

# USER MANUAL

DIR-600

VERSION 4.10



**D-Link**<sup>®</sup>

**WIRELESS**

---

# Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

## Manual Revisions

Revision	Date	Description
1.0	May 25th, 2010	• First release version

## Trademarks

D-Link and the D-Link logo are trademarks or registered trademarks of D-Link Corporation or its subsidiaries in the United States or other countries. All other company or product names mentioned herein are trademarks or registered trademarks of their respective companies.

Copyright © 2010 by D-Link Systems, Inc.

All rights reserved. This publication may not be reproduced, in whole or in part, without prior expressed written permission from D-Link Systems, Inc.

# Table of Contents

<b>Preface</b> .....	<b>i</b>	Manual Wireless Network Setup .....	20
Manual Revisions .....	i	Network Settings.....	22
Trademarks .....	i	DHCP Server Settings .....	23
<b>Product Overview</b> .....	<b>1</b>	DHCP Reservation.....	24
Package Contents .....	1	Virtual Server .....	25
System Requirements .....	1	Port Forwarding .....	27
System Requirements .....	2	Traffic Control .....	28
Features.....	3	Network Filters.....	29
Hardware Overview.....	4	Website Filters .....	30
Connections.....	4	Firewall Settings.....	31
LEDs .....	5	Advanced Wireless Settings.....	32
<b>Installation</b> .....	<b>6</b>	Advanced Network Settings .....	33
Before you Begin .....	6	UPnP.....	33
Wireless Installation Considerations.....	7	Internet Ping Block.....	33
Connect to Cable/DSL/Satellite Modem .....	8	Internet Port Speed.....	33
Connect to Another Router .....	9	Multicast Streams .....	33
<b>Configuration</b> .....	<b>11</b>	Administrator Settings .....	34
Web-based Configuration Utility .....	11	Time Settings.....	35
Easy Setup Wizard .....	12	E-mail Settings.....	36
Manual Configuration.....	15	System Settings.....	37
Dynamic (Cable) .....	15	Update Firmware.....	38
Dynamic IP Address (DHCP).....	16	DDNS .....	39
PPPoE (DSL).....	17	System Check .....	40
Static IP Address .....	18	Device Information.....	41
Wireless Settings .....	19	Log.....	42
		Stats.....	43
		Internet Sessions .....	44

Wireless .....	45
Support.....	46
<b>Wireless Security .....</b>	<b>47</b>
What is WPA? .....	47
Wireless Connection Setup Wizard.....	48
Configure WPA-Personal (PSK) .....	51
<b>Connect to a Wireless Network .....</b>	<b>52</b>
Using Windows 7 .....	52
Configure WPA/WPA2.....	53
Using Windows® XP .....	55
Configure WPA-PSK .....	56
<b>Troubleshooting.....</b>	<b>58</b>
<b>Wireless Basics .....</b>	<b>62</b>
What is Wireless?.....	63
Tips .....	65
Wireless Modes.....	66
<b>Networking Basics .....</b>	<b>67</b>
Check your IP address.....	67
Statically Assign an IP address.....	68
<b>Technical Specifications .....</b>	<b>69</b>

# Package Contents

- D-Link DIR-600 Wireless Router
- Power Adapter
- Ethernet Cable

**Note:** Using a power supply with a different voltage rating than the one included with the DIR-600 will cause damage and void the warranty for this product.

The product must be used with the power adapter included with the device.

**Note:** Always attach the power cord plug to the power supply, before inserting the power cord and connected power supply to the wall outlet.



# System Requirements

- Ethernet-based Cable or DSL Modem
- Computers with Windows®, Macintosh®, or Linux-based operating systems with an installed Ethernet adapter
- Internet Explorer 6 or Firefox 2.0 or above (for configuration)

**Note:** Using a power supply with a different voltage rating than the one included with the DIR-600 will cause damage and void the warranty for this product.

# System Requirements

<b>Network Requirements</b>	<ul style="list-style-type: none"><li>• An Ethernet-based Cable or DSL modem</li><li>• IEEE 802.11n/g wireless clients</li><li>• 10/100 Ethernet</li></ul>
<b>Web-based Configuration Utility Requirements</b>	<p><b>Computer with the following:</b></p> <ul style="list-style-type: none"><li>• Windows®, Macintosh, or Linux-based operating system</li><li>• An installed Ethernet adapter</li></ul> <p><b>Browser Requirements:</b></p> <ul style="list-style-type: none"><li>• Internet Explorer 6.0 or higher</li><li>• Mozilla 1.7.12 or higher</li><li>• Firefox 1.5 or higher</li><li>• Safari 1.0 or higher (with Java 1.3.1 or higher)</li><li>• Flock 0.7.14 or higher</li><li>• Opera 6.0 or higher</li></ul> <p><b>Windows® Users:</b> Make sure you have the latest version of Java installed. Visit <a href="http://www.java.com">www.java.com</a> to download the latest version.</p>

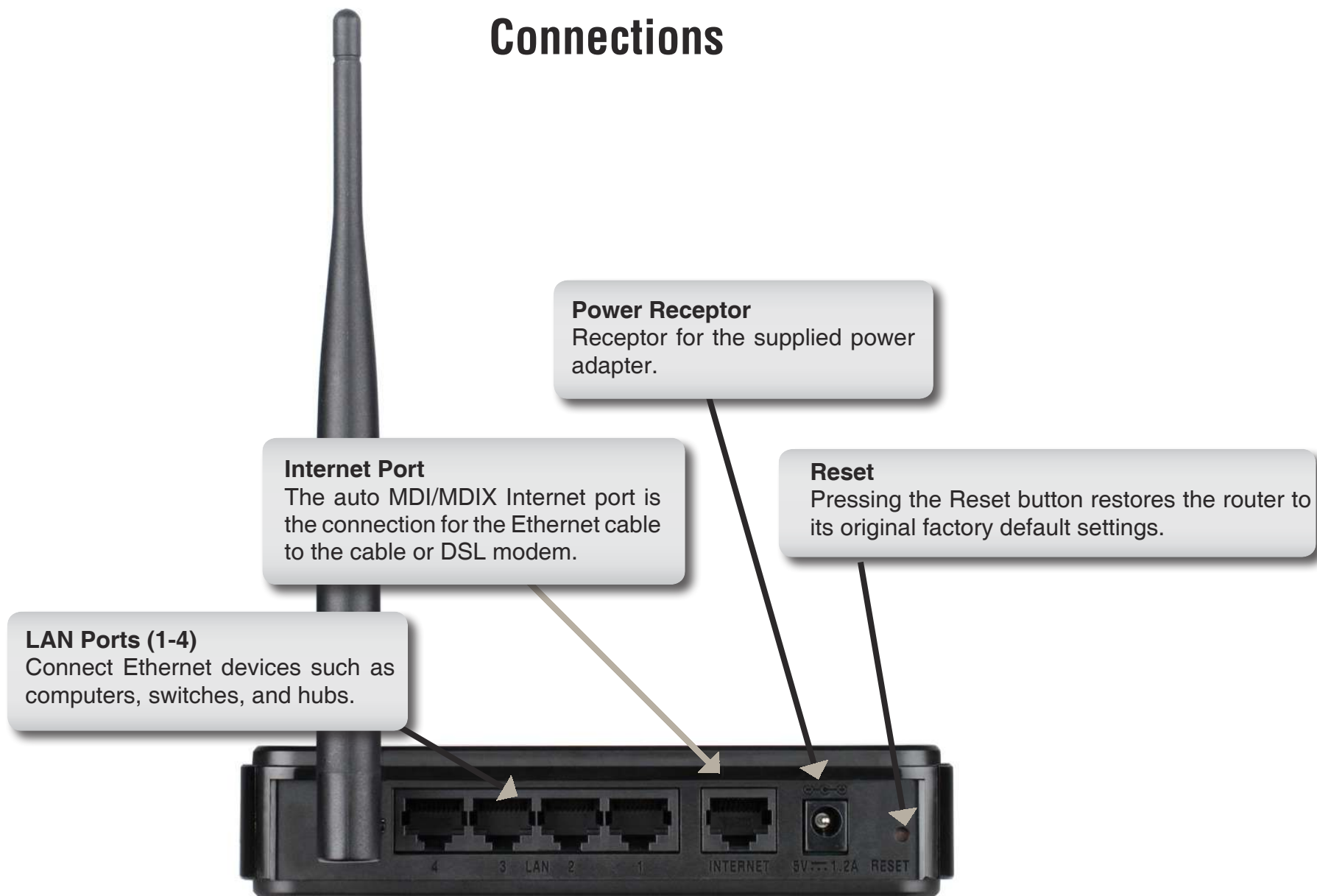
# Features

- **Faster Wireless Networking** - The DIR-600 provides up to 150Mbps\* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio.
- **Compatible with 802.11g Devices** - The DIR-600 is still fully compatible with the IEEE 802.11g standard, so it can connect with existing 802.11g PCI, USB and Cardbus adapters.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
  - **Content Filtering** - Easily applied content filtering based on URL, and/or Domain Name.
  - **Secure Multiple/Concurrent Sessions** - The DIR-600 can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-600 can securely access corporate networks.
- **Easy Setup Wizard** - Through its easy-to-use Web-based user interface, the DIR-600 lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

\* Maximum wireless signal rate derived from IEEE Standard 802.11g and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

# Hardware Overview

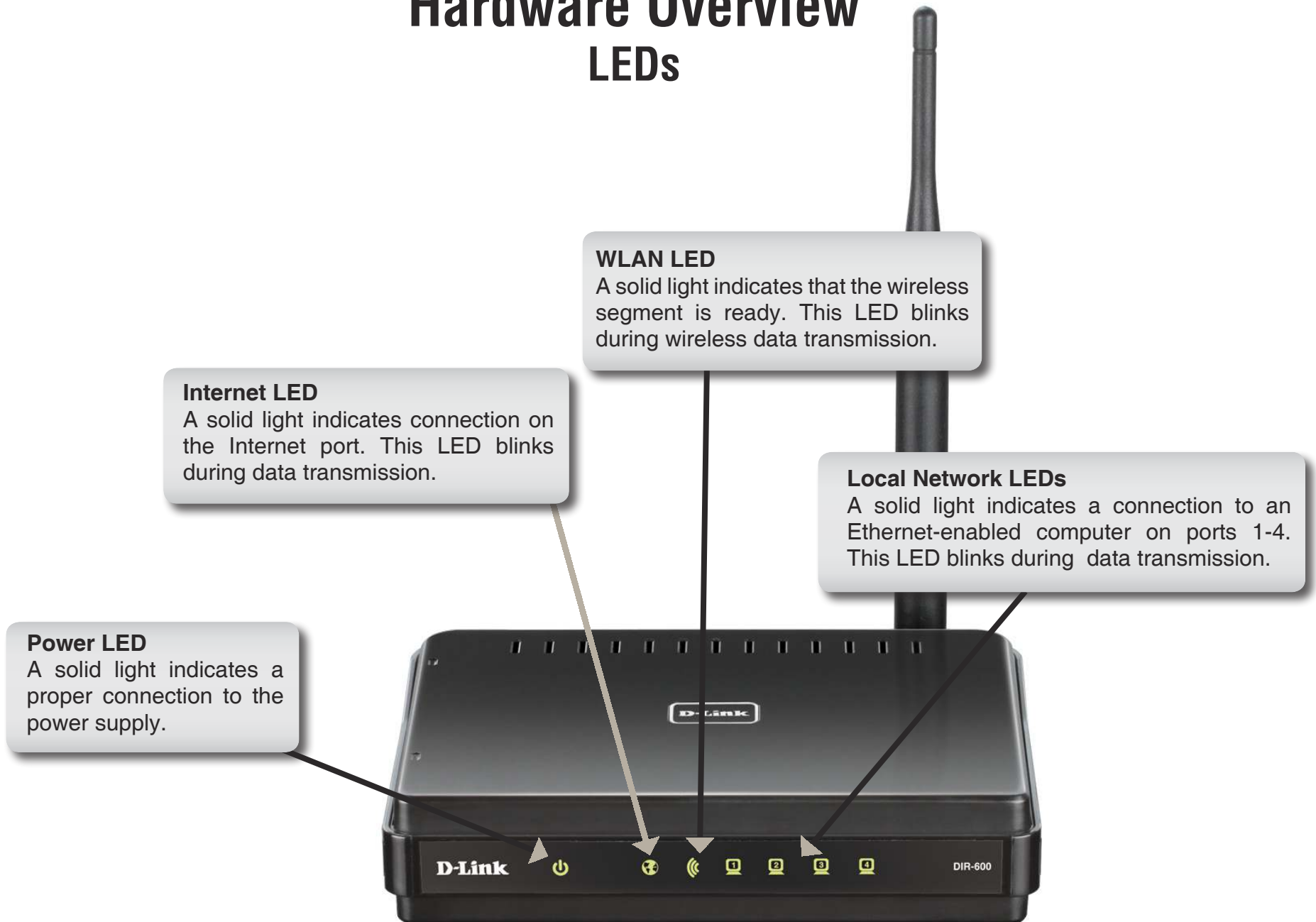
## Connections





# Hardware Overview

## LEDs



# Installation

This section will walk you through the installation process. Placement of the router is very important. Do not place the router in an enclosed area such as a closet, cabinet, or in the attic or garage.

## Before you Begin

- Please configure the router with the computer that was last connected directly to your modem.
- You can only use the Ethernet port on your modem. If you were using the USB connection before using the router, then you must turn off your modem, disconnect the USB cable and connect an Ethernet cable to the Internet port on the router, and then turn the modem back on. In some cases, you may need to call your ISP to change connection types (USB to Ethernet).
- If you have DSL and are connecting via PPPoE, make sure you disable or uninstall any PPPoE software such as WinPoet, Broadjump, or Enternet 300 from your computer or you will not be able to connect to the Internet.

# Wireless Installation Considerations

The D-Link wireless router lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. 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 D-Link router and other network devices to a minimum - each wall or ceiling can reduce your adapter'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 make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

# Connect to Cable/DSL/Satellite Modem

If you are connecting the router to a cable/DSL/satellite modem, please follow the steps below:

1. Place the router in an open and central location. Do not plug the power adapter into the router.
2. Turn the power off on your modem. If there is no on/off switch, then unplug the modem's power adapter. Shut down your computer.
3. Unplug the Ethernet cable (that connects your computer to your modem) from your computer and place it into the Internet port on the router.
4. Plug an Ethernet cable into one of the four LAN ports on the router. Plug the other end into the Ethernet port on your computer.
5. Turn on or plug in your modem. Wait for the modem to boot (about 30 seconds).
6. Plug the power adapter to the router and connect to an outlet or power strip. Wait about 30 seconds for the router to boot.
7. Turn on your computer.
8. Verify the link lights on the router. The power light, Internet light, and the LAN light (the port that your computer is plugged into) should be lit. If not, make sure your computer, modem, and router are powered on and verify the cable connections are correct.
9. Skip to page 11 to configure your router.

# Connect to Another Router

If you are connecting the D-Link router to another router to use as a wireless access point and/or switch, you will have to do the following before connecting the router to your network:

- Disable UPnP™
- Disable DHCP
- Change the LAN IP address to an available address on your network. The LAN ports on the router cannot accept a DHCP address from your other router.

To connect to another router, please follow the steps below:

1. Plug the power into the router. Connect one of your computers to the router (LAN port) using an Ethernet cable. Make sure your IP address on the computer is 192.168.0.xxx (where xxx is between 2 and 254). Please see the **Networking Basics** section for more information. If you need to change the settings, write down your existing settings before making any changes. In most cases, your computer should be set to receive an IP address automatically in which case you will not have to do anything to your computer.
2. Open a web browser and enter **http://192.168.0.1** and press **Enter**. When the login window appears, set the user name to **Admin** and leave the password box empty. Click **Log In** to continue.
3. Click on **Advanced** and then click **Advanced Network**. Uncheck the Enable UPnP checkbox. Click **Save Settings** to continue.
4. Click **Setup** and then click **Network Settings**. Uncheck the Enable DHCP Server server checkbox. Click **Save Settings** to continue.
5. Under Router Settings, enter an available IP address and the subnet mask of your network. Click **Save Settings** to save your settings. Use this new IP address to access the configuration utility of the router in the future. Close the browser and change your computer's IP settings back to the original values as in Step 1.

6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.
7. Connect an Ethernet cable in one of the LAN ports of the router and connect it to your other router. Do not plug anything into the Internet port of the D-Link router.
8. You may now use the other 3 LAN ports to connect other Ethernet devices and computers. To configure your wireless network, open a web browser and enter the IP address you assigned to the router. Refer to the **Configuration** and **Wireless Security** sections for more information on setting up your wireless network.

# Configuration

This section will show you how to configure your new D-Link wireless router using the web-based configuration utility.

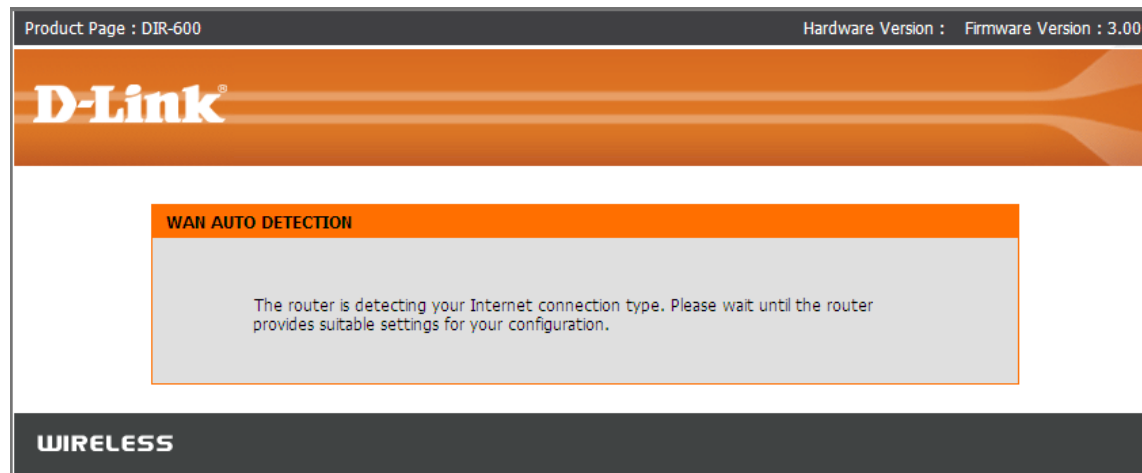
## Web-based Configuration Utility

To access the Easy Setup Wizard or configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.0.1). DIR-600 will detect WAN connection type.



# Easy Setup Wizard

Once logged into the web interface of the router, Easy Setup Wizard will appear and perform WAN auto detection for the type of Internet connection.





According to the detection result, the wizard will indicate the type of Internet connection that you're currently use.

You can configure your wireless network. Click **Configure** button in Wireless Settings. Select the type of Wireless security you use (Disable Wireless Security or AUTO-WPA/WPA2) and enter the network name (SSID, Service Set Identifier) and security password. The network name(SSID) is the name of your wireless network. Create a name using up to 32 characters.

If the type is Dynamic IP(DHCP), click **Save** to continue.

If the type is PPPoE, enter your PPPoE username and password. Click **Next** to continue.

If the type is Static IP, please enter the IP address, subnet mask, gateway, and DNS server addresses that your ISP assigned to you. Click **Connect** to continue.

Note: Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

#### EASY SETUP IS COMPLETED

The Easy Setup process has successfully completed. Click the "Save" button for your settings to take effect. We recommend you check "Save the network settings" box to save your wireless network settings to your computer in case there are more PCs that need to connect to your router wirelessly.

After clicking the "Save" button, you need to provide your username and password to access the device when logging in next time.

<b>Internet Settings</b>	
Internet Connection :	Dynamic IP (DHCP) Status: <b>Connected</b>
<b>Wireless Settings</b>	
Wireless Network Name (SSID) :	dlink Status: <b>Unsecured</b> <a href="#">Configure</a>
Security :	disabled
Your current wireless security settings are not safe. We recommend you configure wireless settings.	
<b>Password Information</b>	
Username :	admin
Password :	<Blank>
<input checked="" type="checkbox"/>	Save my network settings
<input type="checkbox"/>	Set the password of the device to the wireless network key
<a href="#">Save</a>	

#### CONFIGURE YOUR INTERNET CONNECTION

Please fill out the required fields and click "Connect".

Internet Connection:	PPPoE	<a href="#">What is this?</a>
*User Name:	<input type="text"/>	(* is required field)
*Password:	<input type="text"/>	
<a href="#">Connect</a>		

#### CONFIGURE YOUR INTERNET CONNECTION

The router can't detect your Internet connection type. Please select one of the connection types below and fill out the required fields. Click "Connect" to continue.

Internet Connection:	Static IP	<a href="#">What is this?</a>
*IP Address:	<input type="text" value="0.0.0.0"/>	(* is required field)
*Subnet Mask:	<input type="text" value="255.255.255.0"/>	
*Gateway Address:	<input type="text" value="0.0.0.0"/>	
*Primary DNS Server:	<input type="text" value="0.0.0.0"/>	
Secondary DNS Server:	<input type="text" value="0.0.0.0"/>	
<a href="#">Connect</a>		

In the final stage of Easy setup wizard, the summary will show your current configuration. Click Save to complete the setting.

When the internet connectivity is established, the webpage will be redirected to D-Link Website.

**EASY SETUP IS COMPLETED**

The Easy Setup process has successfully completed. Click the "Save" button for your settings to take effect. We recommend you check "Save the network settings" box to save your wireless network settings to your computer in case there are more PCs that need to connect to your router wirelessly.

After clicking the "Save" button, you need to provide your username and password to access the device when logging in next time.

**Internet Settings**

Internet Connection : Dynamic IP (DHCP)    Status: **Connected**

**Wireless Settings**

Wireless Network Name (SSID) : dlink    Status: **Unsecured**    [Configure](#)

Security : disabled

Your current wireless security settings are not safe. We recommend you configure wireless settings.

**Password Information**

Username : admin  
Password : <Blank>

: Save my network settings  
 : Set the password of the device to the wireless network key

[Save](#)

# Manual Configuration

## Dynamic (Cable)

If you opt to set up your Internet connection manually, you will be redirected to a WAN page that allows you to select your Internet type and enter the correct configuration parameters.

Select your Internet connection type using the “**My Internet Connection is**” drop-down menu.

Click the **Save Settings** button when you have configured the connection.

**Access Point Mode:** Use this mode to disable NAT on the router and turn it into an Access Point

**Internet Connection Type:** Select your Internet connection type using the “Internet connection type” drop-down menu.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
EASY SETUP	<b>WAN</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>• <b>Internet Connection:</b> When configuring the router to access the Internet, be sure to choose the correct <b>Internet Connection Type</b> from the drop down menu. If you are unsure of which option to choose, please contact your <b>Internet Service Provider (ISP)</b>.</li> <li>• <b>Support:</b> If you are having trouble accessing the Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.</li> </ul>
INTERNET	Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP and PPPoE. If you are unsure of your connection method, please contact your Internet Service Provider. <b>Note :</b> If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WIRELESS SETTINGS	<b>ACCESS POINT MODE</b> Use this to disable NAT on the router and turn it into an Access Point. <input type="checkbox"/> Enabled Access Point Mode				
NETWORK SETTINGS	<b>INTERNET CONNECTION TYPE</b> Choose the mode to be used by the router to connect to the Internet. My Internet Connection is : <input type="text" value="Dynamic IP (DHCP)"/>				
	<b>DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE :</b> Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password. Host Name : <input type="text" value="DIR-600"/> Primary DNS Server : <input type="text"/> Secondary DNS Server : <input type="text"/> MTU : <input type="text" value="1500"/> MAC Address : <input type="text"/> <input type="button" value="Clone Your PC's MAC Address"/>				
	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
<b>WIRELESS</b>					

## Dynamic IP Address (DHCP)

**My Internet Connection:** Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for Cable modem services.

**Host Name:** The Host Name is optional but may be required by some ISPs. Enter the Primary DNS server IP address assigned by your ISP.

**DNS Addresses:** Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

**MTU:** The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not

**MAC Address:** recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

**INTERNET CONNECTION TYPE**

Choose the mode to be used by the router to connect to the Internet.

**My Internet Connection is :**

---

**DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE :**

Use this Internet connection type if your Internet Service Provider (ISP) didn't provide you with IP Address information and/or a username and password.

**Host Name :**

**Primary DNS Server :**

**Secondary DNS Server :**

**MTU :**

**MAC Address :**

## PPPoE (DSL)

Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP uses a PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services. Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.

**My Internet Connection:** Select **PPPoE (Username/Password)** from the drop-down menu.

**Address Mode:** Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses. In most cases, select **Dynamic**.

**IP Address:** Enter the IP address (Static PPPoE only).

**User Name:** Enter your PPPoE user name.

**Password:** Enter your PPPoE password and then retype the password in the next box.

**Service Name:** Enter the ISP Service Name (optional).

**Reconnection Mode:** Select either **Always-on**, **On-Demand**, or **Manual**.

**Maximum Idle Time:** Enter a maximum idle time during which the Internet connection is maintained during inactivity. To disable this feature, enable Auto-reconnect.

**DNS Addresses:** Enter the Primary and Secondary DNS Server Addresses (Static PPPoE only).

**MTU:** Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1492 is the default MTU.

**MAC Address:** The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
EASY SETUP	<b>WAN</b>				Helpful Hints... <ul style="list-style-type: none"> <li><b>Internet Connection:</b> When configuring the router to access the Internet, be sure to choose the correct <b>Internet Connection Type</b> from the drop down menu. If you are unsure of which option to choose, please contact your <b>Internet Service Provider (ISP)</b>.</li> <li><b>Support:</b> If you are having trouble accessing the Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.</li> </ul>
INTERNET	Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP and PPPoE. If you are unsure of your connection method, please contact your Internet Service Provider. <b>Note :</b> If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WIRELESS SETTINGS	<b>ACCESS POINT MODE</b>				
NETWORK SETTINGS	Use this to disable NAT on the router and turn it into an Access Point. <input type="checkbox"/> Enabled Access Point Mode				
	<b>INTERNET CONNECTION TYPE</b>				
	Choose the mode to be used by the router to connect to the Internet. <b>My Internet Connection is :</b> <input type="text" value="PPPoE (Username / Password)"/>				
	<b>PPPOE INTERNET CONNECTION TYPE :</b>				
	Enter the information provided by your Internet Service Provider (ISP). <b>Address Mode :</b> <input checked="" type="radio"/> Dynamic IP <input type="radio"/> Static IP <b>IP Address :</b> <input type="text"/> <b>Username :</b> <input type="text"/> <b>Password :</b> <input type="text"/> <b>Verify Password :</b> <input type="text"/> <b>Service Name :</b> <input type="text"/> (optional) <b>Reconnect Mode :</b> <input checked="" type="radio"/> Always on <input type="radio"/> On demand <input type="radio"/> Manual				

## Static IP Address

Select Static IP Address if all the Internet port's IP information is provided to you by your ISP. You will need to enter in the IP address, subnet mask, gateway address, and DNS address(es) provided to you by your ISP. Each IP address entered in the fields must be in the appropriate IP form, which are four octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format.

**IP Address:** Enter the IP address assigned by your ISP.

**Subnet Mask:** Enter the Subnet Mask assigned by your ISP.

**Default Gateway:** Enter the Gateway assigned by your ISP.

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

**MTU:** Maximum Transmission Unit - you may need to change the MTU for optimal performance with your specific ISP. 1500 is the default MTU.

**MAC Address:** The default MAC Address is set to the Internet port's physical interface MAC address on the Broadband Router. It is not recommended that you change the default MAC address unless required by your ISP. You can use the **Clone Your PC's MAC Address** button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
EASY SETUP	<b>WAN</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li><b>Internet Connection:</b> When configuring the router to access the Internet, be sure to choose the correct Internet Connection Type from the drop down menu. If you are unsure of which option to choose, please contact your Internet Service Provider (ISP).</li> <li><b>Support:</b> If you are having trouble accessing the Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.</li> </ul>
INTERNET	Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP and PPPoE. If you are unsure of your connection method, please contact your Internet Service Provider.				
WIRELESS SETTINGS	<b>Note :</b> If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
NETWORK SETTINGS	<b>ACCESS POINT MODE</b> Use this to disable NAT on the router and turn it into an Access Point. <input type="checkbox"/> Enabled Access Point Mode				
	<b>INTERNET CONNECTION TYPE</b> Choose the mode to be used by the router to connect to the Internet. My Internet Connection is : <input type="text" value="Static IP"/>				
	<b>STATIC IP ADDRESS INTERNET CONNECTION TYPE :</b> Enter the static address information provided by your Internet Service Provider (ISP). IP Address : <input type="text"/> Subnet Mask : <input type="text" value="0.0.0.0"/> Default Gateway : <input type="text"/> Primary DNS Server : <input type="text"/> Secondary DNS Server : <input type="text"/> MTU : <input type="text" value="1500"/> MAC Address : <input type="text"/> <input type="button" value="Clone Your PC's MAC Address"/>				
	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
<b>WIRELESS</b>					

# Wireless Settings

If you want to configure the wireless settings on your router using the wizard, click **Wireless Connection Setup Wizard** and refer to page 51.

If you want to manually configure the wireless settings on your router click **Manual Wireless Network Setup** and refer to the next page.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
EASY SETUP	<b>WIRELESS SETTINGS</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>• If you are new to wireless networking and have never configured a wireless router before, click on <b>Wireless Connection Setup Wizard</b> and the router will guide you through a few simple steps to get your wireless network up and running.</li> <li>• If you consider yourself an advanced user and have configured a wireless router before, click <b>Manual Wireless Connection Setup</b> to input all the settings manually.</li> </ul>
INTERNET	The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection.				
WIRELESS SETTINGS	Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.				
NETWORK SETTINGS	<b>WIRELESS NETWORK SETUP WIZARD</b> This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure. <div style="text-align: center;"> <input type="button" value="Wireless Network Setup Wizard"/> </div> <p><b>Note:</b> Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.</p>				
	<b>MANUAL WIRELESS NETWORK SETUP</b> If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below. <div style="text-align: center;"> <input type="button" value="Manual Wireless Network Setup"/> </div>				
<b>WIRELESS</b>					

## Manual Wireless Network Setup

**Enable Wireless:** Check the box to enable the wireless function. If you do not want to use wireless, uncheck the box to disable all the wireless functions. Click **Add New** to create your own time schedule to enable the wireless function.

**Wireless Network Name:** Service Set Identifier (SSID) is the name of your wireless network. Create a name using up to 32 characters. The SSID is case-sensitive.

**802.11 Mode:** Select one of the following:

**Mixed 802.11g and 802.11b** - Select if you are using both 802.11b and 802.11g wireless clients.

**802.11n Only** - Select only if all of your wireless clients are 802.11n.

**Mixed 802.11n, 802.11b, and 802.11g** - Select if you are using a mix of 802.11n, 11g, and 11b wireless clients.

**Enable Auto Channel Scan:** The **Auto Channel Scan** setting can be selected to allow the DIR-600 to choose the channel with the least amount of interference.

**Wireless Channel:** Indicates the channel setting for the DIR-600. By default the channel is set to 6. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network. If you enable **Auto Channel Scan**, this option will be greyed out.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
EASY SETUP	<b>WIRELESS NETWORK</b>				Helpful Hints... <ul style="list-style-type: none"> <li>• Changing your Wireless Network Name is the first step in securing your wireless network. We recommend that you change it to a familiar name that does not contain any personal information.</li> <li>• Enable Auto Channel Scan the router can select the best possible channel for your wireless network to operate on.</li> <li>• Enabling WMM can help control latency and jitter when transmitting multimedia content over a wireless connection.</li> <li>• Enabling Hidden Mode is another way to secure your network. With this option enabled, no wireless clients will be</li> </ul>
INTERNET	Use this section to configure the wireless settings for your D-Link router. Please note that changes made in this section may also need to be duplicated on your wireless client. To protect your privacy you can configure wireless security features. This device supports three wireless security modes including: WEP, WPA and WPA2.  <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WIRELESS SETTINGS	<b>WIRELESS NETWORK SETTINGS</b>				
NETWORK SETTINGS	Enable Wireless : <input checked="" type="checkbox"/> Wireless Network Name : <input type="text" value="DIR-600"/> (Also called the SSID) Enable Auto Channel Selection : <input type="checkbox"/> Wireless Channel : <input type="text" value="6"/> Transmission Rate : <input type="text" value="Best (automatic)"/> (Mbit/s) WMM Enable : <input checked="" type="checkbox"/> (Wireless QoS) Enable Hidden Wireless : <input type="checkbox"/> (Also called the SSID Broadcast)  <b>WIRELESS SECURITY MODE</b> Security Mode : <input type="text" value="Disable Wireless Security (not recommended)"/>  <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				



**Transmission Rate:** Select the transmit rate. It is strongly suggested to select **Best (Auto)** for best performance.

**Enable Hidden Wireless:** Enabling Hidden Mode is another way to secure your network. With this option enabled, no wireless clients will be able to see your wireless network when they perform a scan to see what's available. In order for your wireless devices to connect to your router, you will need to manually enter the Wireless Network Name on each device.

**Wireless Security:** Refer to **Section 4- Wireless security** for more information regarding wireless security.

# Network Settings

This section will allow you to change the local network settings of the router and to configure the DHCP settings.

**IP Address:** Enter the IP address of the router. The default IP address is 192.168.0.1.

If you change the IP address, once you click **Save Settings**, you will need to enter the new IP address in your browser to get back into the configuration utility.

**Subnet Mask:** Enter the Subnet Mask. The default subnet mask is 255.255.255.0.

**Enable DNS Relay:** Uncheck the box to transfer the DNS server information from your ISP to your computers. If checked, your computers will use the router for a DNS server.

DIR-600	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT											
EASY SETUP	<b>NETWORK SETTINGS</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>If you already have a DHCP server on your network or are using static IP addresses on all the devices on your network, uncheck <b>Enable DHCP Server</b> to disable this feature.</li> <li>If you have devices on your network that should always have fixed IP addresses, add a <b>DHCP Reservation</b> for each such device.</li> </ul>											
INTERNET	Use this section to configure the internal network settings of your router and also to configure the built-in DHCP server to assign IP addresses to computers on your network. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address in this section, you may need to adjust your PC's network settings to access the network again.															
WIRELESS SETTINGS	<b>Please note that this section is optional and you do not need to change any of the settings here to get your network up and running.</b>															
NETWORK SETTINGS	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>															
	<b>ROUTER SETTINGS</b>															
	Use this section to configure the internal network settings of your router. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address here, you may need to adjust your PC's network settings to access the network again.															
	<b>DHCP SERVER SETTINGS</b>															
	Use this section to configure the built-in DHCP server to assign IP address to the computers on your network.															
	<b>Enable DHCP Server :</b> <input checked="" type="checkbox"/>															
	<b>DHCP IP Address Range :</b> <input type="text" value="100"/> to <input type="text" value="199"/> (addresses within the LAN subnet)															
	<b>DHCP Lease Time :</b> <input type="text" value="10080"/> (minutes)															
	<b>DHCP RESERVATIONS LIST</b>															
	<table border="1"> <thead> <tr> <th>Host Name</th> <th>IP Address</th> <th>MAC Address</th> <th>Expired Time</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Host Name	IP Address	MAC Address	Expired Time								
Host Name	IP Address	MAC Address	Expired Time													
	<b>NUMBER OF DYNAMIC DHCP CLIENTS</b>															
	<table border="1"> <thead> <tr> <th>Host Name</th> <th>IP Address</th> <th>MAC Address</th> <th>Expired Time</th> </tr> </thead> <tbody> <tr> <td>DANIELHSU-PC</td> <td>192.168.0.100</td> <td>00:1c:23:1a:74:68</td> <td>6 Days 22 Hours 50 Minutes</td> </tr> </tbody> </table>				Host Name	IP Address	MAC Address	Expired Time	DANIELHSU-PC	192.168.0.100	00:1c:23:1a:74:68	6 Days 22 Hours 50 Minutes				
Host Name	IP Address	MAC Address	Expired Time													
DANIELHSU-PC	192.168.0.100	00:1c:23:1a:74:68	6 Days 22 Hours 50 Minutes													
	<b>24 - DHCP RESERVATION</b>															
	Remaining number of rules that can be created: 24															
	<table border="1"> <thead> <tr> <th>Computer Name</th> <th>IP Address</th> <th>MAC Address</th> <th></th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>&lt;&lt; Computer Name</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>&lt;&lt; Computer Name</td> </tr> </tbody> </table>				Computer Name	IP Address	MAC Address		<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name
Computer Name	IP Address	MAC Address														
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name													
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name													

## DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The DIR-600 has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to “Obtain an IP Address Automatically.” When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the DIR-600. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

**Enable DHCP Server:** Check this box to enable the DHCP server on your router. Uncheck to disable this function.

**DHCP IP Address Range:** Enter the starting and ending IP addresses for the DHCP server’s IP assignment.

**Note:** If you statically (manually) assign IP addresses to your computers or devices, make sure the IP addresses are outside of this range or you may have an IP conflict.

**Lease Time:** The length of time for the IP address lease. Enter the Lease time in minutes.

### DHCP SERVER SETTINGS

Use this section to configure the built-in DHCP server to assign IP address to the computers on your network.

**Enable DHCP Server :**

**DHCP IP Address Range :**  to  (addresses within the LAN subnet)

**DHCP Lease Time :**  (minutes)



# Virtual Server

The DIR-600 can be configured as a virtual server so that remote users accessing Web or FTP services via the public IP address can be automatically redirected to local servers in the LAN (Local Area Network).

The DIR-600 firewall feature filters out unrecognized packets to protect your LAN network so all computers networked with the DIR-600 are invisible to the outside world. If you wish, you can make some of the LAN computers accessible from the Internet by enabling Virtual Server. Depending on the requested service, the DIR-600 redirects the external service request to the appropriate server within the LAN network.

The DIR-600 is also capable of port-redirection meaning incoming traffic to a particular port may be redirected to a different port on the server computer.

Each virtual service that is created will be listed at the bottom of the screen in the Virtual Servers List. Pre-defined virtual services are already listed in the table. You may use them by enabling them and assigning the server IP to use that particular virtual service.

DIR-600	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
<b>VIRTUAL SERVER</b>					
<p>The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.</p> <p>Save Settings    Don't Save Settings</p>					
<b>24 - VIRTUAL SERVERS LIST</b>					
Remaining number of rules that can be created: 24					
		Port	Traffic Type		
Name	<< Application Name >>	Public 0	Protocol All		
IP Address	<< Computer Name >>	Private 0			
Name	<< Application Name >>	Public 0	Protocol All		
IP Address	<< Computer Name >>	Private 0			
Name	<< Application Name >>	Public 0	Protocol All		

**Helpful Hints...**

- Check the Application Name drop down menu for a list of predefined server types. If you select one of the predefined server types, click the arrow button next to the drop down menu to fill out the corresponding field.
- You can select a computer from the list of DHCP clients in the Computer Name drop down menu, or you can manually enter the IP address of the computer at which you would like to open the specified port.

This will allow you to open a single port. If you would like to open a range of ports, refer to the next page.

**Name:** Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

**IP Address:** Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), your computer will be listed in the “Computer Name” drop-down menu. Select your computer and click <<.

**Private Port/ Public Port:** Enter the port that you want to open next to Private Port and Public Port. The private and public ports are usually the same. The public port is the port seen from the Internet side, and the private port is the port being used by the application on the computer within your local network.

**Protocol Type:** Select **TCP**, **UDP**, or **Both** from the drop-down menu.

24 - VIRTUAL SERVERS LIST				
Remaining number of rules that can be created: 24				
			Port	Traffic Type
<input type="checkbox"/>	Name <input type="text"/>	<< Application Name ▼	Public <input type="text" value="0"/>	Protocol All ▼
	IP Address <input type="text" value="0.0.0.0"/>	<< Computer Name ▼	Private <input type="text" value="0"/>	
<input type="checkbox"/>	Name <input type="text"/>	<< Application Name ▼	Public <input type="text" value="0"/>	Protocol All ▼
	IP Address <input type="text" value="0.0.0.0"/>	<< Computer Name ▼	Private <input type="text" value="0"/>	
<input type="checkbox"/>	Name <input type="text"/>	<< Application Name ▼	Public <input type="text" value="0"/>	Protocol All ▼
	IP Address <input type="text" value="0.0.0.0"/>	<< Computer Name ▼	Private <input type="text" value="0"/>	
<input type="checkbox"/>	Name <input type="text"/>	<< Application Name ▼	Public <input type="text" value="0"/>	Protocol All ▼
	IP Address <input type="text" value="0.0.0.0"/>	<< Computer Name ▼	Private <input type="text" value="0"/>	

# Port Forwarding

This will allow you to open a single port or a range of ports.

**Name:** Enter a name for the rule or select an application from the drop-down menu. Select an application and click << to populate the fields.

**IP Address:** Enter the IP address of the computer on your local network that you want to allow the incoming service to. If your computer is receiving an IP address automatically from the router (DHCP), your computer will be listed in the “Computer Name” drop-down menu. Select your computer and click <<.

**TCP/UDP:** Enter the TCP and/or UDP port or ports that you want to open. You can enter a single port or a range of ports. Separate ports with a common.

Example: 24,1009,3000-4000

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT																								
VIRTUAL SERVER	<b>PORT FORWARDING</b>				Helpful Hints... <ul style="list-style-type: none"> <li>• Check the <b>Application Name</b> drop-down menu for a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.</li> <li>• You can select your computer from the list of DHCP clients in the <b>Computer Name</b> drop-down menu, or enter the IP address manually of the computer you would like to open the specified port to.</li> </ul>																								
PORT FORWARDING	This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in the format, Port Ranges (100-150). This option is only applicable to the INTERNET session. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>																												
NETWORK FILTER	<b>24 -- PORT FORWARDING RULES</b>																												
WEBSITE FILTER	Remaining number of rules that can be created: 24																												
FIREWALL SETTINGS	<table border="1"> <thead> <tr> <th colspan="2"></th> <th colspan="2">Ports to Open</th> <th>Traffic Type</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>Name [ ] &lt;&lt; Application Name ▾</td> <td>Public Port [ ] ~ [ ]</td> <td>Private Port [ ] ~ [ ]</td> <td>Traffic Type [ All ] ▾</td> </tr> <tr> <td><input type="checkbox"/></td> <td>IP Address 0.0.0.0 &lt;&lt; Computer Name ▾</td> <td>Public Port [ ] ~ [ ]</td> <td>Private Port [ ] ~ [ ]</td> <td>Traffic Type [ All ] ▾</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Name [ ] &lt;&lt; Application Name ▾</td> <td>Public Port [ ] ~ [ ]</td> <td>Private Port [ ] ~ [ ]</td> <td>Traffic Type [ All ] ▾</td> </tr> <tr> <td><input type="checkbox"/></td> <td>IP Address 0.0.0.0 &lt;&lt; Computer Name ▾</td> <td>Public Port [ ] ~ [ ]</td> <td>Private Port [ ] ~ [ ]</td> <td>Traffic Type [ All ] ▾</td> </tr> </tbody> </table>						Ports to Open		Traffic Type	<input type="checkbox"/>	Name [ ] << Application Name ▾	Public Port [ ] ~ [ ]	Private Port [ ] ~ [ ]	Traffic Type [ All ] ▾	<input type="checkbox"/>	IP Address 0.0.0.0 << Computer Name ▾	Public Port [ ] ~ [ ]	Private Port [ ] ~ [ ]	Traffic Type [ All ] ▾	<input type="checkbox"/>	Name [ ] << Application Name ▾	Public Port [ ] ~ [ ]	Private Port [ ] ~ [ ]	Traffic Type [ All ] ▾	<input type="checkbox"/>	IP Address 0.0.0.0 << Computer Name ▾	Public Port [ ] ~ [ ]	Private Port [ ] ~ [ ]	Traffic Type [ All ] ▾
		Ports to Open		Traffic Type																									
<input type="checkbox"/>	Name [ ] << Application Name ▾	Public Port [ ] ~ [ ]	Private Port [ ] ~ [ ]	Traffic Type [ All ] ▾																									
<input type="checkbox"/>	IP Address 0.0.0.0 << Computer Name ▾	Public Port [ ] ~ [ ]	Private Port [ ] ~ [ ]	Traffic Type [ All ] ▾																									
<input type="checkbox"/>	Name [ ] << Application Name ▾	Public Port [ ] ~ [ ]	Private Port [ ] ~ [ ]	Traffic Type [ All ] ▾																									
<input type="checkbox"/>	IP Address 0.0.0.0 << Computer Name ▾	Public Port [ ] ~ [ ]	Private Port [ ] ~ [ ]	Traffic Type [ All ] ▾																									
ADVANCED WIRELESS																													
ADVANCED NETWORK																													
TRAFFIC CONTROL																													

# Traffic Control

Use this section to configure D-Link's Smart Traffic Control. The Traffic Control improves your online gaming experience by ensuring that your game traffic is prioritized over other network traffic, such as FTP or Web.

**Enable Traffic Control:** Select this function to control the access bandwidth of computer in LAN.

**Auto Bandwidth Equal:** All the computers in LAN will be distributed the bandwidth equally.

**Key in bandwidth Uplink manually:** Key in the value to setup the Uplink bandwidth manually.

**Key in bandwidth Downlink manually:** Key in the value to setup the Download bandwidth manually.

**Taffic Control Rules:** When the option Auto Bandwidth Equal is unchecked, you can control the access bandwidth of the specific IP address.

**TRAFFIC CONTROL SETUP**

Use this section to configure D-Link's Smart Traffic Control. The Traffic Control improves your online gaming experience by ensuring that your game traffic is prioritized over other network traffic, such as FTP or Web.

**TRAFFIC CONTROL SETUP**

**Enable Traffic Control :**   
**Auto BandWidth Equal :**   
**Manual Uplink Speed :**  kbps  
**Manual Downlink Speed :**  kbps

**32 -- RULE OF TRAFFIC CONTROL**

Remaining number of rules that can be created: 32

	IP Range	Operation Mode	Bandwidth (kbps)
<input type="checkbox"/>	<input type="text"/> ~ <input type="text"/>	Maximum Download Bandwidth ▾	<input type="text"/>
<input type="checkbox"/>	<input type="text"/> ~ <input type="text"/>	Maximum Download Bandwidth ▾	<input type="text"/>



# Network Filters

Use MAC (Media Access Control) Filters to allow or deny LAN (Local Area Network) computers by their MAC addresses from accessing the Network. You can either manually add a MAC address or select the MAC address from the list of clients that are currently connected to the Broadband Router.

**Configure MAC Filtering:** Select Turn MAC Filtering Off, allow MAC addresses listed below, or deny MAC addresses listed below from the drop-down menu.

**MAC Address:** Enter the MAC address you would like to filter.

To find the MAC address on a computer, please refer to the Networking Basics section in this manual.

**DHCP Client:** Select a DHCP client from the drop-down menu and click << to copy that MAC Address.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT												
VIRTUAL SERVER	<b>MAC ADDRESS FILTER</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>• Create a list of MAC addresses and choose whether to allow or deny them access to your network.</li> <li>• Computers that have obtained an IP address from the router's DHCP server will be in the DHCP Client List. Select a device from the drop down menu and click the arrow to add that device's MAC to the list.</li> <li>• Use the check box on the left to either enable or disable a particular entry.</li> </ul>												
PORT FORWARDING	The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the network adapter. A MAC address is a unique ID assigned by the manufacturer of the network adapter. This feature can be configured to ALLOW or DENY network/Internet access.																
NETWORK FILTER	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>																
WEBSITE FILTER	<b>24 -- MAC FILTERING RULES</b>																
FIREWALL SETTINGS	Configure MAC Filtering below: <input type="text" value="Turn MAC Filtering OFF"/>																
ADVANCED WIRELESS	Remaining number of rules that can be created: 24																
ADVANCED NETWORK	<table border="1"> <thead> <tr> <th></th> <th>MAC Address</th> <th></th> <th>DHCP Client List</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td>&lt;&lt;</td> <td>Computer Name ▾</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td>&lt;&lt;</td> <td>Computer Name ▾</td> </tr> </tbody> </table>					MAC Address		DHCP Client List	<input type="checkbox"/>	<input type="text"/>	<<	Computer Name ▾	<input type="checkbox"/>	<input type="text"/>	<<	Computer Name ▾	
	MAC Address		DHCP Client List														
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name ▾														
<input type="checkbox"/>	<input type="text"/>	<<	Computer Name ▾														
TRAFFIC CONTROL																	

# Website Filters

Website Filters are used to allow you to set up a list of allowed Web sites that can be used by multiple users through the network. To use this feature select to **Allow** or **Deny**, enter the domain or website and click **Add**, and then click **Save Settings**. You must also select **Apply Web Filter** under the Access Control section (page 40).

**Configure Website Filter Below:** Select **Deny** or **Allow** computers access to only these sites.

**Clear the list below:** Click to delete all entries in the list.

**Website URL/ Domain:** Enter the keywords or URLs that you want to allow or deny.

DIR-600	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT																						
VIRTUAL SERVER	<b>WEBSITE FILTER</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>• Create a list of Websites that you would like the devices on your network to be allowed or denied access to.</li> <li>• Keywords can be entered in this list in order to block any URL containing the keyword entered.</li> </ul>																						
PORT FORWARDING	The Website Filter option allows you to set up a list of Web sites you would like to allow or deny through your network. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>																										
TRAFFIC CONTROL	<b>40 -- WEBSITE FILTERING RULES</b>																										
NETWORK FILTER	Configure Website Filter below: Turn OFF WEBSITE FILTERING <input type="button" value="v"/> Remaining number of rules that can be created: 40																										
WEBSITE FILTER	<table border="1"> <thead> <tr> <th></th> <th>Website URL</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> <tr><td><input type="checkbox"/></td><td><input type="text"/></td></tr> </tbody> </table>					Website URL	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	
	Website URL																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
<input type="checkbox"/>	<input type="text"/>																										
FIREWALL SETTINGS																											
ADVANCED WIRELESS																											
WI-FI PROTECTED SETUP																											
ADVANCED NETWORK																											

# Firewall Settings

A firewall protects your network from the outside world. The D-Link DIR-600 offers a firewall type functionality. The SPI feature helps prevent cyber attacks. Sometimes you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ. DMZ is short for Demilitarized Zone. This option will expose the chosen computer completely to the outside world.

**Enable SPI:** SPI (Stateful Packet Inspection, also known as dynamic packet filtering) helps to prevent cyber attacks by tracking more state per session. It validates that the traffic passing through the session conforms to the protocol.

**Enable DMZ Host:** If an application has trouble working from behind the router, you can expose one computer to the Internet and run the application on that computer.

**Note:** Placing a computer in the DMZ may expose that computer to a variety of security risks. Use of this option is only recommended as a last resort.

**IP Address:** Specify the IP address of the computer on the LAN that you want to have unrestricted Internet communication. If this computer obtains its IP address automatically using DHCP, be sure to make a static reservation on the **Setup > Network Settings** page so that the IP address of the DMZ machine does not change.

The screenshot shows the 'FIREWALL & DMZ SETTINGS' page in the D-Link DIR-600 web interface. The page is divided into several sections:

- FIREWALL & DMZ SETTINGS:** Contains introductory text about firewall rules and DMZ. It includes 'Save Settings' and 'Don't Save Settings' buttons.
- FIREWALL SETTINGS:** Features a checkbox for 'Enable SPI'.
- DMZ HOST:** Includes a checkbox for 'Enable DMZ', a text input for 'DMZ IP Address', and a dropdown menu for 'Computer Name'. A note below explains the risks of using DMZ.
- 24 -- FIREWALL RULES:** Shows a table for creating firewall rules. The table has columns for 'Interface', 'IP Address', and 'Protocol'. The 'Action' is set to 'Allow'.

Helpful Hints on the right side of the page provide additional information:

- DMZ:** Only enable the DMZ option as a last resort. If you are having trouble using an application from a computer behind the router, first try opening ports associated with the application in the Advanced Port Forwarding section.
- Firewall:** Firewall Rules are an advanced feature used to deny or allow traffic from passing through the device. You can create detailed rules for this device. Please refer to the manual for more details and examples.

# Advanced Wireless Settings

**Transmit Power:** Set the transmit power of the antennas.

**Beacon Period:** Beacons are packets sent by an Access Point to synchronize a wireless network. Specify a value. 100 is the default setting and is recommended.

**RTS Threshold:** This value should remain at its default setting of 2346. If inconsistent data flow is a problem, only a minor modification should be made.

**Fragmentation Threshold:** The fragmentation threshold, which is specified in bytes, determines whether packets will be fragmented. Packets exceeding the 2346 byte setting will be fragmented before transmission. 2346 is the default setting.

**DTIM Interval:** (Delivery Traffic Indication Message) 3 is the default setting. A DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages.

**Short GI:**

Check this box to reduce the guard interval time therefore increasing the data capacity. However, it's less reliable and may create higher data loss.

DIR-600	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	<b>ADVANCED WIRELESS SETTINGS</b>				Helpful Hints... • It is recommended that you leave these parameters with their default values. Adjusting them could limit the performance of your wireless network. • Use 802.11n only for countries where it is required.
PORT FORWARDING	These options are for users that wish to change the behavior of their 802.11n wireless radio from the standard settings. We do not recommend changing these settings from the factory defaults. Incorrect settings may impact the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.				
NETWORK FILTER	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WEBSITE FILTER	<b>ADVANCED WIRELESS SETTINGS</b>				
FIREWALL SETTINGS	<b>Transmit Power :</b> <input type="text" value="100%"/> <b>Beacon interval :</b> <input type="text" value="100"/> (msec, range: 20~1000, default: 100) <b>RTS Threshold :</b> <input type="text" value="2346"/> (range: 256~2346, default: 2346) <b>Fragmentation :</b> <input type="text" value="2346"/> (range: 1500~2346, default: 2346, even number only) <b>DTIM interval :</b> <input type="text" value="1"/> (range: 1~255, default: 1) <b>Preamble Type :</b> <input type="radio"/> Short Preamble <input checked="" type="radio"/> Long Preamble <b>Wireless Mode :</b> <input type="text" value="802.11 Mixed(n/g/b"/> <b>Band Width :</b> <input type="text" value="20/40 MHz(Auto"/> <b>Short Guard Interval :</b> <input checked="" type="checkbox"/>				
ADVANCED WIRELESS	<b>WDS SETTINGS</b>				
ADVANCED NETWORK	<b>Enable WDS :</b> <input type="text" value="Disable"/> <b>Peer MAC :</b> <input type="text"/> <b>Auto generate key :</b> <input type="checkbox"/>				
TRAFFIC CONTROL	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
<b>WIRELESS</b>					

# Advanced Network Settings

**UPnP Settings:** To use the Universal Plug and Play (UPnP™) feature click on **Enabled**. UPNP provides compatibility with networking equipment, software and peripherals.

**Enable WAN Ping Response:** Unchecking the box will not allow the DIR-600 to respond to pings. Blocking the Ping may provide some extra security from hackers. Check the box to allow the Internet port to be “pinged”.

**WAN Port Speed:** You may set the port speed of the Internet port to 10Mbps, 100Mbps, or auto. Some older cable or DSL modems may require you to set the port speed to 10Mbps.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	<b>ADVANCED NETWORK SETTINGS</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>• For added security, it is recommended that you disable the <b>WAN Ping Respond</b> option. Ping is often used by malicious Internet users to locate active networks or PCs.</li> <li>• The WAN speed is usually detected automatically. If you are having problems connecting to the WAN, try selecting the speed manually.</li> </ul>
PORT FORWARDING	These options are for users that wish to change the LAN settings. We do not recommend changing these settings from factory default. Changing these settings may affect the behavior of your network. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
NETWORK FILTER					
WEBSITE FILTER					
FIREWALL SETTINGS					
ADVANCED WIRELESS	<b>UPNP</b> Universal Plug and Play(UPnP) supports peer-to-peer Plug and Play functionality for network devices. <b>Enable UPnP :</b> <input checked="" type="checkbox"/>				
ADVANCED NETWORK	<b>WAN PBIG</b> If you enable this feature, the WAN port of your router will respond to ping requests from the Internet that are sent to the WAN IP Address. <b>Enable WAN Ping Response :</b> <input type="checkbox"/>				
TRAFFIC CONTROL	<b>WAN PORT SPEED</b> <b>WAN Port Speed :</b> Auto 10/100Mbps ▾ <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
<b>WIRELESS</b>					

# Administrator Settings

This page will allow you to change the Administrator and User passwords. You can also enable Remote Management. There are two accounts that can access the management interface through the web browser. The accounts are admin and user. Admin has read/write access while user has read-only access. User can only view the settings but cannot make any changes. Only the admin account has the ability to change both admin and user account passwords.

**Admin Password:** Enter a new password for the Administrator Login Name. The administrator can make changes to the settings.

**Remote Management:** Remote management allows the DIR-600 to be configured from the Internet by a web browser. A username and password is still required to access the Web-Management interface. In general, only a member of your network can browse the built-in web pages to perform Administrator tasks. This feature enables you to perform Administrator tasks from the remote (Internet) host.

**Remote Admin** The port number used to access the DIR-600.

**Port:** Example: http://x.x.x.x:8080 whereas x.x.x.x is the Internet IP address of the DIR-600 and 8080 is the port used for the Web Management interface.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	<b>ADMINISTRATOR SETTINGS</b>				<b>Helpful Hints...</b> • For security reasons, it is recommended that you change the password for the Admin account. Be sure to write down the new password to avoid having to reset the router in case they are forgotten.
TIME	The 'admin' account can access the management interface. The admin has read/write access and can change password. By default there is no password configured. It is highly recommended that you create a password to keep your router secure. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
EMAIL SETTINGS	<b>ADMIN PASSWORD</b>				
SYSTEM	Please enter the same password into both boxes, for confirmation. Password : <input type="text"/> Verify Password : <input type="text"/>				
FIRMWARE	<b>ADMINISTRATION</b>				
DYNAMIC DNS	Enable Remote Management : <input type="checkbox"/> Remote Admin Port : <input type="text"/>				
SYSTEM CHECK	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				

# Time Settings

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the Time Server. Daylight Saving can also be configured to automatically adjust the time when needed.

**Time Zone:** Select the Time Zone from the drop-down menu.

**Daylight Saving:** To select Daylight Saving time manually, select enabled or disabled, and enter a start date and an end date for daylight saving time.

**Sync your Computer's Time Settings:** Press this button to set the device's time the same to local PC.

**Enable NTP Server:** NTP stands for Network Time Protocol. NTP synchronizes computer clock times in a network of computers. Check this box to use a NTP server. This will only connect to a server on the Internet, not a local server.

**NTP Server Used:** Enter the NTP server or select one from the drop-down menu, then the DIR-600 will sync the same time to D-Link Internet time server.

**Manual:** To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second and then click **Save Settings**.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	<b>TIME AND DATE</b>				<b>Helpful Hints...</b> • Either enter the time manually by clicking the <b>Sync. Your Computers Time Settings</b> button, or use the <b>Automatic Time Configuration</b> option to have your router synchronize with a time server on the Internet.
TIME	The Time and Date Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to adjust the time when needed.				
EMAIL SETTINGS	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
SYSTEM	<b>TIME AND DATE CONFIGURATION</b>				
FIRMWARE	Time : 2000/01/01,00:03:47 Time Zone : (GMT+08:00) Taipei				
DYNAMIC DNS	Enable Daylight Saving : <input type="checkbox"/> <input type="button" value="Sync. your computer's time settings"/>				
SYSTEM CHECK	<b>AUTOMATIC TIME AND DATE CONFIGURATION</b>				
	<input type="checkbox"/> Automatically synchronize with D-Link's Internet time server				
	NTP Server Used : <input type="button" value="Select NTP Server"/> <input type="button" value="Update Now"/>				
	<b>SET THE TIME AND DATE MANUALLY</b>				
	Year : 2010	Month : May	Day : 25		
	Hour : 14	Minute : 30	Second : 15		
	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
<b>WIRELESS</b>					

# E-mail Settings

The Email feature can be used to send the system log files, router alert messages, and firmware update notification to your e-mail address.

**From Email Address:** This e-mail address will appear as the sender when you receive a log file or firmware upgrade notification via e-mail.

**To Email Address:** Enter the e-mail address where you want the e-mail sent.

**SMTP Server Address:** Enter the SMTP server address for sending e-mail. If your SMTP server requires authentication, select this option.

DIR-600	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	<b>EMAIL SETTINGS</b>				Helpful Hints... • You may want to make the email settings similar to those of your email client program.
TIME	The Email feature can be used to send the system log files, router alert messages. Save Settings Don't Save Settings				
EMAIL SETTINGS	<b>EMAIL SETTINGS</b>				
SYSTEM	From Email Address : <input type="text"/>				
FIRMWARE	To Email Address : <input type="text"/>				
DYNAMIC DNS	Email Subject : <input type="text"/>				
SYSTEM CHECK	SMTP Server Address : <input type="text"/>				
	Send Mail Now				
	Save Settings Don't Save Settings				
<b>WIRELESS</b>					



# System Settings

**Save Settings to Local Hard Drive:** Use this option to save the current router configuration settings to a file on the hard disk of the computer you are using. First, click the **Save** button. You will then see a file dialog, where you can select a location and file name for the settings.

**Load Settings from Local Hard Drive:** Use this option to load previously saved router configuration settings. First, use the **Browse** control to find a previously save file of configuration settings. Then, click the **Load** button to transfer those settings to the router.

**Restore to Factory Default Settings:** This option will restore all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. Any settings that have not been saved will be lost, including any rules that you have created. If you want to save the current router configuration settings, use the **Save** button above.

**Reboot Device:** Click to reboot the router.

**Clear Language Pack:** This is to restore the device back to English version only. Remove other languages installed for the system web pages.

The screenshot shows the 'DIR-600' router's configuration interface. The top navigation bar includes 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists menu items: ADMIN, TIME, EMAIL SETTINGS, SYSTEM (highlighted), FIRMWARE, DYNAMIC DNS, and SYSTEM CHECK. The main content area is titled 'SAVE AND RESTORE SETTINGS' and contains the following text and controls:

Once the router is configured you can save the configuration settings to a configuration file on your hard drive. You also have the option to load configuration settings, or restore the factory default settings.

**Save Settings To Local Hard Drive :**

**Load Settings From Local Hard Drive :**

**Restore To Factory Default Settings :**

**Reboot The Device :**

**Clear Language Pack :**

On the right side, under 'Helpful Hints...', there is a note: 'Once your router is configured the way you want it, you can save these settings to a configuration file that can later be loaded in the event that the router's default settings are restored. To do this, click the Save button next to where it says Save Settings to Local Hard Drive.'

The bottom of the page features a 'WIRELESS' section header.

# Update Firmware

You can upgrade the firmware of the Router here. Make sure the firmware you want to use is on the local hard drive of the computer. Click on **Browse** to locate the firmware file to be used for the update. Please check the D-Link support site for firmware updates at <http://support.dlink.com>. You can download firmware upgrades to your hard drive from the D-Link support site.

**Firmware Information:** Displays the current firmware version and date.

**Firmware Upgrade:** After you have downloaded the new firmware, click **Browse** to locate the firmware update on your hard drive. Click **Upload** to complete the firmware upgrade.

**Language Pack Upgrade:** This function allows the user to transfer the language of GUI from English to theirs by upgrading the language pack.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	<b>FIRMWARE UPDATE</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>• <b>Firmware Update</b> are released periodically to improve the functionality of your router and also to add features. If you run into a problem with a specific feature of the router, check our support site by clicking on the <b>Click here to check for an upgrade on our support site</b> and see if an updated version of firmware is available for your router.</li> </ul>
TIME	There may be new firmware for your router to improve functionality and performance. <a href="#">Click here to check for an upgrade on our support site.</a> To upgrade the firmware, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the firmware upgrade.				
EMAIL SETTINGS	The language pack allows you to change the language of the user interface on the router. We suggest that you upgrade your current language pack if you upgrade the firmware. This ensures that any changes in the firmware are displayed correctly.				
SYSTEM	To upgrade the language pack, locate the upgrade file on the local hard drive with the Browse button. Once you have found the file to be used, click the Upload button to start the language pack upgrade.				
FIRMWARE	<b>FIRMWARE INFORMATION</b> Current Firmware Version : 2.01_TCL Current Firmware Date : Thu 29 Apr 2010				
DYNAMIC DNS	<b>FIRMWARE UPGRADE</b> <p><b>Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.</b></p> <p>To upgrade the firmware, your PC must have a wired connection to the router. Enter the name of the firmware upgrade file, and click on the Upload button.</p> Upload : <input type="text"/> <input type="button" value="浏览..."/> <input type="button" value="Upload"/>				
SYSTEM CHECK	<b>LANGUAGE PACK UPGRADE</b> Upload : <input type="text"/> <input type="button" value="浏览..."/> <input type="button" value="Upload"/>				
<b>WIRELESS</b>					

# DDNS

The DDNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter in your domain name to connect to your server no matter what your IP address is.

**DDNS:** Dynamic Domain Name System is a method of keeping a domain name linked to a changing IP Address. Check the box to enable DDNS.

**Server Address:** Choose your DDNS provider from the drop down menu.

**Host Name:** Enter the Host Name that you registered with your DDNS service provider.

**User Account:** Enter the Username for your DDNS account.

**Password:** Enter the Password for your DDNS account.

DIR-600	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	<b>DYNAMIC DNS</b>				Helpful Hints... • To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.
TIME	The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc...) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign dynamic (changing) IP addresses. Using a DDNS service provider, your friends can enter your host name to connect to your game server no matter what your IP address is.				
EMAIL SETTINGS	Save Settings Don't Save Settings				
SYSTEM	<b>DYNAMIC DNS SETTINGS</b>				
FIRMWARE	Enable DDNS : <input type="checkbox"/>				
DYNAMIC DNS	Server Address : dlinkddns.com(Free)				
SYSTEM CHECK	Host Name : <input type="text"/>				
	User Account : <input type="text"/>				
	Password : <input type="text"/>				
	Save Settings Don't Save Settings				
<b>WIRELESS</b>					

# System Check

The System Check feature allows you to verify the physical connectivity on both LAN and Internet interface.

**Ping Test:** The Ping Test is used to send Ping packets to test if a computer is on the Internet. Enter the IP Address that you wish to Ping, and click **Ping**.

**Ping Results:** The results of your ping attempts will be displayed here.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN	<b>PING TEST</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>• "Ping" checks whether a computer on the Internet is running and responding. Enter either the IP address of the target computer or enter its fully qualified domain name.</li> </ul>
TIME	Ping Test sends "ping" packets to test a computer on the Internet.				
EMAIL SETTINGS	<b>PING TEST</b>				
SYSTEM	Host Name or IP Address : <input type="text"/> <input type="button" value="Ping"/>				
FIRMWARE	<b>PING RESULT</b>				
DYNAMIC DNS	Enter a host name or IP address above and click 'Ping'				
SYSTEM CHECK					
<b>WIRELESS</b>					

# Device Information

This page displays the current information for the DIR-600. It will display the LAN, WAN (Internet), and Wireless information.

If your Internet connection is set up for a Dynamic IP address then a **Release** button and a **Renew** button will be displayed. Use **Release** to disconnect from your ISP and use **Renew** to connect to your ISP.

If your Internet connection is set up for PPPoE, a **Connect** button and a **Disconnect** button will be displayed. Use **Disconnect** to drop the PPPoE connection and use **Connect** to establish the PPPoE connection.

See the following for more information.

**General:** Displays the router's time and firmware version.

**Internet:** Displays the MAC address and the public IP settings for the router.

**LAN:** Displays the MAC address and the private (local) IP settings for the router.

**Wireless LAN:** Displays the wireless MAC address and your wireless settings such as SSID and Channel.

DIR-600	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
DEVICE INFO LOGS STATISTICS INTERNET SESSIONS WIRELESS	<b>DEVICE INFORMATION</b> All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here.				<b>Helpful Hints...</b> • All of your LAN, Internet and WIRELESS 802.11n connection details are displayed here.
<b>GENERAL</b> Time : 2000/01/01,00:13:39 Firmware Version : 3.00 Thu 29 Apr 2010					
<b>WAN</b> Connection Type : DHCP Client Cable Status : Connected Network Status : Connected <input type="button" value="Renew"/> <input type="button" value="Release"/> Connection Up Time : 0 Day 0 Hour 13 Min 24 Sec MAC Address : 1C:8D:B9:2D:00:87 IP Address : 172.17.5.84 Subnet Mask : 255.255.255.0 Default Gateway : 172.17.5.254 Primary DNS Server : 192.168.168.250 Secondary DNS Server : 192.168.168.201					
<b>LAN</b> MAC Address : 1C:8D:B9:2D:00:86 IP Address : 192.168.0.1 Subnet Mask : 255.255.255.0 DHCP Server : Enabled					
<b>WIRELESS</b> Wireless Radio : Enabled MAC Address : 1C:8D:B9:2D:00:86 802.11 Mode : Mixed 802.11n, 802.11g and 802.11b Channel Width : 20/40MHz Channel : 6 Network Name (SSID) : dlink Security : Disabled					

# Log

The router automatically logs (records) events of possible interest in its internal memory. If there isn't enough internal memory for all events, logs of older events are deleted but logs of the latest events are retained. The Logs option allows you to view the router logs. You can define what types of events you want to view and the level of the events to view. This router also has external Syslog Server support so you can send the log files to a computer on your network that is running a Syslog utility.

**What to View:** You can select the types of messages that you want to display from the log. Firewall & Security, System, and Router Status messages can be selected.

**View Levels:** There are three levels of message importance: Informational, Warning, and Critical. Select the levels that you want displayed in the log.

**Clear:** Clears all of the log contents.

**Link to Log Settings:** The user can click the button to “Link To Email Settings” and send the logs to the designated E-mail account.

The screenshot shows the Web Management Interface for a D-Link DIR-600 router. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar contains menu items: DEVICE INFO, LOGS, STATISTICS, INTERNET SESSIONS, and WIRELESS. The main content area is titled "VIEW LOG" and contains the following sections:

- VIEW LOG:** A description stating "The View Log displays the activities occurring on the device." Below this are two buttons: "Save Settings" and "Don't Save Settings".
- LOG TYPE & LEVEL:** A section with two rows of radio button options:
  - Log Type:  System,  Firewall,  Security
  - Log Level:  Critical,  Warning,  Information
- LOG FILES:** A section with navigation buttons: "First Page", "Last Page", "Previous", "Next", "Clear", and "Link To Log Settings". Below these buttons, it shows "Page 1 / 1" and a table header with columns for "Time" and "Message".

On the right side of the interface, there is a "Helpful Hints..." section with a bullet point: "Check the log frequently to detect unauthorized network usage."

# Stats

The screen below displays the Traffic Statistics. Here you can view the amount of packets that pass through the DIR-600 on both the Internet and the LAN ports. The traffic counter will reset if the device is rebooted.

<b>DIR-600</b> ///	<b>SETUP</b>	<b>ADVANCED</b>	<b>TOOLS</b>	<b>STATUS</b>	<b>SUPPORT</b>											
DEVICE INFO	<b>TRAFFIC STATISTICS</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>This is a summary displaying the number of packets that have passed between the Internet and the LAN since the router was last initialized.</li> </ul>											
LOGS	Traffic Statistics displays Receive and Transmit packets passing through the device.															
STATISTICS	<b>TRAFFIC STATISTICS</b>															
INTERNET SESSIONS	<input type="button" value="Refresh"/> <input type="button" value="Reset"/>															
WIRELESS	<table border="1"> <thead> <tr> <th></th> <th>Receive</th> <th>Transmit</th> </tr> </thead> <tbody> <tr> <td><b>Internet</b></td> <td>19603 Packets</td> <td>29107 Packets</td> </tr> <tr> <td><b>LAN</b></td> <td>8048 Packets</td> <td>30199 Packets</td> </tr> <tr> <td><b>WIRELESS 11n</b></td> <td>257528 Packets</td> <td>4233 Packets</td> </tr> </tbody> </table>						Receive	Transmit	<b>Internet</b>	19603 Packets	29107 Packets	<b>LAN</b>	8048 Packets	30199 Packets	<b>WIRELESS 11n</b>	257528 Packets
	Receive	Transmit														
<b>Internet</b>	19603 Packets	29107 Packets														
<b>LAN</b>	8048 Packets	30199 Packets														
<b>WIRELESS 11n</b>	257528 Packets	4233 Packets														
<b>WIRELESS</b>																

# Internet Sessions

The Internet Sessions page displays full details of active Internet sessions through your router. An Internet session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.

**IP Address:** The IP address and, where appropriate, port number of the local application.

**TCP Session:** This shows the number of TCP packets being sent from the source IP address.

**UDP Session:** This shows the number of UDP packets being sent from the source IP address.

DIR-600	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
DEVICE INFO	<b>INTERNET SESSIONS</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>An Active session is a conversation between a program or application on a LAN-side computer and a program or application on a WAN-side computer.</li> </ul>
LOGS	This page display Source and Destination packets passing through the device. <input type="button" value="Refresh"/>				
STATISTICS	<b>NAPT SESSIONS</b>				
INTERNET SESSIONS	TCP Sessions : 14 UDP Sessions : 1 Total : 15				
WIRELESS	<b>NAPT ACTIVE SESSIONS</b>				
	<b>IP Address</b>	<b>TCP Sessions</b>	<b>UDP Sessions</b>		
	192.168.0.20	0	1		
	192.168.0.100	14	0		



# Wireless

The wireless client table displays a list of current connected wireless clients. This table also displays the connection time and MAC address of the connected wireless clients.

DEVICE INFO	<b>CONNECTED WIRELESS CLIENT LIST</b>	<b>Helpful Hints...</b> <ul style="list-style-type: none"><li>This is a list of all wireless clients that are currently connected to your wireless router.</li></ul>				
LOGS	View the wireless clients that are connected to the router. (A client might linger in the list for a few minutes after an unexpected disconnect.)					
STATISTICS						
INTERNET SESSIONS	<b>NUMBER OF WIRELESS CLIENTS: 0</b>					
WIRELESS						
<table border="1"><thead><tr><th>SSID</th><th>MAC Address</th><th>IP Address</th><th>Mode</th></tr></thead></table>		SSID	MAC Address	IP Address	Mode	
SSID	MAC Address	IP Address	Mode			

**WIRELESS**

# Support

The screenshot displays the D-Link DIR-600 web interface. At the top, the D-Link logo is visible. Below it, a navigation bar contains tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The SUPPORT tab is selected. On the left side, a vertical menu lists the main sections: MENU, SETUP, ADVANCED, TOOLS, and STATUS. The main content area is titled 'SUPPORT MENU' and contains several sub-sections:

- SUPPORT MENU**
  - [Setup](#)
  - [Advanced](#)
  - [Tools](#)
  - [Status](#)
- SETUP HELP**
  - [Internet](#)
  - [Wireless Settings](#)
  - [Network Settings](#)
- ADVANCED HELP**
  - [Virtual Server](#)
  - [Port Forwarding](#)
  - [Network Filter](#)
  - [Website Filter](#)
  - [Firewall Settings](#)
  - [Advanced Wireless](#)
  - [Advanced Network](#)
- TOOLS HELP**
  - [Device Administration](#)
  - [Time and Date](#)
  - [Email Settings](#)
  - [System](#)
  - [Firmware](#)
  - [Dynamic DNS](#)
  - [System Check](#)
- STATUS HELP**
  - [Device Info](#)
  - [Logs](#)
  - [Statistics](#)
  - [Internet Sessions](#)
  - [Wireless](#)

At the bottom of the interface, there is a 'WIRELESS' section header.

# Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-600 offers the following types of security:

- WPA2 (Wi-Fi Protected Access 2)
- WPA (Wi-Fi Protected Access)
- WPA2-PSK(Pre-Shared Key)
- WPA-PSK (Pre-Shared Key)

## What is WPA?

WPA, or Wi-Fi Protected Access, is a Wi-Fi standard that was designed to improve the security features of WEP (Wired Equivalent Privacy).

The 2 major improvements over WEP:

- Improved data encryption through the Temporal Key Integrity Protocol (TKIP). TKIP scrambles the keys using a hashing algorithm and, by adding an integrity-checking feature, ensures that the keys haven't been tampered with. WPA2 is based on 802.11i and uses Advanced Encryption Standard (AES) instead of TKIP.
- User authentication, which is generally missing in WEP, through the extensible authentication protocol (EAP). WEP regulates access to a wireless network based on a computer's hardware-specific MAC address, which is relatively simple to be sniffed out and stolen. EAP is built on a more secure public-key encryption system to ensure that only authorized network users can access the network.

WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?\*&\_) and spaces. This key must be the exact same key entered on your wireless router or access point.

# Wireless Connection Setup Wizard

To run the security wizard, browse to the Setup page and then click the **Wireless Connection Setup Wizard** button.

DIR-600 //	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
EASY SETUP	<b>WIRELESS SETTINGS</b>				<b>Helpful Hints...</b> <ul style="list-style-type: none"> <li>• If you are new to wireless networking and have never configured a wireless router before, click on <b>Wireless Connection Setup Wizard</b> and the router will guide you through a few simple steps to get your wireless network up and running.</li> <li>• If you consider yourself an advanced user and have configured a wireless router before, click <b>Manual Wireless Connection Setup</b> to input all the settings manually.</li> </ul>
INTERNET	The following Web-based wizards are designed to assist you in your wireless network setup and wireless device connection.				
WIRELESS SETTINGS	Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.				
NETWORK SETTINGS	<b>WIRELESS NETWORK SETUP WIZARD</b> This wizard is designed to assist you in your wireless network setup. It will guide you through step-by-step instructions on how to set up your wireless network and how to make it secure. <div style="text-align: center;"> <input type="button" value="Wireless Network Setup Wizard"/> </div> <p><b>Note:</b> Some changes made using this Setup Wizard may require you to change some settings on your wireless client adapters so they can still connect to the D-Link Router.</p>				
	<b>MANUAL WIRELESS NETWORK SETUP</b> If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below. <div style="text-align: center;"> <input type="button" value="Manual Wireless Network Setup"/> </div>				
<b>WIRELESS</b>					

Enter the SSID (Service Set Identifier). The SSID is the name of your wireless network. Create a name using up to 32 characters. The SSID is case-sensitive.

If you would like the router to automatically assign a network key to your network, you can click the button- “automatically assign a network key”.

Click Next to continue.

Or if you would like to create the key by your own, please click the button- “ Manual assign a Network key” and click Next to continue. WPA/WPA2 AUTO for wireless transmission encryption.

All D-Link devices supports WPA to protect your wireless network.

**STEP 1: WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD**

Give your network a name, using up to 32 characters.

Wireless Network Name (SSID) :

**Automatically assign a network key (Recommended)**  
To prevent outsiders from accessing your network, the router will automatically assign a security to your network.

**Manually assign a network key**  
Use this options if you prefer to create our own key.

**Note: All D-Link wireless adapters currently support WPA.**

**STEP 2: SET YOUR WIRELESS SECURITY PASSWORD**

You have selected your security level - you will need to set a wireless security password.

The WPA (Wi-Fi Protected Access) key must meet one of following guidelines:

- Between 8 and 63 characters (A longer WPA key is more secure than a short one )
- Exactly 64 characters using 0-9 and A-F

Wireless Security Password :

**Note: You will need to enter the same password as keys in this step into your wireless clients in order to enable proper wireless communication.**

Click **Save** to finish the Security Wizard.

**SETUP COMPLETE!**

Below is a detailed summary of your wireless security settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

<b>Wireless Band</b> : 2.4GHz Band
<b>Wireless Network Name (SSID)</b> : dlink
<b>Security Mode</b> : Auto (WPA or WPA2) - Personal
<b>Cipher Type</b> : TKIP and AES
<b>Pre-Shared Key</b> : 12345678

# Configure WPA-Personal (PSK)

It is recommended to enable encryption on your wireless router before your wireless network adapters. Please establish wireless connectivity before enabling encryption. Your wireless signal may degrade when enabling encryption due to the added overhead.

1. Log into the web-based configuration by opening a web browser and entering the IP address of the router (192.168.0.1). Click on **Setup** and then click **Wireless Settings** on the left side and then click **Manual Wireless Network Setup**.
2. Next to *Security Mode*, select **WPA/WPA2**.
3. Next to *Cypher Type*, select **AUTO(TKIP/AES) TKIP**, or **AES**. If you have wireless clients that use both types, use **AUTO(TKIP/AES)**.
4. Next to *Pre-Shared Key*, enter a key (passphrase). The key is entered as a pass-phrase in ASCII format at both ends of the wireless connection. The pass-phrase must be between 8-63 characters.
5. Click **Save Settings** to save your settings. If you are configuring the router with a wireless adapter, you will lose connectivity until you enable WPA-PSK on your adapter and enter the same passphrase as you did on the router.

**WIRELESS SECURITY MODE**

Security Mode :

**WPA/WPA2**

WPA/WPA2 requires stations to use high grade encryption and authentication.

Cipher Type :

Network Key :

(8~63 ASCII or 64 HEX)

# Connect to a Wireless Network Using Windows 7

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Click on the wireless icon in your system tray (lower-right corner).



Wireless Icon

2. The utility will display any available wireless networks in your area.



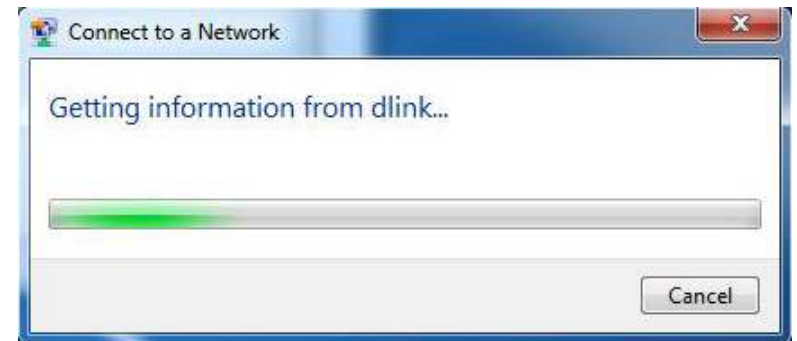


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the Networking Basics section in this manual for more information.



4. The following window appears while your computer tries to connect to the router.



5. Enter the same security key or passphrase that is on your router and click **Connect**. You can also connect by pushing the WPS button on the router.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



# Using Windows® XP

Windows® XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility or Windows® 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows® XP utility as seen below.

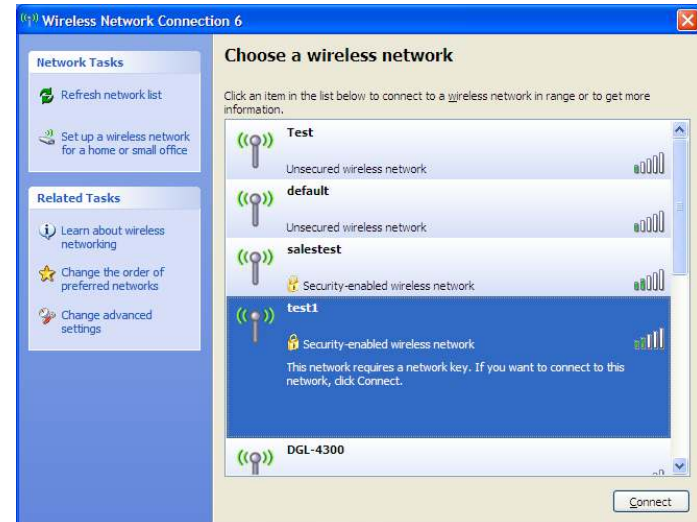
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.



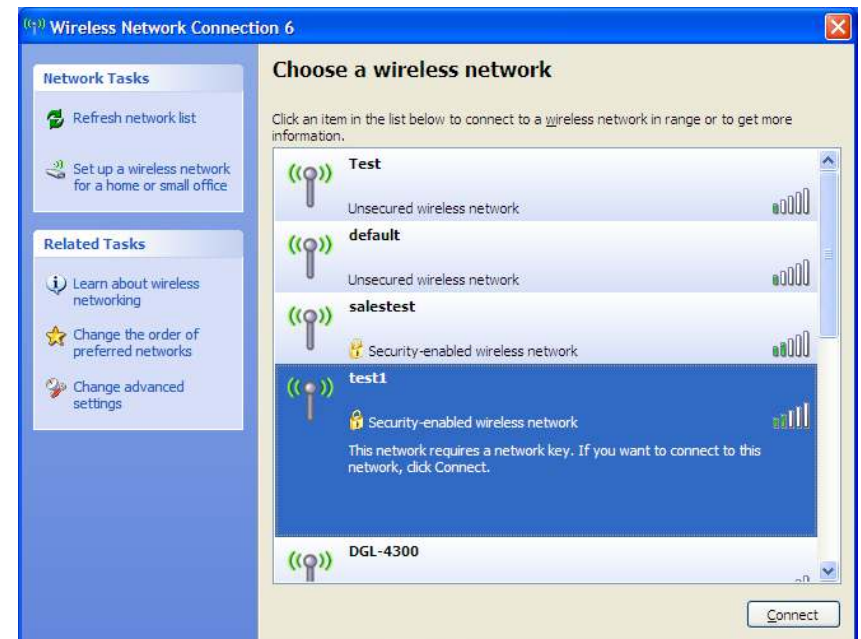
## Configure WPA-PSK

It is recommended to enable WEP on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WEP key being used.

1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.

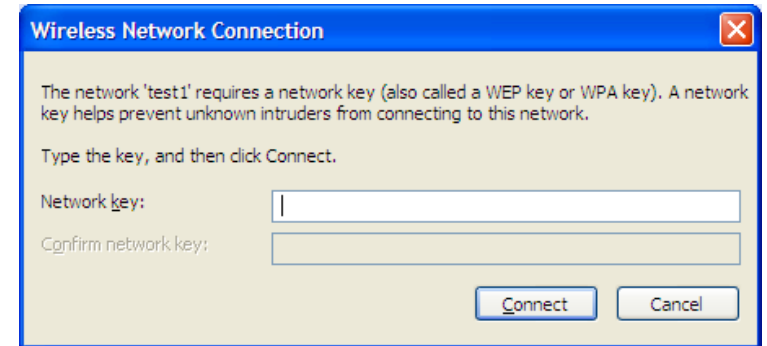


2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK passphrase and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless router.



# Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DIR-600. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screen shots on your computer will look similar to the following examples.)

## 1. Why can't I access the web-based configuration utility?

When entering the IP address of the D-Link router (192.168.0.1 for example), you are not connecting to a website on the Internet or have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Internet Explorer 6.0 or higher
  - Netscape 8 or higher
  - Mozilla 1.7.12 (5.0) or higher
  - Opera 8.5 or higher
  - Safari 1.2 or higher (with Java 1.3.1 or higher)
  - Camino 0.8.4 or higher
  - Firefox 1.5 or higher
- Verify physical connectivity by checking for solid link lights on the device. If you do not get a solid link light, try using a different cable or connect to a different port on the device if possible. If the computer is turned off, the link light may not be on.
- Disable any Internet security software running on the computer. Software firewalls such as Zone Alarm, Black Ice, Sygate, Norton Personal Firewall, and Windows® XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:
  - Go to **Start > Settings > Control Panel**. Double-click the **Internet Options** icon. From the **Security** tab, click the button to restore the settings to their defaults.
  - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
  - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
  - Close your web browser (if open) and open it.
- Access the web management. Open your web browser and enter the IP address of your D-Link router in the address bar. This should open the login page for your the web management.
- If you still cannot access the configuration, unplug the power to the router for 10 seconds and plug back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

## 2. What can I do if I forgot my password?

If you forgot your password, you must reset your router. Unfortunately this process will change all your settings back to the factory defaults.

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is 192.168.0.1. When logging in, the username is **admin** and leave the password box empty.

### 3. Why can't I connect to certain sites or send and receive e-mails when connecting through my router?

If you are having a problem sending or receiving e-mail, or connecting to secure sites such as eBay, banking sites, and Hotmail, we suggest lowering the MTU in increments of ten (Ex. 1492, 1482, 1472, etc).

**Note: AOL DSL+ users must use MTU of 1400.**

To find the proper MTU Size, you'll have to do a special ping of the destination you're trying to go to. A destination could be another computer, or a URL.

- Click on **Start** and then click **Run**.
- Windows® 95, 98, and Me users type in **command** (Windows® NT, 2000, and XP users type in **cmd**) and press **Enter** (or click **OK**).
- Once the window opens, you'll need to do a special ping. Use the following syntax:

**ping [url] [-f] [-l] [MTU value]**

Example: **ping yahoo.com -f -l 1472**

```
C:\>ping yahoo.com -f -l 1482
Pinging yahoo.com [66.94.234.13] with 1482 bytes of data:
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.
Packet needs to be fragmented but DF set.

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping yahoo.com -f -l 1472
Pinging yahoo.com [66.94.234.13] with 1472 bytes of data:
Reply from 66.94.234.13: bytes=1472 time=93ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=109ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=125ms TTL=52
Reply from 66.94.234.13: bytes=1472 time=203ms TTL=52

Ping statistics for 66.94.234.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 93ms, Maximum = 203ms, Average = 132ms

C:\>
```



You should start at 1472 and work your way down by 10 each time. Once you get a reply, go up by 2 until you get a fragmented packet. Take that value and add 28 to the value to account for the various TCP/IP headers. For example, lets say that 1452 was the proper value, the actual MTU size would be 1480, which is the optimum for the network we're working with (1452+28=1480).

Once you find your MTU, you can now configure your router with the proper MTU size.

To change the MTU rate on your router follow the steps below:

- Open your browser, enter the IP address of your router (192.168.0.1) and click **OK**.
- Enter your username (admin) and password (blank by default). Click **OK** to enter the web configuration page for the device.
- Click on **Setup** and then click **Manual Configure**.
- To change the MTU enter the number in the MTU field and click **Save Settings** to save your settings.
- Test your e-mail. If changing the MTU does not resolve the problem, continue changing the MTU in increments of ten.

# 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. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs 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.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A Wireless Router is a device used to provide this link.

## What is Wireless?

Wireless or Wi-Fi technology is another way of connecting your computer to the network without using wires. Wi-Fi uses radio frequency to connect wirelessly, so you have the freedom to connect computers anywhere in your home or office network.

## Why D-Link Wireless?

D-Link is the worldwide leader and award winning designer, developer, and manufacturer of networking products. D-Link delivers the performance you need at a price you can afford. D-Link has all the products you need to build your network.

## How does wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

## Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

## Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away.

Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

## Who uses wireless?

Wireless technology has become so popular in recent years that almost everyone is using it, whether it's for home, office, business, D-Link has a wireless solution for it.

### Home

- Gives everyone at home broadband access
- Surf the web, check e-mail, instant message, and etc
- Gets rid of the cables around the house
- Simple and easy to use

### Small Office and Home Office

- Stay on top of everything at home as you would at office
- Remotely access your office network from home
- Share Internet connection and printer with multiple computers
- No need to dedicate office space

## Where is wireless used?

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a D-Link USB Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

## Tips

Here are a few things to keep in mind, when you install a wireless network.

### Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

### Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

## Security

Don't let you next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

# Wireless Modes

There are basically two modes of networking:

- **Infrastructure** – All wireless clients will connect to an access point or wireless router.
- **Ad-Hoc** – Directly connecting to another computer, for peer-to-peer communication, using wireless network adapters on each computer, such as two or more DWM-140 wireless network USB adapters.

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point.

An Ad-Hoc network contains only clients, such as laptops with wireless cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

# Networking Basics

## Check your IP address

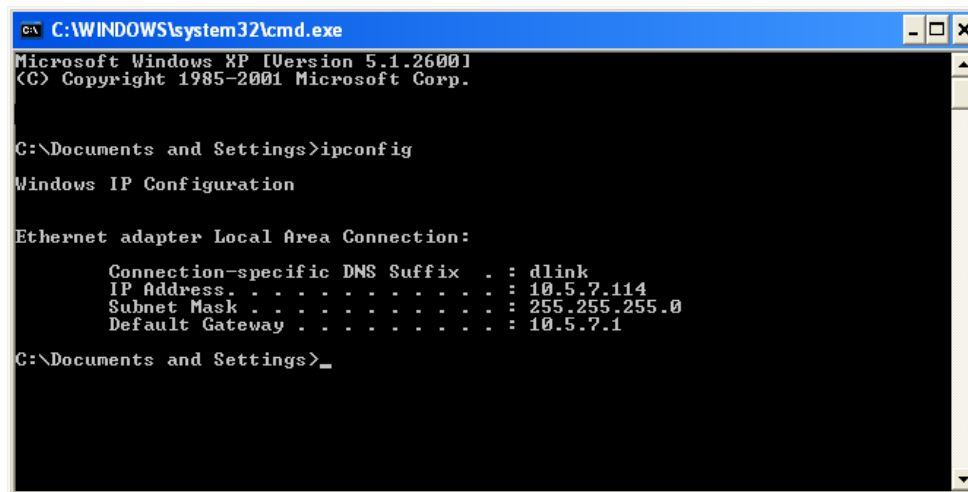
After you install your adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start > Run**. In the run box type *cmd* and click **OK**. (Windows Vista® users type in the **Start Search** box.)

At the prompt, type *ipconfig* and press **Enter**.

This will display the IP address, subnet mask, and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : dlink
    IP Address . . . . . : 10.5.7.114
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.5.7.1

C:\Documents and Settings>_
```

## Statically Assign an IP address

If you are not using a DHCP capable gateway/router, or you need to assign a static IP address, please follow the steps below:

### Step 1

Windows Vista® - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage Network Connections.**

Windows® XP - Click on **Start > Control Panel > Network Connections.**

Windows® 2000 - From the desktop, right-click **My Network Places > Properties.**

### Step 2

Right-click on the **Local Area Connection** which represents your network adapter and select **Properties.**

### Step 3

Highlight **Internet Protocol (TCP/IP)** and click **Properties.**

### Step 4

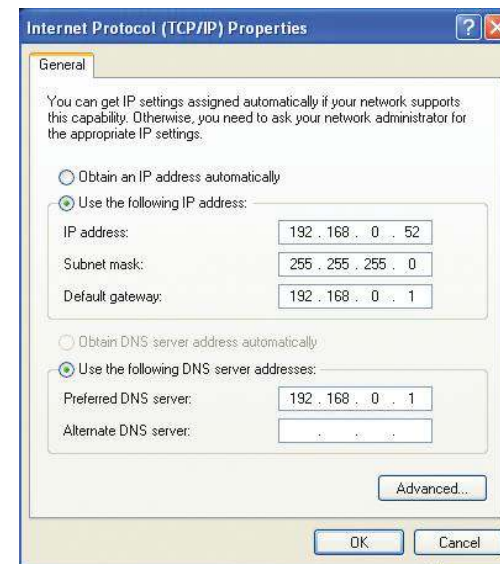
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

**Example:** If the router's LAN IP address is 192.168.0.1, make your IP address 192.168.0.X where X is a number between 2 and 99. Make sure that the number you choose is not in use on the network. Set Default Gateway the same as the LAN IP address of your router (192.168.0.1).

Set Primary DNS the same as the LAN IP address of your router (192.168.0.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

### Step 5

Click **OK** twice to save your settings.





# Technical Specifications

## Standards

- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x

## Security

- 64/128-bit WEP
- WPA-Personal
- WPA2-Personal

## Wireless Signal Rates\*

- 150Mbps
- 54Mbps
- 36Mbps
- 18Mbps
- 11Mbps
- 6Mbps
- 2Mbps
- 48Mbps
- 24Mbps
- 12Mbps
- 9Mbps
- 5.5Mbps
- 1Mbps

## Frequency Range

- 2.4GHz to 2.483GHz

## Transmitter Output Power

- 17dBm  $\pm$  2dB

## LEDs

- Power
- WLAN
- WPS
- Internet
- LAN (10/100)

## Operating Temperature

- 32°F to 104°F ( 0°C to 40°C)

## Operating Humidity

- 10%-90% non-condensing

## Storage Humidity

- 5%-95% non-condensing

## Safety & Emissions

- FCC
- CE
- C-tick

## Dimensions

- L = 4.4 inches
- W = 5.8 inches
- H = 1.2 inches

## Warranty

- 1 Year Limited

\* Maximum wireless signal rate derived from IEEE Standard 802.11g and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental factors will adversely affect wireless signal range.

Copyright ©2010 by D-Link Corporation/D-Link Systems, Inc. All rights reserved.

**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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

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

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

**FCC Caution:**

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**IMPORTANT NOTE:**

**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 & your body.

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

## Free Manuals Download Website

<http://myh66.com>

<http://usermanuals.us>

<http://www.somanuals.com>

<http://www.4manuals.cc>

<http://www.manual-lib.com>

<http://www.404manual.com>

<http://www.luxmanual.com>

<http://aubethermostatmanual.com>

Golf course search by state

<http://golfingnear.com>

Email search by domain

<http://emailbydomain.com>

Auto manuals search

<http://auto.somanuals.com>

TV manuals search

<http://tv.somanuals.com>