

# **USER GUIDE**

# **Dual-Band Wireless-N USB Network Adapter**



### **About This Guide**

#### **Icon Descriptions**

While reading through the User Guide you may see various icons that call attention to specific items. Below is a description of these icons:



**NOTE:** This check mark indicates that there is a note of interest and is something that you should pay special attention to while using the product.



**WARNING:** This exclamation point indicates that there is a caution or warning and it is something that could damage your property or product.



**WEB:** This globe icon indicates a noteworthy website address or e-mail address.

#### **Online Resources**

Website addresses in this document are listed without **http://** in front of the address because most current web browsers do not require it. If you use an older web browser, you may have to add **http://** in front of the web address.

Resource	Website
Linksys	www.linksys.com
Linksys International	www.linksys.com/international
Glossary	www.linksys.com/glossary
Network Security	www.linksys.com/security

## **Copyright and Trademarks**



ılıılı cısco Linksys is a registered trademark or trademark of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries. Copyright © 2008 Cisco Systems, Inc. All rights reserved. Other brands and product names are trademarks or registered trademarks of their respective holders.

## **Table of Contents**

Chapter 1: Product Overview	1
LED	1
Chapter 2: Wireless Security Checklist	2
General Network Security Guidelines	2
Additional Security Tips	2
Chapter 3: Advanced Configuration	3
How to Access the Wireless Network Monitor	3
How to Use the Wireless Network Monitor	3
Status	3
Connect	
Profiles	
Appendix A: Troubleshooting	24
Appendix B: Windows Vista Configuration	25
Windows Vista Configuration	
New Wireless Connection	25
Appendix C: Windows XP Wireless Zero Configuration	28
Windows XP Wireless Zero Configuration	
Appendix D: Specifications	30
Appendix E: Warranty Information	31
Limited Warranty	
Appendix F: Regulatory Information	33
FCC Statement	
FCC Radiation Exposure Statement	
Safety Notices	
Industry Canada Statement	
Règlement d'Industry Canada	
Wireless Disclaimer	
Avis de non-responsabilité concernant les appareils sans fil	
User Information for Consumer Products Covered by EU Directive 2002/9 Electric and Electronic Equipment (WEEE)	
Appendix G: Software License Agreement	39
Software in Linksys Products	
Software Licenses	

Chapter 1 Product Overview

# **Chapter 1: Product Overview**

Thank you for choosing the Linksys Dual-Band Wireless-N USB Network Adapter. Using the latest wireless networking technology, the Adapter adds or upgrades wireless connectivity on your notebook computer. To help protect your data and privacy, you can use industrial-strength WPA2 encryption to protect your wireless connection. The included Setup Wizard will walk you through configuring the Adapter to your network's settings, step by step.

#### **LED**



\$

**Link** (Green) The LED flashes when there is wireless network activity.

# **Chapter 2: Wireless Security Checklist**

Wireless networks are convenient and easy to install, so homes with high-speed Internet access are adopting them at a rapid pace. Because wireless networking operates by sending information over radio waves, it can be more vulnerable to intruders than a traditional wired network. Like signals from your cellular or cordless phones, signals from your wireless network can also be intercepted. Since you cannot physically prevent someone from connecting to your wireless network, you need to take some additional steps to keep your network secure.



# 1. Change the default wireless network name or SSID

Wireless devices have a default wireless network name or Service Set Identifier (SSID) set by the factory. This is the name of your wireless network, and can be up to 32 characters in length. Linksys wireless products use **linksys** as the default wireless network name. You should change the wireless network name to something unique to distinguish your wireless network from other wireless networks that may exist around you, but do not use personal information (such as your Social Security number) because this information may be available for anyone to see when browsing for wireless networks.



#### 2. Change the default password

For wireless products such as access points and routers, you will be asked for a password when you want to change their settings. These devices have a default password set by the factory. The Linksys default password is **admin**. Hackers know these defaults and may try to use them to access your wireless device and change your network settings. To thwart any unauthorized changes, customize the device's password so it will be hard to guess.



## 3. Enable MAC address filtering

Linksys routers give you the ability to enable Media Access Control (MAC) address filtering. The MAC address is a unique series of numbers and letters assigned to every networking device. With MAC address filtering enabled, wireless network access is provided solely for wireless devices with specific MAC addresses. For example, you can specify the MAC address of each computer in your home so that only those computers can access your wireless network.



## 4. Enable encryption

Encryption protects data transmitted over a wireless network. Wi-Fi Protected Access (WPA/WPA2) and Wired Equivalency Privacy (WEP) offer different levels of security for wireless communication.

A network encrypted with WPA/WPA2 is more secure than a network encrypted with WEP, because WPA/WPA2 uses dynamic key encryption. To protect the information as it passes over the airwaves, you should enable the highest level of encryption supported by your network equipment.

WEP is an older encryption standard and may be the only option available on some older devices that do not support WPA.

#### **General Network Security Guidelines**

Wireless network security is useless if the underlying network is not secure.

- Password protect all computers on the network and individually password protect sensitive files.
- Change passwords on a regular basis.
- Install anti-virus software and personal firewall software.
- Disable file sharing (peer-to-peer). Some applications may open file sharing without your consent and/or knowledge.

#### **Additional Security Tips**

- Keep wireless routers, access points, or gateways away from exterior walls and windows.
- Turn wireless routers, access points, or gateways off when they are not being used (at night, during vacations).
- Use strong passphrases that are at least eight characters in length. Combine letters and numbers to avoid using standard words that can be found in the dictionary.



**WEB:** For more information on wireless security, visit **www.linksys.com/security** 

# **Chapter 3: Advanced Configuration**

Advanced configuration is performed through the Wireless Network Monitor (the Monitor). Use it to check the status information, search for available wireless networks, or create profiles that hold different configuration settings.

Diagnostics is performed through the Diagnostic utility. Use it to detect the Adapter, test the driver and Monitor, and troubleshoot if needed.

#### How to Access the Wireless Network Monitor

After installing the Adapter, the Monitor icon appears in the system tray of your computer. If the Monitor is enabled, the icon is green. If the Monitor is disabled or the Adapter is not inserted, the icon is gray.



Wireless Network Monitor Icon

Double-click the icon to open the Monitor.

#### **How to Use the Wireless Network Monitor**

The opening screen of the Monitor is the *Status* screen. From this screen, you can find out how strong the current wireless signal is and how good the connection's quality is. You can also click the Wi-Fi Protected Setup button to connect to a router that supports Wi-Fi Protected Setup.



**NOTE:** The Adapter supports Wi-Fi Protected Setup, which is a feature that makes it easy to set up your wireless network.

Click **More Information** to view additional status information about the current connection. To search for available wireless networks, click the **Connect** tab. To perform configuration changes or create connection profiles, click the **Profiles** tab.

#### Status

The *Status* screen displays network mode, signal strength, and link quality information about the current connection. It also displays the Wi-Fi Protected Setup button. Click **More Information** for additional status information.



Wi-Fi Protected Setup Button



Status

**Signal Strength** The Signal Strength bar indicates signal strength.

**Link Quality** The Link Quality bar indicates the quality of the wireless network connection.

**More Information** Click **More Information** to view additional information about the wireless network connection on the *Wireless Network Status* screen.

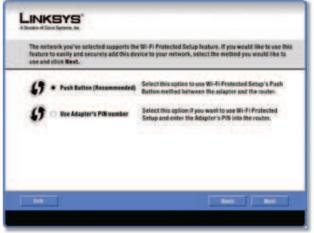
**Wi-Fi Protected Setup** Click the **Wi-Fi Protected Setup** button **10** to connect to a router that supports Wi-Fi Protected Setup. Proceed to the "Wi-Fi Protected Setup" section.

#### Wi-Fi Protected Setup



**NOTE:** Make sure the router supports Wi-Fi Protected Setup.

Before you begin, make sure the router and the computer with the Adapter are in the same room. Then select the method that is most convenient for you.



Select a Method

**Push Button (Recommended)** Select this option to use the push button method.

**Use Adapter's PIN number** Select this option to enter the Adapter's PIN number on the router.

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

Proceed to the instructions for the method you selected.

#### Use the Push Button



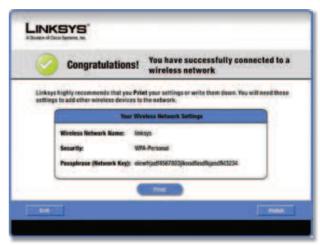
Use the Push Button

- Press the Wi-Fi Protected Setup button on the router.
- 2. Within two minutes, click the **Wi-Fi Protected Setup** button **10** on this screen.
- 3. The Adapter connects to the network.



Connecting to the Network

4. Click **Print** to print out your wireless network settings. Then click **Finish** to return to the *Status* screen, or click **Exit** to exit the Monitor.



Congratulations

# Congratulations! The Adapter is connected to the network.

#### **Enter the Adapter's PIN Number**



Enter the PIN Number

- 1. Access the web-based utility of the router. (Refer to the router's documentation for instructions.)
- 2. On the router's *Wi-Fi Protected Setup* screen, enter the Adapter's PIN number in the *PIN* field. Then click **Register**.

3. On the Adapter's PIN number screen, click **Next**.



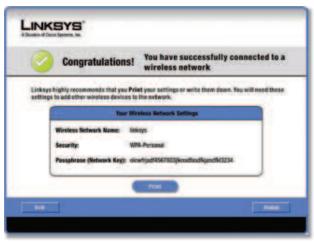
Enter the PIN Number

4. The Adapter connects to the network.



Connecting to the Network

 Click **Print** to print out your wireless network settings. Then click **Finish** to return to the *Status* screen, or click **Exit** to exit the Monitor.



Congratulations

## Congratulations! The Adapter is connected to the network.

#### Wireless Network Status

The Wireless Network Status screen provides information on your current network settings.



Wireless Network Status

**Radio Band** This is the radio band used on the network.

**Wireless Network Name** This is the unique name (SSID) of the wireless network.

**Wireless Mode** This is the mode of the wireless network currently in use.

**Wide Channel** This is the Wireless-N primary channel used with a 40 MHz radio band network.

**Standard Channel** This is the channel used by your wireless network.

**Security** This is the status of the wireless security feature.

**Authentication** This is your wireless network's authentication method.

**Network Type** This is the wireless network type.

**IP Address** This is the IP Address of the Adapter.

**Subnet Mask** This is the Adapter's Subnet Mask.

**Default Gateway** This is the Default Gateway address.

**DNS1** This is the DNS address of the Adapter.

**MAC Address** This is the MAC address of the wireless network's wireless router or access point.

**Signal Strength** The Signal Strength bar indicates the signal strength.

**Link Quality** The Link Quality bar indicates the quality of the wireless network connection.

**Statistics** Click **Statistics** to go to the *Wireless Network Statistics* screen.

**Back** Click **Back** to return to the initial *Status* screen.

**Save to Profile** Click **Save to Profile** to save the currently active connection settings to a profile.

#### Wireless Network Statistics

The Wireless Networks Statistics screen provides statistics on your current network settings.



Wireless Network Statistics

**Transmit Rate** This is the data transmission rate of the current connection. (In Auto mode, the Adapter dynamically shifts to the fastest data transmission rate at any given time.)

**Receive Rate** This is the rate that the Adapter receives data.

**Packets Received** This shows the packets that the Adapter receives, in real time, after connecting to the wireless network or after clicking Refresh.

**Packets Transmitted** This shows the packets that the Adapter transmits, in real time, after connecting to the wireless network or after clicking Refresh.

**Bytes Received** This shows the bytes that the Adapter receives, in real time, after connecting to the wireless network or after clicking Refresh.

**Bytes Transmitted** This shows the bytes that the Adapter transmits, in real time, after connecting to the wireless network or after clicking Refresh.

**Driver Version** This shows the Adapter's driver version.

**Noise Level** This shows the level of background noise that affects the wireless signal. A lower reading translates into a higher quality signal.

**Signal Strength** This is the intensity of the wireless signal that the Adapter receives.

**Transmit Power** This is the power output at which the Adapter transmits.

**Up Time** This indicates the length of the most recent connection to a wireless network.

**Total Up Time** This indicates the cumulative total of the Adapter's connection time.

**Signal Strength** The Signal Strength bar indicates the signal strength.

**Link Quality** The Link Quality bar indicates the quality of the wireless network connection.

**Back** Click **Back** to return to the initial *Status* screen.

**Status** Click **Status** to go to the *Wireless Network Status* screen.

**Save to Profile** Click **Save to Profile** to save the currently active connection settings to a profile.

**Refresh** Click **Refresh** to reset the statistics.

#### **Connect**

The *Connect* screen displays a list of available networks in the table. The table shows each network's wireless network name, radio band, signal strength, and security method. You may click the column heading (Wireless Network Name, GHz, Signal strength, or Security method) to sort by that field.



**NOTE:** The icon **o** indicates that the router supports Wi-Fi Protected Setup.



Connect

**Wireless Network Name** This is the SSID or unique name of the wireless network.

**GHz** This is the radio band used on the network. The number 2.4 indicates Wireless-B, -G, or -N (2.4 GHz). The number 5 indicates Wireless-A or -N (5 GHz).

**Signal** This is the percentage of signal strength, from 0 to 100%.

**Security** This is the security method used by the network.

**Wi-Fi Protected Setup** Click the **Wi-Fi Protected Setup** button to connect to a router that supports Wi-Fi Protected Setup. Refer to the "Wi-Fi Protected Setup" instructions in the "Status" section at the beginning of this chapter.

**Refresh** Click **Refresh** to perform a new search for wireless devices.

**Connect** To connect to one of the networks on the list, select the wireless network, and click **Connect**.

If the router does not support Wi-Fi Protected Setup, proceed to the section, "No Wi-Fi Protected Setup". If the router supports Wi-Fi Protected Setup  $\mathcal{G}$ , proceed to the section, "Wi-Fi Protected Setup".

#### No Wi-Fi Protected Setup

If the router does not use Wi-Fi Protected Setup, proceed to the appropriate section, "Wireless Security Disabled" or "Wireless Security Enabled".

#### **Wireless Security Disabled**

If you connect to a network whose wireless security is disabled, then you will view this screen:



Click Connect Anyway

- 1. Click Connect Anyway.
- 2. Click Finish.



Congratulations

## Congratulations! The Adapter is connected to the network.

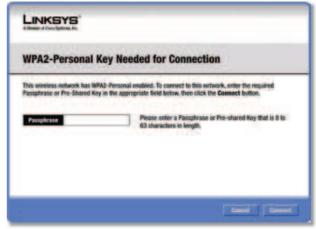
#### **Wireless Security Enabled**

If you connect to a network whose wireless security is enabled, then you will view one of three screens.

1. Proceed to the appropriate instructions.

#### WPA2 (Wi-Fi Protected Access 2)

If the network uses WPA2 Personal security, then the WPA2-Personal Key Needed for Connection screen appears.



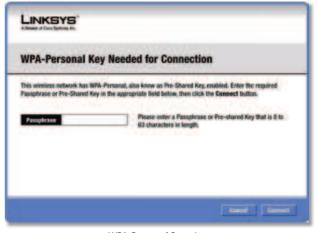
WPA2-Personal Security

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### WPA (Wi-Fi Protected Access)

If the network uses WPA Personal security, then the WPA-Personal Key Needed for Connection screen appears.



WPA-Personal Security

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### **WEP (Wired Equivalent Privacy)**

If the network uses WEP encryption, then the WEP Key or Passphrase Needed for Connection screen appears.



**WEP Security** 

Passphrase Enter the Passphrase or WEP key.

The passphrase is case-sensitive and must be 16 or fewer alphanumeric characters. It must match the passphrase of your other wireless network devices and is compatible with Linksys wireless products only. (For non-Linksys wireless products, enter the WEP key manually.)

If you enter the network's WEP key, enter the appropriate number of hexadecimal characters ("0" to "9" and "A" to "F"). For 64-bit encryption, enter exactly 10 hexadecimal characters. For 128-bit encryption, enter exactly 26 hexadecimal characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### 2. Click Finish.



Congratulations

Congratulations! The Adapter is connected to the network.

#### Wi-Fi Protected Setup

If you connect to a router that supports Wi-Fi Protected Setup, then you will view this screen:



Select a Method

Before you begin, make sure the router and the computer with the Adapter are in the same room. Then select the method that is most convenient for you.

**Push Button (Recommended)** Select this option to use the push button method.

**Use Adapter's PIN number** Select this option to enter the Adapter's PIN number on the router.

**Enter Key Manually** Select this option to manually enter the security key.

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

Proceed to the instructions for the method you selected.

#### **Use the Push Button**



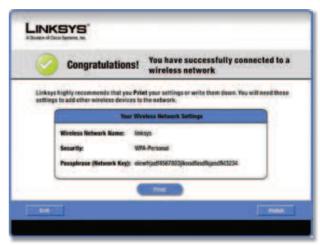
Use the Push Button

- Press the Wi-Fi Protected Setup button on the router
- 2. Within two minutes, click the **Wi-Fi Protected Setup** button **1** on this screen.
- 3. The Adapter connects to the network.



Connecting to the Network

4. Click **Print** to print out your wireless network settings. Then click **Finish** to return to the *Status* screen, or click **Exit** to exit the Monitor.



Congratulations

# Congratulations! The Adapter is connected to the network.

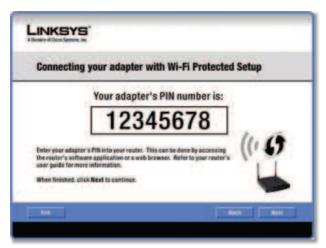
#### Enter the Adapter's PIN Number



Enter the PIN Number

- 1. Access the web-based utility of the router. (Refer to the router's documentation for instructions.)
- 2. On the router's *Wi-Fi Protected Setup* screen, enter the Adapter's PIN number in the *PIN* field. Then click **Register**.

3. On the Adapter's PIN number screen, click Next.



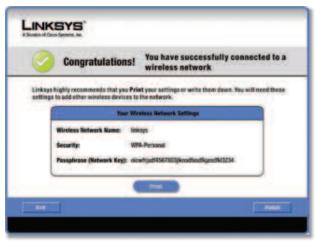
Enter the PIN Number

4. The Adapter connects to the network.



Connecting to the Network

5. Click **Print** to print out your wireless network settings. Then click **Finish** to return to the *Status* screen, or click **Exit** to exit the Monitor.



Congratulations

# Congratulations! The Adapter is connected to the network.

#### **Enter Key Manually**

Proceed to the appropriate section, "Wireless Security Disabled" or "Wireless Security Enabled".

#### **Wireless Security Disabled**

If you connect to a network whose wireless security is disabled, then you will view this screen:



Click Connect Anyway

- 1. Click Connect Anyway.
- 2. Click Finish.



Congratulations

Congratulations! The Adapter is connected to the network.

#### **Wireless Security Enabled**

If you connect to a network whose wireless security is enabled, then you will view one of three screens.

1. Proceed to the appropriate instructions.

#### WPA2 (Wi-Fi Protected Access 2)

If the network uses WPA2 Personal security, then the WPA2-Personal Key Needed for Connection screen appears.



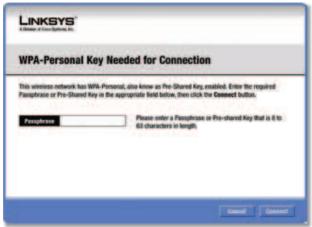
WPA2-Personal Security

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### **WPA (Wi-Fi Protected Access)**

If the network uses WPA Personal security, then the WPA-Personal Key Needed for Connection screen.



WPA-Personal Security

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### **WEP (Wired Equivalent Privacy)**

If the network uses WEP encryption, then the WEP Key or Passphrase Needed for Connection screen appears.



**WEP Security** 

#### Passphrase Enter the Passphrase or WEP key.

The passphrase is case-sensitive and must be 16 or fewer alphanumeric characters. It must match the passphrase of your other wireless network devices and is compatible with Linksys wireless products only. (For non-Linksys wireless products, enter the WEP key manually.)

If you enter the network's WEP key, enter the appropriate number of hexadecimal characters ("0" to "9" and "A" to "F"). For 64-bit encryption, enter exactly 10 hexadecimal characters. For 128-bit encryption, enter exactly 26 hexadecimal characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### 2. Click Finish.



Congratulations

Congratulations! The Adapter is connected to the network.

#### **Profiles**

The *Profiles* screen lets you save different configuration profiles for different network setups. The table on the left displays a list of available profiles with their profile names and wireless network names.



Profiles

**Profile** This is the name of the profile.

**Wireless Network Name** This is the SSID or unique name of the wireless network.

#### **Profile Information**

For each profile selected, the following are listed:

**Wireless Mode** This is the mode of the wireless network currently in use.

**Standard Channel** This is the channel used by your wireless network.

**Security** This is the status of the wireless security.

**Authentication** This is the authentication setting for the network.

**IP Address** This is the method used by the network to assign IP addresses.

**Connect** To connect to a wireless network using a specific profile, select the profile, and click **Connect**.

**Wi-Fi Protected Setup** Click the **Wi-Fi Protected Setup** button to connect to a router that supports Wi-Fi Protected Setup. Refer to the "Wi-Fi Protected Setup" instructions in the "Status" section at the beginning of this chapter.

**New** Click **New** to create a new profile. See the next section, "Create a New Profile," for instructions.

**Edit** Select the profile you want to change and click **Edit**.

**Import** Click **Import** to import a profile that is saved in another location. Select the appropriate file, and click **Open**.

**Export** Select the profile you want to save in a different location, and click **Export**. Direct Windows to the appropriate folder, and click **Save**.

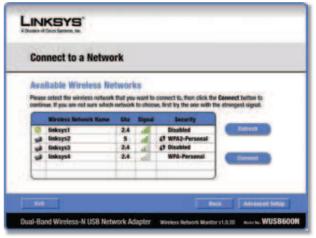
**Delete** Select the profile you want to delete and click **Delete**.



**NOTE:** If you want to export more than one profile, you must export them one at a time.

#### **Create a New Profile**

The next screen is the Available Wireless Networks screen.



Available Wireless Networks

This screen provides two options for setting up the Adapter.

**Available Wireless Networks (For most users)** Use this option if you already have a network set up. The networks available to this Adapter are listed on this screen. You can choose one of these networks and click **Connect** to connect to it. Click **Refresh** to update the Available Wireless Networks list.

**Advanced Setup** If your network is not listed on this screen, select **Advanced Setup** to set up the Adapter manually. This method is for advanced users only.

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

#### **Available Wireless Networks**

The available networks are listed in the table on the center of the screen by Wireless Network Name. Select the wireless network you wish to connect to and click **Connect**. (If you do not see your network listed, click **Refresh** to bring the list up again.)

If the router does not support Wi-Fi Protected Setup, proceed to the section, "No Wi-Fi Protected Setup". If the router supports Wi-Fi Protected Setup G, proceed to the section, "Wi-Fi Protected Setup".

#### No Wi-Fi Protected Setup

If the router does not use Wi-Fi Protected Setup, proceed to the appropriate section, "Wireless Security Disabled" or "Wireless Security Enabled".

#### **Wireless Security Disabled**

If you connect to a network whose wireless security is disabled, then you will view this screen:



Click Connect Anyway

- 1. Click Connect Anyway.
- 2. Click Finish.



Congratulations

# Congratulations! The Adapter is connected to the network.

#### **Wireless Security Enabled**

If you connect to a network whose wireless security is enabled, then you will view one of three screens.

1. Proceed to the appropriate instructions.

#### WPA2 (Wi-Fi Protected Access 2)

If the network uses WPA2 Personal security, then the WPA2-Personal Key Needed for Connection screen appears.



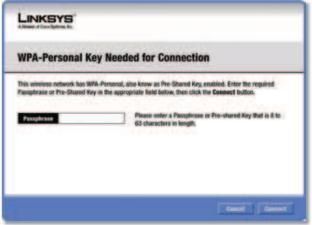
WPA2-Personal Security

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### WPA (Wi-Fi Protected Access)

If the network uses WPA Personal security, then the WPA-Personal Key Needed for Connection screen appears.



WPA-Personal Security

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### **WEP (Wired Equivalent Privacy)**

If the network uses WEP encryption, then the WEP Key or Passphrase Needed for Connection screen appears.



WEP Security

Passphrase Enter the Passphrase or WEP key.

The passphrase is case-sensitive and must be 16 or fewer alphanumeric characters. It must match the passphrase of your other wireless network devices and is compatible with Linksys wireless products only. (For non-Linksys wireless products, enter the WEP key manually.)

If you enter the network's WEP key, enter the appropriate number of hexadecimal characters ("0" to "9" and "A" to "F"). For 64-bit encryption, enter exactly 10 hexadecimal characters. For 128-bit encryption, enter exactly 26 hexadecimal characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### 2. Click Finish.

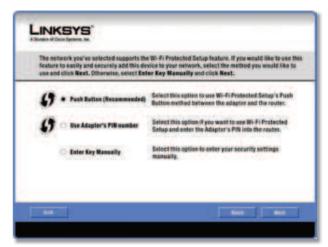


Congratulations

Congratulations! The Adapter is connected to the network.

#### **Wi-Fi Protected Setup**

If you connect to a router that supports Wi-Fi Protected Setup, then you will view this screen:



Select a Method

Before you begin, make sure the router and the computer with the Adapter are in the same room. Then select the method that is most convenient for you.

**Push Button (Recommended)** Select this option to use the push button method.

**Use Adapter's PIN number** Select this option to enter the Adapter's PIN number on the router.

**Enter Key Manually** Select this option to manually enter the security key.

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

Proceed to the instructions for the method you selected.

#### **Use the Push Button**



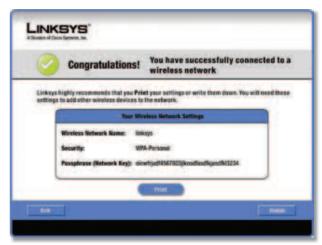
Use the Push Button

- Press the Wi-Fi Protected Setup button on the router.
- 2. Within two minutes, click the **Wi-Fi Protected Setup** button **1** on this screen.
- 3. The Adapter connects to the network.



Connecting to the Network

4. Click **Print** to print out your wireless network settings. Then click **Finish** to return to the *Status* screen, or click **Exit** to exit the Monitor.



Congratulations

Congratulations! The Adapter is connected to the network.

#### **Enter the Adapter's PIN Number**



Enter the PIN Number

- 1. Access the web-based utility of the router. (Refer to the router's documentation for instructions.)
- 2. On the router's *Wi-Fi Protected Setup* screen, enter the Adapter's PIN number in the *PIN* field. Then click **Register**.
- 3. On the Adapter's PIN number screen, click Next.



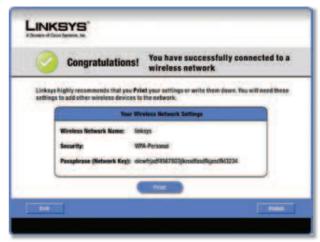
Enter the PIN Number

4. The Adapter connects to the network.



Connecting to the Network

 Click **Print** to print out your wireless network settings. Then click **Finish** to return to the *Status* screen, or click **Exit** to exit the Monitor.



Congratulations

Congratulations! The Adapter is connected to the network.

#### **Enter Key Manually**

Proceed to the appropriate section, "Wireless Security Disabled" or "Wireless Security Enabled".

#### **Wireless Security Disabled**

If you connect to a network whose wireless security is disabled, then you will view this screen:



Click Connect Anyway

- 1. Click Connect Anyway.
- 2. Click Finish.



Congratulations

Congratulations! The Adapter is connected to the network.

#### **Wireless Security Enabled**

If you connect to a network whose wireless security is enabled, then you will view one of three screens.

1. Proceed to the appropriate instructions.

#### WPA2 (Wi-Fi Protected Access 2)

If the network uses WPA2 Personal security, then the WPA2-Personal Key Needed for Connection screen appears.



WPA2-Personal Security

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### **WPA (Wi-Fi Protected Access)**

If the network uses WPA Personal security, then the WPA-Personal Key Needed for Connection screen.



**WPA-Personal Security** 

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### **WEP (Wired Equivalent Privacy)**

If the network uses WEP encryption, then the WEP Key or Passphrase Needed for Connection screen appears.



**WEP Security** 

#### Passphrase Enter the Passphrase or WEP key.

The passphrase is case-sensitive and must be 16 or fewer alphanumeric characters. It must match the passphrase of your other wireless network devices and is compatible with Linksys wireless products only. (For non-Linksys wireless products, enter the WEP key manually.)

If you enter the network's WEP key, enter the appropriate number of hexadecimal characters ("0" to "9" and "A" to "F"). For 64-bit encryption, enter exactly 10 hexadecimal characters. For 128-bit encryption, enter exactly 26 hexadecimal characters.

To connect to the network, click **Connect**. To cancel the connection, click **Cancel**.

#### 2. Click Finish.

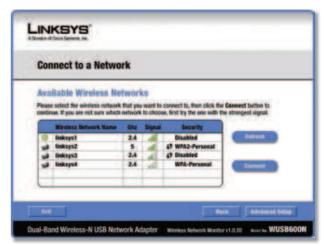


Congratulations

Congratulations! The profile is successfully configured.

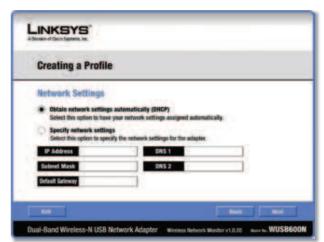
#### **Advanced Setup**

If your network is not listed with the available networks, use Advanced Setup.



Available Wireless Networks

- 1. Click **Advanced Setup** on the *Available Wireless Networks* screen to set up the Adapter manually.
- 2. The Network Settings screen appears.



Wireless Network

If your network has a router or other DHCP server, select **Obtain network settings automatically (DHCP)**.

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

- IP Address This IP Address must be unique to your network.
- Subnet Mask The Adapter's Subnet Mask must be the same as your wired network's Subnet Mask.

- Default Gateway Enter the IP address of your network's Gateway.
- DNS 1 and DNS 2 Enter the DNS address of your wired Ethernet network.

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

The Wireless Mode screen shows a choice of two wireless modes.



Wireless Mode

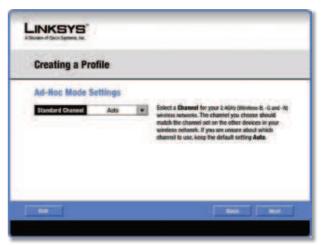
- Infrastructure Mode Select this mode if you want to connect to a wireless router or access point.
- Ad-Hoc Mode Select this mode if you want to connect to another wireless device directly without using a wireless router or access point.
- Wireless Network Name Enter a wireless network name (SSID) that must be used for all devices in your wireless network. It is case-sensitive and should be a unique name to help prevent others from entering your network.

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

4. If you chose Infrastructure Mode, go to step 5 now. If you chose Ad-Hoc Mode, the *Ad-Hoc Mode Settings* screen appears.



**NOTE:** The Adapter only supports Ad-Hoc Mode for 2.4 GHz networks: Wireless-B, Wireless-G, and Wireless-N (using 2.4 GHz).



Ad-Hoc Mode Settings

 Standard Channel Select the correct channel for your wireless network. If you are unsure about which channel to use, keep the default, Auto.

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

 If your wireless network does not have wireless security, select **Disabled** and then click **Next** to continue. Proceed to step 6.



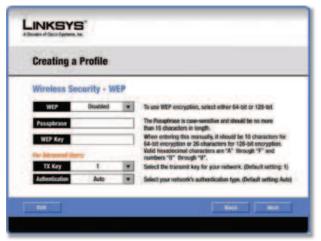
Wireless Security

If your wireless network has wireless security, select the method of security used: WEP, WPA Personal, WPA2 Personal, WPA2 Enterprise, or RADIUS. WEP stands for Wired Equivalent Privacy, and WPA stands for Wi-Fi Protected Access. WPA2 stands for Wi-Fi Protected Access 2. WPA is a stronger security method than WEP. WPA2 is a stronger security method than WPA. RADIUS stands for Remote Authentication Dial-In User Service. Click **Next** to continue, or click **Back** to return to the previous screen.

Proceed to the section for your security method.

#### WEP

Make sure the settings you configure match the settings of your wireless network.



WFP

#### WEP Select 64-bit or 128-bit encryption.

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

**WEP Key** If you do not have the Passphrase, enter the WEP key of your wireless network. For 64-bit encryption, enter exactly 10 hexadecimal characters. For 128-bit encryption, enter exactly 26 hexadecimal characters. Valid hexadecimal characters are "0" to "9" and "A" to "F".

#### **Advanced Users**

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

**Authentication** The default is **Open System**. For Open System authentication, the sender and the recipient do not share a WEP key for authentication. For Shared Key authentication, both the sender and the recipient share a WEP key for authentication.

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

#### WPA Personal

WPA Personal offers two encryption methods, TKIP and AES, with dynamic encryption keys.



WPA Personal

#### **Encryption** Select **TKIP** or **AES**.

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

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

#### **WPA2 Personal**

WPA2 Personal uses the encryption method, AES, with dynamic encryption keys.



WPA2 Personal

**Passphrase** Enter the network's Passphrase (also called a pre-shared key) of 8-63 characters.

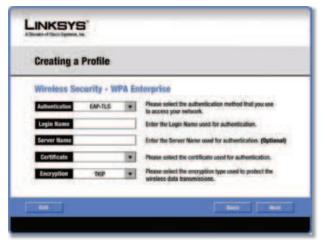
Click **Next** to continue, or click **Back** to return to the previous screen.

#### **WPA Enterprise**

WPA Enterprise features WPA security used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the router.) WPA Enterprise offers two authentication methods, EAP-TLS and PEAP, as well as two encryption methods, TKIP and AES, with dynamic encryption keys.

**Authentication** Select the authentication method your network is using, **EAP-TLS** or **PEAP**.

#### **EAP-TLS**



WPA Enterprise - EAP-TLS

If you selected EAP-TLS, configure the following:

**Login Name** Enter the login name of your wireless network.

**Server Name** Enter the name of the authentication server (this is optional).

**Certificate** Select the certificate you installed to authenticate you on your wireless network.

**Encryption** Select the type of encryption, **TKIP** or **AES**.

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

#### PEAP



WPA Enterprise - PEAP

If you selected PEAP, configure the following:

**Login Name** Enter the login name of your wireless network.

**Password** Enter the password of your wireless network.

**Server Name** Enter the name of the authentication server (this is optional).

**Certificate** Select the certificate you installed to authenticate you on your wireless network. If you want to use any certificate, keep the default, **Trust Any**.

**Inner Authen.** Select the authentication method used inside the PEAP tunnel.

**Encryption** Select the type of encryption, **TKIP** or **AES**.

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

#### WPA2 Enterprise

WPA2 Enterprise features WPA2 security used in coordination with a RADIUS server. (This should only be used when a RADIUS server is connected to the router.) WPA2 Enterprise offers two authentication methods, EAP-TLS and PEAP.

**Authentication** Select the authentication method your network is using, **EAP-TLS** or **PEAP**.

#### **EAP-TLS**



WPA2 Enterprise - EAP-TLS

If you selected EAP-TLS, configure the following:

**Login Name** Enter the login name of your wireless network.

**Server Name** Enter the name of the authentication server (this is optional).

**Certificate** Select the certificate you installed to authenticate you on your wireless network.

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

#### **PEAP**



WPA2 Enterprise - PEAP

If you selected PEAP, configure the following:

**Login Name** Enter the login name of your wireless network.

**Password** Enter the password of your wireless network.

**Server Name** Enter the name of the authentication server (this is optional).

**Certificate** Select the certificate you installed to authenticate you on your wireless network. If you want to use any certificate, keep the default, **Trust Any**.

**Inner Authen.** Select the authentication method used inside the PEAP tunnel.

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

#### **RADIUS**

RADIUS features use of a RADIUS server. (This should only be used when a RADIUS server is connected to the router.) RADIUS offers two authentication types: EAP-TLS and PEAP.

**Authentication** Select the authentication method your network is using, **EAP-TLS** or **PEAP**.

#### **EAP-TLS**



**RADIUS - EAP-TLS** 

If you selected EAP-TLS, configure the following:

**Login Name** Enter the login name of your wireless network.

**Server Name** Enter the name of the authentication server (this is optional).

**Certificate** Select the certificate you installed to authenticate you on your wireless network.

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

#### **PEAP**



**RADIUS - PEAP** 

If you selected PEAP, configure the following:

**Login Name** Enter the login name of your wireless network.

**Password** Enter the password of your wireless network.

**Server Name** Enter the name of the authentication server (this is optional).

**Certificate** Select the certificate you installed to authenticate you on your wireless network. If you want to use any certificate, keep the default, **Trust Any**.

**Inner Authen.** Select the authentication method used inside the PEAP tunnel.

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

6. The Confirm New Settings screen appears.



Confirm New Settings

To save the new settings, click **Save**. To edit the new settings, click **Back**. To exit Advanced Setup through the Monitor, click **Exit**.

7. The *Congratulations* screen appears. Click **Connect to Network** to implement the new settings immediately and return to the *Status* screen. Click **Return to Profiles screen** to keep the current settings active and return to the *Profiles* screen.



Congratulations

Congratulations! The profile is successfully configured.

# Appendix A: Troubleshooting

#### Your computer does not recognize the Adapter.

Make sure that the Adapter is properly inserted into the USB slot.

#### The Adapter does not work properly.

Remove the Adapter, and then reinsert it into the computer's USB slot.

Your computer cannot communicate with the other computers linked via Ethernet in the Infrastructure configuration.

- 1. Make sure that the computers are powered on.
- 2. Make sure that the Adapter is configured with the same Wireless Network Name (SSID) and wireless security settings as the other wireless computers in the Infrastructure configuration.



**WEB:** If your questions are not addressed here, refer to the Linksys website, **www.linksys.com** 

# Appendix B: Windows Vista Configuration

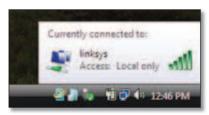
#### **Windows Vista Configuration**

After you have installed the Adapter, the Windows Vista Wireless Network Configuration utility icon appears on your computer's system tray.



Wireless Network Configuration Utility Icon

When your mouse pointer hovers over the icon, the status information of your wireless connection appears.

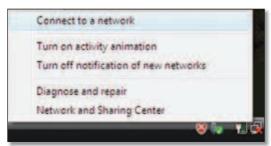


Wireless Connection Status

#### **New Wireless Connection**

To connect to a different wireless network:

- 1. Right-click the Wireless Network Configuration utility icon.
- 2. Click Connect to a network.



Utility Menu

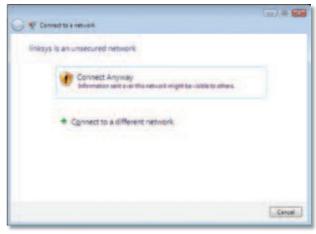
3. Select your network, and then click Connect.



Select Network

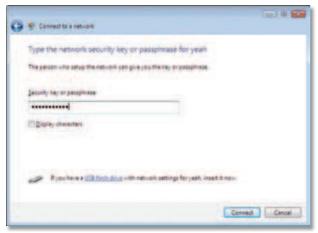
4. If your network has wireless security, go to step 5.

If your network has no wireless security, this screen appears. To connect to your unsecured network, click **Connect Anyway** and go to step 7.



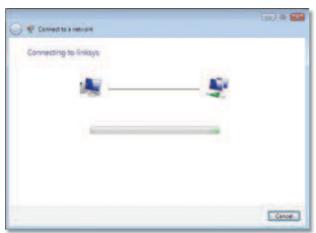
Unsecured Network

5. Enter the security key, WEP key, or passphrase (also known as a pre-shared key), depending on your type of security. Click **Connect**.



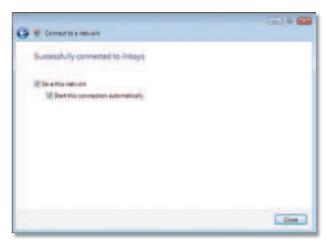
Secured Network

6. This screen appears while the Adapter connects to your network. Do not cancel, unless you want to end the installation.



Connecting to Network

7. This screen appears when you are connected to your network. Select **Save this network**, if you want to save your settings. Click **Close**.



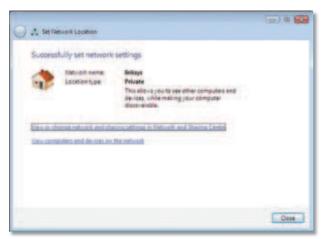
Connected to Network

8. The *Set Network Location* screen may appear to help apply the correct settings for your type of location. Select **Home**, **Work**, or **Public location**.



Select Network Location

9. This screen varies according to the selected location. Click **Close**.



Network Settings Saved



**NOTE:** For help with the Windows Vista Wireless Network Configuration utility, refer to Windows Vista Help and Support, by clicking Vista's Start button > **Help and Support**.

Your computer is now connected to your wireless network.

# Appendix C: Windows XP Wireless Zero Configuration

#### **Windows XP Wireless Zero Configuration**

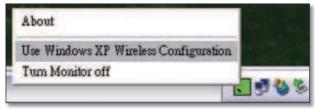
If your computer is running Windows XP, then this choice will be available. If you want to use Windows XP Wireless Zero Configuration to control the Adapter, instead of using the Wireless Network Monitor, then right-click the Wireless Network Monitor icon, and select **Use Windows XP Wireless Configuration**.



**NOTE:** If you have WPA2 wireless security, refer to Update for Windows XP (KB893357) on the microsoft.com website to be able to connect correctly.

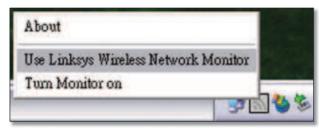


Wireless Network Monitor Icon



Use Windows XP Wireless Configuration

If you want to switch back to the Wireless Network Monitor, right-click the Wireless Network Monitor icon, and select **Use Linksys Wireless Network Monitor**.



Use Linksys Wireless Network Monitor



**NOTE:** For more information on Windows XP Wireless Zero Configuration, refer to Windows Help.

 After installing the Adapter, the Windows XP Wireless Zero Configuration icon appears in your computer's system tray. Double-click the icon.



Windows XP Wireless Zero Configuration Icon

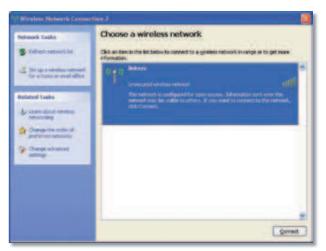
The screen that appears will show any available wireless network. Select the network you want. Click Connect.

If your network does not have wireless security enabled, go to step 3.

If your network does have wireless security enabled, go to step 4.



**NOTE:** Steps 2 and 3 are for Windows XP with Service Pack 2 installed.



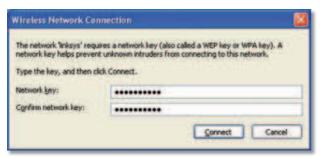
Available Wireless Network

 If your network does not have wireless security enabled, click **Connect Anyway** to connect the Adapter to your network.



No Wireless Security

4. If your network uses WEP wireless security, enter the WEP Key in the *Network Key* and *Confirm network key* fields. If your network uses WPA Personal wireless security, enter the Passphrase in the *Network Key* and *Confirm network key* fields. Click **Connect**.

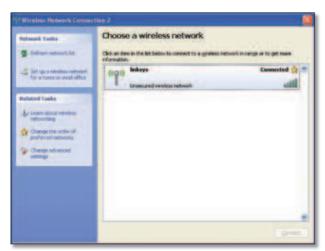


Wireless Security



**NOTE:** Windows XP Wireless Zero Configuration does not support the use of a passphrase. Enter the exact WEP key used by your wireless router or access point.

5. Your wireless network will appear as Connected when your connection is active.



Wireless Network Connection

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

Your computer is now connected to your wireless network.

Specifications

# Appendix D: Specifications

Model WUSB600N

Standards IEEE 802.11a, IEEE 802.11b,

IEEE 802.11g, Draft IEEE 802.11n

LEDs Link/Act

Number of Antennas 2 Internal Antennas

Transmitted Power 2.4 GHz Wireless-N @ <16 dBm

(Typical)

5 GHz Wireless-N @ <16 dBm

(Typical)

Receive Sensitivity 2.4 GHz Wireless-N @ <-91 dBm

(Typical)

5 GHz Wireless-N @ <-91 dBm

(Typical)

Antenna Gain in dBi 2.4 GHz Wireless @ ± (Typical):

 $2 dB \pm 1 dB$  (Typical)

5 GHz Wireless @ ± (Typical):

 $4 dB \pm 1 dB$ 

Power Consumption TX: 480 mA (Maximum)

RX: 300 mA (Maximum)

Security Features WEP, WPA, and WPA2
Security Key Bits Up to 256-Bit Encryption

OS Requirements Windows 2000 with Service Pack 4

(or later), XP with Service Pack 2 (or

later), or Vista

#### **Environmental**

Dimensions 3.86" x 0.43" x 1.10"

(98 x 11 x 28 mm)

Weight 0.79 oz (23 g)

Certification FCC, CE, IC, Wi-Fi A/B/G/Draft-N

Operating Temp. 32 to 104°F (0 to 40°C)

Storage Temp. 14 to 158°F (-20 to 70°C)

Operating Humidity 10 to 85% Noncondensing

Storage Humidity 5 to 90% Noncondensing

Specifications are subject to change without notice.

# **Appendix E: Warranty Information**

#### **Limited Warranty**

Linksys warrants this Linksys hardware product against defects in materials and workmanship under normal use for the Warranty Period, which begins on the date of purchase by the original end-user purchaser and lasts for the period specified below:

- One (1) year for new product
- Ninety (90) days for refurbished product

This limited warranty is non-transferable and extends only to the original end-user purchaser. Your exclusive remedy and Linksys' entire liability under this limited warranty will be for Linksys, at its option, to (a) repair the product with new or refurbished parts, (b) replace the product with a reasonably available equivalent new or refurbished Linksys product, or (c) refund the purchase price of the product less any rebates. Any repaired or replacement products will be warranted for the remainder of the original Warranty Period or thirty (30) days, whichever is longer. All products and parts that are replaced become the property of Linksys.

#### **Exclusions and Limitations**

This limited warranty does not apply if: (a) the product assembly seal has been removed or damaged, (b) the product has been altered or modified, except by Linksys, (c) the product damage was caused by use with non-Linksys products, (d) the product has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Linksys, (e) the product has been subjected to abnormal physical or electrical stress, misuse, negligence, or accident, (f) the serial number on the Product has been altered, defaced, or removed, or (g) the product is supplied or licensed for beta, evaluation, testing or demonstration purposes for which Linksys does not charge a purchase price or license fee.

ALL SOFTWARE PROVIDED BY LINKSYS WITH THE PRODUCT, WHETHER FACTORY LOADED ON THE PRODUCT OR CONTAINED ON MEDIA ACCOMPANYING THE PRODUCT, IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND. Without limiting the foregoing, Linksys does not warrant that the operation of the product or software will be uninterrupted or error free. Also, due to the continual development of new techniques for intruding upon and attacking networks, Linksys does not warrant that the product, software or any equipment, system or network on which the product or software is used will be free of vulnerability to intrusion or attack. The product may include or be bundled with third party software or

service offerings. This limited warranty shall not apply to such third party software or service offerings. This limited warranty does not guarantee any continued availability of a third party's service for which this product's use or operation may require.

TO THE EXTENT NOT PROHIBITED BY LAW, ALL IMPLIED WARRANTIES AND CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY 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, BUT NOT LIMITED TO, 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 limited warranty gives you specific legal rights, and you may also have other rights which vary by jurisdiction.

TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT WILL LINKSYS BE LIABLE FOR ANY LOST DATA, REVENUE OR PROFIT, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, REGARDLESS OF THE THEORY OF LIABILITY (INCLUDING NEGLIGENCE), ARISING OUT OF OR RELATED TO THE USE OF OR INABILITY TO USE THE PRODUCT (INCLUDING ANY SOFTWARE), EVEN IF LINKSYS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL LINKSYS' LIABILITY EXCEED THE AMOUNT PAID BY YOU FOR THE PRODUCT. The foregoing limitations will apply even if any warranty or remedy provided under this limited warranty 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.

#### **Obtaining Warranty Service**

If you have a question about your product or experience a problem with it, please go to www.linksys.com/support where you will find a variety of online support tools and information to assist you with your product. If the product proves defective during the Warranty Period, contact Linksys Technical Support for instructions on how to obtain warranty service. The telephone number for Linksys Technical Support in your area can be found in the product User Guide and at www.linksys.com. Have your product serial number and proof of purchase on hand when calling. A DATED PROOF OF ORIGINAL PURCHASE IS REQUIRED TO PROCESS WARRANTY CLAIMS. If you are requested to return your product, you will be given a Return Materials Authorization (RMA) number. You are responsible for properly packaging and shipping your product to Linksys at your cost and risk. You must include the RMA number and a copy of your dated proof of original purchase when returning your product. Products received without a RMA number and dated proof of original purchase will be

rejected. Do not include any other items with the product you are returning to Linksys. Defective product covered by this limited warranty will be repaired or replaced and returned to you without charge. Customers outside of the United States of America and Canada are responsible for all shipping and handling charges, custom duties, VAT and other associated taxes and charges. Repairs or replacements not covered under this limited warranty will be subject to charge at Linksys' then-current rates.

#### **Technical Support**

This limited warranty is neither a service nor a support contract. Information about Linksys' current technical support offerings and policies (including any fees for support services) can be found at:

#### www.linksys.com/support.

This limited warranty is governed by the laws of the jurisdiction in which the Product was purchased by you.

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

# **Appendix F: Regulatory Information**

#### **FCC Statement**

This equipment has been tested and found to comply with the limits 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 in accordance with 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 can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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.

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.

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 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. To maintain compliance with FCC RF exposure compliance requirements, please follow operation instructions as documented in this manual.

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

SAR compliance has been established in typical laptop computer(s) with USB slot, and this product could be used in typical laptop computer(s) with USB slot. Other applications like handheld PC or similar device have not been verified and may not be in compliance with related RF exposure rule and such use shall be prohibited.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

#### **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.



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

### **Industry Canada Statement**

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with RSS-210 of the Industry Canada 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.

### 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.

#### **IMPORTANT NOTE**

#### **Radiation Exposure Statement:**

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. To maintain compliance with IC RF exposure compliance requirements, please follow operation instruction as documented in this manual.

### REMARQUE IMPORTANTE

#### Exposition aux radiofréquences :

Ce matériel est conforme aux limites d'exposition aux radiofréquences établies pour un environnement non contrôlé. Pour assurer le maintien de cette conformité, l'utilisateur doit suivre les consignes d'utilisation décrites dans le présent manuel.

### **Wireless Disclaimer**

The maximum performance for wireless is derived from IEEE Standard 802.11 specifications. Actual performance can vary, including lower wireless network capacity, data throughput rate, range and coverage. Performance depends on many factors, conditions and variables, including distance from the access point, volume of network traffic, building materials and construction, operating system used, mix of wireless products used, interference and other adverse conditions.

## Avis de non-responsabilité concernant les appareils sans fil

Les performances maximales pour les réseaux sans fil sont tirées des spécifications de la norme IEEE 802.11. Les performances réelles peuvent varier, notamment en fonction de la capacité du réseau sans fil, du débit de la transmission de données, de la portée et de la couverture. Les performances dépendent de facteurs, conditions et variables multiples, en particulier de la distance par rapport au point d'accès, du volume du trafic réseau, des matériaux utilisés dans le bâtiment et du type de construction, du système d'exploitation et de la combinaison de produits sans fil utilisés, des interférences et de toute autre condition défavorable.

### 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.

#### Български (Bulgarian) - Информация относно опазването на околната среда за потребители в Европейския съюз

Европейска директива 2002/96/ЕС изисква уредите, носещи този символ № върху изделието и/или опаковката му, да не се изхвърля т с несортирани битови отпадъци. Символът обозначава, че изделието трябва да се изхвърля отделно от сметосъбирането на обикновените битови отпадъци. Ваша е отговорността този и другите електрически и електронни уреди да се изхвърлят в предварително определени от държавните или общински органи специализирани пунктове за събиране. Правилното изхвърляне и рециклиране ще спомогнат да се предотвратят евентуални вредни за околната среда и здравето на населението последствия. За по-подробна информация относно изхвърлянето на вашите стари уреди се обърнете към местните власти, службите за сметосъбиране или магазина, от който сте закупили уреда.

### Čeština (Czech) - Informace o ochraně životního prostředí pro zákazníky v zemích Evropské unie

Evropská směrnice 2002/96/ES zakazuje, aby zařízení označené tímto symbolem ¾ 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 ĕ en el propio aparato y/o en su embalaje no deben eliminarse junto con otros residuos urbanos no seleccionados. El símbolo indica que el producto en cuestión debe separarse de los residuos domésticos convencionales con vistas a su eliminación. Es responsabilidad suya desechar este y cualesquiera otros aparatos eléctricos y electrónicos a través de los puntos de recogida que ponen a su disposición el gobierno y las autoridades locales. Al desechar y reciclar correctamente estos aparatos estará contribuyendo a evitar posibles consecuencias negativas para el medio ambiente y la salud de las personas. Si desea obtener información más detallada sobre la eliminación segura de su aparato usado, consulte a las autoridades locales, al servicio de recogida y eliminación de residuos de su zona o pregunte en la tienda donde adquirió el producto.

# Ελληνικά (Greek) - Στοιχεία περιβαλλοντικής προστασίας για πελάτες εντός της Ευρωπαϊκής Ένωσης

Σύμφωνα με την Κοινοτική Οδηγία 2002/96/ΕC, ο εξοπλισμός που φέρει αυτό το σύμβολο Σ στο προϊόν ή/και τη συσκευασία του δεν πρέπει να απορρίπτεται μαζί με τα μη διαχωρισμένα αστικά 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 ορίζονται από το κράτος ή τις αρμόδιες τοπικές αρχές. Η σωστή απόρριψη και ανακύκλωση συμβάλλει στην πρόληψη ενδεχόμενων αρνητικών επιπτώσεων στο περιβάλλον και την υγεία. Για περισσότερες πληροφορίες σχετικά με την απόρριψη του παλαιού σας εξοπλισμού, επικοινωνήστε με τις τοπικές αρχές, τις υπηρεσίες αποκομιδής απορριμμάτων 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 kurios pakuotė yra pažymėta šiuo simboliu (įveskite simbolį), 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 issimbolu ≝ fuq il-prodott u/jew fuq l-ippakkjar ma jistax jintrema ma' skart municipali 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 ĭ 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 das 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.

### Română (Romanian) - Informații de mediu pentru clienții din Uniunea Europeană

Directiva europeană 2002/96/CE impune ca echipamentele care prezintă acest simbol ≝ pe produs şi/sau pe ambalajul acestuia să nu fie casate împreună cu gunoiul menajer municipal. Simbolul indică faptul că acest produs trebuie să fie casat separat de gunoiul menajer obișnuit. Este responsabilitatea dvs. să casați acest produs şi alte echipamente electrice şi electronice prin intermediul unităților de colectare special desemnate de guvern sau de autoritățile locale. Casarea şi reciclarea corecte vor ajuta la prevenirea potențialelor consecințe negative asupra sănătății mediului şi a oamenilor. Pentru mai multe informații detaliate cu privire la casarea acestui echipament vechi, contactați autoritățile locale, serviciul de salubrizare sau magazinul de la care ați achiziționat produsul.

### 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.

### Slovenščina (Slovene) - Okoljske informacije za stranke v Evropski uniji

Evropska direktiva 2002/96/ES prepoveduje odlaganje opreme s tem simbolom 🛎 – na izdelku in/ali na embalaži z nesortiranimi komunalnimi odpadki. Ta simbol opozarja, da je treba izdelek zavreči ločeno od preostalih gospodinjskih odpadkov. Vaša odgovornost je, da to in preostalo električno in elektronsko opremo oddate na posebna zbirališča, ki jih določijo državne ustanove ali lokalne oblasti. 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 lokalne oblasti, odlagališče odpadkov 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.



**WEB:** For additional information, please visit **www.linksys.com** 

# **Appendix G: Software License Agreement**

### **Software in Linksys Products**

This product from Cisco-Linksys LLC or from one of its affiliates Cisco Systems-Linksys (Asia) Pte Ltd. or Cisco-Linksys K.K. ("Linksys") contains software (including firmware) originating from Linksys and its suppliers and may also contain software from the open source community. Any software originating from Linksys and its suppliers is licensed under the Linksys Software License Agreement contained at Schedule 1 below. You may also be prompted to review and accept that Linksys Software License Agreement upon installation of the software

Any software from the open source community is licensed under the specific license terms applicable to that software made available by Linksys at <a href="https://www.linksys.com/gpl">www.linksys.com/gpl</a> or as provided for in Schedules 2, 3 and 4 below.

Where such specific license terms entitle you to the source code of such software, that source code is upon request available at cost from Linksys for at least three years from the purchase date of this product and may also be available for download from <a href="https://www.linksys.com/gpl">www.linksys.com/gpl</a>. For detailed license terms and additional information on open source software in Linksys products please look at the Linksys public web site at: <a href="https://www.linksys.com/gpl/">www.linksys.com/gpl/</a> or Schedules 2, 3 or 4 below as applicable.

BY DOWNLOADING OR INSTALLING THE SOFTWARE, OR USING THE PRODUCT CONTAINING THE SOFTWARE, YOU ARE CONSENTING TO BE BOUND BY THE SOFTWARE LICENSE AGREEMENTS BELOW. IF YOU DO NOT AGREE TO ALL OF THESE TERMS, THEN YOU MAY NOT DOWNLOAD, INSTALL OR USE THE SOFTWARE. YOU MAY RETURN UNUSED SOFTWARE (OR, IF THE SOFTWARE IS SUPPLIED AS PART OF ANOTHER PRODUCT, THE UNUSED PRODUCT) FOR A FULL REFUND UP TO 30 DAYS AFTER ORIGINAL PURCHASE, SUBJECT TO THE RETURN PROCESS AND POLICIES OF THE PARTY FROM WHICH YOU PURCHASED SUCH PRODUCT OR SOFTWARE.

### **Software Licenses**

The software Licenses applicable to software from Linksys are made available at the Linksys public web site at: **www.linksys.com**. For your convenience of reference, a copy of the Linksys Software License Agreement and the main open source code licenses used by Linksys in its products are contained in the Schedules below.

### Schedule 1 - Linksys Software License Agreement

THIS LICENSE AGREEMENT IS BETWEEN YOU AND CISCO-LINKSYS LLC OR ONE OF ITS AFFILIATES CISCO SYSTEMS-LINKSYS (ASIA) PTE LTD. OR CISCO-LINKSYS K.K. ("LINKSYS") LICENSING THE SOFTWARE INSTEAD OF CISCO-LINKSYS LLC. BY DOWNLOADING OR INSTALLING THE SOFTWARE, OR USING THE PRODUCT CONTAINING THE SOFTWARE, YOU ARE CONSENTING TO BE BOUND BY THIS AGREEMENT. IF YOU DO NOT AGREE TO ALL OF THESE TERMS, THEN YOU MAY NOT DOWNLOAD, INSTALL OR USE THE SOFTWARE. YOU MAY RETURN UNUSED SOFTWARE (OR, IF THE SOFTWARE IS SUPPLIED AS PART OF ANOTHER PRODUCT, THE UNUSED PRODUCT) FOR A FULL REFUND UP TO 30 DAYS AFTER ORIGINAL PURCHASE, SUBJECT TO THE RETURN PROCESS AND POLICIES OF THE PARTY FROM WHICH YOU PURCHASED SUCH PRODUCT OR SOFTWARE.

License. Subject to the terms and conditions of this Agreement, Linksys grants the original end user purchaser of the Linksys product containing the Software ("You") a nonexclusive license to use the Software solely as embedded in or (where authorized in the applicable documentation) for communication with such product. This license may not be sublicensed, and is not transferable except to a person or entity to which you transfer ownership of the complete Linksys product containing the Software, provided you permanently transfer all rights under this Agreement and do not retain any full or partial copies of the Software, and the recipient agrees to the terms of this Agreement.

"Software" includes, and this Agreement will apply to (a) the software of Linksys or its suppliers provided in or with the applicable Linksys product, excluding technology from the open source community, and (b) any upgrades, updates, bug fixes or modified versions ("Upgrades") or backup copies of the Software supplied to You by Linksys or an authorized reseller, provided you already hold a valid license to the original software and have paid any applicable fee for the Upgrade.

**Protection of Information.** The Software and documentation contain trade secrets and/or copyrighted materials of Linksys or its suppliers. You will not copy or modify the Software or decompile, decrypt, reverse engineer or disassemble the Software (except to the extent expressly permitted by law notwithstanding this provision), and You will not disclose or make available such trade secrets or copyrighted material in any form to any third party. Title to and ownership of the Software and documentation and any portion thereof, will remain solely with Linksys or its suppliers.

**Collection and Processing of Information.** You agree that Linksys and/or its affiliates may, from time to time, collect and process information about your Linksys product and/or the Software and/or your use of either in order (i) to enable Linksys to offer you Upgrades; (ii) to ensure that

your Linksys product and/or the Software is being used in  $accordance \,with \,the \,terms \,of \,this \,Agreement; (iii) \,to \,provide$ improvements to the way Linksys delivers technology to you and to other Linksys customers; (iv) to enable Linksys to comply with the terms of any agreements it has with any third parties regarding your Linksys product and/or Software and/or (v) to enable Linksys to comply with all applicable laws and/or regulations, or the requirements of any regulatory authority or government agency. Linksys and/ or its affiliates may collect and process this information provided that it does not identify you personally. Your use of your Linksys product and/or the Software constitutes this consent by you to Linksys and/ or its affiliates' collection and use of such information and. for EEA customers, to the transfer of such information to a location outside the EEA.

Software Upgrades etc. If the Software enables you to receive Upgrades, you may elect at any time to receive these Upgrades either automatically or manually. If you elect to receive Upgrades manually or you otherwise elect not to receive or be notified of any Upgrades, you may expose your Linksys product and/or the Software to serious security threats and/or some features within your Linksys product and/or Software may become inaccessible. There may be circumstances where we apply an Upgrade automatically in order to comply with changes in legislation, legal or regulatory requirements or as a result of requirements to comply with the terms of any agreements Linksys has with any third parties regarding your Linksys product and/or the Software. You will always be notified of any Upgrades being delivered to you. The terms of this license will apply to any such Upgrade unless the Upgrade in question is accompanied by a separate license, in which event the terms of that license will apply.

**Open Source Software.** The GPL or other open source code incorporated into the Software and the open source license for such source code are available for free download at <a href="http://www.linksys.com/gpl">http://www.linksys.com/gpl</a>. If You would like a copy of the GPL or other open source code in this Software on a CD, Linksys will mail to You a CD with such code for \$9.99 plus the cost of shipping, upon request.

**Term and Termination.** You may terminate this License at any time by destroying all copies of the Software and documentation. Your rights under this License will terminate immediately without notice from Linksys if You fail to comply with any provision of this Agreement.

**Limited Warranty.** The warranty terms and period specified in the applicable Linksys Product User Guide shall also apply to the Software.

**Disclaimer of Liabilities.** IN NO EVENT WILL LINKSYS OR ITS SUPPLIERS BE LIABLE FOR ANY LOST DATA, REVENUE OR PROFIT, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, REGARDLESS OF CAUSE (INCLUDING NEGLIGENCE), ARISING OUT OF

OR RELATED TO THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF LINKSYS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL LINKSYS' LIABILITY EXCEED THE AMOUNT PAID BY YOU FOR THE PRODUCT. The foregoing limitations will apply even if any warranty or remedy 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.

**Export.** Software, including technical data, may be subject to U.S. export control laws and regulations and/or export or import regulations in other countries. You agree to comply strictly with all such laws and regulations.

**U.S. Government Users.** The Software and documentation qualify as "commercial items" as defined at 48 C.F.R. 2.101 and 48 C.F.R. 12.212. All Government users acquire the Software and documentation with only those rights herein that apply to non-governmental customers.

**General Terms.** This Agreement will be governed by and construed in accordance with the laws of the State of California, without reference to conflict of laws principles. The United Nations Convention on Contracts for the International Sale of Goods will not apply. If any portion of this Agreement is found to be void or unenforceable, the remaining provisions will remain in full force and effect. This Agreement constitutes the entire agreement between the parties with respect to the Software and supersedes any conflicting or additional terms contained in any purchase order or elsewhere.

#### **END OF SCHEDULE 1**

#### Schedule 2

If this Linksys product contains open source software licensed under Version 2 of the "GNU General Public License" then the license terms below in this Schedule 2 will apply to that open source software. The license terms below in this Schedule 2 are from the public web site at http://www.gnu.org/copyleft/gpl.html

### **GNU GENERAL PUBLIC LICENSE**

Version 2, June 1991

Copyright © 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301,

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

#### **Preamble**

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the

GNU General Public License is intended to guarantee your freedom to share and change free software–to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

O. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

 You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

- 2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
  - a. You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
  - b. You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c. If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

- 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:
  - Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
  - b. Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c. Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

- 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it
- 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.
  - Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does

- not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.
- 10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

#### **NO WARRANTY**

- 11. BECAUSETHE PROGRAMIS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED INWRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
- 12. INNO EVENTUNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

**END OF TERMS AND CONDITIONS** 

#### **END OF SCHEDULE 2**

### Schedule 3

If this Linksys product contains open source software licensed underVersion 2.1 of the "GNU Lesser General Public License" then the license terms below in this Schedule 3 will apply to that open source software. The license terms below in this Schedule 3 are from the public web site at <a href="http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html">http://www.gnu.org/licenses/old-licenses/lgpl-2.1.html</a>.

#### **GNU LESSER GENERAL PUBLIC LICENSE**

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

#### **Preamble**

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software—to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages—typically libraries—of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

#### **GNU LESSER GENERAL PUBLIC LICENSE**

### TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

 This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

- You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.
  - You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
- 2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
  - a) The modified work must itself be a software library.
  - b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
  - c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
  - d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

4. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

5. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables. When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

6. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

- b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.
- c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.
- d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.
- e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

- 7. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:
  - Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.
  - b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

- 8. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
- 9. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.
- 10. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.
- 11. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of

software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

- 12. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.
- 13. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.
  - Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.
- 14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

**NO WARRANTY** 

- 15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED INWRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
- 16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

**END OF TERMS AND CONDITIONS** 

#### **END OF SCHEDULE 3**

#### Schedule 4

If this Linksys product contains open source software licensed under the OpenSSL license:

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/).

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

In addition, if this Linksys product contains open source software licensed under the OpenSSL license then the license terms below in this Schedule 3 will apply to that open source software. The license terms below in this Schedule 3 are from the public web site at <a href="http://www.openssl.org/source/license.html">http://www.openssl.org/source/license.html</a>.

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

### **OpenSSL License**

Copyright © 1998-2007 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
- 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
- Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
- Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

### **Original SSLeay License**

Copyright © 1995-1998 Eric Young (eay@cryptsoft.com)All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com).

The implementation was written so as to conform with Netscape's SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft. com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed.

If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
- Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
  - "This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)"
  - The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related.
- 4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement: "This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY

DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The license and distribution terms for any publicly available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution license [including the GNU Public License.]

#### **END OF SCHEDULE 4**