

LINKSYS[®]
A Division of Cisco Systems, Inc.



2.4GHz
802.11g

Wireless-G

**PrintServer with
Multifunction Printer Support**

User Guide



Model No. **WPSM54G**



Copyright and Trademarks

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

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

How to Use this User Guide

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



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



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



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

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

word: definition.

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

Figure 0-1: Sample Figure Description

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

Table of Contents

Chapter 1: Introduction	1
Welcome	1
What's in this Guide?	2
Chapter 2: Getting to Know the PrintServer	4
Overview	4
The Back Panel	4
The Front Panel	5
Chapter 3: Installing the PrintServer Using the Setup Wizard	6
Before You Begin	6
Installation	6
About the New Program Icons	16
Chapter 4: Installing the PrintServer Driver	17
Overview	17
Installation	17
Chapter 5: Using the Diagnostic Utility	21
Overview	21
How to Access the Diagnostic Utility	21
About the Print Server Information Screen	22
Chapter 6: Using the Web-based Utility	24
Overview	24
The Setup Tab	25
The Protocol Tab - TCP/IP	26
The Protocol Tab - SNMP	27
The Wireless Tab - Basic	28
The Wireless Tab - Security	29
The Printer Tab - Scan	31
The Printer Tab - Internet Printing	32
The Printer Tab - Logical Port	33
The Status Tab - Device	34
The Status Tab - Printer	35
The Status Tab - Wireless	35
The Exit Tab	35

Wireless-G PrintServer with Multifunction Printer Support

Appendix A: Troubleshooting	36
Common Problems and Solutions	36
Appendix B: Wireless Security	38
Security Precautions	38
Security Threats Facing Wireless Networks	38
Appendix C: Upgrading Firmware	40
Appendix D: Windows Help	41
Appendix E: Glossary	42
Appendix F: Specifications	47
Appendix G: Warranty Information	49
Appendix H: Regulatory Information	50
Appendix I: Contact Information	57

List of Figures

Figure 2-1: PrintServer's Back Panel	4
Figure 2-2: PrintServer's Front Panel	5
Figure 3-1: Welcome	6
Figure 3-2: Set up PrintServer	6
Figure 3-3: Disconnect the USB Printer Cable and Power	7
Figure 3-4: Connect the PrintServer to the Printer	7
Figure 3-5: Connect the PrintServer to the Router	8
Figure 3-6: Connect the Power to the PrintServer	8
Figure 3-7: Reconnect the Power to the Printer	9
Figure 3-8: Select the PrintServer	9
Figure 3-9: Configure IP Settings (Automatic)	10
Figure 3-10: Configure IP Settings (Static IP)	10
Figure 3-11: Set the PrintServer's Password	11
Figure 3-12: Select the Wireless Network	11
Figure 3-13: Configure Wireless Settings	12
Figure 3-14: Wireless Security - WPA Pre-Shared Key	12
Figure 3-15: Wireless Security - WEP (128-Bit)	13
Figure 3-16: WEP Key	13
Figure 3-17: Confirm New Settings	13
Figure 3-18: Disconnect the Power Adapter	14
Figure 3-19: Disconnect the Network Cable	14
Figure 3-20: Reconnect the Power Adapter	15
Figure 3-21: Checking Network Connection	15
Figure 3-22: PrintServer on Wireless Network	15
Figure 3-23: Continue to Set up Computer	16
Figure 3-24: New Program Icons	16
Figure 4-1: Welcome	18
Figure 4-2: Set up Computer	18
Figure 4-3: Select Printer	19
Figure 4-4: Check Printer Driver	19
Figure 4-5: Please Wait	20

Wireless-G PrintServer with Multifunction Printer Support

Figure 4-6: Print Test Page	20
Figure 5-1: Diagnostic Utility Icon	21
Figure 5-2: Right-Click Utility Icon	21
Figure 5-3: About Print Server Utility	21
Figure 5-4: Exit Utility	21
Figure 5-5: Program Icons	22
Figure 5-6: Print Server Information - Connected	22
Figure 5-7: Print Server Information - Disconnected	22
Figure 5-8: Auto-Disconnect (Time)	23
Figure 5-9: Auto-Disconnect (Always Connect)	23
Figure 6-1: Login	24
Figure 6-2: Setup Tab	25
Figure 6-3: Protocol Tab - TCP/IP	26
Figure 6-4: Protocol Tab - SNMP	27
Figure 6-5: Wireless Tab - Basic	28
Figure 6-6: Wireless Tab - Security (WPA Personal)	29
Figure 6-7: Wireless Tab - Security (WPA2 Personal)	29
Figure 6-8: Wireless Tab - Security (WEP)	30
Figure 6-9: Printer Tab - Scan	31
Figure 6-10: Printer Tab - Internet Printing	32
Figure 6-11: Printer Tab - Logical Port	33
Figure 6-12: Status Tab - Device	34
Figure 6-13: Firmware Upgrade	34
Figure 6-14: Status Tab - Printer	35
Figure 6-15: Status Tab - Wireless	35
Figure C-1: Status Tab - Device	40
Figure C-2: Firmware Upgrade	40

Chapter 1: Introduction

Welcome

Thank you for choosing the Linksys Wireless-G PrintServer with Multifunction Printer Support. The PrintServer lets you connect a multifunction USB printer directly to your network, eliminating the need to dedicate a PC to print sharing chores. Using a PrintServer frees up your “print share PC” so you don’t have to leave it on all the time. It also removes the printing bottleneck, and sets your PC free to do more useful work.

The PrintServer is compatible with most USB multifunction printers, and allows full access to printing, faxing, scanning, and copying functions. Like any print server, users on the network can print anytime. The other functions are treated a little differently—any user can request access to one of the other functions, and get exclusive use of that function until the task is complete.

How does the PrintServer do all of this? A print server is a device that allows multiple computers to share a printer over a network. You can connect the PrintServer directly to your network using an Ethernet network cable, or you can connect the PrintServer over Wireless-G (802.11g) at up to 54Mbps. The wireless option lets you put your printer wherever you want to, without having to run a cable. Whichever way the PrintServer is attached to your network, both your wireless and wired PCs will have access to it and its USB printer.

But what does all of this mean?

Networks are useful tools for sharing Internet access and computer resources. Multiple computers can share Internet access, so you don’t need more than one high-speed Internet connection. Plus, you can access data located on another computer’s hard drive and play multi-player video games. Using the PrintServer, you can access one printer from different computers.

PCs on a wired network create a LAN, or Local Area Network. They are connected with Ethernet cables, which is why the network is called “wired”.

PCs equipped with wireless adapters can communicate without cables. By sharing the same wireless settings, within their transmission radius, they form a Wireless Local Area Network (WLAN). Your network router bridges wireless networks and wired networks, allowing them to communicate with each other.

To guide you through the process of installing the PrintServer, run the Setup Wizard on the Setup CD-ROM (you can use the instructions in the Quick Installation or User Guide to help you). After you have installed the PrintServer, you can change its settings using its browser-based utility, which is described in this User Guide. These instructions should be all you need to get the most out of the Wireless-G PrintServer with Multifunction Printer Support.

mbps: one million bits per second; a unit of measurement for data transmission

lan (local area network): the computers and networking products that make up the network in your home or office

ethernet: an IEEE standard network protocol that specifies how data is placed on and retrieved from a common transmission medium

802.11b: an IEEE wireless networking standard that specifies a maximum data transfer rate of 11Mbps and an operating frequency of 2.4GHz

802.11g: an IEEE wireless networking standard that specifies a maximum data transfer rate of 54Mbps, an operating frequency of 2.4GHz, and backward compatibility with 802.11b devices

browser: an application program that provides a way to look at and interact with all the information on the World Wide Web

What's in this Guide?

This user guide covers the steps for setting up and using the PrintServer.

- **Chapter 1: Introduction**
This chapter describes the PrintServer's applications and this User Guide.
- **Chapter 2: Getting to Know the PrintServer**
This chapter describes the physical features and placement options of the PrintServer.
- **Chapter 3: Installing the PrintServer using the Setup Wizard**
This chapter instructs you on how to use the Setup Wizard to install your PrintServer.
- **Chapter 4: Installing the PrintServer Driver**
This chapter explains how to install the driver for the PrintServer.
- **Chapter 5: Using the Diagnostic Utility**
This chapter explains how to use the diagnostic utility to control the PrintServer.
- **Chapter 6: Using the Web-based Utility**
This chapter describes how to use the web-based utility to change the PrintServer's settings.
- **Appendix A: Troubleshooting**
This appendix describes some potential problems and solutions regarding use of the PrintServer.
- **Appendix B: Wireless Security**
This appendix explains the security risks in wireless networking and how you can help protect your network
- **Appendix C: Upgrading Firmware**
This appendix instructs you on how to upgrade the firmware on the PrintServer should you need to do so.
- **Appendix D: Windows Help**
This appendix describes how you can use Windows Help for instructions about networking, such as installing the TCP/IP protocol.
- **Appendix E: Glossary**
This appendix gives a brief glossary of terms frequently used in networking.
- **Appendix F: Specifications**
This appendix provides the technical specifications for the PrintServer.

Wireless-G PrintServer with Multifunction Printer Support

- **Appendix G: Warranty Information**
This appendix supplies the warranty information for the PrintServer.
- **Appendix H: Regulatory Information**
This appendix supplies the regulatory information regarding the PrintServer.
- **Appendix I: Contact Information**
This appendix provides contact information for a variety of Linksys resources, including Technical Support.

Chapter 2: Getting to Know the PrintServer

Overview

This chapter describes the back panel, front panel, and placement options of the PrintServer.

The Back Panel

The PrintServer's ports and Reset button are located on the back panel.



Figure 2-1: PrintServer's Back Panel



IMPORTANT: Resetting the PrintServer will delete all of your settings and replace them with the factory defaults. Do not reset the PrintServer if you want to retain the settings.

Reset Button Use the **Reset Button** to reset the PrintServer to its factory defaults or print a test page. The instructions are provided on the right side of this page.

Ethernet The **Ethernet** port is where you will connect the PrintServer to your wired network (for setup).

USB The **USB** port is where you will connect the USB printer to the PrintServer.

The USB icon (right) designates a USB port. The PrintServer comes with a USB cable. One end has a rectangular connector called Type A. The other end has a square connector called Type B. The USB cable's Type A end connects to the PrintServer, and the Type B end connects to the printer.



USB Connector-Type A



USB Connector-Type B

Power The **Power** port is where you will connect the power adapter.

To reset the factory default settings

1. Unplug the power from the PrintServer.
2. Press and hold the Reset button. While pressing the button, plug in the power.
3. Hold down the Reset button for ten seconds, and the PrintServer will be reset to factory defaults.

To generate a diagnostic print-out

1. Ensure that both the PrintServer and the printer attached to the USB port are ON.
2. Press the Reset button, and hold it in for 2 seconds.
3. The test page, which lists the current settings, will be printed.

PostScript printers are unable to print this page. If you have a PostScript printer on the USB port, the test page will not be printed.

The Front Panel

The PrintServer's LEDs are located on the front panel.



Figure 2-2: PrintServer's Front Panel

- | | |
|-----------------|--|
| USB | Green/Orange. The USB LED lights up green when there is a printer connected to the USB port. The LED flashes green when the PrintServer is sending data through the USB port. It lights up orange when there is a problem with the USB printer. |
| Wireless | Green. The Wireless LED serves two purposes. If the LED is continuously lit, the PrintServer is connected to the wireless network. If the LED is flashing, the PrintServer is sending or receiving data from the wireless network. |
| Ethernet | Green/Orange. If the Ethernet LED is continuously lit green, the PrintServer is connected to a device through the Ethernet port. The LED flashes green when the PrintServer is sending or receiving data from the wired network. It flashes orange when there are collisions detected on the Ethernet port. |
| Power | Green/Orange. If the Power LED is continuously lit green, then the PrintServer is ready for use. The LED flashes green when the PrintServer is booting up, a system self-test is running, or the firmware is being upgraded. It lights up orange when there is an error. |

Chapter 3: Installing the PrintServer Using the Setup Wizard

Before You Begin



HAVE YOU: already set up your printer? Linksys recommends that you set up your printer and install your printer's driver before you install the PrintServer's driver.

Note the PrintServer's default name, which starts with "LK" (for example, LK71107). It is shown in the *Server* field on the sticker located on the PrintServer's back panel. During the Setup Wizard, this name is used to identify the PrintServer you are currently installing.

Installation

To install the PrintServer, you will use the Setup CD-ROM to run the Setup Wizard. It is highly recommended that you use a computer on the wired network to set up the PrintServer. However, if you only have a wireless network, then you can use a computer on the wireless network to set up the PrintServer.

1. Insert the Setup CD-ROM into the computer's CD-ROM drive. The Setup Wizard should run automatically. If it does not, click the **Start** button and choose **Run**. In the box that appears, enter **D:\SetupWizard.exe** (if "D" is the letter of your CD-ROM drive).
2. When you see the *Welcome* screen, click **Click Here to Start** to begin the installation. Click **Exit** to end the installation. Click **User Guide** button to view the User Guide.
3. If this is the first time you have installed the PrintServer, click **Set up PrintServer**. If you have already installed and configured the PrintServer, click **Set up Computer** and proceed to "Chapter 4: Installing the PrintServer Driver."



Figure 3-1: Welcome



Figure 3-2: Set up PrintServer

Wireless-G PrintServer with Multifunction Printer Support

4. Disconnect the USB printer cable from the computer, and disconnect the printer's power adapter from the electrical outlet. Click **Next**.

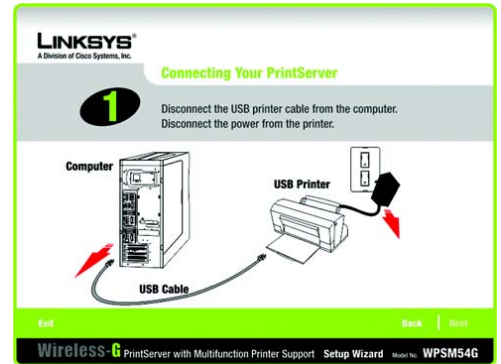


Figure 3-3: Disconnect the USB Printer Cable and Power

5. Connect the USB printer cable to the USB port on the PrintServer. Click **Next**.

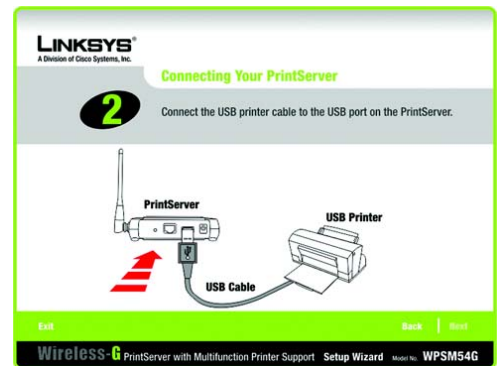


Figure 3-4: Connect the PrintServer to the Printer

Wireless-G PrintServer with Multifunction Printer Support

6. Connect the Ethernet network cable to your router. Connect the other end of the cable to the Ethernet port of the PrintServer.

(The Ethernet connection is for configuration purposes only. Later you can disconnect the Ethernet network cable when the PrintServer has connected wirelessly.)

Click **Next**.

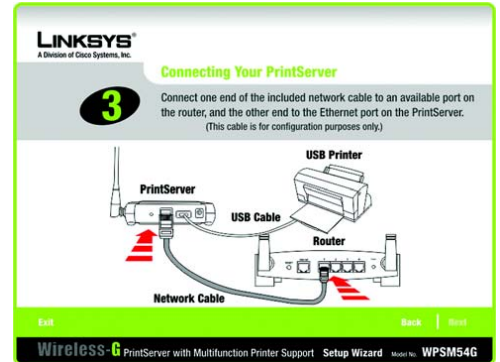


Figure 3-5: Connect the PrintServer to the Router

7. Connect the power adapter to the PrintServer and an electrical outlet. Click **Next**.



IMPORTANT: Make sure you use the power adapter supplied with the PrintServer. Use of a different power adapter could damage the PrintServer.



NOTE: The PrintServer does not have an on/off power switch. Whenever its power adapter is plugged into a power supply, the PrintServer is powered on. The PrintServer can be powered on before, during, or after your network is powered on.

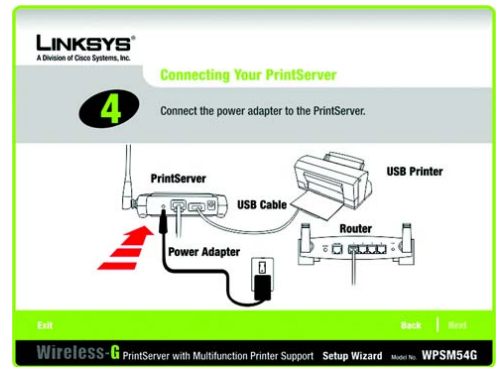


Figure 3-6: Connect the Power to the PrintServer

Wireless-G PrintServer with Multifunction Printer Support

8. Reconnect the printer's power adapter to the electrical outlet.

Click **Next**.

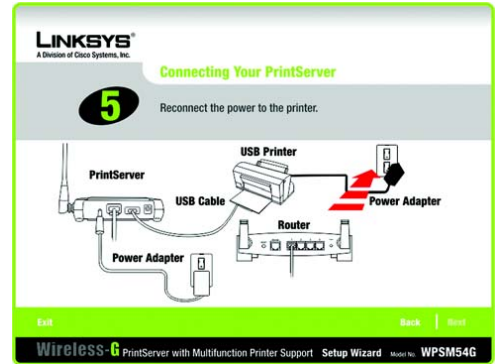


Figure 3-7: Reconnect the Power to the Printer

9. Wait a few moments while the system searches for the PrintServer.

Select the appropriate PrintServer. If you cannot find the PrintServer, click **Refresh**.

Click **Next**.



Figure 3-8: Select the PrintServer

Wireless-G PrintServer with Multifunction Printer Support

10. If your network uses a router that automatically assigns IP addresses, select **Automatically obtain an IP address (DHCP)**. If your network uses a static IP address, select **Set IP configuration manually**, and enter the IP Address, Subnet Mask, and Gateway in the fields provided.

Click **Next**.

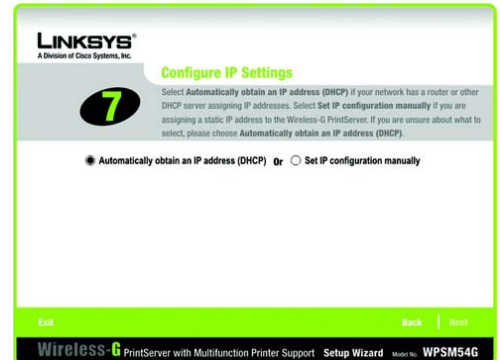


Figure 3-9: Configure IP Settings (Automatic)

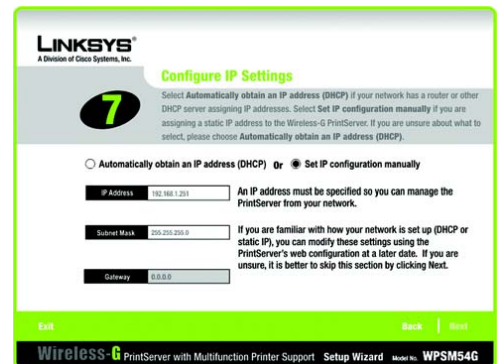


Figure 3-10: Configure IP Settings (Static IP)

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

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

static ip address: a fixed address assigned to a computer or device connected to a network.

Wireless-G PrintServer with Multifunction Printer Support

11. Create a password and enter it in the *Password* field. Enter the new password again in the *Confirm* field.

Click **Next**.

LINKSYS
A Division of Cisco Systems, Inc.

8 Set PrintServer's Password

For security reasons, you should change your PrintServer's password. You will need this password to access the Wireless-G PrintServer's web-based utility.

Password Create a password and enter it in the Password field.

Confirm Re-enter the password in the Confirm field.

Exit Back Next

Wireless-G PrintServer with Multifunction Printer Support Setup Wizard Model No. WPSM54G

Figure 3-11: Set the PrintServer's Password

12. Select the wireless network that the PrintServer should join. If you do not see the wireless network you want to use, click **Refresh** and locate the network. Click **Next** and go to step 14.

If you want to manually enter the settings for the wireless network, click **Manual Setup**. Click **Next** and go to step 13.

LINKSYS
A Division of Cisco Systems, Inc.

9 Select Wireless Network

Select the wireless network you wish to connect to and click Next. If you do not see your wireless network in the list below, click the Refresh button to locate your wireless network.

SSID	Mac Address	Mode	Channel	Signal	Security
Linksys	00-14-BF-ED-04-E3	Infrastructure	6	65%	None

Refresh Manual Setup

Exit Back Next

Wireless-G PrintServer with Multifunction Printer Support Setup Wizard Model No. WPSM54G

Figure 3-12: Select the Wireless Network

Wireless-G PrintServer with Multifunction Printer Support

13. If you clicked Manual Setup, the *Configure Wireless Settings* screen appears with the *SSID* field. Enter the SSID or name of the wireless network. This is the unique name shared by all devices in a wireless network. The SSID is case-sensitive and should have 32 or fewer characters.

Click **Next**.

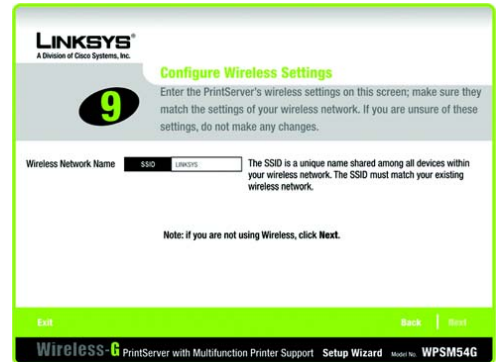


Figure 3-13: Configure Wireless Settings

14. The wireless security method of your network should be automatically selected. The available methods are WEP (64-Bit), WEP (128-Bit), WPA Pre-Shared Key (TKIP), or WPA2 Pre-Shared Key (AES). Proceed to the instructions for your wireless security method.

If wireless security is disabled, keep the default, **Disabled**, and click **Next**.

WPA Pre-Shared Key (TKIP) or WPA2 Pre-Shared Key (AES)

Enter a Passphrase (also known as a Pre-Shared or Shared Key) that is 8-63 characters in length. Click **Next**.



Figure 3-14: Wireless Security - WPA Pre-Shared Key

Wireless-G PrintServer with Multifunction Printer Support

WEP (128-Bit) or WEP (64-Bit)

Enter a Passphrase that has 16 or fewer alphanumeric characters. Click **Next**. A WEP key will be automatically generated. (The Passphrase is compatible with Linksys wireless products only. You will have to manually enter the WEP key on any non-Linksys wireless products.)

If you want to manually enter the WEP key, leave the *Passphrase* field blank and click **Next**. A new screen will appear. In the *Key 1* field, enter 26 hexadecimal characters if you are using 128-bit WEP encryption. Enter 10 hexadecimal characters if you are using 64-bit WEP encryption. Valid hexadecimal characters are "0"-"9" and "A"-"F". Click **Next**.



Figure 3-15: Wireless Security - WEP (128-Bit)



Figure 3-16: WEP Key

15. Your old and new settings will be displayed. If you want to save the new settings, click **Next**. If you want to make changes, click **Back**.

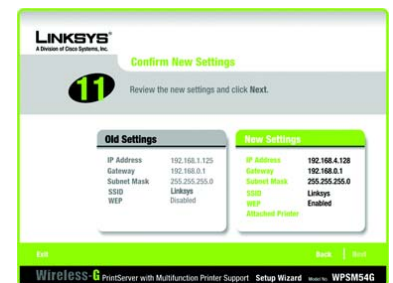


Figure 3-17: Confirm New Settings

Wireless-G PrintServer with Multifunction Printer Support

16. Wait a few moments while the PrintServer's settings are updated.

In the next few screens, you will disconnect and reconnect the PrintServer. Proceed in the order specified to avoid any networking conflicts.

Disconnect the power adapter from the PrintServer. Click **Next**.

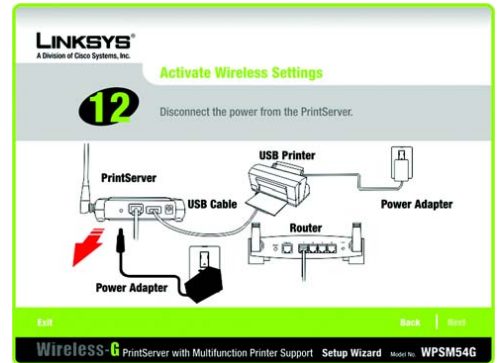


Figure 3-18: Disconnect the Power Adapter

17. Disconnect the Ethernet network cable from the PrintServer and router. Click **Next**.

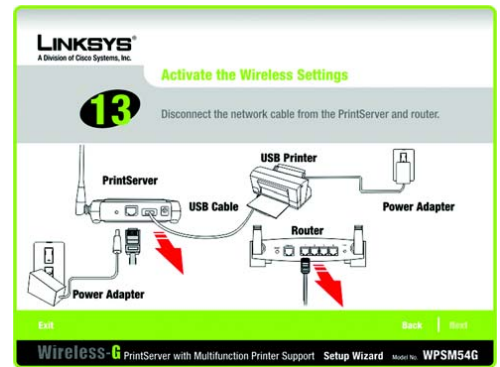


Figure 3-19: Disconnect the Network Cable

Wireless-G PrintServer with Multifunction Printer Support

18. Reconnect the power adapter to the PrintServer and click **Next**.

Wait a few moments while the system checks for the network.

19. Wait a few minutes while the PrintServer connects to your wireless network.

The next screen will indicate that the PrintServer is now part of your wireless network. Click **Next**.

The order in which you connected the PrintServer, router, and printer is important. If the PrintServer did not connect to your wireless network, then click **Back** and review the steps you took.

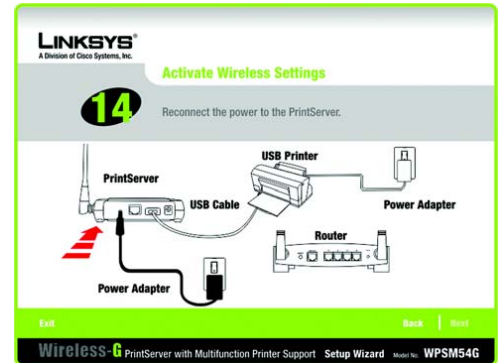


Figure 3-20: Reconnect the Power Adapter



Figure 3-21: Checking Network Connection

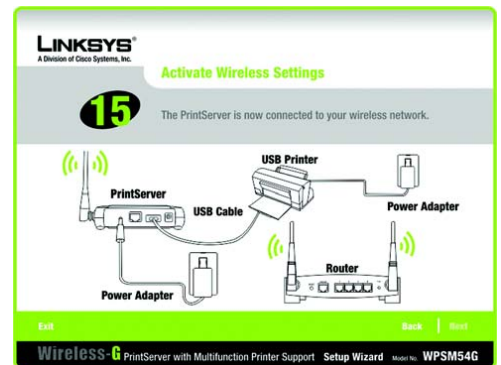


Figure 3-22: PrintServer on Wireless Network

20. The PrintServer is now connected to your wireless network.

Next you need to install the PrintServer driver on your computer. Click **Set up Computer**, and go to “Chapter 4: Installing the PrintServer Driver”.

About the New Program Icons

After you have run the Set up PrintServer Setup Wizard, the PrintServer program icons will appear in the Start menu. To access these icons, click **Start**. Select **Programs**. Then select **Linksys MFP Network Adapter**. You will have four options available:

- To uninstall the PrintServer from your computer, click **Uninstall**.
- To run the wizard that sets up the PrintServer driver, click **Diagnostic**. Refer to “Chapter 4: Installing the PrintServer Driver” for details.
- To access the diagnostic utility, click **PrintServer Utility**. For more information, refer to “Chapter 5: Using the Diagnostic Utility”.
- To run the wizard that sets up the PrintServer, click **Setup Wizard**. Refer to the previous section in this chapter, “Installation”.



Figure 3-23: Continue to Set up Computer

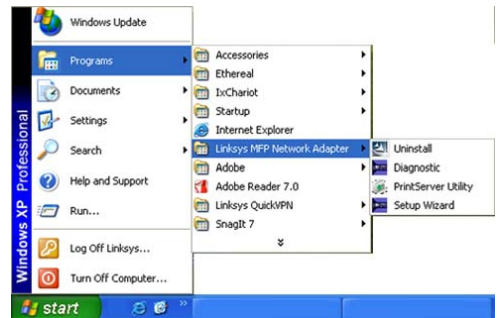


Figure 3-24: New Program Icons

Chapter 4: Installing the PrintServer Driver

Overview

This section installs the PrintServer's software on your Windows 2000 or XP computers so they can use the PrintServer for print jobs. (The PrintServer is fully compatible with Windows 2000 and XP.)



HAVE YOU: already set up your printer? Linksys recommends that you set up your printer and install your printer's driver before you install the PrintServer's driver.

At this point, you must have the following:

- the PrintServer hardware installed on your network. If not, refer to "Chapter 3: Installing the PrintServer Using the Setup Wizard".
- TCP/IP installed on each of your computers. (TCP/IP is installed by default.)
- an IP address assigned to each of the computers on your network. (In most networks, the network router assigns IP addresses to the computers on the network.)
- an IP address assigned to the PrintServer by you or your network router. By default the PrintServer has DHCP enabled so the network router will automatically assign an IP address. If you need to manually assign an IP address, run the Setup Wizard on the Setup CD-ROM (refer to "Chapter 3: Installing the PrintServer Using the Setup Wizard").

It is assumed that your CD-ROM drive's letter name is designated as "D". If your CD-ROM drive is named another letter, replace all instances of "D" with the appropriate letter.

Installation

1. Make sure you have no programs or applications running on your computer.
2. If you haven't already done so, insert the Setup CD-ROM into the computer's CD-ROM drive. The Setup CD-ROM should run automatically. If it does not, click the **Start** button and choose **Run**. In the field that appears, enter **D:\SetupWizard.exe** (if "D" is the letter of your CD-ROM drive).

Wireless-G PrintServer with Multifunction Printer Support

3. When you see the *Welcome* screen, click **Click Here to Start** to continue. Click **Exit** to end the installation. Click **User Guide** button to view the User Guide.



Figure 4-1: Welcome

4. Click **Set up Computer**.



Figure 4-2: Set up Computer

Wireless-G PrintServer with Multifunction Printer Support

5. Select the printer connected to the PrintServer. Click **Next**.



NOTE: If the PrintServer is not listed, click **Refresh**. If the PrintServer is not found, then follow these instructions:

1. Disconnect the power adapter from the PrintServer.
2. Wait two seconds, and reconnect the power adapter to the PrintServer.
3. If the PrintServer is not found, then click the checkbox to disable the firewall.
4. Click **Refresh** again.



Figure 4-3: Select Printer

6. The Setup Wizard will install the PrintServer's driver and re-install the printer drivers.

Make sure the printer is connected to the PrintServer, and click **Next**.



Figure 4-4: Check Printer Driver

Wireless-G PrintServer with Multifunction Printer Support

7. Please wait while the printer drivers are configured for use with the PrintServer. This may take two to three minutes.



Figure 4-5: Please Wait

8. You will be notified when the installation of the PrintServer is complete. If you want to print a test page, click **Test Print**.

Click **Finish**.

The driver installation and configuration is complete.

Proceed to “Chapter 5: Using the Diagnostic Utility”.



Figure 4-6: Print Test Page

Chapter 5: Using the Diagnostic Utility

Overview

This chapter describes the diagnostic utility used to control the PrintServer.

How to Access the Diagnostic Utility

There are two ways to access the diagnostic utility. One way uses the diagnostic icon in the system tray, and the other way uses the program icon accessed through the Start menu.

Diagnostic Icon in the System Tray

The PrintServer diagnostic icon appears in the system tray of your desktop. When you double-click the icon, you will see the *Print Server Information* screen. Refer to the following section, “About the Print Server Information Screen”, for details.

When you right-click the PrintServer diagnostic icon, you will see a menu with four options:

- To see the version number of the diagnostic utility, click **About**.
- To see the *Print Server Information* screen, click **Info**. Refer to the following section, “About the Print Server Information Screen”, for details.
- Click **Connect** to connect your computer to the printer for scans, faxes, or usage of a memory card (many printers have a slot for reading information from a memory card).



NOTE: The computer **MUST** be connected to the printer for all scans, faxes, or usage of a memory card. If the *Connection status* field says, “Disconnected”, then click the **Connect** button. (The computer will automatically connect to the printer for print jobs.)

- To close the utility, click **Exit**. A confirmation screen will appear. If you close the utility, your computer will not be able to use the PrintServer. To exit the utility, click **Yes**. To keep the utility running, click **No**.



Figure 5-1: Diagnostic Utility Icon



Figure 5-2: Right-Click Utility Icon

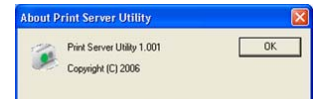


Figure 5-3: About Print Server Utility

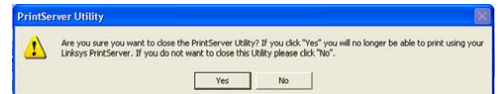


Figure 5-4: Exit Utility

Program Icon Accessed through the Start Menu

The PrintServer program icons appear in the Start menu. To access these icons, click **Start**. Select **Programs**. Then select **Linksys MFP Network Adapter**. You will have four options available:

- To uninstall the PrintServer from your computer, click **Uninstall**.
- To run the wizard that sets up the PrintServer driver, click **Diagnostic**. Refer to “Chapter 4: Installing the PrintServer Driver” for details.
- To access the diagnostic utility, click **PrintServer Utility**. Refer to the following section, “About the PrintServer Information Screen”, for details.
- To run the wizard that sets up the PrintServer, click **Setup Wizard**. Refer to “Chapter 3: Installing the PrintServer Using the Setup Wizard” for details.

About the Print Server Information Screen

The *Print Server Information* screen shows status information for the PrintServer. Use this screen to connect your computer to the printer for scans, faxes, or usage of a memory card (many printers have a slot for reading information from a memory card).

Printer Information

Printer Model. The model number of the connected printer.

Status. This section shows the printer's status information. When a computer is connected to the printer, the *Status* field states the name and IP address of the computer that is currently connected. When a computer is not connected to the printer, the *Status* field says, “On-Line”.

Also shown is the number of seconds before the current computer is disconnected from the printer.

Connection status

To scan, fax, or read information from a memory card, your computer must be connected to the printer, indicated by the message, “Connected”. To allow another computer to use the printer, click the **Disconnect** button. To manually re-connect to the printer, click the **Connect** button.

NOTE: The computer **MUST** be connected to the printer for all scans, faxes, or usage of a memory card. If the *Connection status* field says, “Disconnected”, then click the **Connect** button. (The computer will automatically connect to the printer for print jobs.)

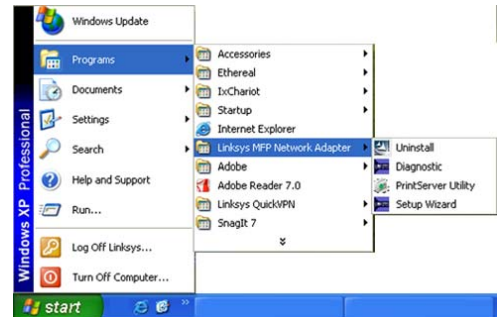


Figure 5-5: Program Icons

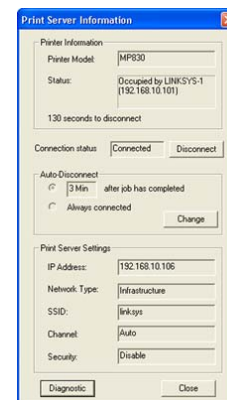


Figure 5-6: Print Server Information - Connected

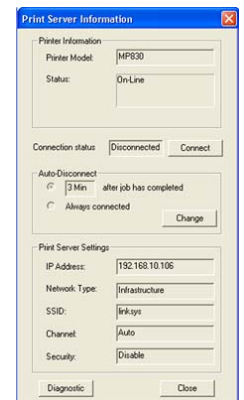


Figure 5-7: Print Server Information - Disconnected

Auto-Disconnect

By default, the computer will be disconnected three minutes after the scan, print job, or fax is completed. To make changes, click the **Change** button. To change the length of time before the computer is disconnected from the printer, select the appropriate length of time from the drop-down menu, and then click the **Set** button. If you want the computer to always be connected to the printer, such as when you have only one computer using the printer, click **Always connect**, and then click the **Set** button.

Print Server Settings

This section shows you the PrintServer's settings, which were configured during the Setup Wizard.

If you will use the PrintServer's web-based utility, write down the IP address of the PrintServer. You will need it to access the web-based utility.

Diagnostic

To run the wizard that sets up the PrintServer driver, click the **Diagnostic** button. Refer to "Chapter 4: Installing the PrintServer Driver" for details.

Close

To close the *Print Server Information* screen, click the **Close** button.

If you would like to change the PrintServer's advanced settings, use the web-based utility. For more information, refer to "Chapter 6: Using the Web-based Utility".

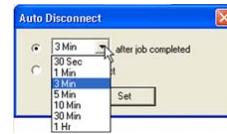


Figure 5-8: Auto-Disconnect (Time)

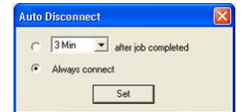


Figure 5-9: Auto-Disconnect (Always Connect)

Chapter 6: Using the Web-based Utility

Overview

After setting up the PrintServer with the Setup Wizard, the PrintServer will be ready for use. However, if you'd like to change its advanced settings, use the PrintServer's web-based utility. This chapter will describe each web page of the utility and each page's key functions. The utility can be accessed via your web browser through a networked computer.

There are six main tabs: Setup, Protocol, Wireless, Printer, Status, and Exit. Additional tabs will be available after you click one of the main tabs, except for the Setup and Exit tabs.

To access the web-based utility, launch the web browser of your computer, and enter the PrintServer's IP address in the *Address* field. Then press **Enter**.



NOTE: Double-click the PrintServer diagnostic icon. The IP address of the PrintServer will be displayed on the *PrintServer Info* screen.

On the login screen, leave the *User name* field blank, and enter the password you set when you ran the Setup Wizard (the default password is **admin**). Click the **OK** button.



Figure 6-1: Login

The Setup Tab

The first screen that appears is the Setup tab and allows you to change the PrintServer's general settings.

WPSM54G Device Name

Enter the PrintServer's name in the field provided. The name is located on a sticker on the bottom of the PrintServer.

Password

Current Password. To change the PrintServer's password, enter the current password in the *Current Password* field.

New Password and Verify Password. Enter the new password in the *New Password* field, and then enter the new password again in the *Verify Password* field.

Protocols

The TCP/IP protocol is enabled by default.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

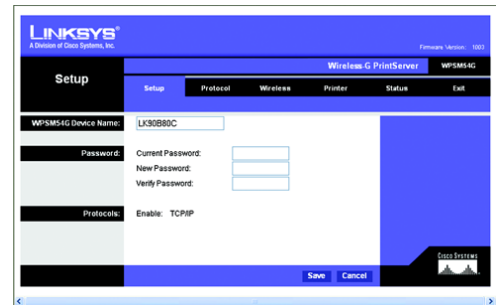


Figure 6-2: Setup Tab

The Protocol Tab - TCP/IP

Click the **TCP/IP** tab to view or change the TCP/IP values of the PrintServer.

IP Address

Obtain an IP Address Automatically. If your network router is using DHCP to assign IP addresses, select **Obtain an IP Address Automatically**. By default, **Obtain an IP Address Automatically** is enabled.

Use the Following IP Address. If you need to assign the PrintServer a fixed IP address (also known as static IP address), select **Use the Following IP Address**, and enter the appropriate values under IP Address, Subnet Mask, and Gateway. Make sure the IP Address and Subnet Mask are appropriate for your network. If you change the PrintServer's IP address, make sure you that you reconnect to the PrintServer using that new IP address. Otherwise, you will not be communicating with the PrintServer. In most cases, the Gateway IP address is the IP address of your router, and you should complete the *Gateway* field if you will use the PrintServer for Internet printing. (To find out your router's IP address, consult your router's documentation.)

Connection

Delay before reconnection attempt. Set how long you want the PrintServer to wait between attempts.

Number of reconnection attempts. Specify the number of times that the PrintServer will attempt to connect to the network.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

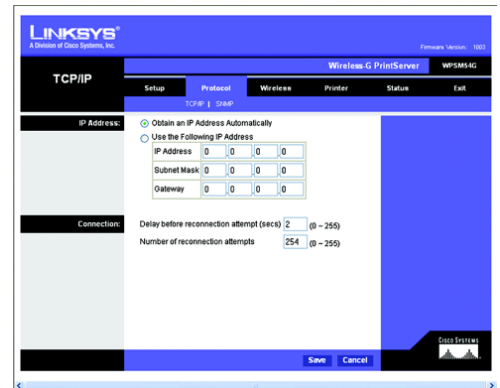


Figure 6-3: Protocol Tab - TCP/IP

The Protocol Tab - SNMP

Use this screen to view or change the PrintServer's SNMP (Simple Network Management Protocol) settings.

The PrintServer supports SNMP, which allows network administrators to monitor and control the PrintServer through the use of network management platforms, such as HP OpenView.

The appropriate MIB file must be imported into your SNMP management program using the Import-Compile command. Check your program's documentation for details on this procedure. The MIB file is named Mib2p.mib and is provided in the MIB folder on the Setup CD-ROM.

General

SysContact. Enter the name of the contact person in the *SysContact* field.

SysLocation. Enter the location of the contact person in the *SysLocation* field.

Management Stations

Station No. Select the number of the management station from the *Station No.* drop-down menu (1-4). Click the **Get Data** button to display the information for the selected station.

IP Address. Enter the IP address of the management station running the SNMP program.

Community. Enter the name of the SNMP community, which is usually **public** or **private**.

Access. Select the level of access for this management station, **Not Accessible**, **Read-only**, or **Read/Write**.

Trap Receivers

Receiver No. Select the number of the trap receiver from the *Receiver No.* drop-down menu (1-4). Click the **Get Data** button to display the information for the selected trap receiver.

IP Address. Enter the IP address of the trap receiver that will be sent the trap messages or notifications.

Community. In the *Community* field, enter the name of the SNMP community, which is usually **public** or **private**.

Enable with Severity level. To designate a severity level, click the checkbox next to *Enable with Severity level*. From the following drop-down menu, select the desired level of severity, with 1 meaning least severe.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

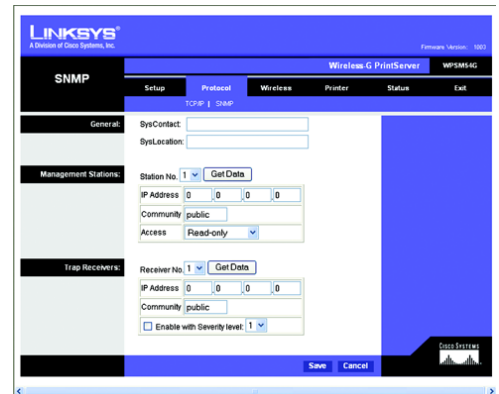


Figure 6-4: Protocol Tab - SNMP

The Wireless Tab - Basic

This screen allows you to change the PrintServer's basic wireless settings.

Configuration

Regulatory Domain and MAC Address. The PrintServer's Regulatory Domain and MAC Address are listed and cannot be changed.

SSID. In the *SSID* field, enter the name of your wireless network. This is the unique name shared by all devices in a wireless network. The SSID is case-sensitive and should have 32 or fewer characters.

Channel No. If your network is set to ad-hoc mode, select your network's channel setting from the *Channel No.* drop-down menu. If your network is set to infrastructure mode, keep the default, **Auto**.

Network Type. The Network Type setting shows a choice of two wireless modes. Select **Infrastructure** if you want the PrintServer to communicate using an access point or wireless router. Select **Ad-Hoc** if you want the PrintServer to communicate without using an access point or wireless router.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.



Figure 6-5: Wireless Tab - Basic

The Wireless Tab - Security

Configure the security of your wireless network on this screen. Wi-Fi Protected Access (WPA), WPA2, and two levels of Wired Equivalent Privacy (WEP) encryption are available. If you do not want to use wireless security, select **None** from the *Security Mode* drop-down menu.

Wireless Security

Security Mode. To use WPA, select **WPA Personal**. To use WPA2, which is stronger than WPA, select **WPA2 Personal**. To use WEP, select the level of WEP encryption you want to use, **64 Bit Keys (10 Hex chars)** or **128 Bit Keys (26 Hex chars)**, which is stronger than 64-bit WEP.

Proceed to the instructions for your security method.

WPA Personal

WPA Encryption Algorithm. TKIP is the default algorithm.

WPA Shared Key. Enter your Shared Key, which must have 8-63 characters in length.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

WPA2 Personal

WPA Encryption Algorithm. AES is the default algorithm.

WPA Shared Key. Enter your Shared Key, which must have 8-63 characters in length.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

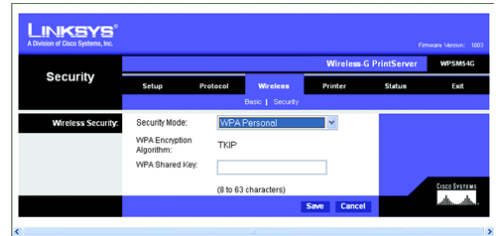


Figure 6-6: Wireless Tab - Security (WPA Personal)

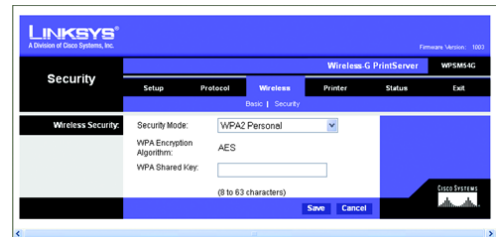


Figure 6-7: Wireless Tab - Security (WPA2 Personal)

WEP

Default Transmit Key. Select the Default Transmit Key used by your wireless network. This indicates which WEP key your network uses for WEP encryption.

Passphrase. Enter a Passphrase and click the **Generate Keys** button to automatically generate WEP Keys 1-4. The Passphrase is case-sensitive and should have no more than 16 alphanumeric characters. It must match your wireless network's passphrase and is compatible with Linksys wireless products only. (Enter the WEP key(s) manually on any non-Linksys wireless products.)

Key 1 to Key 4. To enter the WEP keys manually, leave the *Passphrase* field blank and enter your WEP key(s). For 64-bit WEP encryption, each key must have 10 hexadecimal characters, while for 128-bit WEP encryption, the key must have 26 hexadecimal characters. Valid hexadecimal characters are "0"-"9" and "A"-"F".

Authentication. Select your wireless network's authentication type. The default is **Open System**, for which the sender and the recipient do NOT use a WEP key for authentication. You can also choose **Shared Key**, for which the sender and recipient use a WEP key for authentication.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

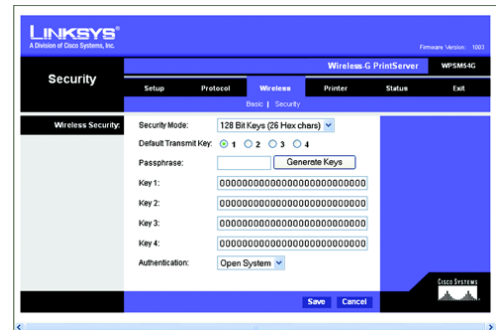


Figure 6-8: Wireless Tab - Security (WEP)

The Printer Tab - Scan

By default, the computer that sent the print job will be disconnected three minutes after the print job is completed. Use this screen to change the length of time the computer is connected to the printer.

Auto Disconnect

3 min after job completed. To change the number of minutes before the computer is disconnected from the printer, enter the new number (1-60) in this field.

Always connect. If you want the computer to always be connected to the printer, click **Always connect**.

Click the **Save** button to apply your change, or click **Cancel** to cancel your change.



Figure 6-9: Printer Tab - Scan

The Printer Tab - Internet Printing

Internet Printing allows you to automatically print any e-mails that are sent to a specific e-mail account on your network. This is especially useful for printing information when you are not connected to the network. You can print from any location where you can access e-mail.

Mail Server

Mail Server IP Address. Enter the address of your mail server. (This value must be a fixed IP address.)

Account Name and Password. Enter the Account Name and Account Password.

Verify Password. Enter the password again in the *Verify Password* field.

Check Mail every. Specify how often you want the PrintServer to check for e-mail to be printed.

Redirect unprintable Mail to. Specify an e-mail address to which e-mails that cannot be printed are routed; this is useful for both graphic-intensive e-mails and for troubleshooting purposes.

Printer

Printer Model. Enter the Printer Model in the field provided. You can find this in the Device Manager.

Printer Port. Choose the appropriate Printer Port from the drop-down menu: USB, the PrintServer's USB port, or **Logical Printer 1-3**. The PrintServer has three logical or virtual printer ports. For example, you can have three different configurations for your USB printer: Logical Printer 1 for landscape orientation, Logical Printer 2 for double-sided copies, and Logical Printer 3 for manual feed. Then configure the Logical Printers on the Logical Port tab, so Logical Printers 1, 2, and 3 will be mapped to the physical printer on the PrintServer's USB port.

Options

Print every E-Mail. Click this checkbox if you want to print every e-mail message.

Print Banner Page. Enabled by default, this feature tells the PrintServer to print a banner page for every print job (the banner page describes the print job). Click the checkbox to remove the checkmark and disable this feature.

Mail response when printed. Click this checkbox if you want an e-mail sent when a print job is complete.

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.

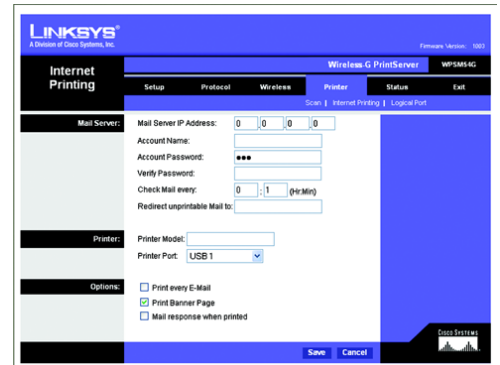


Figure 6-10: Printer Tab - Internet Printing

The Printer Tab - Logical Port

The Logical Printers tab contains the logical printer settings of the PrintServer. Configure them for each Logical Printer.

The PrintServer has three logical or virtual printer ports. For example, you can have three different configurations for your USB printer: Logical Printer 1 for landscape orientation, Logical Printer 2 for double-sided copies, and Logical Printer 3 for manual feed. Then you will map Logical Printers 1, 2, and 3 to the physical printer on the PrintServer's USB port.

Select Printer

Logical Printer No. From the *Logical Printer Port No.* drop-down menu, select the number (1-3) of the printer you wish to configure. Click the **Get Data** button to update the display with the current data for the selected logical printer.

Details

Pre-string (Hex). Enter the printer control string (in hexadecimal characters) to be sent to the printer before each print job. This string cannot exceed 30 characters.

Post String (Hex). Enter the printer control string (in hexadecimal characters) to be sent to the printer after each print job. This string cannot exceed 30 characters.

Convert LF to CR+LF. If checked, LF (line feed) characters are changed to CR+LF (carriage return + line feed).

Click the **Save** button to apply your changes, or click **Cancel** to cancel your changes.



Figure 6-11: Printer Tab - Logical Port

The Status Tab - Device

The Device tab displays information about the PrintServer.

Server Details

The PrintServer's settings and status information are displayed here. No values can be changed on this screen. This screen is for information only. Click the **Refresh** button to update this information.

Upgrade. If you want to upgrade the PrintServer's firmware, follow these instructions:

1. Visit www.linksys.com and download the firmware upgrade file for the Wireless-G PrintServer with Multifunction Printer Support.
2. Extract the file on your computer.
3. On the *Device* screen, click the **Upgrade** button.
4. On the *Firmware Upgrade* screen, enter the location of the extracted firmware file, or click the **Browse** button to find this file.
5. Click the **Start Upgrade** button, and follow the on-screen instructions.

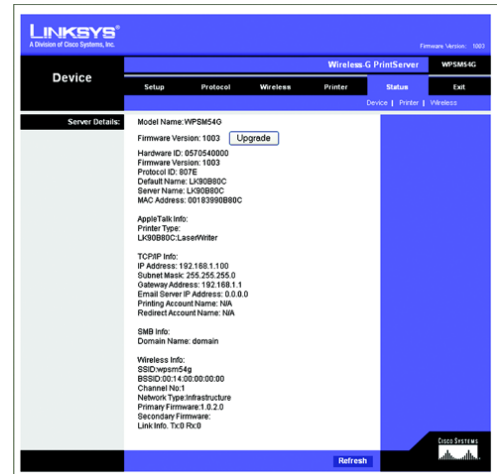


Figure 6-12: Status Tab - Device

firmware: the programming code that runs a networking device

download: to receive a file transmitted over a network

upgrade: to replace existing software or firmware with a newer version

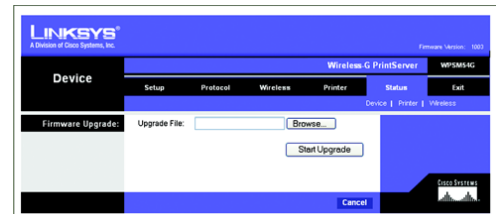


Figure 6-13: Firmware Upgrade

The Status Tab - Printer

The Printer tab displays information about the printer. No values can be changed on this screen. This screen is for information only.

Port 1 (USB Port)

The port's status information is displayed here. No values can be changed on this screen. This screen is for information only.

Print Test Page. Click the **Print Test Page** button to print a test page on the connected printer.

Click the **Refresh** button to update this information.

The Status Tab - Wireless

The Wireless tab displays information about the PrintServer's wireless connection. No values can be changed on this screen. This screen is for information only.

Link Info

Settings and current transmission rate for the wireless connection are displayed here.

Throughput

The throughput information for the wireless connection is displayed here.

Click the **Refresh** button to update this information.

The Exit Tab

Select the **Exit** tab to close the web-based utility.



Figure 6-14: Status Tab - Printer



Figure 6-15: Status Tab - Wireless

Appendix A: Troubleshooting

This appendix consists of "Common Problems and Solutions". Provided are possible solutions to problems that may occur during the installation and operation of the PrintServer. Read the descriptions below to help you solve your problems. If you can't find an answer here, check the Linksys website at www.linksys.com.

Common Problems and Solutions

1. All the LEDs on the front of the PrintServer are not lit.

Check the power adapter and the connection to the electrical outlet.

2. The PrintServer's Power LED lights up orange or flashes continuously.

Reset the PrintServer. Unplug the power adapter and plug it back in, or press the **Reset** button on the back of the PrintServer for approximately ten seconds.

3. A printer connected to the PrintServer cannot print or prints garbage.

Do the following:

- Check the cable connection between the PrintServer and printer.
- Make sure the printer driver in the application program or Windows matches the printer.
- Make sure the printer cable is not too long, less than 10 feet.

If there is still a printing issue, follow these steps:

1. Double-click the PrintServer diagnostic icon.
2. On the *PrintServer Info* screen, click the **Diagnostic** button.
3. Follow the on-screen instructions.

4. I am using DHCP, and the PrintServer gets an IP address conflict involving the PrintServer.

If the PrintServer is left powered on when the DHCP server, which is usually the network router, is powered off, the PrintServer will retain its IP address without informing the DHCP server. Reset the PrintServer so it will obtain a new IP address. This problem may also occur if you assigned a static IP address within the range used by the DHCP server. If so, use another address NOT within the range used by the DHCP server.

5. The PrintServer's Ethernet LED is not lit.

Check your Ethernet network cable and make sure that the appropriate Ethernet or Link LED on your router or switch is lit.

Wireless-G PrintServer with Multifunction Printer Support

6. To start over, I need to set the PrintServer to its factory default settings.

Unplug the PrintServer's power adapter. Press the **Reset** button while you plug in the PrintServer's power adapter. Continue to hold the **Reset** button for ten seconds and then release it. This will reset the password, wireless, and other settings on the PrintServer to the factory defaults. In other words, the PrintServer will revert to its original factory configuration.

7. I need to upgrade the firmware.

In order to upgrade the firmware with the latest features, follow these steps:

1. Go to the Linksys website at <http://www.linksys.com> and download the latest firmware for the PrintServer. Then extract the firmware file on your PC.
2. Open the PrintServer's web-based utility. Click **Status** and then **Device**.
3. Click the **Upgrade** button, and follow the on-screen instructions.

Appendix B: Wireless Security

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

Security Precautions

The following is a complete list of security precautions to take:

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

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

Security Threats Facing Wireless Networks

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

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



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

Wireless-G PrintServer with Multifunction Printer Support

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

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

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

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

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

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

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

There are several ways that WEP can be maximized:

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

WPA. Wi-Fi Protected Access (WPA) is the newest and best available standard in Wi-Fi security. WPA2 has stronger encryption than WPA. WPA uses Temporal Key Integrity Protocol (TKIP), while WPA2 uses Advanced Encryption System (AES).

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



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

Appendix C: Upgrading Firmware

Use the PrintServer's web-based utility to upgrade its firmware. Follow these instructions:

1. Visit www.linksys.com and download the firmware upgrade file for the Wireless-G PrintServer with Multifunction Printer Support.
2. Extract the file on your computer.
3. Open the PrintServer's web-based utility.
4. Click the **Status** tab, and then click the **Device** tab.
5. On the *Device* screen, click the **Upgrade** button.
6. On the *Firmware Upgrade* screen, enter the location of the extracted firmware file, or click the **Browse** button to find this file.
7. Click the **Start Upgrade** button, and follow the on-screen instructions.

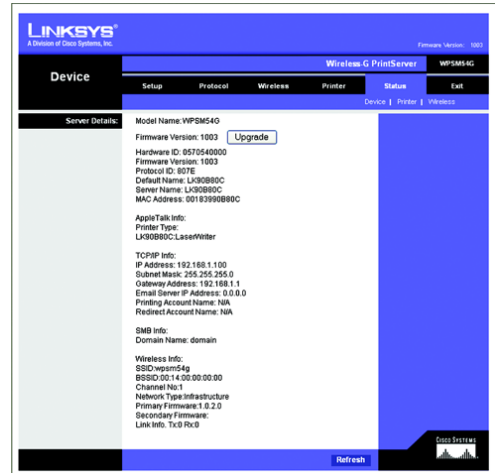


Figure C-1: Status Tab - Device



Figure C-2: Firmware Upgrade

Appendix D: Windows Help

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

TCP/IP

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

Shared Resources

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

Network Neighborhood/My Network Places

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

Appendix E: Glossary

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

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

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

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

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

Bit - A binary digit.

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

Broadband - An always-on, fast Internet connection.

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

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

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

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

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

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

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

Wireless-G PrintServer with Multifunction Printer Support

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

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

Domain - A specific name for a network of computers.

Download - To receive a file transmitted over a network.

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

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

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

Encryption - Encoding data transmitted in a network.

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

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

Firmware - The programming code that runs a networking device.

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

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

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

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

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

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

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

Wireless-G PrintServer with Multifunction Printer Support

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

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

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

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

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

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

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

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

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

Packet - A unit of data sent over a network.

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

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

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

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

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

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

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

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

Wireless-G PrintServer with Multifunction Printer Support

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

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

Router - A networking device that connects multiple networks together.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Wireless-G PrintServer with Multifunction Printer Support

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

Topology - The physical layout of a network.

TX Rate - Transmission Rate.

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

Upload - To transmit a file over a network.

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

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

WAN (Wide Area Network)- The Internet.

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

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

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

Appendix F: Specifications

Model	WPSM54G
Standards	IEEE 802.3, IEEE 802.11g, IEEE 802.11b, USB 1.1, USB 2.0
Ports	Power, USB, Ethernet
Button	Reset
LEDs	Power, Ethernet, Wireless, USB
Cabling type	Category 5e Ethernet cable
# of Antennas	1
Connector type	Fixed
Detachable (Y/N)	No
RF Pwr (EIRP) in dBm	14dBm@54Mbps, 18dBm@11Mbps
Antenna Gain in dBi	3.3dBi
Dimensions (W x H x D)	4.84" x 1.02" x 3.70" (123 mm x 26 mm x 94 mm)
Unit Weight	6.30 oz. (0.18 kg)
Power	5V, 2A
Certifications	FCC Class B, UL, CE
Operating Temp.	0°C to 40°C (32°F to 104°F)

Wireless-G PrintServer with Multifunction Printer Support

Storage Temp.	-20°C to 70°C (-4°F to 158°F)
Operating Humidity	10% to 85%, Non-Condensing
Storage Humidity	5% to 90%, Non-Condensing

Appendix G: Warranty Information

LIMITED WARRANTY

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

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

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

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

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

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

Appendix H: Regulatory Information

FCC Statement

This 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.

This product has been tested and complies with the specifications for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment or devices
- Connect the equipment to an outlet other than the receiver's
- Consult a dealer or an experienced radio/TV technician for assistance

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

FCC Radiation Exposure Statement

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. IEEE 802.11b or 802.11g operation of this product in the USA is firmware-limited to channels 1 through 11.

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.

Wireless-G PrintServer with Multifunction Printer Support

Industry Canada Statement

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

Déclaration d'Industrie Canada

Cet appareil est conforme aux normes NMB003 et RSS210 d'Industrie Canada.

Industry Canada Statement

Operation is subject to the following two conditions:

1. This device may not cause interference and
2. This device must accept any interference, including interference that may cause undesired operation of the device.
This device has been designed to operate with an antenna having a maximum gain of 2dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.
To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the EIRP is not more than required for successful communication.
3. Industry Canada Radiation Exposure Statement:
This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Avis d'Industrie Canada

L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes :

1. il ne doit pas produire de brouillage et
2. il doit accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif. Le dispositif a été conçu pour fonctionner avec une antenne ayant un gain maximum de 2 dBi. Les règlements d'Industrie Canada interdisent strictement l'utilisation d'antennes dont le gain est supérieur à cette limite. L'impédance requise de l'antenne est de 50 ohms.
Afin de réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisis de façon à ce que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne soit pas supérieure au niveau requis pour obtenir une communication satisfaisante.
3. Avis d'Industrie Canada concernant l'exposition aux radiofréquences :
Ce matériel est conforme aux limites établies par IC en matière d'exposition aux radiofréquences dans un environnement non contrôlé. Ce matériel doit être installé et utilisé à une distance d'au moins 20 cm entre l'antenne et le corps de l'utilisateur.
L'émetteur ne doit pas être placé près d'une autre antenne ou d'un autre émetteur, ou fonctionner avec une autre antenne ou un autre émetteur.

Wireless-G PrintServer with Multifunction Printer Support

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

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

English

Environmental Information for Customers in the European Union

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

Ceština/Czech

Informace o ochraně životního prostředí pro zákazníky v zemích Evropské unie

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



Dansk/Danish

Miljøinformation for kunder i EU

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

Deutsch/German

Umweltinformation für Kunden innerhalb der Europäischen Union

Die Europäische Richtlinie 2002/96/EC verlangt, dass technische Ausrüstung, die direkt am Gerät und/oder an der Verpackung mit diesem Symbol versehen ist nicht zusammen mit unsortiertem Gemeindeabfall entsorgt werden darf. Das Symbol weist darauf hin, dass das Produkt von regulärem Hausmüll 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 tavalisest olmejäätmevoogudest. Olete kohustatud kõrvaldama käesoleva ja ka muud elektri- ja elektroonikaseadmed riigi või kohalike ametiasutuste poolt ette nähtud kogumispunktide kaudu. Seadmete korrektnete kõrvaldamine ja ringlussevõtt aitab vältida võimalikke negatiivseid tagajärgi keskkonnale ning inimeste tervisele. Vanade seadmete kõrvaldamise kohta täpsema informatsiooni saamiseks võtke palun ühendust kohalike ametiasutustega, jäätmekäitlusfirmaga või kauplusega, kust te toote ostsite.

Español/Spanish

Información medioambiental para clientes de la Unión Europea

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

Ελληνικά/Greek

Στοιχεία περιβαλλοντικής προστασίας για πελάτες εντός της Ευρωπαϊκής Ένωσης

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

Français/French

Informations environnementales pour les clients de l'Union européenne

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

Italiano/Italian

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

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

Latviešu valoda/Latvian

Ekoloģiska informācija klientiem Eiropas Savienības jurisdikcijā

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

Appendix H: Regulatory Information

Lietuvškai/Lithuanian

Aplinkosaugos informacija, skirta Europos Sąjungos vartotojams

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

Malti/Maltese

Informazzjoni Ambjentali għal Klijenti fl-Unjoni Ewropea

Id-Direttiva Ewropea 2002/96/KE titlob li t-tagħmir li jkun fih is-simbolu fuq il-prodott u/jew fuq l-ippakkjar ma jistax jintrema ma' skart municipali li ma għex 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' facilitajiet ta' għbir 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-hanut minn fejn xtrajt il-prodott.

Magyar/Hungarian

Környezetvédelmi információ az európai uniós vásárlók számára

A 2002/96/EC számú európai uniós irányelv megkívánja, hogy azokat a termékeket, 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 hulladékélezési rendszerektől elkülönített eljárást kell alkalmazni. Az Ön felelőssége, hogy ezt, és más elektromos és elektronikus berendezéseit a kormányzati vagy a helyi hatóságok által kijelölt gyűjtőrendszereken 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 exhibe este símbolo no produto e/ou na sua embalagem não seja eliminado junto com os resíduos municipais não separados. O símbolo indica que este produto deve ser eliminado separadamente dos resíduos domésticos regulares. É da sua responsabilidade eliminar este e qualquer outro equipamento eléctrico e electrónico através 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.

Slovenčina/Slovak

Informácie o ochrane životného prostredia pre zákazníkov v Európskej únii

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

Slovenčina/Slovene

Okoljske informacije za stranke v Evropski uniji

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

Wireless-G PrintServer with Multifunction Printer Support

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 kontakter du dina lokala myndigheter, avfallshanteringen eller butiken där du köpte produkten.

For more information, visit www.linksys.com.

Appendix I: Contact Information

Need to contact Linksys?

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

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

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

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

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

800-326-7114
support@linksys.com

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

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

949-823-3000