvern jew mill-awtoritajiet lokali. Ir-rimi b'mod korrett u r-riciklaġġ jgħin jipprevjeni konsegwenzi negattivi potenzjali għall-ambjent u għassaħħa 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' I-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:

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:

If you experience problems with any Linksys product, you can call us at:

Don't wish to call? You can e-mail us at:

http://www.linksys.com or ftp.linksys.com

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

800-326-7114 support@linksys.com

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Wireless-G IP Phone

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