

**D-Link *AirPlus Xtreme™* G**  
**DWL-G800AP**  
**802.11g Wireless Range Extender**

**Manual**

**D-Link®**

**Building Networks for People**

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# Package Contents



## Contents of Package:

- **D-Link AirPlus Xtreme G™ DWL-G800AP**  
802.11g Wireless Range Extender
- Power Adapter-DC 5V, 2.5A
- Manual and Warranty on CD
- Quick Installation Guide

If any of the above items are missing, please contact your reseller.

*Note: Using a power supply with a different voltage rating than the one included with the DWL-G800AP will cause damage and void the warranty for this product.*

## System Requirements for Configuration:

- Computers with Windows, Macintosh, or Linux-based operating systems with an installed Ethernet adapter
- Internet Explorer Version 6.0 or Netscape Navigator Version 6.0 and Above

# Introduction

At up to fifteen times the maximum wireless signal rate of previous wireless devices (up to 108Mbps\* in Super G mode), you can work faster and more efficiently, increasing productivity. With the DWL-G800AP, bandwidth-intensive applications like graphics or multimedia will benefit significantly because large files are able to move across the network quickly.

The D-Link *AirPlus Xtreme™* G DWL-G800AP Wireless Range Extender is an enhanced 802.11g high-performance, wireless device. It is an ideal way to extend the reach and number of computers connected to your wireless network.

The DWL-G800AP can act as an access point or a wireless repeater. In repeating mode, the DWL-G800AP repeats the wireless signal of D-Link *AirPlus Xtreme™* G access points and wireless routers to extend the range of your wireless network.

Unlike most 802.11g devices, the DWL-G800AP is capable of data transfer rates up to 108Mbps\* when used with other D-Link *AirPlus Xtreme™* G products such as the DWL-G520 Wireless PCI Adapter, DWL-G650 Wireless Cardbus Adapter, and the DI-624 Wireless Router.

The DWL-G800AP is compatible with most popular operating systems, including Macintosh, Linux and Windows, and can be integrated into a large network.

The DWL-G800AP has the newest, strongest and most advanced security features available today. When used with other 802.11 WPA (Wi-Fi Protected Access) and 802.1x compatible products in a network with a RADIUS server, the security features include:

**WPA: Wi-Fi Protected Access** which authorizes and identifies users based on a secret key that changes automatically at regular intervals. **WPA uses TKIP (Temporal Key Integrity Protocol)** to change the temporal key every 10,000 packets (a packet is a kind of message transmitted over a network.) This ensures much greater security than the standard WEP security. (By contrast, the previous WEP encryption implementations required the keys to be changed manually.)

**802.1x: Authentication** which is a first line of defense against intrusion. In the authentication process, the Authentication Server verifies the identity of the client attempting to connect to the network. Unfamiliar clients would be denied access.

For home users that will not incorporate a RADIUS server in their network, the security for the DWL-G800AP, used in conjunction with other WPA-compatible 802.11 products, will still be much stronger than ever before. Utilizing the **Pre-Shared Key mode** of WPA, the DWL-G800AP will obtain a new security key every time it connects to the 802.11 network. You only need to input your encryption information once in the configuration menu. No longer will you have to manually input a new WEP key frequently to ensure security. With the DWL-G800AP, you will automatically receive a new key every time you connect, vastly increasing the safety of your communication.

\*Maximum wireless signal rate derived from IEEE Standard 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors lower actual data throughput rate.

# Connections



Receptor  
for the  
**Power  
Adapter**

Pressing the  
**Reset Button**  
restores the DWL-  
G800AP to its  
original factory  
default settings.

The **LAN Port** is Auto-  
MDI/MDIX. You can  
insert either a  
straight-through or a  
crossover Ethernet  
cable in this port in  
order to connect the  
DWL-G800AP to the  
local network.

# LEDs

LED stands for Light-Emitting Diode. The DWL-G800AP Wireless Range Extender has 2 LEDs as shown below:



**Power:** A steady green light indicates a connection to a power source.

**Wireless Link/Act:** A steady green light indicates a good wireless connection. A blinking light indicates that the DWL-G800AP is receiving/transmitting from/to the wireless network.

# Features and Benefits

- Extends the range of your wireless network.
- Up to 5X Faster with D-Link *AirPlus Xtreme™* G Products - high-speed wireless data transfer rates up to 54Mbps. With increased data rate and capacity, the DWL-G800AP delivers media rich content such as digital images, videos, and MP3 files much faster than standard 802.11b networks.
- Fully 802.11b Compatible – Fully compatible with the IEEE 802.11b standard and interoperable with all existing 802.11b compliant devices.
- Easy setup with the setup wizard.
- Web-based interface for Managing and Configuring – Easy-to-use interface independent of the operating system.
- 2 Different Operation Modes – Capable of operating in **Access Point** or **Repeater** mode. In **Repeater** mode the DWL-G800AP will extend your existing wireless network up to 328 feet when used with the D-Link *AirPlus Xtreme G* DI-624 Enhanced Wireless Router-Firmware 2.37 or newer (Rev.C); as well as other 802.11g and 802.11b standards-compliant routers and access points.
- Auto-MDI/MDIX Ethernet port.

# Wireless Basics

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. D-Link wireless products will allow you access to the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking brings.

A wireless local area network (WLAN) is a computer network that transmits and receives data with radio signals instead of wires. WLANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

*People use WLAN technology for many different purposes:*

**Mobility** - Productivity increases when people have access to data in any location within the operating range of the WLAN. Management decisions based on real-time information can significantly improve worker efficiency.

**Low Implementation Costs** - WLANs are easy to set up, manage, change and relocate. Networks that frequently change can benefit from WLANs ease of implementation. WLANs can operate in locations where installation of wiring may be impractical.

**Installation and Network Expansion** - Installing a WLAN system can be fast and easy and can eliminate the need to pull cable through walls and ceilings. Wireless technology allows the network to go where wires cannot go - even outside the home or office.

**Inexpensive Solution** - Wireless network devices are as competitively priced as conventional Ethernet network devices.

**Scalability** - WLANs can be configured in a variety of ways to meet the needs of specific applications and installations. Configurations are easily changed and range from Peer-to-Peer networks suitable for a small number of users to larger Infrastructure networks to accommodate hundreds or thousands of users, depending on the number of wireless devices deployed.



# Wireless Basics *(continued)*

The DWL-G800AP is compatible, in default mode, with the following wireless products:

- **D-Link AirPlus Xtreme G™ DWL-G650**  
Wireless Cardbus Adapters used with laptop computers
- **D-Link AirPlus Xtreme G™ DI-624-Firmware 2.37 or newer (Rev.C)**  
Wireless Router
- The DWL-G800AP is also interoperable with other 802.11g and 802.11b standards-compliant devices.

## Standards-Based Technology

The DWL-G800AP Wireless Range Extender utilizes the **802.11b** and the **802.11g** standards.

The IEEE **802.11g** standard is an extension of the **802.11b** standard. It increases the data rate up to 54 Mbps within the 2.4GHz band, utilizing **OFDM technology**.

This means that in most environments, within the specified range of this device, you will be able to transfer large files quickly or even watch a movie in MPEG format over your network without noticeable delays. This technology works by transmitting high-speed digital data over a radio wave utilizing **OFDM (Orthogonal Frequency Division Multiplexing)** technology. **OFDM** works by splitting the radio signal into multiple smaller sub-signals that are then transmitted simultaneously at different frequencies to the receiver. **OFDM** reduces the amount of **crosstalk** (interference) in signal transmissions. The D-Link DWL-G800AP will automatically sense the best possible connection speed to ensure the greatest speed and range possible.

# Wireless Basics *(continued)*

## Installation Considerations

The D-Link AirPlus Xtreme G™ DWL-G800AP lets you access your network, using a wireless connection, from virtually anywhere within its operating range. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

- 1** Keep the number of walls and ceilings between the DWL-G800AP and other network devices to a minimum - each wall or ceiling can reduce your DWL-G800AP's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
- 2** Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
- 3** Building materials can impede the wireless signal - a solid metal door or aluminum studs may have a negative effect on range. Try to position wireless devices and computers with wireless adapters so that the signal passes through drywall or open doorways and not other materials.
- 4** Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

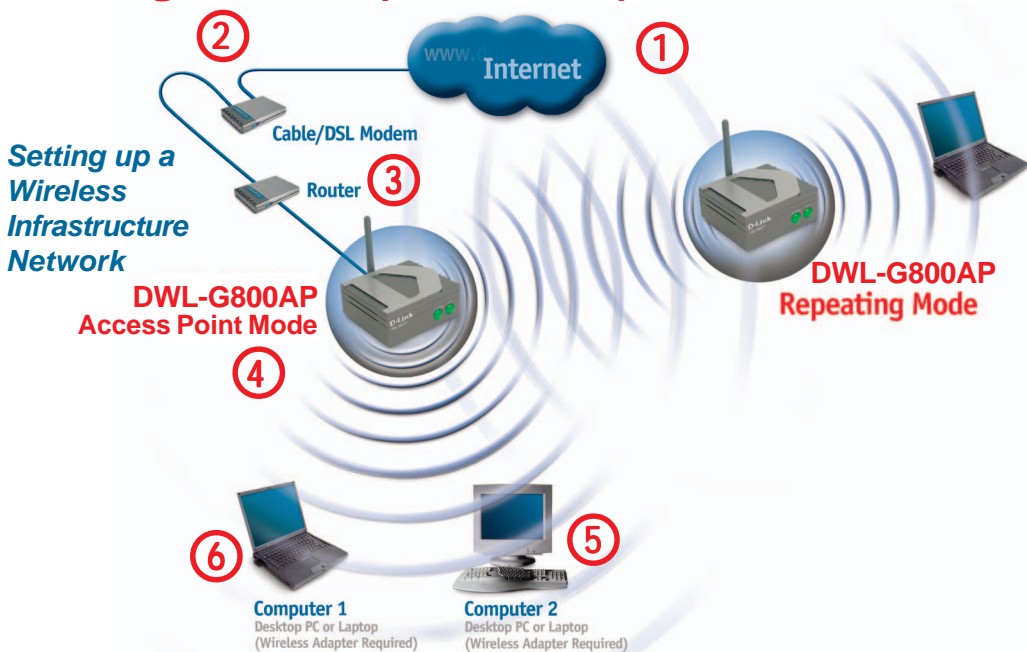
# Getting Started

On the following pages we will show you an example of an **Infrastructure Network** incorporating the DWL-G800AP.

An **Infrastructure** network contains an access point or a wireless router. The **Infrastructure Network** example shown on the following page contains the following D-Link network devices (your existing network may be comprised of other devices):

- 2 wireless range extenders -  
(one is used as an access point and the other as a repeater )  
**D-Link AirPlus Xtreme™ G DWL-G800AP**
- A wireless router - **D-Link AirPlus Xtreme™ G DI-624-Firmware 2.37 or newer (Rev.C)**
- A laptop computer with a wireless adapter -  
**D-Link AirPlus Xtreme™ G DWL-G650**
- A desktop computer with a wireless adapter -  
**D-Link AirPlus Xtreme™ G DWL-G520**
- A cable modem - **D-Link DCM-201**

# Getting Started (continued)



Please remember that **D-Link AirPlus Xtreme™ G** wireless devices are pre-configured to connect together, right out of the box, with their default settings.

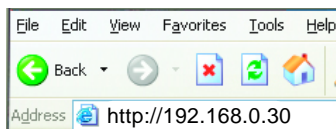
For a typical wireless setup at home (as shown above), please do the following:

- 1** You will need broadband Internet access (a cable or DSL-subscriber line into your home or office).
- 2** Consult with your cable or DSL provider for proper installation of the modem.
- 3** Connect the cable or DSL modem to the DI-624 router. (See the printed Quick Installation Guide included with your router.)
- 4** Connect the router to the DWL-G800AP. (See the printed Quick Installation Guide included with the DWL-G800AP.)
- 5** If you are connecting a desktop computer to your network, install the D-Link AirPlus Xtreme™ G DWL-G520 wireless PCI adapter into an available PCI slot on your desktop computer.  
(See the printed Quick Installation Guide included with the network adapter.)
- 6** Install the D-Link DWL-G650 wireless cardbus adapter into a laptop computer.  
(See the printed Quick Installation Guide included with the DWL-G650.)

# Using the Configuration Menu

After you have completed the *Setup Wizard* (please see the *Quick Installation Guide* that came with the product) you can access the *Configuration* menu at any time by opening the Web browser and typing in the IP address of the DWL-G800AP. The DWL-G800AP default IP address is shown below:

- Open the Web browser
- Type in the **IP address** of the DWL-G800AP



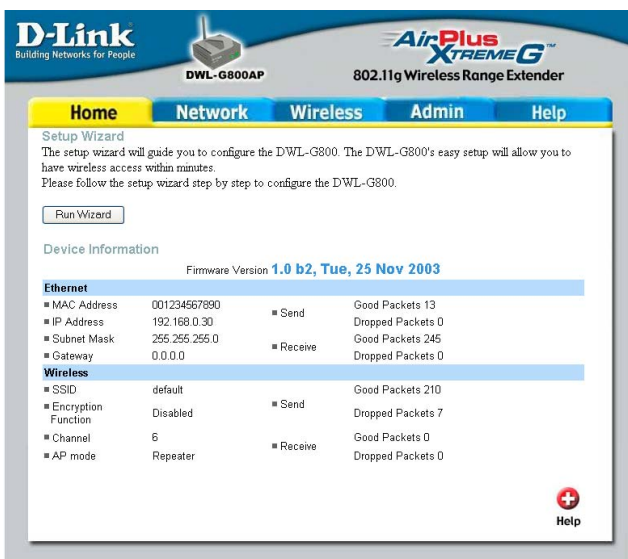
*Note: if you have changed the default IP address assigned to the DWL-G800AP, make sure to enter the correct IP address.*

- Type **admin** in the **User name** field
- Leave the **Password** blank.  
*(However, if you have changed the password, please enter the correct password.)*
- Click **OK**



## Home > Wizard

The **Home>Wizard** screen will appear. Please refer to the *Quick Installation Guide* for more information regarding the Setup Wizard.

A screenshot of the DWL-G800AP web interface. The top navigation bar has tabs for Home, Network, Wireless, Admin, and Help. The "Home" tab is selected. The main content area shows the "Setup Wizard" screen. It includes a "Run Wizard" button and "Device Information" section. The "Device Information" section is divided into "Ethernet" and "Wireless" sections, each with a table of settings and statistics.

Ethernet			
MAC Address	001234567890	Send	Good Packets 13
IP Address	192.168.0.30		Dropped Packets 0
Subnet Mask	255.255.255.0	Receive	Good Packets 245
Gateway	0.0.0.0		Dropped Packets 0

Wireless			
SSID	default	Send	Good Packets 210
Encryption Function	Disabled		Dropped Packets 7
Channel	6	Receive	Good Packets 0
AP mode	Repeater		Dropped Packets 0

# Using the Configuration Menu (continued)

## Network

The screenshot shows the configuration interface for a D-Link DWL-G800AP AirPlus Xtreme G 802.11g Wireless Range Extender. The top navigation bar includes 'Home', 'Network' (highlighted), 'Wireless', 'Admin', and 'Help'. Below the navigation bar, the 'IP Address Settings' section is visible. It contains a 'LAN IP' section with two radio buttons: 'Dynamic IP Address' (unselected) and 'Static IP Address' (selected). Below these are three input fields: 'IP Address' with the value '192.168.0.30', 'Subnet Mask' with '255.255.255.0', and 'Gateway' with '0.0.0.0'. At the bottom right of the configuration area, there are three buttons: 'Apply' (with a green checkmark icon), 'Cancel' (with a red X icon), and 'Help' (with a red plus icon).

**LAN IP- Dynamic IP Address-** Select this option to receive a dynamic IP address from the DHCP server on your network.

**Static IP Address-** Assign a static IP address to the DWL-G800AP. This selection is recommended for ease of network configuration.

**IP Address-** When **Static IP Address** is selected, you will input the static IP address of the DWL-G800AP into this field. The IP address must be within the range of the IP addresses in your network.

**Subnet Mask-** Enter the subnet mask.

**Gateway-** Enter the IP address of the router in the network.

**Apply-** Click **Apply** to save the changes.

# Using the Configuration Menu (continued)

## Operating Mode -

**AP Mode**-Select this mode to use the DWL-G800AP as an access point.

**Repeater**-Repeater is the default setting. Use this setting to repeat the wireless signal of a D-Link access point.

## AP Name -

You can rename your DWL-G800AP, especially if you have more than one access point on your network. (Available only in AP mode.)

## SSID (Service Set Identifier) -

The name designated for a specific wireless local area network (WLAN).

**Site Survey** - Click **Site Survey** to receive a list of networks that are available for connection. Please see the screen on the following pages for more information on this feature.

**Channel** - Select the channel from the pulldown menu. All devices on the network must share the same channel to communicate. (Available only in AP mode.)

**Authentication - Open System** - Communicates the key across the network.

**Shared Key** - Devices must have identical WEP settings to communicate.

**WEP** - Select **Enable Encryption** to use **WEP (Wired Equivalent Privacy)** on the network. All devices on the network, including the access point, must share the same WEP selection - either **Enable** or **Disable**.

**WEP Encryption** - Select either 64- or 128-bit length.

**WEP Mode** - Select **ASCII** or **Hexadecimal** mode and then input the appropriate digits or letters into each Key field. You can create up to 4 keys. Select the key you wish to use.

**Hexadecimal** digits consist of the numbers 0-9 and the letters A-F  
**ASCII** (American Standard Code for Information Interchange) is a code for representing English letters as numbers from 0-127

**TX Rates** - Select the transmission rate for the network.

**Apply** - Click **Apply** to save the changes.

## Wireless > Repeater

The screenshot shows the configuration page for a D-Link DWL-G800AP, specifically the 'Wireless' settings for Repeater mode. The page has a blue header with the D-Link logo and 'AirPlus Xtreme G' branding. The main content area is titled 'Wireless Settings' and contains several configuration options:

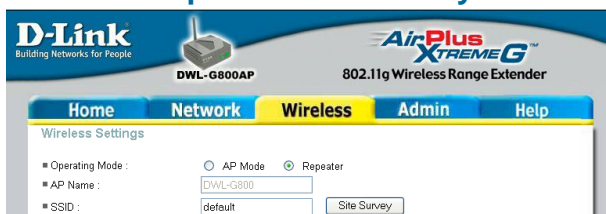
- Operating Mode:** Radio buttons for 'AP Mode' and 'Repeater' (selected).
- AP Name:** Text field containing 'DWL-G800'.
- SSID:** Text field containing 'default' and a 'Site Survey' button.
- Channel:** Dropdown menu showing '6'.
- Authentication:** Radio buttons for 'Open System' (selected), 'Shared Key', 'WPA', and 'WPA-PSK'.
- WEP:** Radio buttons for 'Enabled' and 'Disabled' (selected).
- WEP Encryption:** Dropdown menu showing '64Bit'.
- WEP Mode:** Dropdown menu showing 'HEX'.
- Key1-4:** Four text input fields for WEP keys, with 'Key1' selected.
- TX Rates:** Dropdown menu showing 'Auto (Mbps)'.
- Super G:** Dropdown menu showing 'Disabled'.

At the bottom right, there are three status icons (green checkmark, orange X, red plus) and buttons for 'Apply', 'Cancel', and 'Help'.

# Using the Configuration Menu (continued)

Click **Site Survey** in the **Wireless** configuration screen displayed on the previous page.

## Wireless Repeater>Site Survey



*The DWL-G800AP will scan the network. Please wait a few seconds for this process to complete.*

## Site Survey Completed

The Site Survey displays the features of each available network as follows:

**BSSID-** Basic Service Set Identifier is the 48-bit MAC address of the wireless interface of the access point.

**SSID-** Service Set Identifier is a 32-character name that differentiates one WLAN from another. All devices connecting to a specific WLAN must use the same SSID.

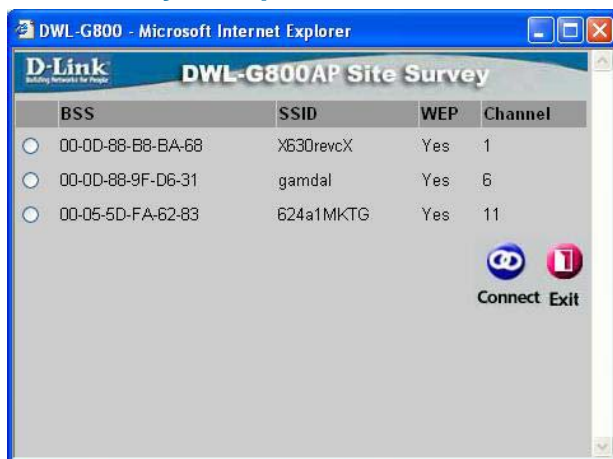
**WEP- Yes** in this column indicates that **WEP** is enabled on the network.

**Channel-** Displays the Channel the network is using.

**Connect-** Select the network to which you wish to connect and click **Connect**.

**Exit-** Click to exit the site survey function.

The information shown here allows you to select a network to join, or gives you the information you need to configure your DWL-G800AP for a connection to a specific network.





# Using the Configuration Menu (continued)

## Wireless > Access Point

The screenshot shows the configuration interface for a D-Link DWL-G800AP. The page title is "AirPlus Xtreme G 802.11g Wireless Range Extender". The navigation tabs are Home, Network, Wireless (selected), Admin, and Help. The "Wireless Settings" section includes the following options:

- Operating Mode:  AP Mode  Repeater
- AP Name:
- SSID:
- Channel:
- Authentication:  Open System  Shared Key  WPA  WPA-PSK
- WEP:  Enabled  Disabled
- WEP Encryption:
- WEP Mode:
- Key1:
- Key2:
- Key3:
- Key4:
- TX Rates:  (Mbps)
- Super G:

At the bottom right, there are three icons: a green checkmark (Apply), a red X (Cancel), and a red plus sign (Help).

### Operating Mode -

**AP Mode**-Select this mode to use the DWL-G800AP as an access point.

**Repeater**-Repeater is the default setting. Use this setting to repeat the wireless signal of a D-Link access point.

### AP Name -

You can rename your DWL-G800AP, especially if you have more than one access point on your network.

### SSID (Service Set Identifier) -

The name designated for a specific wireless local area network (WLAN).

**Site Survey** - Click **Site Survey** to receive a list of networks that are available for connection. Please see the screen on the following pages for more information on this feature.

# Using the Configuration Menu (continued)

## Wireless > Access Point (continued)

**Channel** - Select the channel from the pulldown menu. All devices on the network must share the same channel to communicate.

### Authentication -

**Open System** - Communicates the key across the network.

**Shared Key** - Devices must have identical WEP settings to communicate.

**WPA** - **Wi-Fi Protected Access** which authorizes and identifies users based on a secret key that changes automatically at regular intervals. **WPA** uses **TKIP (Temporal Key Integrity Protocol)** to change the temporal key every 10,000 packets (a packet is a kind of message transmitted over a network.) This ensures much greater security than the standard WEP security. (By contrast, the previous WEP encryption implementations required the keys to be changed manually.)

**WPA-PSK**- For home users that will not incorporate a RADIUS server in their network, the security for the DWL-G800AP, used in conjunction with other WPA-compatible 802.11 products, will still be much stronger than ever before. Utilizing the **Pre-Shared Key mode** of WPA, the DWL-G800AP will obtain a new security key every time it connects to the 802.11 network. You only need to input your encryption information once in the configuration menu. No longer will you have to manually input a new WEP key frequently to ensure security. With the DWL-G800AP, you will automatically receive a new key every time you connect, vastly increasing the safety of your communication.

**WEP** - Select **Enable Encryption** to use **WEP (Wired Equivalent Privacy)** on the network. All devices on the network, including the access point, must share the same WEP selection - either **Enable** or **Disable**.

**WEP Encryption** - Select either 64- or 128-bit length.

**WEP Mode** - Select **ASCII** or **Hexadecimal** mode and then input the appropriate digits or letters into each Key field. You can create up to 4 keys. Select the key you wish to use.

**Hexadecimal** digits consist of the numbers 0-9 and the letters A-F

**ASCII** (American Standard Code for Information Interchange) is a code for representing English letters as numbers from 0-127

**TX Rates** - Select the transmission rate for the network.

# Using the Configuration Menu (continued)

## Wireless > Access Point (continued)

**Super G Mode-** Super G is a group of performance enhancement features that increase end user application throughput in an 802.11g network. Super G is backwards compatible to standard 802.11g devices. For top performance, all wireless devices on the network should be Super G capable. Select either Disabled, Super G without Turbo, Super G with Dynamic Turbo, or Super G with Static Turbo.

**Disabled-** Standard 802.11g support, no enhanced capabilities.

### **Super G without Turbo-**

Capable of Packet Bursting, FastFrames, Compression, and no Turbo mode.

### **Super G with Dynamic Turbo-**

Capable of Packet Bursting, FastFrames, Compression, and Dynamic Turbo. This setting is backwards compatible with non-Turbo (legacy) devices. Dynamic Turbo mode is only enabled when all devices on the wireless network are configured with Super G with Dynamic Turbo enabled.

### **Super G with Static Turbo-**

Capable of Packet Bursting, FastFrames, Compression, and Static Turbo. This setting is not backwards compatible with non-Turbo (legacy) devices. Static turbo mode is always on and is only enabled when all the devices on the wireless network are configured with Super G with Static Turbo enabled.

**Apply -** Click **Apply** to save the changes.

# Using the Configuration Menu (continued)

## Wireless >Access Point>WPA

**D-Link**  
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**DWL-G800AP**

**AirPlus XTREME G™**  
802.11g Wireless Range Extender

Home Network **Wireless** Admin Help

Wireless Settings

- Operating Mode :  AP Mode  Repeater
- AP Name :
- SSID :
- Channel :
- Authentication :  Open System  Shared Key  WPA  WPA-PSK

802.1X

RADIUS Server 1 IP   
Port   
Shared Secret

RADIUS Server 2 IP (Optional)   
Port   
Shared Secret

TX Rates :  (Mbps)

Super G:

When you select WPA in the Wireless configuration window, you will configure the following:

**RADIUS Server 1 IP-** Enter the IP address of the RADIUS server in your network.

**Port-** Enter the port dedicated to the RADIUS server.

**Shared Secret-** Enter the secret word that devices on the network will input into their wPA configuration.

**RADIUS Server 2 IP (Optional)-** If there are two RADIUS servers in your network you will need to fill out these fields, as above.

**TX Rates-** Select the transmission rate from the pulldown menu.

**Super G-** Please refer to page 19 for information about this field.

# Using the Configuration Menu (continued)

## Wireless>Access Point>WPA-PSK

The screenshot shows the configuration interface for a D-Link DWL-G800AP, an AirPlus Xtreme G 802.11g Wireless Range Extender. The page has a blue header with the D-Link logo and product name. Below the header is a navigation menu with tabs for Home, Network, Wireless (selected), Admin, and Help. The main content area is titled "Wireless Settings" and contains the following fields and options:

- Operating Mode :**  AP Mode  Repeater
- AP Name :**
- SSID :**
- Channel :**
- Authentication :**  Open System  Shared Key  WPA  WPA-PSK
- Passphrase :**
- Confirmed Passphrase :**
- TX Rates :**  (Mbps)
- Super G:**

At the bottom right of the configuration area, there are three icons: a green checkmark, a red X, and a red plus sign, with the labels "Apply", "Cancel", and "Help" respectively.

When you select WPA-PSK in the Wireless configuration window, you will configure the following:

**Passphrase-** Enter the Passphrase that all devices on the network will share in order to use the security features of WPA-PSK.

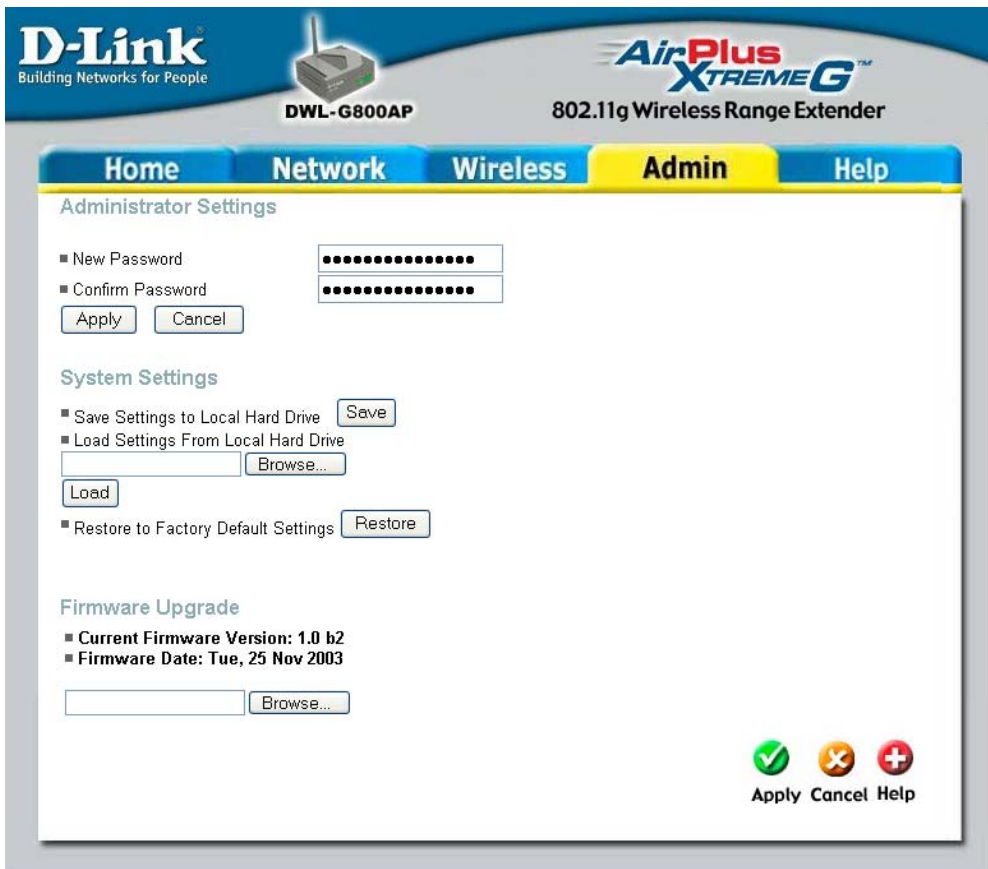
**Confirmed Passphrase-** Enter the passphrase again to confirm.

**TX Rates-** Select the transmission rate from the pulldown menu.

**Super G-** Please refer to page 19 for information on this field.

# Using the Configuration Menu (continued)

## Admin



**Administrator Settings** - Change your password in this window. Re-enter the new password to confirm. It can be up to 14 characters in length. Please keep a copy of your password in a safe place.

Click **Apply**, if you have made any changes.

**System Settings** - The current system settings can be saved as a file onto the local hard drive by clicking **Save**. The saved file can be loaded back on the DWL-G800AP by clicking **Browse**. When you have selected the settings file, click **Load**.

Click **Restore** to return to **Factory Default Settings**.

**Firmware Upgrade** - Upgrade the firmware for the DWL-G800AP. Find upgrades to the firmware on the D-Link website at <http://support.dlink.com>. After you have downloaded a firmware upgrade to your local drive, click **Browse**. Select the firmware and click **Apply** to complete the upgrade. **Do not upgrade firmware from a computer with a wireless connection. Doing so may damage the device.**

**Apply** - Click **Apply** if you have made any changes.

# Using the Configuration Menu (continued)

## Help



The screenshot shows the configuration menu for a D-Link DWL-G800AP 802.11g Wireless Range Extender. The page has a blue header with the D-Link logo and product name. Below the header is a navigation bar with tabs for Home, Network, Wireless, Admin, and Help. The Help tab is selected and highlighted in yellow. The main content area is white and contains a list of links organized into sections: Home, Network, Wireless, and Admin. Each section has a list of links to various configuration options.

**D-Link**  
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**DWL-G800AP**

**AirPlus Xtreme G™**  
802.11g Wireless Range Extender

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**Home**

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- [Device Information](#)

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- [Subnet Mask](#)
- [Gateway](#)

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- [WEP](#)
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**Admin**

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The **Help** window displays information about each section in the Configuration menu. When you change the settings in the Configuration menu, you will need to restart the DWL-G800AP for the changes to take effect.



# Networking Basics

## Using the Network Setup Wizard in Windows XP

In this section you will learn how to establish a network at home or work, using **Microsoft Windows XP**.

*Note: Please refer to websites such as <http://www.homenethelp.com> and <http://www.microsoft.com/windows2000> for information about networking computers using Windows 2000/Me/98SE.*

Go to **Start>Control Panel>Network Connections**

Select **Set up a home or small office network**

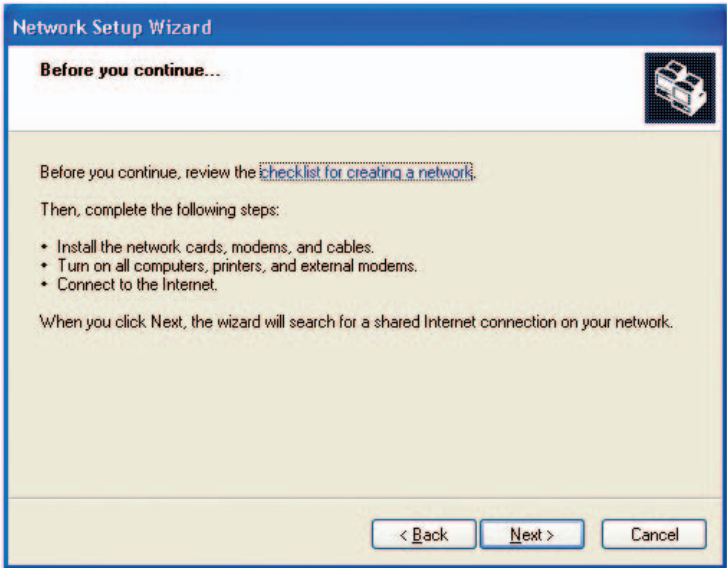


When this screen appears, click **Next**.



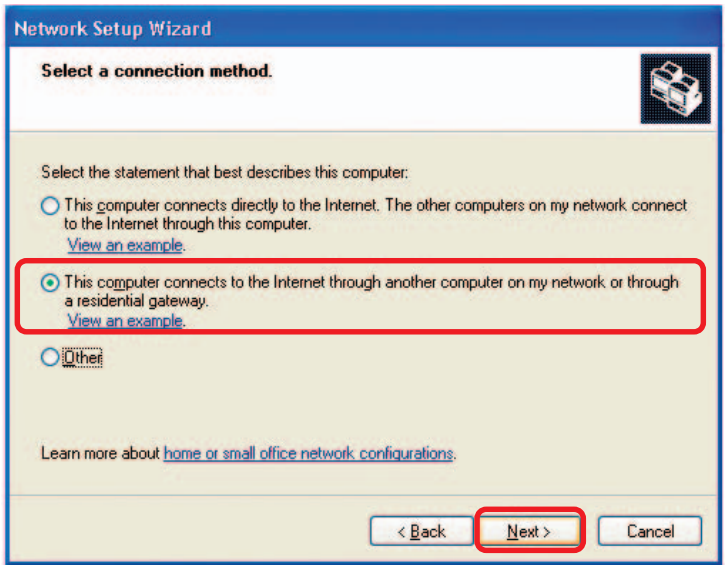
# Networking Basics (continued)

Please follow all the instructions in this window:



Click **Next**.

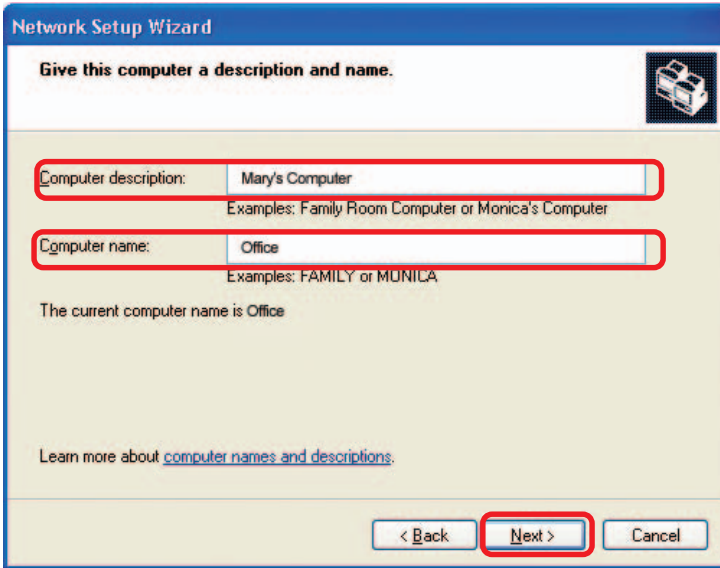
In the following window, select the best description of your computer. If your computer connects to the Internet through a router, select the second option as shown.



Click **Next**.

# Networking Basics (continued)

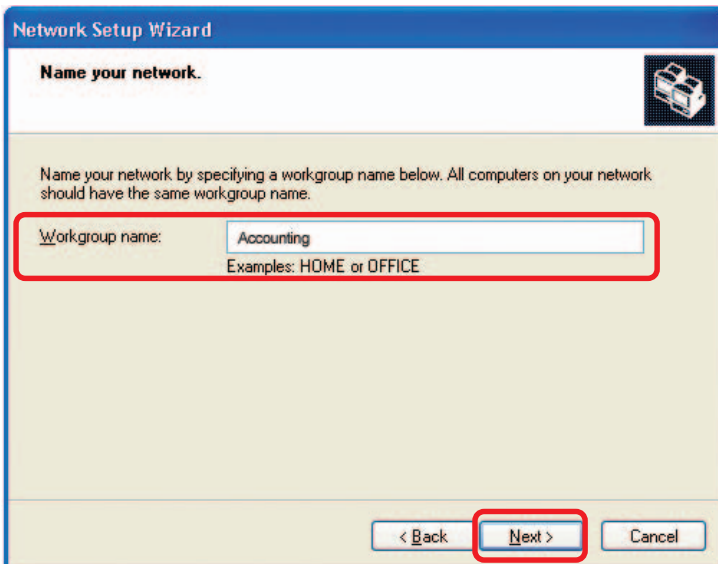
Enter a **Computer description** and a **Computer name** (optional.)



The screenshot shows the 'Network Setup Wizard' window with the title 'Give this computer a description and name.' The window contains two text input fields. The first field is labeled 'Computer description:' and contains the text 'Mary's Computer'. Below it, there are examples: 'Examples: Family Room Computer or Monica's Computer'. The second field is labeled 'Computer name:' and contains the text 'Office'. Below it, there are examples: 'Examples: FAMILY or MONICA'. Below the fields, it says 'The current computer name is Office'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red box.

Click **Next**.

Enter a **Workgroup** name. All computers on your network should have the same **Workgroup** name.

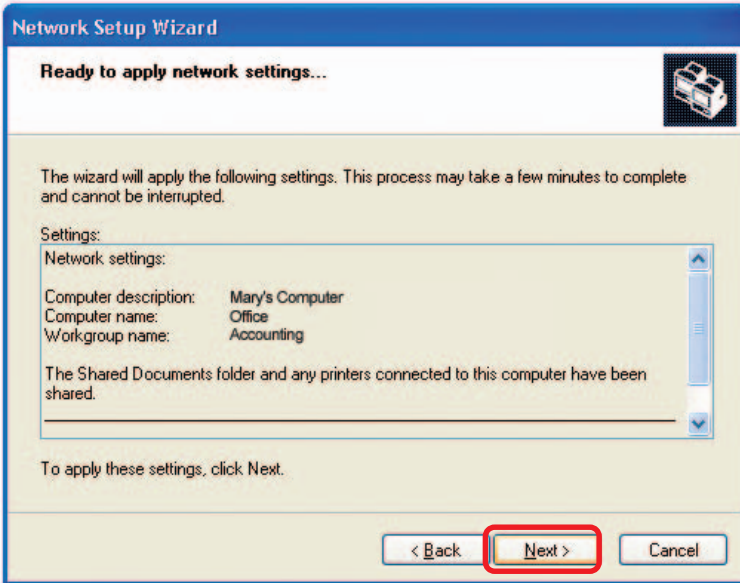


The screenshot shows the 'Network Setup Wizard' window with the title 'Name your network.' The window contains a text input field labeled 'Workgroup name:' with the text 'Accounting'. Below it, there are examples: 'Examples: HOME or OFFICE'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red box.

Click **Next**.

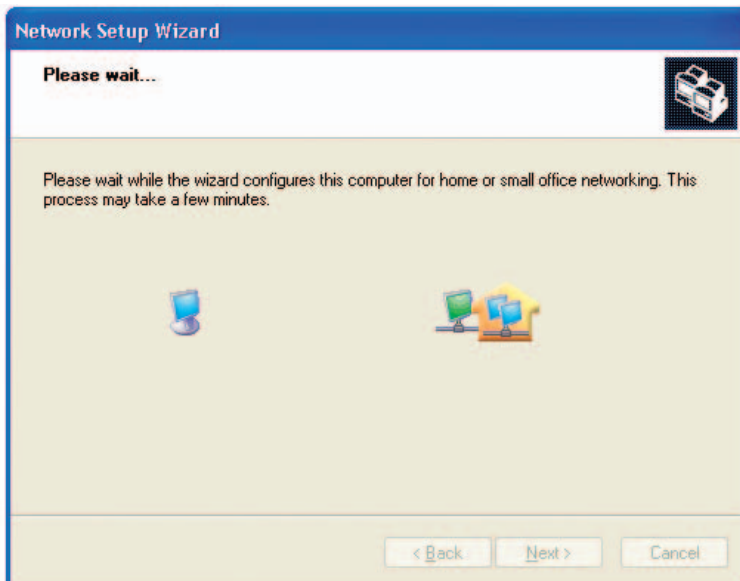
# Networking Basics (continued)

Please wait while the **Network Setup Wizard** applies the changes.



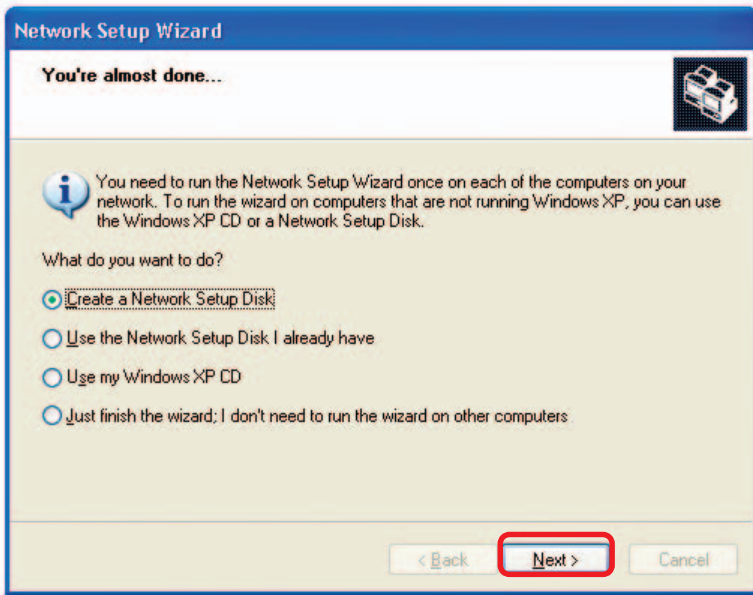
When the changes are complete, Click **Next**.

Please wait while the **Network Setup Wizard** configures the computer. This may take a few minutes.

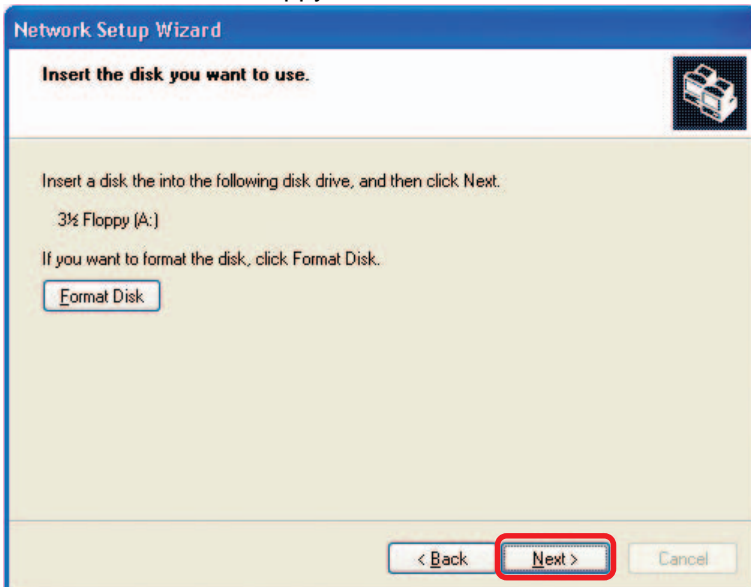


# Networking Basics (continued)

In the window below, select the option that fits your needs. In this example, **Create a Network Setup Disk** has been selected. You will run this disk on each of the computers on your network. Click **Next**.

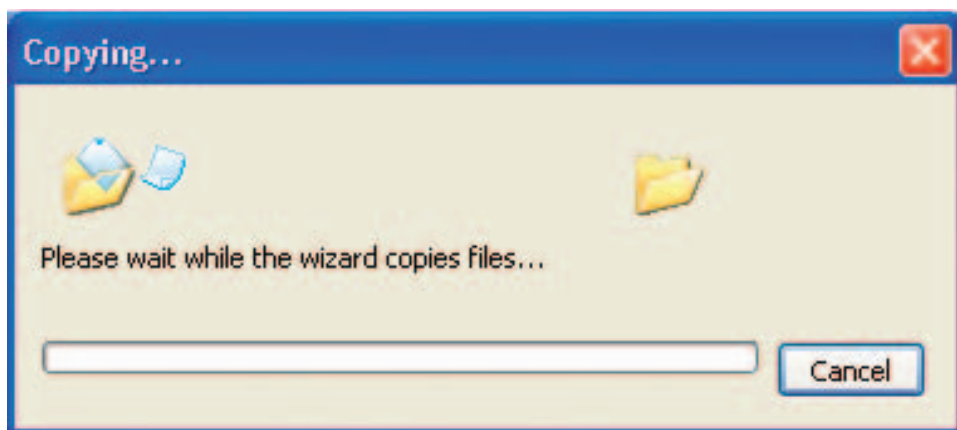


Insert a disk into the Floppy Disk Drive, in this case drive **A**.

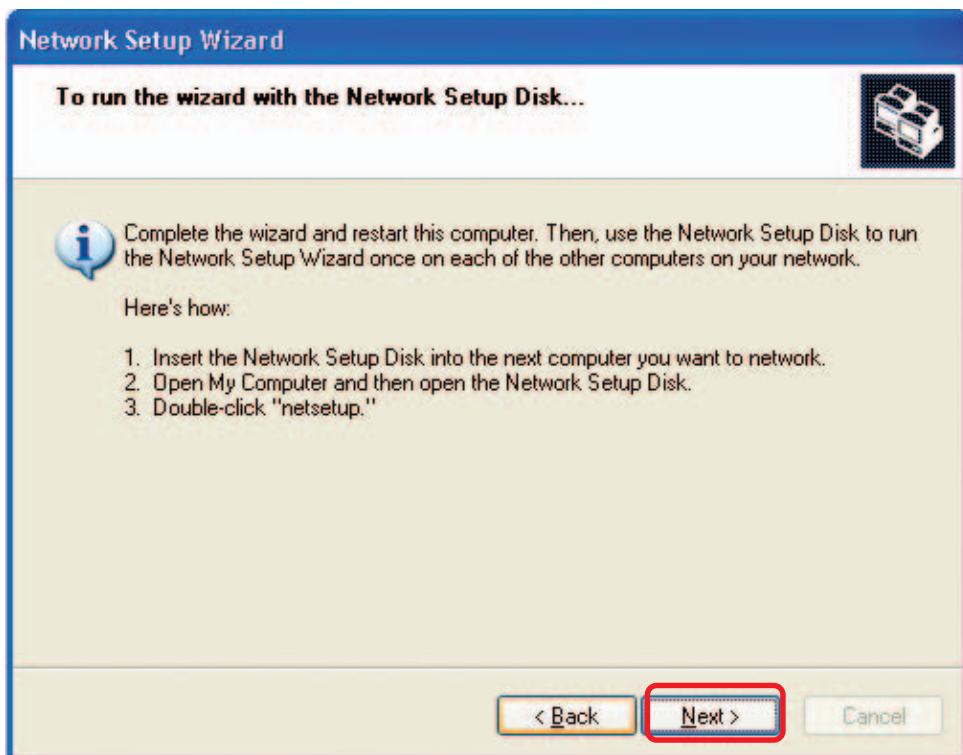


Click **Next**.

## Networking Basics (continued)

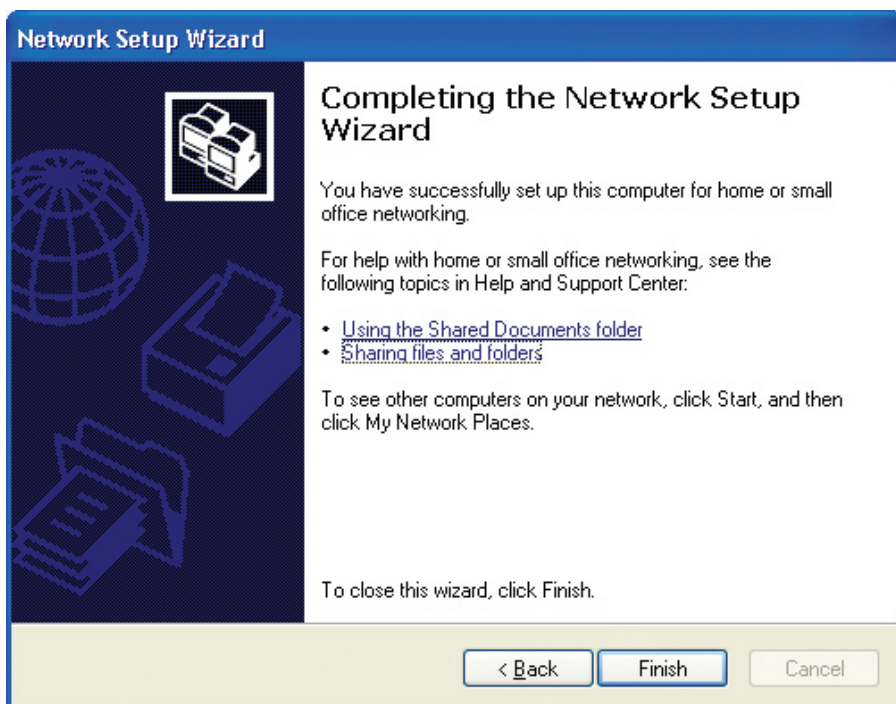


Please read the information under **Here's how** in the screen below. After you complete the **Network Setup Wizard** you will use the **Network Setup Disk** to run the **Network Setup Wizard** once on each of the computers on your network. Click **Next**.

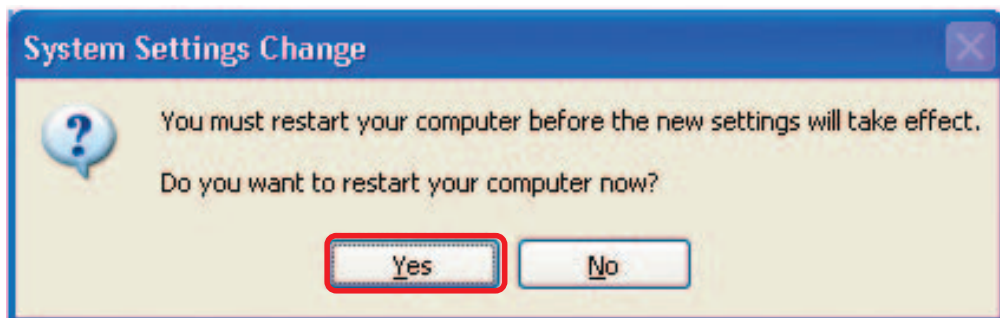


## Networking Basics (continued)

Please read the information on this screen, then click **Finish** to complete the **Network Setup Wizard**.



The new settings will take effect when you restart the computer. Click **Yes** to restart the computer.



You have completed configuring this computer. Next, you will need to run the **Network Setup Disk** on all the other computers on your network. After running the **Network Setup Disk** on all your computers, your new wireless network will be ready to use.

# Networking Basics (continued)

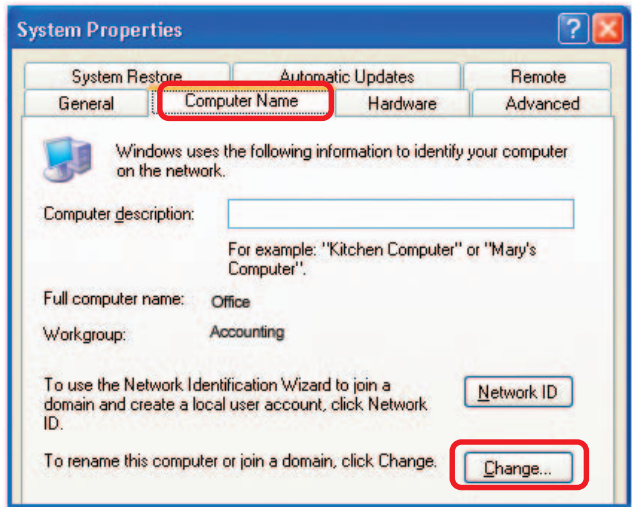
## Naming your Computer

To name your computer using **Windows XP**, please follow these directions:

- Click **Start** (in the lower left corner of the screen)
- **Right-click** on **My Computer**
- Select **Properties**



- Select the **Computer Name Tab** in the System Properties window.



- You may enter a **Computer Description** if you wish; this field is optional.

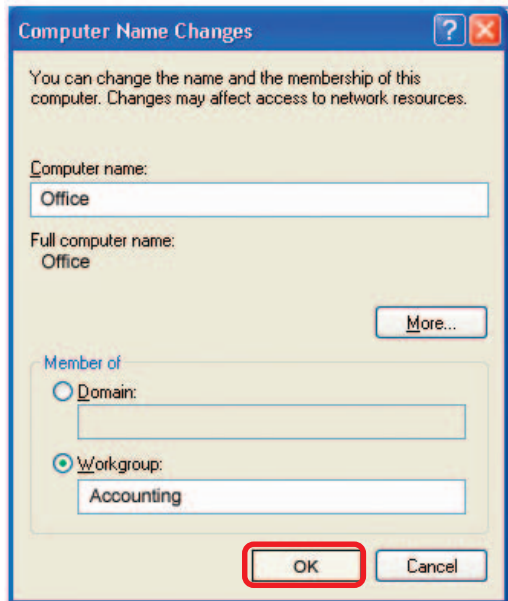
- To rename the computer and join a domain, click **Change**.



# Networking Basics (continued)

## Naming your Computer (continued)

- In this window, enter the **Computer name**
- Select **Workgroup** and enter the name of the **Workgroup**
- All computers on your network must have the same **Workgroup** name.
- Click **OK**



## Checking the IP Address in Windows XP

The adapter-equipped computers in your network must be in the same IP address range (see *Getting Started* in this manual for a definition of IP address range.) To check on the IP address of the adapter, please do the following:

- Right-click on the **Local Area Connection icon** in the task bar
- Click on **Status**



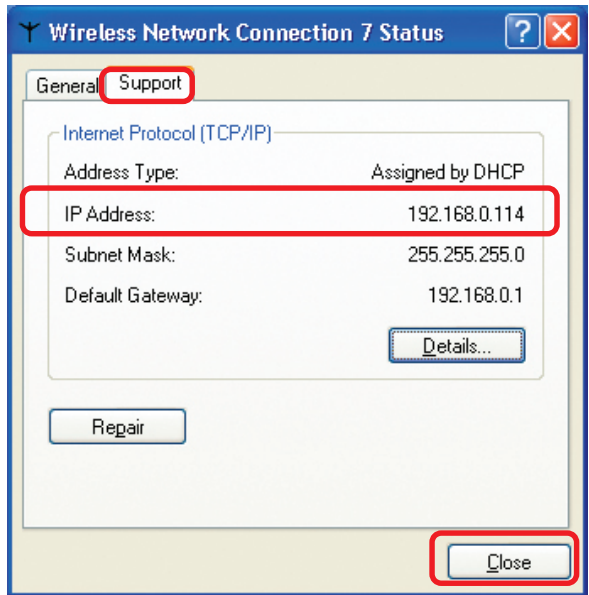


# Networking Basics (continued)

## Checking the IP Address in Windows XP

This window will appear.

- Click the **Support** tab
  
  
  
  
  
  
  
  
  
  
- Click **Close**

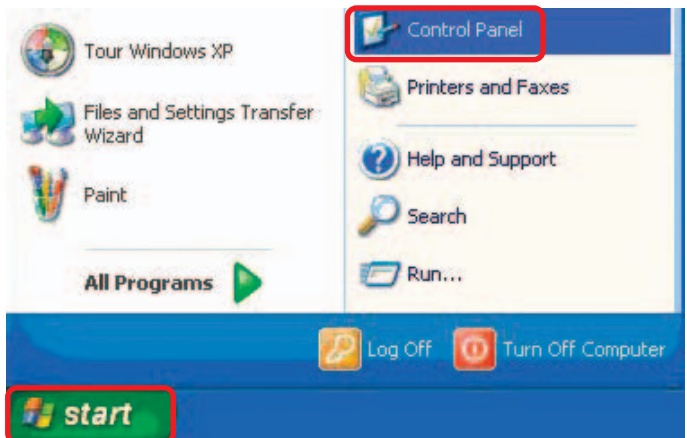


## Assigning a Static IP Address in Windows XP/2000

*Note: DHCP-capable routers will automatically assign IP addresses to the computers on the network, using DHCP (Dynamic Host Configuration Protocol) technology. If you are using a DHCP-capable router you will not need to assign static IP addresses.*

If you are not using a DHCP capable router, or you need to assign a static IP address, please follow these instructions:

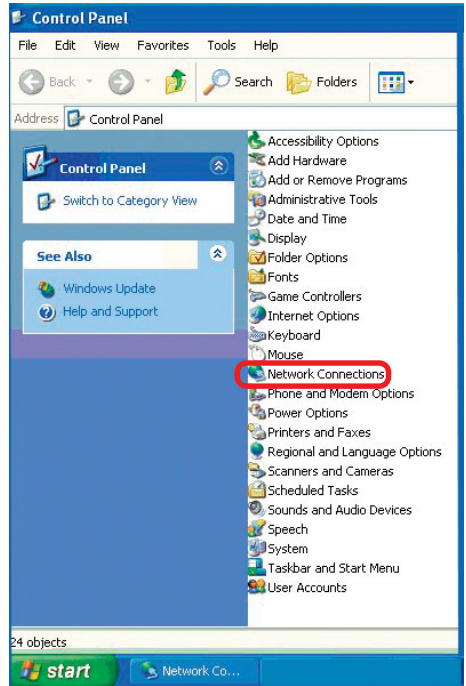
- Go to **Start**
  
  
  
  
  
  
  
  
  
  
- Double-click on **Control Panel**



# Networking Basics (continued)

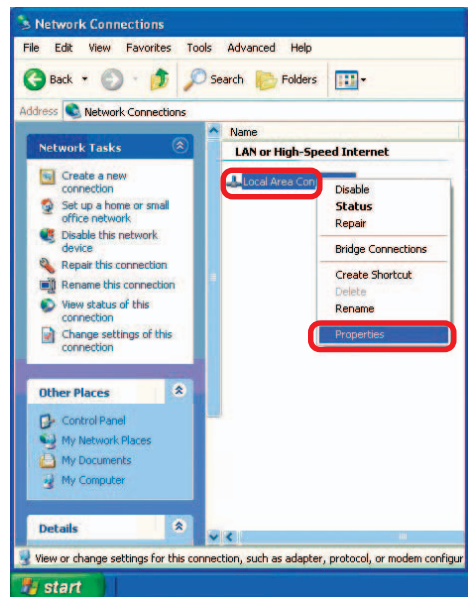
## Assigning a Static IP Address in Windows XP/2000

- Double-click on **Network Connections**



- Right-click on **Local Area Connections**

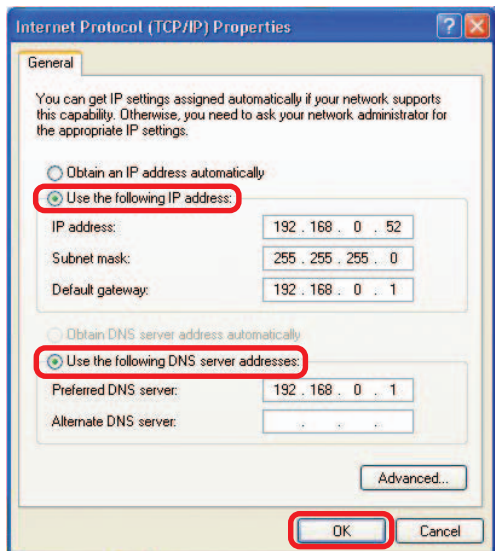
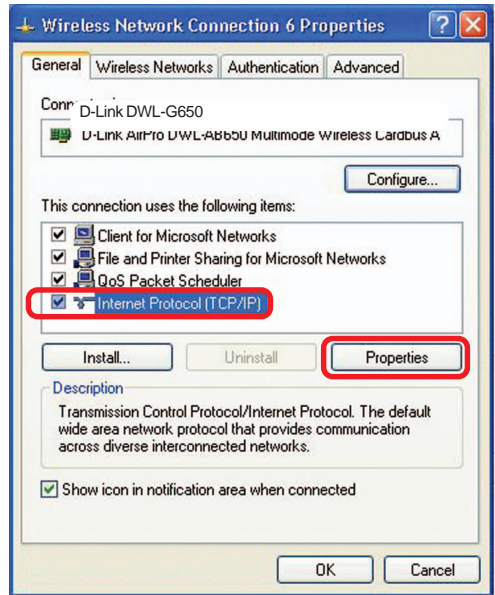
- Double-click on **Properties**



# Networking Basics (continued)

## Assigning a Static IP Address in Windows XP/2000

- Click on **Internet Protocol (TCP/IP)**
- Click **Properties**
- Input your **IP address and subnet mask**. (The IP addresses on your network must be within the same range. For example, if one computer has an IP address of 192.168.0.2, the other computers should have IP addresses that are sequential, like 192.168.0.3 and 192.168.0.4. The subnet mask must be the same for all the computers on the network.)
- Input your **DNS server addresses**. (Note: If you are entering a DNS server, you must enter the IP Address of the Default Gateway.)



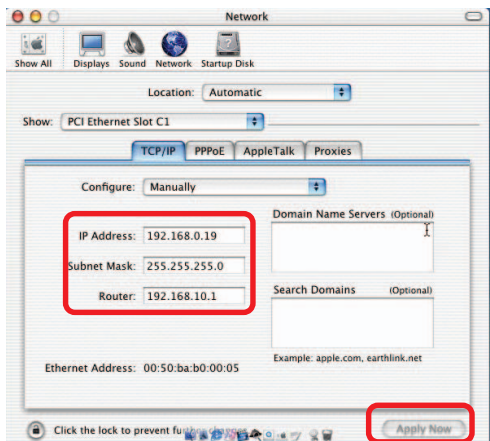
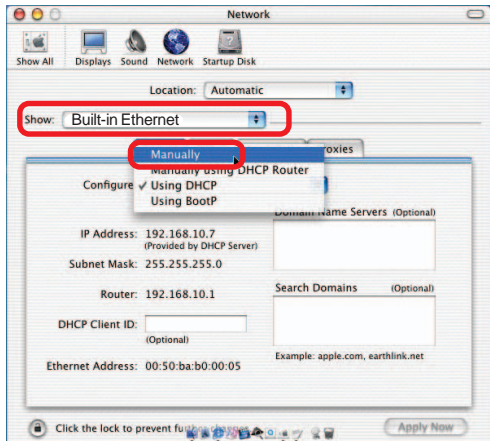
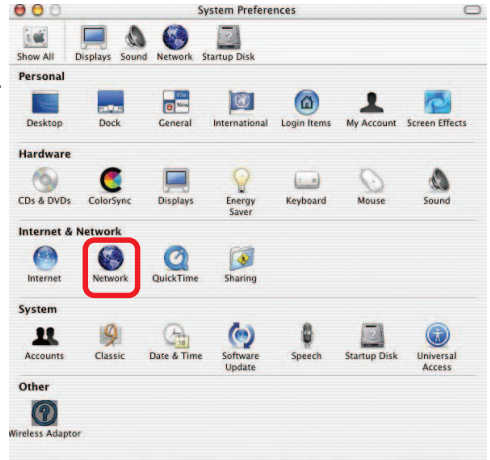
*The DNS server information will be supplied by your ISP (Internet Service Provider.)*

- Click **OK**

# Networking Basics (continued)

## Assigning a Static IP Address with Macintosh OSX

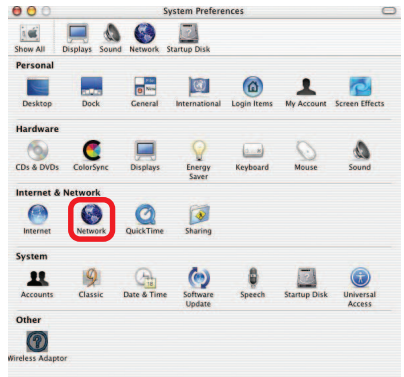
- Go to the **Apple Menu** and select **System Preferences**
- Click on **Network**
- Select **Built-in Ethernet** in the **Show** pull-down menu
- Select **Manually** in the **Configure** pull-down menu
- Input the **Static IP Address**, the **Subnet Mask** and the **Router IP Address** in the appropriate fields
- Click **Apply Now**



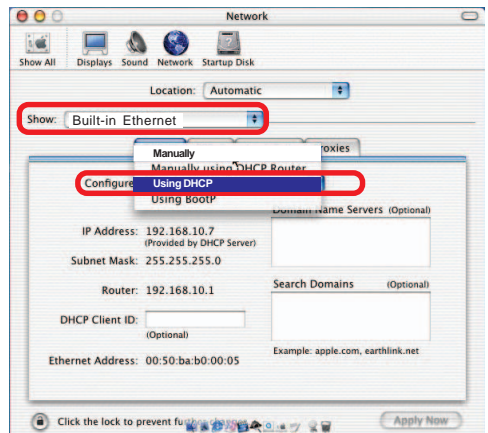
# Networking Basics (continued)

## Selecting a Dynamic IP Address with Macintosh OSX

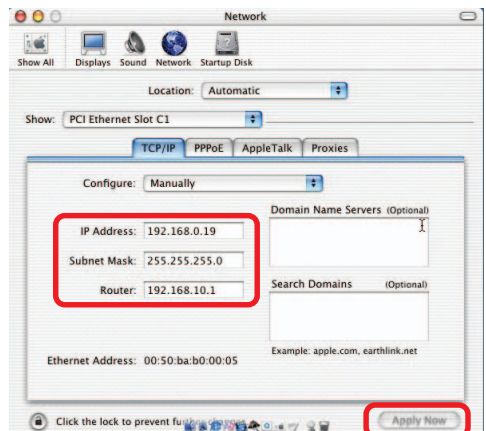
- Go to the **Apple Menu** and select **System Preferences**
- Click on **Network**



- Select **Built-in Ethernet** in the **Show** pull-down menu
- Select **Using DHCP** in the **Configure** pull-down menu



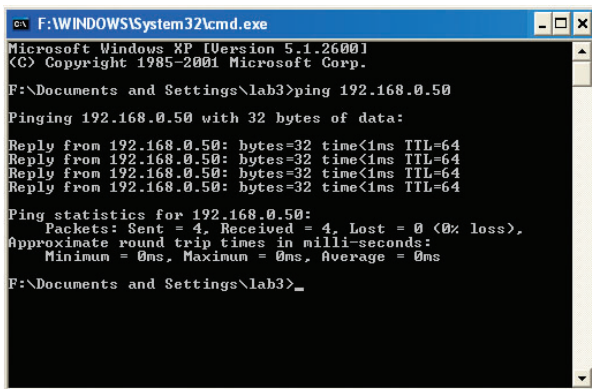
- Click **Apply Now**
- The **IP Address**, **Subnet mask**, and the **Router's IP Address** will appear in a few seconds



# Networking Basics (continued)

## Checking the Wireless Connection by Pinging in Windows XP/2000

- Go to **Start > Run >** type **cmd**. A window similar to this one will appear. Type **ping**  
**xxx.xxx.xxx.xxx**, where **xxx** is the **IP address** of the wireless router or access point. A good wireless connection will show four replies from the wireless router or access point, as shown.



```

F:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

F:\Documents and Settings\lab3>ping 192.168.0.50

Pinging 192.168.0.50 with 32 bytes of data:

Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64

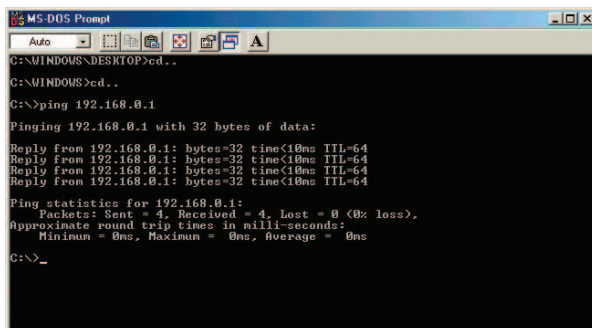
Ping statistics for 192.168.0.50:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

F:\Documents and Settings\lab3>_

```

## Checking the Wireless Connection by Pinging in Windows Me/98

- Go to **Start > Run >** type **command**. A window similar to this will appear. Type **ping**  
**xxx.xxx.xxx.xxx** where **xxx** is the **IP address** of the wireless router or access point. A good wireless connection will show four replies from the wireless router or access point, as shown.



```

MS-DOS Prompt
Auto
C:\WINDOWS\DESKTOP>cd..
C:\WINDOWS>cd..
C:\>ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:

Reply from 192.168.0.1: bytes=32 time<10ms TTL=64
Reply from 192.168.0.1: bytes=32 time<10ms TTL=64
Reply from 192.168.0.1: bytes=32 time<10ms TTL=64
Reply from 192.168.0.1: bytes=32 time<10ms TTL=64

Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>_

```



# Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DWL-G800AP Wireless Range Extender. We cover various aspects of the network setup, including the network adapters. Please read the following if you are having problems.

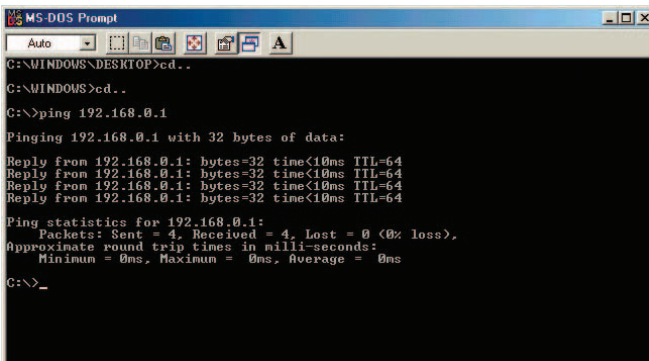
**Note:** *It is recommended that you use an Ethernet connection to configure the DWL-G800AP Wireless Range Extender.*

## 1.The computer used to configure the DWL-G800AP cannot access the configuration menu.

- Check that the **Ethernet LED** on the DWL-G800AP is **ON**. If the **LED** is not **ON**, check that the cable for the Ethernet connection is securely inserted.
- Check that the Ethernet adapter is working properly. Please see item 3 (**Check that the drivers for the network adapters are installed properly**) in this **Troubleshooting** section to check that the drivers are loaded properly.
- Check that the **IP address** is in the same range and subnet as the DWL-G800AP. Please see **Checking the IP Address in Windows XP** in the **Networking Basics** section of this manual.

**Note:** *The IP address of the DWL-G800AP is 192.168.0.30. All the computers on the network must have a unique IP address in the same range, e.g., 192.168.0.x. Any computers that have identical IP addresses will not be visible on the network. They must all have the same subnet mask, e.g., 255.255.255.0*

- Do a **Ping test** to make sure that the DWL-G800AP is responding. Go to **Start>Run>Type Command>Type ping 192.168.0.30**. A successful ping will show four replies.



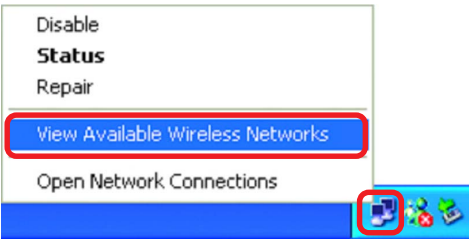
```
MS-DOS Prompt
Auto
C:\WINDOWS\DESKTOP>cd..
C:\WINDOWS>cd..
C:\>ping 192.168.0.1
Pinging 192.168.0.1 with 32 bytes of data:
Reply from 192.168.0.1: bytes=32 time<10ms TTL=64
Reply from 192.168.0.1: bytes=32 time<10ms TTL=64
Reply from 192.168.0.1: bytes=32 time<10ms TTL=64
Reply from 192.168.0.1: bytes=32 time<10ms TTL=64
Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>_
```

*Note: If you have changed the default IP address, make sure to ping the correct IP address assigned to the DWL-G800AP.*

# Troubleshooting (continued)

## 2. The wireless client cannot access the Internet in Infrastructure mode.

Make sure the wireless client is associated and joined with the correct device. To check this connection: **Right-click** on the **local area connection icon** in the taskbar > select **View Available Wireless Networks**. The **Connect to Wireless Network** screen will appear. Please make sure you have selected the correct available network, as shown in the illustration below.



- Check that the **IP address** assigned to the wireless adapter is within the same **IP address range** as the existing network. (Since the DWL-G800AP has an IP address of 192.168.0.30, wireless adapters must have an IP address in the same range, e.g., 192.168.0.x. Each device must have a unique IP address; no two devices may have the same IP address. The subnet mask must be the same for all the computers on the network.) To check the **IP address** assigned to the wireless adapter, **double-click** on the **local area connection icon** in the taskbar > select the **Support** tab and the **IP address** will be displayed. (Please refer to **Checking the IP Address** in the **Networking Basics** section of this manual.)
- If it is necessary to assign a **static IP address** to the wireless adapter, please refer to the appropriate section in **Networking Basics**. If you are entering a **DNS server address** you must also enter the **default gateway address**. (Remember that if you have a DHCP-capable router, you will not need to assign a static IP address. See **Networking Basics: Assigning a Static IP Address**.)



# Troubleshooting (continued)

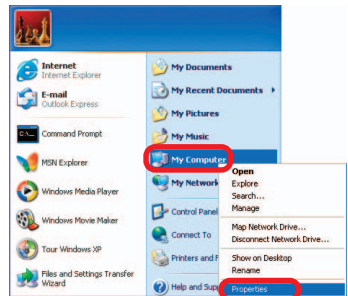
## 2. The wireless client cannot access the Internet in the Infrastructure mode (continued).

- If you are using the DWL-G800AP to repeat the wireless signal, check that the Ethernet MAC address of the wireless router or access point is entered properly in the settings. Please note that the Repeater function is compatible with the following D-Link devices:
  - 1 D-Link AirPlus Xtreme G™ DI-624 Wireless Router - Firmware 2.37 (Rev. C) or newer.
  - 2 D-Link AirPlus Xtreme G™ DWL-2000AP Wireless Access Point - Firmware 1.56 (Rev. A), 2.06 (Rev. B) or newer.
  - 3 D-Link AirPlus Xtreme G™ DWL-G800AP Wireless Range Extender.
- If you wish to repeat a device that is not a D-Link product, please check the FAQs for supported products on the D-Link support website (<http://support.dlink.com>) to make certain that the device can be repeated by the DWL-G800AP.

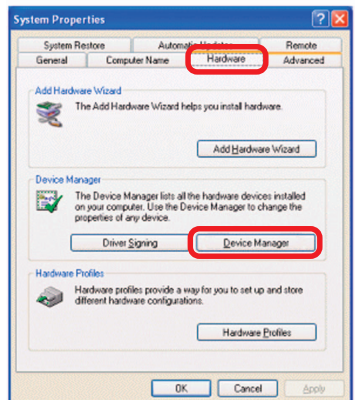
## 3. Check that the drivers for the network adapters are installed properly.

You may be using different network adapters than those illustrated here, but this procedure will remain the same, regardless of the type of network adapters you are using.

- Go to **Start > My Computer > Properties**



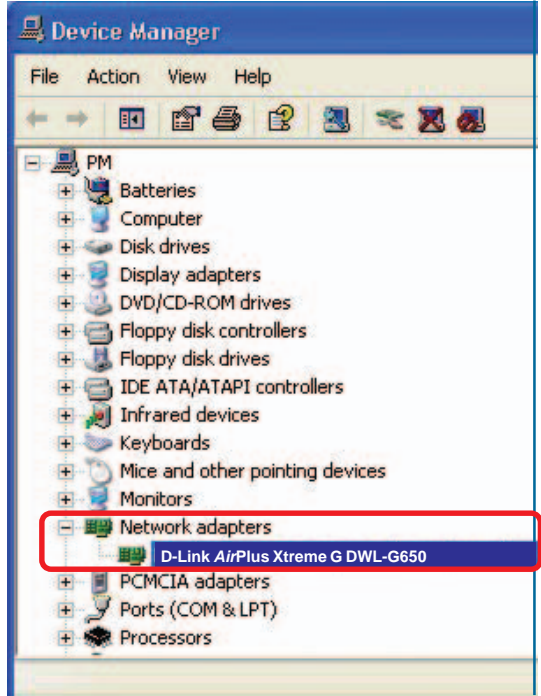
- Select the **Hardware** tab



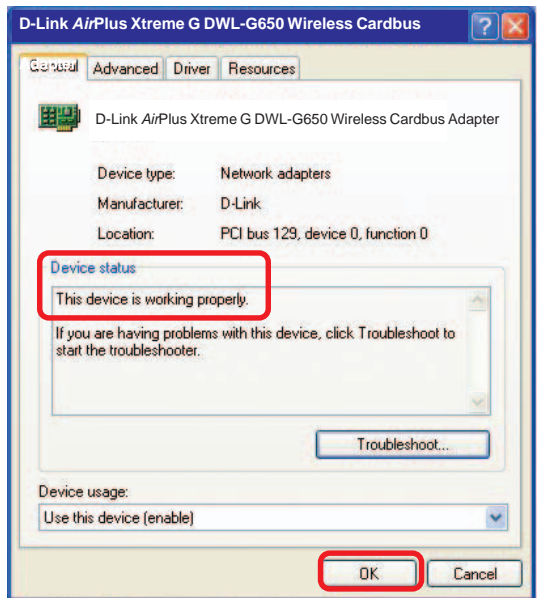
- Click **Device Manager**

# Troubleshooting (continued)

- Double-click on **Network Adapters**
- Right-click on **D-Link AirPlus Xtreme G DWL-G650 Wireless Cardbus Adapter** (In this example we use the DWL-G650; you may be using other network adapters, but the procedure will remain the same.)



- Select **Properties** to check that the drivers are installed properly
- Look under **Device Status** to check that the device is working properly



- Click **OK**

# Troubleshooting (continued)

## 4. What variables may cause my wireless products to lose reception?

D-Link products let you access your network from virtually anywhere you want. However, the positioning of the products within your environment will affect the wireless range. Please refer to **Installation Considerations** in the **Wireless Basics** section of this manual for further information about the most advantageous placement of your D-Link wireless products.

## 5. Why does my wireless connection keep dropping?

- Antenna Orientation - Try different antenna orientations for the DWL-G800AP. Try to keep the antenna at least 6 inches away from the wall or other objects.
- If you are using 2.4GHz cordless phones, X-10 equipment or other home security systems, ceiling fans, and lights, your wireless connection will degrade dramatically or drop altogether. Try changing the channel on your router, access point and wireless adapter to a different channel to avoid interference.
- Keep your product away (at least 3-6 feet) from electrical devices that generate RF noise, like microwaves, monitors, electric motors, etc.

## 6. Why can't I get a wireless connection?

If you have enabled encryption on the DWL-G800AP, you must also enable encryption on all wireless clients in order to establish a wireless connection.

- Make sure that the encryption bit level is the same on the DWL-G800AP and the wireless client.
- Make sure that the SSID on the DWL-G800AP and the wireless client are exactly the same. If they are not, wireless connection will not be established.
- Check that the DWL-G800AP is configured properly, whether as a repeater or an access point.
- Check that the wireless clients are working properly.

# Troubleshooting (continued)

## 6. Why can't I get a wireless connection? (continued)

- Make sure that all devices are set to **Infrastructure** mode.
- Check that the LEDs are indicating normal activity. If not, check that the AC power and Ethernet cables are firmly connected.
- Check that the IP address, subnet mask, and gateway settings are correctly entered for the network.
- If you are using 2.4GHz cordless phones, X-10 equipment or other home security systems, ceiling fans, and lights, your wireless connection will degrade dramatically or drop altogether. Try changing the channel on your DWL-G800AP, and on all the devices in your network to avoid interference.
- Keep your product away (at least 3-6 feet) from electrical devices that generate RF noise, like microwaves, monitors, electric motors, etc.

## 7. I forgot my encryption key.

- Reset the DWL-G800AP to its factory default settings and restore the other devices on your network to their default settings. You may do this by pressing the Reset button on the back of the unit. You will lose the current configuration settings.

# Troubleshooting (continued)

## 8. Resetting the DWL-G800AP to factory default settings

After you have tried other methods for troubleshooting your network, you may choose to **Reset** the DWL-G800AP to the factory default settings.



**Reset button**

To hard-reset the D-Link DWL-G800AP to the factory default settings, please do the following:

- Locate the **Reset** button on the back of the DWL-G800AP
- Use a paper clip to press the **Reset** button
- Hold for about 5 seconds and then release
- After the DWL-G800AP reboots (this may take a few minutes) it will be reset to the factory **Default** settings

# Technical Specifications

## Standards

- IEEE 802.11g
- IEEE 802.11
- IEEE 802.11b
- IEEE 802.3
- IEEE 802.3u

## Device Management

- Web-Based- Internet Explorer v6 or later; Netscape Navigator v6 or later; or other Java-enabled browsers
- DHCP Server and Client

## Wireless Operating Range\*

- Indoors – up to 328 feet (100 meters)
- Outdoors – up to 1312 feet (400 meters)

## Temperature

- Operating: 32°F to 149°F (0°C to 55°C)
- Storing: 4°F to 167°F (-20°C to 75°C)

## Humidity:

- 95% maximum (non-condensing)

## Safety and Emissions:

- FCC
- UL

## Wireless Frequency Range:

- 2.4GHz to 2.4835GHz

## Wireless Data Rates with Automatic Fallback:

- |           |            |
|-----------|------------|
| ■ 54 Mbps | ■ 11 Mbps  |
| ■ 48 Mbps | ■ 9 Mbps   |
| ■ 36 Mbps | ■ 6 Mbps   |
| ■ 24 Mbps | ■ 5.5 Mbps |
| ■ 18 Mbps | ■ 2 Mbps   |
| ■ 12 Mbps | ■ 1 Mbps   |

\* Environmental conditions may adversely affect wireless signal range.

# Technical Specifications (continued)

## Receiver Sensitivity:

- 54Mbps OFDM, 10% PER, -68dBm
- 48Mbps OFDM, 10% PER, -68dBm
- 36Mbps OFDM, 10% PER, -75dBm
- 24Mbps OFDM, 10% PER, -79dBm
- 18Mbps OFDM, 10% PER, -82dBm
- 12Mbps OFDM, 10% PER, -84dBm
- 11Mbps CCK, 8% PER, -82dBm
- 9Mbps OFDM, 10% PER, -87dBm
- 6Mbps OFDM, 10% PER, -88dBm
- 5.5Mbps CCK, 8% PER, -85dBm
- 2Mbps QPSK, 8% PER, -86dBm
- 1Mbps BPSK, 8% PER, -89dBm

## Physical Dimensions:

- L = 5.6 inches (142mm)
- W = 4.3 inches (109mm)
- H = 1.2 inches (31mm)

## Wireless Transmit Power:

- 15dBm (32mW)  $\pm$  2dB

## Security:

- 64-, 128-bit WEP encryption

## External Antenna Type:

- 1.0dBm gain with reverse SMA connector

## Modulation Technology:

- Orthogonal Frequency Division Multiplexing (OFDM)
- Complementary Code Keying (CCK)

# Technical Specifications (continued)

## Media Access Control:

- CSMA/CA with ACK

## Power Input:

- Ext. Power Supply DC 5V, 2.5A

## Weight:

- .44 lbs. (200 g)

## Warranty:

- 3 year



# Technical Support

You can find software updates and user documentation on the D-Link website.

D-Link provides free technical support for customers within the United States and within Canada for the duration of the warranty period on this product.

U.S. and Canadian customers can contact D-Link technical support through our web site, or by phone.

## Tech Support for customers within the United States:

### ***D-Link Technical Support over the Telephone:***

(877) 453-5465

24 hours a day, seven days a week.

### ***D-Link Technical Support over the Internet:***

<http://support.dlink.com>

email:[support@dlink.com](mailto:support@dlink.com)

## Tech Support for customers within Canada:

### ***D-Link Technical Support over the Telephone:***

(800) 361-5265

Monday to Friday 7:30am to 9:00pm EST

### ***D-Link Technical Support over the Internet:***

<http://support.dlink.ca>

email:[support@dlink.ca](mailto:support@dlink.ca)

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited warranty for its product only to the person or entity that originally purchased the product from:

- D-Link or its authorized reseller or distributor and
- Products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, addresses with an APO or FPO.

**Limited Warranty:** D-Link warrants that the hardware portion of the D-Link products described below will be free from material defects in workmanship and materials from the date of original retail purchase of the product, for the period set forth below applicable to the product type ("Warranty Period"), except as otherwise stated herein.

3-Year Limited Warranty for the Product(s) is defined as follows:

- Hardware (excluding power supplies and fans) Three (3) Years
- Power Supplies and Fans One (1) Year
- Spare parts and spare kits Ninety (90) days

D-Link's sole obligation shall be to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund at D-Link's sole discretion. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or have an identical make, model or part. D-Link may in its sole discretion replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement Hardware will be warranted for the remainder of the original Warranty Period from the date of original retail purchase. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

**Limited Software Warranty:** D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. D-Link's sole obligation shall be to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund at D-Link's sole discretion. Except as otherwise agreed by D-Link in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Software will be warranted for the remainder of the original Warranty Period from the date of original retail purchase. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software will be refunded by D-Link; provided that the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

**Non-Applicability of Warranty:** The Limited Warranty provided hereunder for hardware and software of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

**Submitting A Claim:** The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same.

- The original product owner must obtain a Return Material Authorization (“RMA”) number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided.
- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the Product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery (“COD”) is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link, with shipping charges prepaid. Expedited shipping is available if shipping charges are prepaid by the customer and upon request.
- Return Merchandise Ship-To Address  
**USA:** 17595 Mt. Herrmann, Fountain Valley, CA 92708  
**Canada:** 2180 Winston Park Drive, Oakville, ON, L6H 5W1 (Visit <http://www.dlink.ca> for detailed warranty information within Canada)

D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link’s reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.

**What Is Not Covered:** This limited warranty provided by D-Link does not cover: Products, if in D-Link’s judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product. Repair by anyone other than D-Link or an Authorized D-Link Service Office will void this Warranty.

**Disclaimer of Other Warranties:** EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED “AS-IS” WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

**Limitation of Liability:** TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK’S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

**Governing Law:** This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This limited warranty provides specific legal rights and the product owner may also have other rights which vary from state to state.

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**CE Mark Warning:** This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**For detailed warranty outside the United States, please contact corresponding local D-Link office.**

