



# User Manual

## Wireless N 300 Cloud Router

DIR-605L

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# 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	December 02, 2011	• First release version
4.0	August 22, 2012	• First update
5.0	December 13, 2013	• Second update

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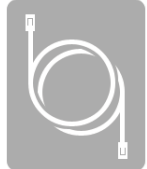
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# Package Contents



DIR-605L Wireless N 300 Cloud Router



Ethernet Cable



Power Adapter



Quick Installation Guide

**Note:** Always attach the power cord plug to the power supply, before inserting the power cord and connected power supply to the wall outlet. Using a power supply with a different voltage rating than the one included with the DIR-605L 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 802.11b, 802.11g, 802.11n 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 8 or higher</li><li>• Firefox 2.0 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-605L provides up to 300 Mbps\* 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 802.11b and 802.11g Devices** - The DIR-605L is fully compatible with the IEEE 802.11b and IEEE 802.11g standards, so it can connect with existing 802.11b and IEEE 802.11g wireless adapters and devices.
- **mydlink Cloud Service** - The DIR-605L features a new mydlink cloud service that pushes information such as firmware upgrade notifications, user activity, and intrusion alerts, to the mydlink app on Android and Apple mobile devices. You can monitor a user's online activity with real-time Web-browsing history, maintaining a safe and secure environment, especially for children at home. To ensure that your router is up-to-date with the latest features, mydlink will also notify you when an update is available for your router.
- **Easy Setup Wizard** - Through its easy-to-use Web-based user interface, the DIR-605L lets you control what information is accessible to those on the wireless network, whether from the Internet or from your internal network. Simply 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

## LEDs

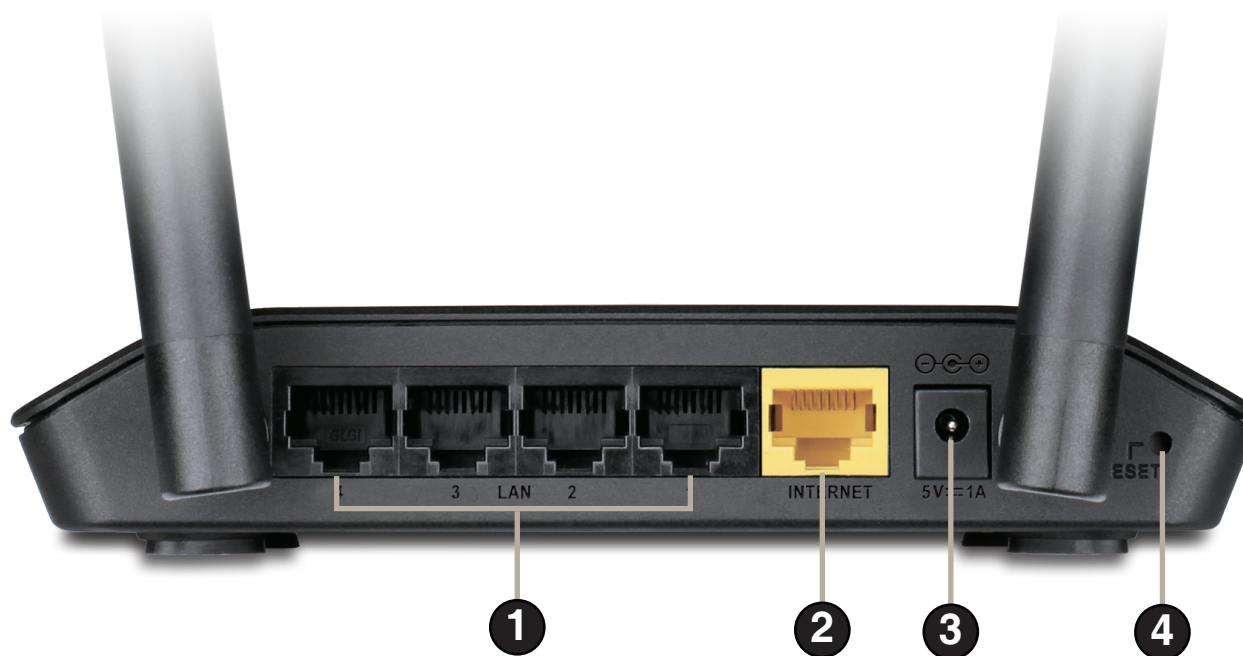


<b>1</b>	Power LED	A solid green light indicates a proper connection to the power supply.
<b>2</b>	Internet	A solid light indicates connection on the WAN port. This LED blinks during wireless data transmission.
<b>3</b>	Wireless LED	A solid light indicates that the wireless segment is ready. This LED blinks during wireless data transmission.
<b>4</b>	LAN	A solid light indicates connection on the LAN port. This LED blinks during wireless data transmission.



# Hardware Overview

## Connections



1	LAN Ports (1-4)	Connect Ethernet devices such as computers, switches, and hubs.
2	Internet Port	Connect your DSL, cable modem or other Internet connection here to provide Internet connectivity to the router.
3	Power Receptor	Receptor for the supplied power adapter.
4	Reset	Pressing the Reset button restores the router to its original factory default settings.

# 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.
- When running the Setup Wizard, make sure the computer is connected to the Internet and online or the wizard will not work. If you have disconnected any hardware, re-connect your computer back to the modem and make sure you are online.

# 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 2.4 GHz 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 2.4 GHz 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

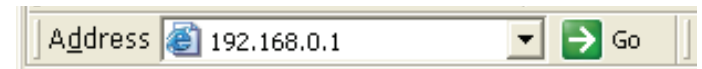
If you are connecting the router to a cable/DSL/satellite modem, please follow the steps below:

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 plug it into the WAN 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. Connect the power adapter to the router and plug it into 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, Internet, and the LAN LEDs (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. Go to page 9 to configure your router.

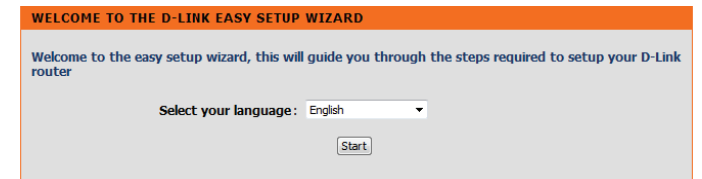
# Configuration Easy Setup Wizard

This section will show you how to configure your new D-Link wireless router using the Easy Setup Wizard.

**Step 1:** To access the configuration utility, open a Web browser such as Internet Explorer and enter the IP address of the router (192.168.0.1) or **http://dlinkrouter**.



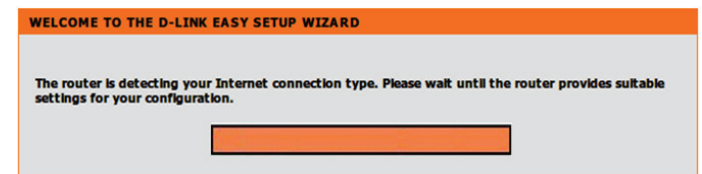
**Step 2:** Select your preferred language and click **Start**.



**Step 3:** Select **Auto Configuration** (or **Manual Configuration** if you wish to manually configured your settings) and click **Next** to continue.



**Step 4:** If you selected **Auto Configuration**, the router will detect your Internet type.



**Step 5:** You can configure your custom wireless settings on the next screen. Click **Next** when you are done.

**Step 6:** You can change the username and password for your router's administrator account. Click **Next** when you are done.

**Step 7:** Select the Time Zone for your location. Click **Next** to save the settings. The "Easy Setup Complete" page will display your configuration summary.

**Step 8:** Click **Configure** next to "mydlink Account" to proceed to setup mydlink service;

OR

Click **Save** to skip mydlink and store your settings.

**STEP 1: CONFIGURE YOUR INTERNET CONNECTION**

Internet Connection

The result of Wan auto detection is: Dynamic IP (DHCP)

Internet Connection: Dynamic IP (DHCP) [What is this?](#)

Wireless Settings

Network Name (SSID): dlink

Security Mode:  Disable Wireless Security (Not recommended)  AUTO-WPA/WPA2(Recommended)

Network Key:

Auto generate network key

[Prev](#) [Next](#)

**STEP 2: SET YOUR PASSWORD**

By default, your new D-Link Router does not have a password configured for administrator access to the Web-based configuration pages. To secure your new networking device, please set and verify a password below

Password:

Confirm Password:

[Prev](#) [Next](#)

**STEP 3: SELECT YOUR TIME ZONE**

Select the appropriate time zone for your location. This information is required to configure the time-based options for the router.

Time Zone: (GMT+08:00) Taipei

[Prev](#) [Next](#)

**EASY SETUP COMPLETE**

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: **Disconnected**

Wireless Settings

Wireless Network Name (SSID): dir605-dan Status: **Encryption** [Configure](#)

Security: Auto (WPA or WPA2) - Personal

Network Key: 11111111

Device Info

User Name: admin

Password: 111111

mydlink Account

You have not activated mydlink service. Status: **Not Connected** [Configure](#)

Save my network settings

[Save](#)

**Step 9:** If you do not have a mydlink account, click **No, I want to register with a new mydlink account** and complete the registration form.

Click **Register**.

OR

If you already have a mydlink account, click **Yes, I have a mydlink account** and enter your account name and password.

Click **Login**.

**Step 10:** On the next screen, there will be a note indicating mydlink service is activated and the status will show "Connected". You have completed the setup wizard and can click **Manual Setup** to continue to the management UI or simply close your browser.

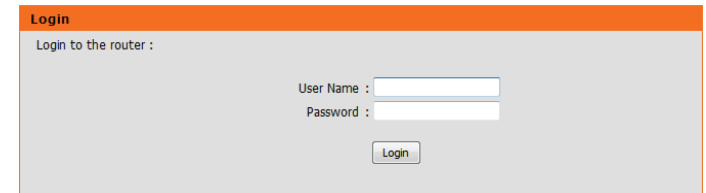
The screenshot shows the 'CONFIGURE YOUR MYDLINK ACCOUNT' registration page. At the top, it asks 'Do you have mydlink account?' with two radio button options: 'Yes, I have a mydlink account.' and 'No, I want to register and login with a new mydlink account.' The second option is selected. Below this, it says 'Please fulfill the options to complete the registration.' and lists four input fields: 'E-mail Address (Account Name):', 'Password:', 'Confirm Password:', and 'Last name:'. There is also a 'First Name:' field. A link 'What is this?' is next to the email field. At the bottom, there is a checkbox for 'I Accept the mydlink terms and conditions.' and two buttons: 'Register' and 'Back'.

The screenshot shows the 'CONFIGURE YOUR MYDLINK ACCOUNT' login page. It asks 'Do you have mydlink account?' with two radio button options: 'Yes, I have a mydlink account.' (selected) and 'No, I want to register and login with a new mydlink account.' Below this, there are two input fields: 'E-mail Address (Account Name):' and 'Password:'. At the bottom, there are two buttons: 'Login' and 'Back'.

The screenshot shows the 'CURRENT NETWORK SETTING' screen. It has an orange header. Below the header, there is a paragraph of text: 'The current network settings and the connection status are displayed below. If you want to reconfigure your wireless settings, please click the "Configure" button. You can also enter advanced settings by clicking "Manual Setup".' The screen is divided into four sections: 'Internet Settings' (Internet Connection: Dynamic IP (DHCP), Status: Connected), 'Wireless Settings' (Network Name (SSID): dir605-dan, Security: Auto (WPA or WPA2) - Personal, Network Key: 11111111, Status: Encryption, and a 'Configure' button), 'Device Info' (User Name: admin, Password: 111111), and 'mydlink Account' (You have activated mydlink service., Status: Connected, and a 'Configure' button). At the bottom, there are two buttons: 'Cancel' and 'Manual Setup'.

The next time you access the router's IP from your browser, you will need to log in with the username and password for the administrator account. Click **Login**.

The current network settings will be shown and you can click **Manual Setup** to continue to the management UI for further configuration.

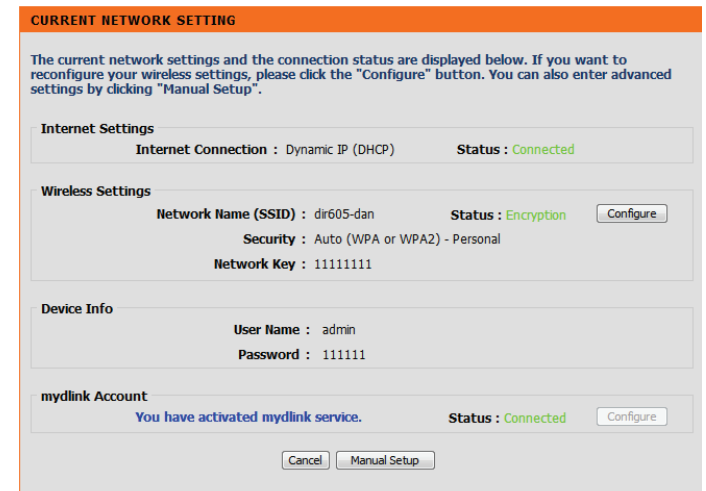


**Login**

Login to the router :

User Name :

Password :



**CURRENT NETWORK SETTING**

The current network settings and the connection status are displayed below. If you want to reconfigure your wireless settings, please click the "Configure" button. You can also enter advanced settings by clicking "Manual Setup".

**Internet Settings**

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

**Wireless Settings**

Network Name (SSID) : dir605-dan      Status : **Encryption**     

Security : Auto (WPA or WPA2) - Personal

Network Key : 11111111

**Device Info**

User Name : admin

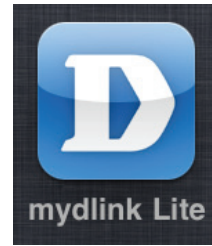
Password : 111111

**mydlink Account**

You have activated mydlink service.      Status : **Connected**



After the router is connected to mydlink service, you can download the “mydlink lite” app from Google Play or App Store for your mobile device!



After installation, simply log in with your mydlink account details and you can manage your router from anywhere!



# Internet Connection Setup

## Static IP (assigned by ISP)

Select Static IP Address if all WAN 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. Click **Save Settings** to apply them.

**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.

**MAC Address:** The default MAC address is set to the WAN'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 **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet card installed by your ISP and replace the WAN MAC address with the MAC address of the router. It is not recommended that you change the default MAC address unless required by your ISP.

**Primary DNS Address:** Enter the primary DNS server IP address assigned by your ISP.

**Secondary DNS Address:** Enter an optional secondary DNS address.

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

**INTERNET CONNECTION TYPE**

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

My Internet Connection is :  ▼

---

**STATIC IP ADDRESS INTERNET CONNECTION TYPE**

Enter the static address information provided by your Internet Service Provider (ISP).

IP Address :

Subnet Mask :

Default Gateway :

MAC Address :  -  -  -  -  -  (optional)

Primary DNS Server :

Secondary DNS Server :  (optional)

MTU :  bytes MTU default 1500

# Internet Setup

## Dynamic IP (DHCP)

To manually set up the Internet connection, click the **Manual Internet Connection Setup** button on the router's opening window. Click **Save Settings** to apply them.

**Dynamic IP Address:** Choose Dynamic IP Address 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. The default host name is the device name of the router and may be changed.

**MAC Address:** The default MAC address is set to the WAN'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 **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet card installed by your ISP and replace the WAN MAC address with the MAC address of the router. It is not recommended that you change the default MAC address unless required by your ISP.

**Primary and Secondary DNS Addresses:** Enter the primary and secondary DNS (Domain Name Server) server IP addresses assigned by your ISP.

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

**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 :

MAC Address :  -  -  -  -  -  (optional)

Primary DNS Server :

Secondary DNS Server :  (optional)

MTU :  bytes MTU default 1500

# Internet Setup

## PPPoE

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. Click **Save Settings** to apply them.

**PPPoE:** Select **Dynamic** (most common) or **Static**. Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

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

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

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

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

**MAC Address:** The default MAC address is set to the WAN'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 **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet card installed by your ISP and replace the WAN MAC address with the MAC address of the router. It is not recommended that you change the default MAC address unless required by your ISP.

**Primary and Secondary DNS Addresses:** Enter the primary and secondary DNS server addresses (Static PPPoE only).

**INTERNET CONNECTION TYPE**

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

My Internet Connection is : PPPoE(Username / Password) ▼

---

**PPPOE**

Enter the information provided by your Internet Service Provider (ISP).

Dynamic IP (DHCP)    Static IP

User Name :

Password :

Confirm Password :

Service Name :  (optional)

IP Address :

MAC Address :  -  -  -  -  -  (optional)

Receive DNS from ISP    Enter DNS Manually

Primary DNS Server :

Secondary DNS Server :  (optional)

Maximum Idle Time :  (minutes, 0=infinite)

MTU :  bytes MTU default 1492

Connection mode select :  Always ▼   Manual  Connection-on demand

**Maximum Idle Time:** Enter a maximum idle time during which the Internet connection is maintained during inactivity.

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

**Connection Mode Select:** Select either **Always-on**, **Manual**, or **Connect-on demand**.

# Internet Setup

## PPTP

Choose PPTP (Point-to-Point-Tunneling Protocol) if your ISP uses a PPTP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

**PPTP:** Select **Dynamic** (most common) or **Static**. Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

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

**Subnet Mask:** Enter the primary and secondary DNS server addresses (Static PPTP only).

**Gateway:** Enter the gateway IP address provided by your ISP.

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

**MAC Address:** The default MAC address is set to the WAN'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 **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet card installed by your ISP and replace the WAN MAC address with the MAC address of the router. It is not recommended that you change the default MAC address unless required by your ISP.

**Server IP:** Enter the server IP address provided by your ISP (optional).

**PPTP Account:** Enter your PPTP account name.

**INTERNET CONNECTION TYPE**

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

My Internet Connection is : PPTP(Username / Password) ▼

---

**PPTP INTERNET CONNECTION TYPE :**

Enter the information provided by your Internet Service Provider (ISP).

Dynamic IP (DHCP)    Static IP

PPTP IP Address :

PPTP Subnet Mask :

PPTP Gateway IP Address :

Primary DNS Server :

MAC Address :  -  -  -  -  -  (optional)

PPTP Server IP Address :

User Name :

Password :

Confirm Password :

Maximum Idle Time :  (minutes, 0=infinite)

MTU :  bytes

Connection mode select :  Always ▼   Manual  Connection-on demand

**PPTP Password:** Enter your PPTP password, then retype the password in the next box.

**Maximum Idle Time:** Enter a maximum idle time during which the Internet connection is maintained during inactivity.

**MTU:** Maximum Transmission Unit - You may need to change the MTU for optimal performance.

**Connect Mode:** Select either **Always-on**, **Manual**, or **Connect-on demand**.

# Internet Setup

## L2TP

Choose L2TP (Layer 2 Tunneling Protocol) if your ISP uses a L2TP connection. Your ISP will provide you with a username and password. This option is typically used for DSL services.

**L2TP:** Select **Dynamic** (most common) or **Static**. Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

**IP Address:** Enter the IP address (Static L2TP only).

**Subnet Mask:** Enter the primary and secondary DNS server addresses (Static L2TP only).

**Gateway:** Enter the gateway IP address provided by your ISP.

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

**MAC Address:** The default MAC address is set to the WAN'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 **Copy Your PC's MAC Address** button to copy the MAC address of the Ethernet card installed by your ISP and replace the WAN MAC address with the MAC address of the router. It is not recommended that you change the default MAC address unless required by your ISP.

**Server IP:** Enter the server IP address provided by your ISP (optional).

**L2TP Account:** Enter your L2TP account name.

**INTERNET CONNECTION TYPE**

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

My Internet Connection is : L2TP(Username / Password) ▾

---

**L2TP INTERNET CONNECTION TYPE :**

Enter the information provided by your Internet Service Provider (ISP).

Dynamic IP (DHCP)
  Static IP

L2TP IP Address :

L2TP Subnet Mask :

L2TP Gateway IP Address :

Primary DNS Server :

MAC Address :  -  -  -  -  -  (optional)

L2TP Server IP Address :

User Name :

Password :

Confirm Password :

Maximum Idle Time :  (minutes, 0=infinite)

MTU :  bytes

Connection mode select :  Always ▾ 
  
 Manual  Connection-on demand



**L2TP Password:** Enter your L2TP password, then retype the password in the next box.

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

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

**Connect Mode:** Select either **Always-on**, **Manual**, or **Connect-on demand**.

# Wireless Connection Setup

## Using the Setup Wizard

Wireless settings for the router may be configured manually or by using a wizard. To use the wizard, click the **Wireless Connection Setup Wizard** button, then follow the steps described below. To configure the wireless settings manually, click the **Manual Wireless Connection Setup** button. The parameters for this window are described later in this section. The Wireless Security section that directly follows this section provides additional explanation on how to configure the WEP, WPA, WPA2, and WPA/WPA2 wireless security mode options.

The screenshot shows the router's configuration page with a sidebar on the left containing menu items like 'Easy Setup', 'Internet Setup', 'Wireless Setup', 'LAN Setup', 'Time and Date', 'Parental Control', and 'Logout'. The main content area is titled 'WIRELESS CONNECTION' and contains the following text:

There are 2 ways to setup your wireless connection. You can use the Wireless Connection Setup wizard or you can manually configure the connection.

Please note that changes made on this section will also need to be duplicated to your wireless clients and PC.

**WIRELESS CONNECTION SETUP WIZARD**

If you would like to utilize our easy to use Web-based Wizard to assist you in connecting your new D-Link Systems Wireless Router to the Internet, click on the button below.

[Wireless Connection Setup Wizard](#)

**Note:** Before launching the wizard, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.

**MANUAL WIRELESS CONNECTION OPTIONS**

If you would like to configure the Internet settings of your new D-Link Router manually, then click on the button below.

[Manual Wireless Connection Setup](#)

**Helpful Hints...**

If you are new to wireless networking and have never configured a wireless router before, click on **Wireless Network Setup Wizard** and the router will guide you through a few simple steps to get your wireless network up and running.

If you consider yourself an advanced user and have configured a wireless router before, click **Manual Wireless Network Setup** to input all the settings manually.

[More...](#)

**Step 1:** Click **Next** to continue.

**WELCOME TO THE D-LINK WIRELESS SECURITY SETUP WIZARD**

This wizard will guide you through a step-by-step process to set up your wireless network and make it secure.

- Step 1: Set your Wireless Network.
- Step 2: Set your Wireless Security Password

[Next](#) [Cancel](#)

**Step 2:** Enter a Wireless Network Name, select **Manually assign a network key**, then click **Next** to continue.

**Note:** Tick **Use WPA encryption** for better security.

**STEP 1: SETUP YOUR WIRELESS NETWORK**

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

Wireless Network Name (SSID)  (Also called the SSID)

No Encryption  
 Automatically assign a network key (Recommended)  
 To prevent outsiders from accessing your network, the router will automatically assign a security key (also called WEP or WPA key) to your network.  
 Manually assign a network key  
 Use this option if you prefer to create your own key.  
 Use WPA encryption instead of WEP (WPA is stronger than WEP and all D-LINK wireless client adapters support WPA)

[Prev](#) [Next](#) [Cancel](#)

**Step 3:** Enter a Wireless Security Password and click **Next** to continue.

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

You have selected your security level - you will need to set a wireless security password.  
The WEP (Wired Equivalent Privacy) key must meet one of following guidelines:

- Exactly 5 or 13 characters
- Exactly 10 or 26 characters using 0-9 and A-F

A longer WEP key is more secure than a short one

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.

**Step 4:** This window displays a summary of your wireless security settings. Print this out or record this information for storage in a safe place, then click **Save** to continue.

**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.

**Wireless Network Name (SSID) :** dlink  
**Wep Key Length :** 64 bits  
**Default WEP Key to Use :** 1  
**Authentication :** Open  
**Wep Key :** 1234567890

Note: In some smart wireless utilities (e.g. DLINK wireless utility or wireless zero configuration), you only select Wireless Network Name and enter Network Key to access Internet.

The router will save your new settings and reboot. After the process completes, the management page will be displayed.

**REBOOTING...**

Saving Changes and Restarting.

## Wireless Security

1. To enable wireless security on the router, use the drop-down menu to select the desired option. To enable WEP, select *Enable WEP Wireless Security (basic)*.
2. Next to **Authentication**, select either *Open* or *Shared Key*. Shared Key provides greater security.
3. Select either *64-bit* or *128-bit* encryption from the drop-down menu next to **WEP Encryption**.
4. Next to **Default Key Type**, select *WEP Key 1* and enter a WEP key that you create. Make sure you enter this key exactly on all your wireless devices. You may enter up to four different keys either using *Hex* or *ASCII*. *Hex* is recommended (letters A-F and numbers 0-9 are valid). In *ASCII* all numbers and letters are valid.
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 WEP on your adapter and enter the same WEP key as you did on the router.

**WIRELESS SECURITY MODE**

Security Mode: Enable WEP Wireless Security (basic) ▼

- Disable Wireless Security (not recommended)
- Enable WEP Wireless Security (basic)
- Enable WPA Only Wireless Security (enhanced)
- Enable WPA2 Only Wireless Security (enhanced)
- Enable WPA/WPA2 Wireless Security (enhanced)

**WEP**

WEP is the wireless encryption standard. To use it you must enter the same key(s) into the router and the wireless stations. For 64 bit keys you must enter 10 hex digits into each key box. For 128 bit keys you must enter 26 hex digits into each key box. A hex digit is either a number from 0 to 9 or a letter from A to F. For the most secure use of WEP set the authentication type to 'Shared Key' when WEP is enabled.

You may also enter any text string into a WEP key box, in which case it will be converted into a hexadecimal key using the ASCII values of the characters. A maximum of 5 text characters can be entered for 64 bit keys, and a maximum of 13 characters for 128 bit keys.

Authentication: Open ▼

Wep Key Length: 64Bit ▼

Default WEP Key to Use: WEP Key 1 ▼

WEPPassword:  (5 ASCII or 10 HEX)

### NOTE:

It is recommended to enable encryption on your wireless router before connecting 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. To enable WPA, WPA2, or WPA/WPA2, select either *Enable WPA Only Wireless Security (enhanced)*, *Enable WPA2 Only Wireless Security (enhanced)*, or *Enable WPA/WPA2 Wireless Security (enhanced)*.
2. Next to **Cipher Type**, select *TKIP*, *AES*, or *Both*.
3. Next to **PSK/EAP**, select *PSK*.
4. Next to **Network Key**, enter a passphrase. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?\*&\_) and spaces. Make sure you enter this key exactly the same on all other wireless clients.
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, WPA2, or WPA/WPA2 (whichever of the three options you have selected above) on your adapter and enter the same network key as you did on the router.

WIRELESS SECURITY MODE	
Security Mode :	<input type="text" value="Enable WPA Only Wireless Security (enhanced)"/>
WPA ONLY	
WPA Only requires stations to use high grade encryption and authentication.	
Cipher Type :	<input type="text" value="TKIP"/>
PSK / EAP :	<input type="text" value="PSK"/>
Network Key :	<input type="text"/> (8~63 ASCII or 64 HEX)

WIRELESS SECURITY MODE	
Security Mode :	<input type="text" value="Enable WPA2 Only Wireless Security (enhanced)"/>
WPA2 ONLY	
WPA2 Only requires stations to use high grade encryption and authentication.	
Cipher Type :	<input type="text" value="TKIP"/>
PSK / EAP :	<input type="text" value="PSK"/>
Network Key :	<input type="text"/> (8~63 ASCII or 64 HEX)

WIRELESS SECURITY MODE	
Security Mode :	<input type="text" value="Enable WPA/WPA2 Wireless Security (enhanced)"/>
WPA/ WPA2	
WPA/WPA2 requires stations to use high grade encryption and authentication.	
Cipher Type :	<input type="text" value="TKIP"/>
PSK / EAP :	<input type="text" value="PSK"/>
Network Key :	<input type="text"/> (8~63 ASCII or 64 HEX)

## Manual Wireless Connection Setup

You can configure your specific wireless network settings in this section. Click **Save Settings** to apply them.

**Wi-Fi Protected Setup:** To implement WPS, tick the **Enable** checkbox. Click either **Generate New PIN** or **Reset PIN to Default**, then configure the Wi-Fi settings below. Click **Add Wireless Device with WPS** to connect a WPS-enabled device.

**Wireless Mode:** Select between **Wireless Router**, **Access Point**, **WDS Only**, **WDS +AP**, **WDS +AP +Router** modes.

**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.

**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.

**Enable Auto Channel Selection:** This setting can be selected to allow the DIR-605L to choose the channel with the least amount of interference.

**Wireless Channel:** Indicates the channel setting for the DIR-605L. 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.

**Transmission Rate:** Use the drop-down menu to select the appropriate Transmission Rate in Mbits per second. Many users will want to use the default setting, *Best (automatic)*.

**WMM Enable:** Enable Wi-Fi Multimedia to enjoy basic quality of service features. WMM prioritizes traffic according to four access categories: voice, video, best effort, and background.

The screenshot displays the configuration interface for the DIR-605L router. The left sidebar contains navigation options: Easy Setup, Connection, Wireless Connection, LAN Setup, Time and Date, Parental Control Rules, and Logout. The main content area is titled 'WIRELESS' and includes the following sections:

- WIRELESS:** A message states: "Use this section to configure the wireless settings for your D-Link Router. Please note that changes made on this section may also need to be duplicated on your Wireless Client." Buttons for "Save Settings" and "Don't Save Settings" are present.
- WI-FI PROTECTED SETUP (ALSO CALLED WCN 2.0 IN WINDOWS VISTA):**
  - Enable:
  - Current PIN: 44571382
  - Buttons: Generate New PIN, Reset PIN to Default
  - Wi-Fi Protected Status: Enable / Configured
  - Buttons: Reset to Unconfigured, Add Wireless Device with WPS, WPS-PIN Unlock
- WIRELESS NETWORK SETTINGS:**
  - Wireless Mode: Wireless Router (dropdown)
  - Enable Wireless:
  - Wireless Network Name (SSID): dlink-dan (Also called the SSID)
  - Enable Auto Channel Selection:
  - Wireless Channel: 6 (dropdown)
  - Transmission Rate: Best (automatic) (Mbit/s) (dropdown)
  - WMM Enable:  (Wireless QoS)
  - Enable Hidden Wireless:  (Also called the SSID Broadcast)
- WIRELESS SECURITY MODE:**
  - Security Mode: Enable WPA/WPA2 Wireless Security (enhanced) (dropdown)
- WPA/WPA2:**
  - Message: WPA/WPA2 requires stations to use high grade encryption and authentication.
  - Cipher Type: AUTO(TKIP/AES) (dropdown)
  - PSK / EAP: PSK (dropdown)
  - Network Key: 11111111 (8~63 ASCII or 64 HEX)

Buttons for "Save Settings" and "Don't Save Settings" are located at the bottom of the WPA/WPA2 section.

**Helpful Hints...**  
Enable Auto Channel Scan so that the router can select the best possible channel for your wireless network to operate on.

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 scan to see what's available. For your wireless devices to connect to your router, you will need to manually enter the Wireless Network Name on each device.

If you have enabled Wireless Security, make sure you write down the Key or Passphrase that you have configured. You will need to enter this information on any wireless device that you connect to your wireless network.

[More...](#)

**Enable Hidden Wireless:** Check this option if you would not like the SSID of your wireless network to be broadcasted by the DIR-605L. If this option is checked, the SSID of the DIR-605L will not be seen by Site Survey utilities so your wireless clients will have to know the SSID of your DIR-605L in order to connect to it.

**Wireless Security Mode:** Select between **WEP, WPA Only, WPA2 Only, WPA/WPA2,** or **Disabled** wireless security. The fields below will change according to your choice and you can set a custom key for your network. You can refer to "Wireless Security" on page 58 for more details on these settings.

# LAN Setup

This section will allow you to change the local network settings of the router and to configure the DHCP settings. Click **Save Settings** to apply your settings.

**Router 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 **Apply**, you will need to enter the new IP address in your browser to get back into the configuration utility.

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

**Local Domain Name:** Enter the Domain name (Optional).

**Enable DNS Relay:** Check the box to transfer the DNS server information from your ISP to your computers. If unchecked, your computers will use the router as its DNS server.

SETUP	ADVANCED	MAINTENANCE	STATUS
<p><b>LAN SETUP</b></p> <p>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 the 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 here, you may need to adjust your PC's network settings to access the network again.</p> <p><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></p> <p>Save Settings      Don't Save Settings</p>			
<p><b>ROUTER SETTINGS</b></p> <p>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.</p> <p>Router IP Address: <input type="text" value="192.168.0.1"/></p> <p>Subnet Mask : <input type="text" value="255.255.255.0"/></p> <p>Local Domain Name : <input type="text"/></p> <p>Enable DNS Relay : <input checked="" type="checkbox"/></p>			



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

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

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

**DHCP Client List:** Displays currently connected client details.

**Avoid ARP Attack:** Tick this to enable ARP spoofing prevention feature.

**DHCP Reservation:** Enter the MAC address of specific clients to reserve an IP address for each one.

**DHCP SERVER SETTINGS**

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

Enable DHCP Server :

DHCP IP Address Range : 100 to 199 (address within the LAN subnet)

DHCP Lease Time : 1440 (minutes)

**DHCP CLIENT LIST**

Host Name	IP Address	MAC Address	Expired Time
07904PCWIN7E	192.168.0.100	44:37:e6:b5:ff:3d	23 Hours 10 Minutes

**AVOID ARP ATTACK**

Avoid Arp Attack :

**24--DHCP RESERVATION**

Remaining number of clients that can be configured : 24

	Computer Name	IP Address	MAC Address	
<input type="checkbox"/>				<< Computer Name ▼
<input type="checkbox"/>				<< Computer Name ▼
<input type="checkbox"/>				<< Computer Name ▼
<input type="checkbox"/>				<< Computer Name ▼
<input type="checkbox"/>				<< Computer Name ▼

# Time and Date

This section will allow you to configure, update, and maintain the correct time on the internal system clock of the device. Click **Save Settings** to apply your settings.

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

**Enable Daylight Saving:** Ticking this checkbox enables Daylight Saving time. Click **Sync your computer's time settings** to copy your PC's time settings.

**NTP Server Used:** Tick the **Automatically synchronize with D-Link's Internet time server** checkbox, then use the drop-down menu to select an NTP server. NTP is short for Network Time Protocol. NTP synchronizes computer clock times in a network of computers.

**Set the Date and Time Manually:** To manually input the time, enter the values in these fields for the Year, Month, Day, Hour, Minute, and Second. Click **Save Settings**.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>TIME AND DATE</b> 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 NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>			
<b>TIME AND DATE CONFIGURATION</b> Time : 2011Year3Month25Day(s)Fri 3:41:56 Time Zone : (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi ▼ Enable Daylight Saving : <input type="checkbox"/> <input type="button" value="Sync your computer's time settings"/>			
<b>AUTOMATIC TIME AND DATE CONFIGURATION</b> <input type="checkbox"/> <b>Automatically synchronize with D-Link's Internet time server</b> NTP Server Used : ntp1.dlink.com ▼ <input type="button" value="Update Now"/>			
<b>SET THE DATE AND TIME MANUALLY</b> Year : 2011 ▼    Month : Mar ▼    Day(s) : 25 ▼ Hour : 03 ▼    Minute : 41 ▼    Second : 50 ▼ <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>			

## Parental Control Rules

This feature allows you to create a list of websites that you want to either allow or deny users access. Click **Save Settings** to apply your settings.

**Configure Parental Control:** Select **Turn Parental Control OFF, Turn Parental Control ON and ALLOW computers access to ONLY these sites, or Turn Parental Control ON and DENY computers access to ONLY these sites.**

**Website URL:** Enter the keywords or URLs that you want to block (or allow). Any URL with the keyword in it will be blocked.

**Schedule:** The schedule of time when the parental control filter will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times by clicking **Add New** as well as in the **Maintenance > Schedules** section.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>PARENTAL CONTROL RULES</b> Parental Control provides the useful tools for restricting Internet access. Website URL allows you to quickly create a list of all web sites that you wish to allow or deny users from accessing. Schedule allows you to control when clients or PCs connected to Router are allowed to access the Internet. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>			
<b>10 -- PARENTAL CONTROL RULES</b>			
Configure Parental Control below: <input type="text" value="Turn Parental Control OFF"/>			
Remaining number of rules that can be created : 10			
	Website URL	Schedule	
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Always ▾	<input type="button" value="Add New"/>

# Advanced

## Advanced Port Forwarding Rules

This will allow you to open a single port or a range of ports. Click **Save Settings** to apply your settings.

**Rule:** Check the box to enable the rule.

**Name:** Enter a name for the rule. You can also choose from the **Application Name** drop-down box.

**IP Address:** Enter the IP address of the computer on your local network that you want to allow the incoming service to. You can also choose from the Application Name drop-down box.

**Public Port/ Private Port:** Enter the port or range of ports that you want to open. If you want to open one port, enter the same port in both boxes.

**Traffic Type:** Select **TCP**, **UDP**, or **Any** to specify the protocol.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>PORT FORWARDING</b>			
<p>The Advanced Port Forwarding 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 service such as FTP or Web Servers.</p> <p><input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/></p>			
<b>24--ADVANCED PORT FORWARDING RULES</b>			
Remaining number of rules that can be created : 24			
<input type="checkbox"/>	Name <input type="text"/> << Application Name ▼	Public Port <input type="text"/> ~ <input type="text"/>	Traffic Type Any ▼
<input type="checkbox"/>	IP Address <input type="text"/> << Computer Name ▼	Private Port <input type="text"/> ~ <input type="text"/>	Traffic Type Any ▼
<input type="checkbox"/>	Name <input type="text"/> << Application Name ▼	Public Port <input type="text"/> ~ <input type="text"/>	Traffic Type Any ▼
<input type="checkbox"/>	IP Address <input type="text"/> << Computer Name ▼	Private Port <input type="text"/> ~ <input type="text"/>	Traffic Type Any ▼
<input type="checkbox"/>	Name <input type="text"/> << Application Name ▼	Public Port <input type="text"/> ~ <input type="text"/>	Traffic Type Any ▼
<input type="checkbox"/>	IP Address <input type="text"/> << Computer Name ▼	Private Port <input type="text"/> ~ <input type="text"/>	Traffic Type Any ▼

# Application Rules

Some applications require multiple connections, such as Internet gaming, video conferencing, Internet telephony and others. These applications have difficulties working through NAT (Network Address Translation). Application rules let these applications trigger and pass through the DIR-605L's firewall. Click **Save Settings** to apply your settings.

**Rule:** Check the box to enable the rule.

**Name:** Enter a name for the rule. You can also choose from the **Application Name** drop-down box.

**Trigger Port:** This is the port used to trigger the application. It can be either a single port or a range of ports.

**Firewall Port:** This is the port number on the WAN side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or port ranges.

**Traffic Type:** Select **TCP**, **UDP**, or **Any**.

SETUP	ADVANCED	MAINTENANCE	STATUS	
<b>APPLICATION RULES</b>				
<p>The Application Rules option is used to open single or multiple ports in your firewall when the router sense data sent to the Internet on a outgoing 'Trigger' port or port range. Special Applications rules apply to all computers on your internal network.</p> <p> <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/> </p>				
<b>24--APPLICATION RULES</b>				
Remaining number of rules that can be created : 24				
			Port	Traffic Type
<input type="checkbox"/>	Name <input type="text"/>	Application << Application Name ▼	Trigger <input type="text"/>	Any ▼
			Firewall <input type="text"/>	Any ▼
<input type="checkbox"/>	Name <input type="text"/>	Application << Application Name ▼	Trigger <input type="text"/>	Any ▼
			Firewall <input type="text"/>	Any ▼
<input type="checkbox"/>	Name <input type="text"/>	Application << Application Name ▼	Trigger <input type="text"/>	Any ▼
			Firewall <input type="text"/>	Any ▼

# MAC Filtering

The MAC (Media Access Controller) Address filter option is used to control network access based on the MAC Address of the client device. This feature can be configured to ALLOW or DENY network/Internet access for this client. Click **Save Settings** to apply your settings.

**Configure MAC Filtering below:** Select how the rule will work: **Turn MAC Filtering OFF, Turn MAC Filtering ON and ALLOW computers, or Turn MAC Filtering ON and DENY computers listed.**

**Rule:** Check the box to enable the rule.

**MAC Address:** Enter the MAC Address of the device that the rule will affect. You can also choose from the **DHCP Client List** drop-down box.

**Computer Name:** Type a custom name for the client.

**Schedule:** This sets the schedule for when the filter will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times by clicking **Add New** as well as in the **Maintenance > Schedules** section.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>MAC FILTERING</b>			
<p>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.</p> <p> <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/> </p>			
<b>24 -- MAC FILTERING RULES</b>			
Configure MAC Filtering below: <input type="text" value="Turn MAC Filtering OFF"/>			
Remaining number of rules that can be created : 24			
	MAC Address	DHCP Client List	Schedule
<input type="checkbox"/>	<input type="text"/>	<< Computer Name	Always <input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	<< Computer Name	Always <input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	<< Computer Name	Always <input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	<< Computer Name	Always <input type="button" value="Add New"/>

# ACL Filter

Use ACL (Access Control Lists) Filter rules to allow or deny LAN (Local Area Network) computers by their MAC addresses from accessing the network. You can manually add a MAC address and apply a rule. Click **Save Settings** to apply your settings.

**Configure ACL** Select **Close ACL filter** or **Turn ACL filtering ON and DENY Filter: computers listed to access the network.**

**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” on page 79 section in this manual.

SETUP	ADVANCED	MAINTENANCE	STATUS																				
<b>ACL FILTER</b>																							
<p>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.</p> <p> <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/> </p>																							
<b>25 -- ACL FILTER RULES</b>																							
<p>Configure ACL filter:  <input type="text" value="Turn ACL Filtering ON and DENY"/> </p> <p>Remaining number of rules that can be created : 25</p> <table border="1"> <thead> <tr> <th></th> <th>MAC Address</th> </tr> </thead> <tbody> <tr> <td><input checked="" 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>					MAC Address	<input checked="" 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"/>
	MAC Address																						
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# Traffic Control

Traffic Control can guarantee bandwidth priority to specified LAN/Wireless clients. You can do this by setting up traffic control rules. Click **Save Settings** to apply your settings.

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

**Automatic Distribute Bandwidth:** All the computers in LAN will have their bandwidth distributed equally.

**Key in Download Bandwidth Manually:** Key in the value in kbps to setup the bandwidth manually.

**Key in Upload Bandwidth Manually:** Key in the value in kbps to setup the upload bandwidth manually.

**Traffic Control Rules:** When the option **Automatic Distribute Bandwidth** is unchecked, you can select **Guarantee minimum bandwidth**, **Restrict maximum download bandwidth**, or **Restrict maximum upload bandwidth** of specific IP addresses from their drop-down boxes.

**Schedule:** The schedule of time when the filter will be enabled. The schedule may be set to **Always**, which will allow the particular service to always be enabled. You can create your own times by clicking **New Scheduler** as well as in the **Maintenance > Schedules** section.

SETUP	ADVANCED	MAINTENANCE	STATUS	
<b>TRAFFIC CONTROL</b>				
Traffic Control can distribute download bandwidth equally to the LAN/Wireless client. User also can setup the traffic control rules manually.				
<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
<b>TRAFFIC CONTROL SETTING</b>				
Enable Traffic Control: <input type="checkbox"/>				
Automatic Distribute Bandwidth: <input checked="" type="checkbox"/>				
Key in download bandwidth manually: <input type="text" value="0"/> kbps				
Key in upload bandwidth manually: <input type="text" value="0"/> kbps				
<b>5-TRAFFIC CONTROL RULES</b>				
	IP Range	Mode	Bandwidth(kbps)	Schedule
<input type="checkbox"/>	IP Address <input type="text"/> ~ <input type="text"/>	Guaranteed minimur ▾	<input type="text"/>	Always ▾ <input type="button" value="New Scheduler"/>
<input type="checkbox"/>	IP Address <input type="text"/> ~ <input type="text"/>	Guaranteed minimur ▾	<input type="text"/>	Always ▾ <input type="button" value="New Scheduler"/>
<input type="checkbox"/>	IP Address <input type="text"/> ~ <input type="text"/>	Guaranteed minimur ▾	<input type="text"/>	Always ▾ <input type="button" value="New Scheduler"/>
<input type="checkbox"/>	IP Address <input type="text"/> ~ <input type="text"/>	Guaranteed minimur ▾	<input type="text"/>	Always ▾ <input type="button" value="New Scheduler"/>
<input type="checkbox"/>	IP Address <input type="text"/> ~ <input type="text"/>	Guaranteed minimur ▾	<input type="text"/>	Always ▾ <input type="button" value="New Scheduler"/>



## Firewall & DMZ

If you have a client PC that cannot run Internet applications properly from behind the DIR-605L, then you can set the client up for unrestricted Internet access. It allows a computer to be exposed to the Internet. This feature is useful for gaming purposes. Enter the IP address of the internal computer that will be the DMZ host. Adding a client to the DMZ (Demilitarized Zone) may expose your local network to a variety of security risks, so only use this option as a last resort. Click **Save Settings** to apply your settings.

**Enable Anti-Spoof checking:** Check to enable Anti-Spoof checking.

**Enable SPI:** Check this to enable SPI.

**Enable DMZ Host:** Check this box to enable DMZ.

**DMZ IP Address:** Enter the IP address of the computer you would like to open all ports to.

**Application Level Gateway (ALG) Configuration:** Check the box to enable RTSP.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>FIREWALL &amp; DMZ</b>			
<p>Firewall rules can be used to allow or deny traffic passing through the router. You can specify a single port by utilizing the input box on the top or a range of ports by utilizing both input boxes. DMZ means 'Demilitarized Zone'. DMZ allows computers behind the router firewall to be accessible to Internet traffic. Typically, your DMZ would contain Web servers, FTP servers and others.</p> <p>Save Settings    Don't Save Settings</p>			
<b>ANTI-SPOOF CHECKING</b>			
Enable Anti-Spoof checking: <input checked="" type="checkbox"/>			
<b>FIREWALL SETTINGS</b>			
Enable SPI: <input checked="" type="checkbox"/>			
<b>DMZ HOST</b>			
<p>The DMZ (Demilitarized Zone) option lets you set a single computer on your network outside of the router. If you have a computer that cannot run Internet applications successfully from behind the router, then you can place the computer into the DMZ for unrestricted Internet access.</p> <p>Putting 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.</p> <p>Enable DMZ : <input type="checkbox"/></p> <p>DMZ IP Address : <input type="text" value="0.0.0.0"/> &lt;&lt; Computer Name <input type="text"/></p>			
<b>APPLICATION LEVEL GATEWAY (ALG) CONFIGURATION</b>			
RTSP : <input checked="" type="checkbox"/>			

**Name:** Choose a name for the firewall rule.

**Action:** Select to **Allow** or **Deny** transport of the data packets according to the criteria defined in the rule.

**Source/Dest:** The Source/Destination is the TCP/UDP port on either the LAN or WAN side.

**IP Address:** Enter a beginning and ending IP address.

**Protocol:** Select the transport protocol that will be used for the filter rule.

**Port Range:** Enter the desired port range for the filter rule.

**Schedule:** Click **Add New** to access the Schedules window. Go to **Maintenance>Schedules** for more information.

50 - FIREWALL RULES

Remaining number of rules that can be created : 50

	Name	Interface	IP Address	Protocol	Port Range	Schedule
<input type="checkbox"/>	<input type="text"/>	Source	<input type="text"/>	TCP	<input type="text"/>	Always <input type="button" value="Add New"/>
<input type="checkbox"/>	<input type="text"/>	Dest	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	Source	<input type="text"/>	TCP	<input type="text"/>	Always <input type="button" value="Add New"/>

## Advanced Wireless Settings

This window allows you to change the behavior of the 802.11g wireless radio from the standard settings. Please be aware that any changes to the factory default settings may adversely affect the behavior of your network. Click **Save Settings** to apply your 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:** 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) *1* is the default setting. A DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages.

**Preamble Type:** Select **Short** or **Long Preamble**. The preamble defines the length of the CRC block (Cyclic Redundancy Check is a common technique for detecting data transmission errors) for communication between the wireless router and the roaming wireless network adapters. **Auto** is the default setting. Note: High network traffic areas should use the shorter preamble type.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>ADVANCED WIRELESS SETTINGS</b>			
<p>These options are for users that wish to change the behavior of their 802.11n wireless radio from the standard setting. We do not recommend changing these settings from the factory default. Incorrect settings may impact the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments.</p> <p> <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/> </p>			
<b>ADVANCED WIRELESS SETTINGS</b>			
<p>Transmit Power: <input type="text" value="100%"/></p> <p>Beacon Period: <input type="text" value="100"/> (msec, range:20~1000, default:100)</p> <p>RTS Threshold: <input type="text" value="2346"/> (range: 256~2346, default:2346)</p> <p>Fragmentation: <input type="text" value="2346"/> (range: 1500~2346, default:2346, even number only)</p> <p>DTIM Interval: <input type="text" value="1"/> (range: 1~255, default:1)</p> <p>Preamble Type : <input type="radio"/> Short Preamble <input type="radio"/> Long Preamble</p> <p>CTS Mode : <input checked="" type="radio"/> None <input type="radio"/> Always <input type="radio"/> Auto</p> <p>Wireless Mode: <input type="text" value="802.11Mixed(n/g/b)"/></p> <p>Band Width: <input type="text" value="20MHz"/></p> <p>STBC: <input type="radio"/> Enable <input checked="" type="radio"/> Disabled</p> <p>20/40MHz Coexist: <input checked="" type="radio"/> Enable <input type="radio"/> Disabled</p> <p>Short Guard Interval : <input checked="" type="checkbox"/></p>			

**CTS Mode:** CTS (Clear To Send) is a function used to minimize collisions among wireless devices on a wireless local area network (LAN). CTS will make sure the wireless network is clear before a wireless client attempts to send wireless data. Enabling CTS will add overhead and may lower wireless throughput.

**None:** CTS is typically used in a pure 802.11g environment. If CTS is set to "None" in a mixed mode environment populated by 802.11b clients, wireless collisions may occur frequently.

**Always:** CTS will always be used to make sure the wireless LAN is clear before sending data.

**Auto:** CTS will monitor the wireless network and automatically decide whether to implement CTS based on the amount of traffic and collisions that occurs on the wireless network.

CTS Mode :  None  Always  Auto  
 Wireless Mode: 802.11Mixed(n/g/b) ▼  
 Band Width: 20MHz ▼  
 STBC:  Enable  Disabled  
 20/40MHz Coexist:  Enable  Disabled  
 Short Guard Interval :

**Wireless** Select one of the following:

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

**Band Width:** Select the Channel Width:

- Auto 20/40 MHz** - Select if you are using both 802.11n and non-802.11n wireless devices.
- 20 MHz** - Select if you are not using any 802.11n wireless clients.

**STBC:** **Enable** or **disable** Space-time block code.

**20/40 MHz** **Enable** or **disable** 20/40 MHz Coexistence.  
**Coexist:**

**Short GI:** Check this box to reduce the guard interval time therefore increasing the data capacity. However, it's less reliable and may cause more data loss.

## Advanced Network Settings

This window allows you to change the LAN settings. Please be aware that any changes to the factory default settings may affect the behavior of your network. Click **Save Settings** to apply your settings.

**Enable UPnP:** To use the Universal Plug and Play (UPnP™) feature tick this checkbox. UPnP provides compatibility with networking equipment, software and peripherals.

**Enable WAN Ping Respond:** Unchecking the box will not allow the DIR-605L to respond to pings. Blocking the ping may provide some extra security from hackers. Tick this checkbox to allow the WAN port to be “pinged”.

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

**Enable Multicast Streams:** Tick to enable multicasting.

**Wireless Enhance mode:** Tick to enhance wireless.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>ADVANCED NETWORK SETTINGS</b>			
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"/>			
<b>UPNP</b>			
<b>Universal Plug and Play (UPnP) supports peer-to-peer Plug and Play functionality for network devices.</b>			
Enable UPnP : <input checked="" type="checkbox"/>			
<b>WAN PING</b>			
<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 Respond : <input type="checkbox"/>			
<b>WAN PORT SPEED</b>			
10/100Mbps Auto ▼			
<b>MULTICAST STREAMS</b>			
Enable Multicast Streams : <input type="checkbox"/>			
Wireless enhance mode : <input type="checkbox"/>			

# Routing

This option allows you to define fixed routes to defined destinations. Click **Save Settings** to apply your settings.

**Enable:** Tick this checkbox to enable or disable fixed routes to defined destinations.

**Interface:** Use the drop-down menu to choose the *WAN* or *WAN (Physical Port)* Interface the IP packet must use to transit out of the router.

**Destination:** The IP address of the packets that will take this route.

**Subnet Mask:** The subnet of the IP address of the packets that will take this route.

**Gateway:** Specifies the next hop to be taken if this route is used.

SETUP	ADVANCED	MAINTENANCE	STATUS	
<b>ROUTING</b>				
The Routing option allows you to define fixed routes to defined destinations.				
<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
<b>32--STATIC ROUTING</b>				
Remaining number of rules that can be created : 32				
	Interface	Destination	Subnet Mask	Gateway
<input type="checkbox"/>	WAN ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	WAN ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	WAN ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	WAN ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	WAN ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	WAN ▾	<input type="text"/>	<input type="text"/>	<input type="text"/>

# Maintenance

## Device Administration

This window will allow you to change the administrator password. You can also enable remote management.

**Administrator Login Name:** Enter a new Login Name for the administrator account.

**Administrator Password:** Enter a new password for the administrator Login Name, then retype the new password in the Confirm Password text box. The administrator can make changes to the settings.

**Enable Graphical Authentication:** Tick this to enable a graphical captcha for secure administrator login.

**Enable Remote Management:** Remote management allows the DIR-605L 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 Internet.

**IP Allowed to Access:** The Internet IP address of the computer that has access to the broadband router. If you input an asterisk (\*) into this field, then any computer will be able to access the router. Putting an asterisk (\*) into this field would present a security risk and is not recommended.

**Port:** The port number used to access the DIR-605L. For example: `http://x.x.x.x:8080` whereas `x.x.x.x` is the WAN IP address of the DIR-605L and 8080 is the port used for the Web-Management interface.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>ADMINISTRATOR SETTINGS</b>			
There is no password for this router by default. To help secure your network, we recommend that you should choose a new password.			
<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>			
<b>ADMINISTRATOR (The default login name is 'admin')</b>			
Login Name : <input type="text" value="admin"/>			
Password : <input type="password" value="*****"/>			
Confirm Password : <input type="password" value="*****"/>			
<b>REMOTE MANAGEMENT</b>			
Enable Graphical Authentication : <input type="checkbox"/>			
Enable Remote Management : <input type="checkbox"/>			
IP Allowed to Access : <input type="text" value="0.0.0.0"/>			
Port : <input type="text" value="8080"/>			

## Save and Restore Settings

This window allows you to save your configuration file to a hard drive, load configuration settings from a hard drive, and restore the router's factory default 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** button to find a previously save file of configuration settings. Then, click the **Upload Settings** 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.

**Clear Language Pack:** Click **Clear** to remove installed language packs.

**Reboot Router:** Click the **Reboot** button on the left side of the window to restart the router.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>SAVE AND RESTORE SETTINGS</b>			
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.			
<b>SAVE AND RESTORE SETTINGS</b>			
Save Settings To Local Hard Drive : <input type="button" value="Save"/>			
<input type="text"/> <input type="button" value="Browse..."/>			
Load Settings From Local Hard Drive : <input type="button" value="Upload Settings"/>			
Restore To Factory Default Settings : <input type="button" value="Restore Device"/>			
Clear Language Pack : <input type="button" value="Clear"/>			
Reboot Router : <input type="button" value="Rebooting"/>			



# Firmware Update

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:** This section displays the firmware version and date. Click the **Check Now** button (or the link at the top of the window) to find out if there is an updated firmware; if so, download the new firmware to your hard drive.

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

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>FIRMWARE UPDATE</b>			
<p>There may be new firmware for your DIR-605L to improve functionality and performance. <a href="#">Click here to check for an upgrade on our support site.</a></p> <p>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.</p> <p>The language pack allows you to change the language of the user interface on the DIR-605L. 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.</p> <p>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.</p>			
<b>FIRMWARE INFORMATION</b>			
<p><b>Current Firmware Version</b> : 1.14</p> <p><b>Current Firmware Date</b> : Mon 19 Nov 2012</p> <p><b>Check Online Now for Latest Firmware Version</b> : <input type="button" value="Check Now"/></p>			
<b>FIRMWARE UPGRADE</b>			
<p><b>Note</b> : Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.</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> <p>Upload: <input type="text"/> <input type="button" value="Browse..."/></p> <p><input type="button" value="Upload"/></p>			

**Language Pack** Click the **Browse** button (or the link at the top of the **Upgrade:** window) and **Upload** to install the language pack.

**mydlink Pack** You can click **Browse** in this window to locate the mydlink **Upgrade:** pack upgrade on your hard drive. Click **Upload** to complete the upgrade.

The image shows two screenshots of a web-based configuration interface. The top screenshot is titled "LANGUAGE PACK UPGRADE" and features an "Upload:" label followed by a text input field, a "Browse..." button to the right of the field, and an "Upload" button centered below the field. The bottom screenshot is titled "MYDLINK PACK UPGRADE" and has an identical layout with an "Upload:" label, a text input field, a "Browse..." button, and an "Upload" button.

# Dynamic DNS

The router supports DDNS (Dynamic Domain Name Service). The Dynamic DNS service allows a dynamic public IP address to be associated with a static host name in any domain, allowing access to a specified host from various locations on the Internet. Many ISPs assign public IP addresses using DHCP, which can make it difficult to locate a specific host if the IP changes. For example, if you are running a public Web server or VPN server on your LAN, this ensures that the host can be located from the Internet if the ISP reassigns your public IP address.

**Enable DDNS:** Tick the checkbox to enable support for DDNS.

**Server Address:** Select one of the DDNS registration organizations from those listed in the pull-down menu.

**Host Name:** Enter the host name of the DDNS server.

**Username:** Enter the username given to you by your DDNS provider.

**Password:** Enter the password given to you by your DDNS provider.

**Status:** Shows the status of the DDNS connection.

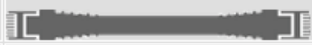




SETUP	ADVANCED	MAINTENANCE	STATUS
<b>DYNAMIC DNS</b>			
<p>The Dynamic DNS feature allows you to host a server (Web, FTP, Game Server, etc.) using a domain name that you have purchased (www.whateveryournameis.com) with your dynamically assigned IP address. Most broadband Internet Service Providers assign 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.</p> <p><a href="http://www.Dlinkddns.com">Sign up for D-Link's Free DDNS service at www.Dlinkddns.com.</a></p> <p><input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/></p>			
<b>DYNAMIC DNS SETTINGS</b>			
Enable DDNS : <input checked="" type="checkbox"/>			
Server Address : <input type="text" value="dlinkddns.com"/>			
Host Name : <input type="text"/>			
Username : <input type="text"/>			
Password : <input type="password" value="*****"/>			
<input type="button" value="DDNS Account Testing"/>			
Status :			

# System Check

This tool is used to verify the physical connectivity on both the LAN and the WAN interfaces. The Ping Test can be used to test the status of the Internet.

**Virtual Cable Tester (VCT) Info:** VCT is an advanced feature that integrates a LAN cable tester on every Ethernet port on the router. Through the graphical user interface (GUI), VCT can be used to remotely diagnose and report cable faults such as opens, shorts, swaps, and impedance mismatch. This feature significantly reduces service calls and returns by allowing users to easily troubleshoot their cable connections.

**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**.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>SYSTEM CHECK</b>			
The System Check tool can be used to verify the physical connectivity on both the LAN and Internet interfaces. The Ping Test tool can be used to verify the status of the Internet.			
<b>VCT INFO</b>			
Port	Link Status		
Internet		100Mbps FULL Duplex	<a href="#">More Info</a>
LAN1		Disconnected	<a href="#">More Info</a>
LAN2		Disconnected	<a href="#">More Info</a>
LAN3		100Mbps FULL Duplex	<a href="#">More Info</a>
LAN4		Disconnected	<a href="#">More Info</a>
<b>PING TEST</b>			
Ping Test is used to send 'Ping' packets to test if a computer is on the Internet.			
Host Name or IP Address : <input type="text"/> <input type="button" value="Ping"/>			
<b>PING RESULT</b>			

# Schedule

The router allows the user the ability to manage schedule rules for various firewall and parental control features on this window. Once you have finished configuring the new schedule rule, click the **Save Settings** button at the top of the window.

**Name:** Enter a name for the new schedule rule.

**Day(s):** Choose the desired day(s), either **All Week** or **Select Day(s)**. If the latter is selected, please use the checkboxes directly below to specify the individual days.

**All Day - 24 hrs:** Tick this check box if the new schedule rule applies to the full 24-hour period.

**Start Time/End Time:** If the new schedule rule does not apply to the full 24-hour period, untick the previous checkbox, then enter a specific beginning and ending time.

**Schedule Rules List:** Displays details of your schedule rules.

SETUP	ADVANCED	MAINTENANCE	STATUS								
<p><b>SCHEDULE</b></p> <p>The Schedule configuration option is used to manage schedule rules for various firewall and parental control features.</p> <p>Save Settings    Don't Save Settings</p>											
<p><b>33 - ADD SCHEDULE RULE</b></p> <p>Name : <input type="text"/></p> <p>Day(s) : <input type="radio"/> All Week <input checked="" type="radio"/> Select Day(s)</p> <p><input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat</p> <p>All Day - 24 hrs : <input type="checkbox"/></p> <p>Start Time : <input type="text"/> : <input type="text"/> (hour:minute, 24 hour time)</p> <p>End Time : <input type="text"/> : <input type="text"/> (hour:minute, 24 hour time)</p>											
<p><b>SCHEDULE RULES LIST</b></p> <table border="1"> <thead> <tr> <th>Name</th> <th>Day(s)</th> <th>Time Frame</th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Name	Day(s)	Time Frame					
Name	Day(s)	Time Frame									

# Log Settings

The system log displays chronological event log data specified by the admin. You may also save a simple text file containing the log to your computer. Click the **Save Settings** button to apply changes.

**Save Log File:** Click on the **Save** button link on this window to save the log file to your local hard drive.

**Enable Logging to Syslog Server:** Click the checkbox to save the log in the log server in the LAN side.

**Log Type & Level:** Click the checkbox(es) of the type and level of log information requested: **“System, Firewall & Security, Router Status, Critical, Warning and Information”**

**Send by Mail:** Enter the your receiving/sending e-mail information, SMTP server name (or IP address), authentication information (if required), and e-mail port. Click **Send Mail Now** to test.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>LOG SETTINGS</b>			
Logs can be saved by sending it to an admin email address.			
<input type="button" value="Save Settings"/>		<input type="button" value="Don't Save Settings"/>	
<b>SAVE LOG FILE</b>			
Save Log File To Local Hard Drive		<input type="button" value="Save"/>	
<b>SYSLOG SETTINGS</b>			
Enable Logging To Syslog Server: <input type="checkbox"/>			
Syslog Server IP Address : <input type="text" value="0.0.0.0"/>		<< <input type="text" value="Computer Name"/>	
<b>LOG TYPE &amp; LEVEL</b>			
Log Type: <input checked="" type="checkbox"/> System		<input checked="" type="checkbox"/> Firewall & Security	<input checked="" type="checkbox"/> Router Status
Log Level: <input type="checkbox"/> Critical		<input type="checkbox"/> Warning	<input type="checkbox"/> Information
<b>SEND BY MAIL</b>			
Email Address : <input type="text"/>			
Email Subject : <input type="text"/>			
Sender Email Address : <input type="text"/>			
SMTP Server/IP Address : <input type="text"/>			
Enable Authentication : <input type="checkbox"/>			
User Name : <input type="text"/>			
Password : <input type="text"/>			
Confirm Password : <input type="text"/>			
Enable Security : <input type="checkbox"/>			
Send Port : <input type="text" value="25"/>		<input type="button" value="Send Mail Now"/>	

# mydlink Event Management

The mydlink Event Management lets the administrator manage mydlink functions for your cloud router. Click **Save Settings** to apply changes.

**Real-Time Browsing History:** Tick to **Enable** the real-time browsing history feature.

**Push Event:** Tick **Enable** to allow push notifications to mydlink. Tick the below boxes to receive **Online User Logging**, **Firmware Upgrade**, and **Wireless Intrusion** notifications.

**Event Trigger:** **Enable** to allow event triggering.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>MYDLINK EVENT MANAGEMENT</b>			
<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>			
<b>REAL-TIME BROWSING HISTORY</b>			
Enable : <input checked="" type="checkbox"/>			
<b>PUSH EVENT</b>			
Enable : <input checked="" type="checkbox"/>			
<input type="checkbox"/> Notice of Online User Logging	<input checked="" type="checkbox"/> Notice of Firmware Upgrade	<input type="checkbox"/> Notice of Wireless Intrusion	
<b>EVENT TRIGGER</b>			
Enable : <input checked="" type="checkbox"/>			

# Status

## Device Info

This window displays the current information for the DIR-605L. It will display the LAN, WAN, and Wireless information. If your WAN connection is set up for a Dynamic IP address then a **DHCP Release** button and a **DHCP Renew** button will be displayed. Use **DHCP Release** to disconnect from your ISP and use **DHCP Renew** to connect to your ISP. If your WAN 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.

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

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

**Wireless 802.11n:** Displays the your network's wireless settings such as SSID, Channel, and Encryption status.

SETUP	ADVANCED	MAINTENANCE	STATUS
<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>Firmware Version :1.03, Fri 25 Mar 2011</b>			
<b>LAN</b>			
MAC Address :F0:7D:68:82:85:BE IP Address :192.168.0.1 Subnet Mask :255.255.255.0 DHCP Server :Enabled			
<b>INTERNET</b>			
MAC Address :F0:7D:68:82:85:BF DHCP Client Connected Connection : <input type="button" value="DHCP Renew"/> <input type="button" value="DHCP Release"/> IP Address :172.17.5.7 Subnet Mask :255.255.255.0 Default Gateway :172.17.5.254 DNS :192.168.168.250, 192.168.168.201			
<b>WIRELESS 802.11N</b>			
SSID :dlink Channel :11 Encryption :Disabled			



# View Log

This section allows you to view a log of activities on the router. This is especially helpful for detecting unauthorized network usage.

**First Page:** View the first page of the log.

**Last Page:** View the last page of the log.

**Previous:** View the previous page.

**Next:** View the next page.

**Clear:** Clear the log.

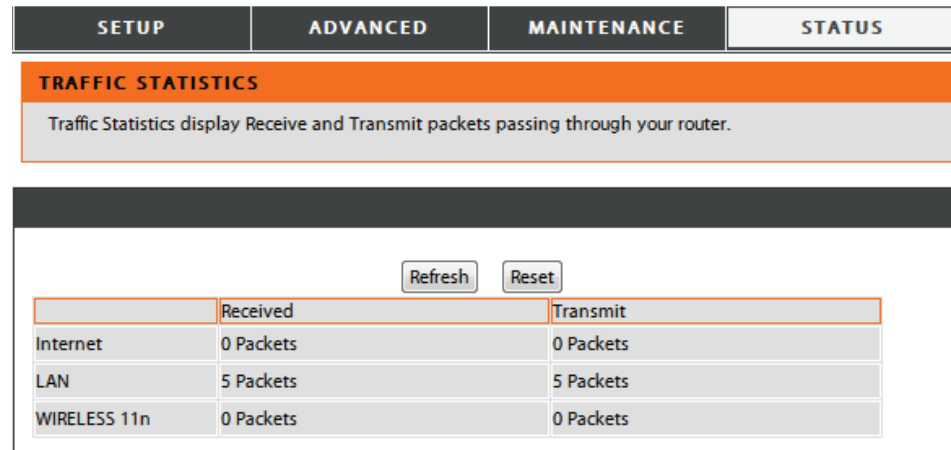
**Link to Log Settings:** Click this button to go directly to the Log Settings window  
**Settings:** (Maintenance > Log Settings).

The screenshot shows a web management console with a top navigation bar containing 'SETUP', 'ADVANCED', 'MAINTENANCE', and 'STATUS'. Below this is a 'VIEW LOG' section with an orange header. A message states: 'View Log displays the activities occurring on the DIR-501.' Below this is another 'VIEW LOG' section with a dark header. It contains navigation buttons: 'First Page', 'Last Page', 'Previous', 'Next Page', 'Clear', and 'Link To Log Settings'. Below the buttons, it says 'Page 1 of 1'. A table displays log entries with columns 'Time and Date' and 'Message'. The entry shown is: 'Mar 25 04:31:01' and 'Log message was cleared.'

Time and Date	Message
Mar 25 04:31:01	Log message was cleared.

# Traffic Statistics

The window below displays the Traffic Statistics. Here you can view the amount of packets that pass through the DIR-605L on both the WAN and the LAN ports. The traffic counter will reset if the device is rebooted. Click **Refresh** to update the statistics. Click **Reset** to reset the statistics.



TRAFFIC STATISTICS

Traffic Statistics display Receive and Transmit packets passing through your router.

Refresh Reset

	Received	Transmit
Internet	0 Packets	0 Packets
LAN	5 Packets	5 Packets
WIRELESS 11n	0 Packets	0 Packets

## Active Sessions

The NATP Active Sessions table displays a list of all active conversations between WAN computers and LAN computers. Click **Refresh** to update the statistics.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>ACTIVE SESSIONS</b>			
This page displays the full details of active internet sessions to your router.			
<input type="button" value="Refresh"/>			
<b>NAPT SESSION</b>			
TCP Session: 11 UDP Session: 1 Total: 12			
<b>NAPT SESSION</b>			
IP Address	TCP Session	UDP Session	
192.168.0.100	11	0	
192.168.0.1	0	1	

# Wireless

The wireless client table displays a list of currently connected wireless clients. This table also displays the connection details of any connected wireless clients.

SETUP	ADVANCED	MAINTENANCE	STATUS	
<b>WIRELESS</b>				
Use this option to view the wireless clients that are connected to your wireless router.				
<b>NUMBER OF WIRELESS CLIENTS : 0</b>				
MAC Address	IP Address	Mode	Rate	Signal (%)

# Help

Click on a link to get more information about the various features of your router.

SETUP	ADVANCED	MAINTENANCE	STATUS
<b>HELP MENU</b>			
Setup			
<ul style="list-style-type: none"><li>• <a href="#">Internet Setup</a></li><li>• <a href="#">Wireless Setup</a></li><li>• <a href="#">Lan Setup</a></li><li>• <a href="#">Time and Date</a></li><li>• <a href="#">Parental Control</a></li></ul>			
Advanced			
<ul style="list-style-type: none"><li>• <a href="#">Port Forwarding</a></li><li>• <a href="#">Application Rules</a></li><li>• <a href="#">Access Control</a></li><li>• <a href="#">Traffic Control</a></li><li>• <a href="#">Firewall &amp; DMZ</a></li><li>• <a href="#">Advanced Wireless</a></li><li>• <a href="#">Advanced Network</a></li><li>• <a href="#">Routing</a></li></ul>			
Maintenance			
<ul style="list-style-type: none"><li>• <a href="#">Device Administration</a></li><li>• <a href="#">Save and Restore</a></li><li>• <a href="#">Firmware Update</a></li><li>• <a href="#">DDNS Setting</a></li><li>• <a href="#">System Check</a></li><li>• <a href="#">Schedules</a></li><li>• <a href="#">Log Setting</a></li></ul>			
Status			
<ul style="list-style-type: none"><li>• <a href="#">Device Info</a></li><li>• <a href="#">View Log</a></li><li>• <a href="#">Traffic Statistics</a></li><li>• <a href="#">Active Sessions</a></li><li>• <a href="#">Wireless</a></li></ul>			

# Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The DIR-605L 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 (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.

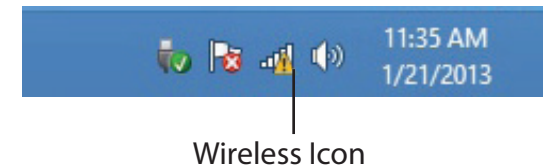
WPA-PSK/WPA2-PSK uses a passphrase or key to authenticate your wireless connection. The key is an alpha-numeric password between 8 and 63 characters long. The password can include symbols (!?\*&\_) and spaces. This key must be the exact same key entered on your wireless router or access point.

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

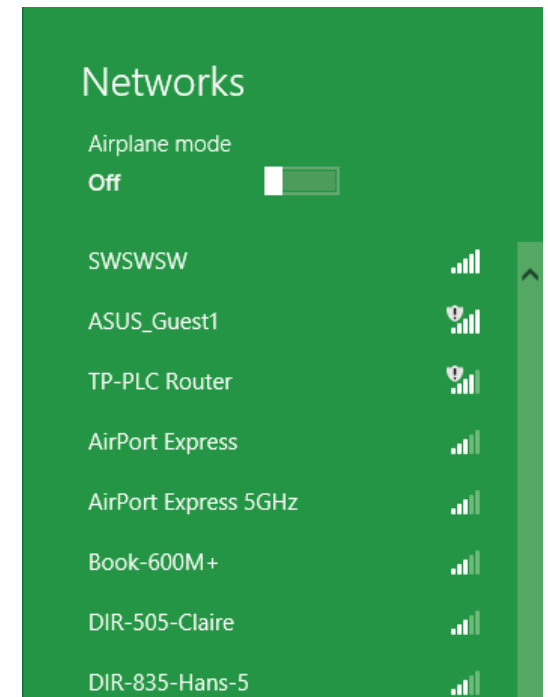
# Connect to a Wireless Network Using Windows® 8

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 (Wi-Fi password) being used.

To join an existing network, locate the wireless network icon in the taskbar, next to the time display.

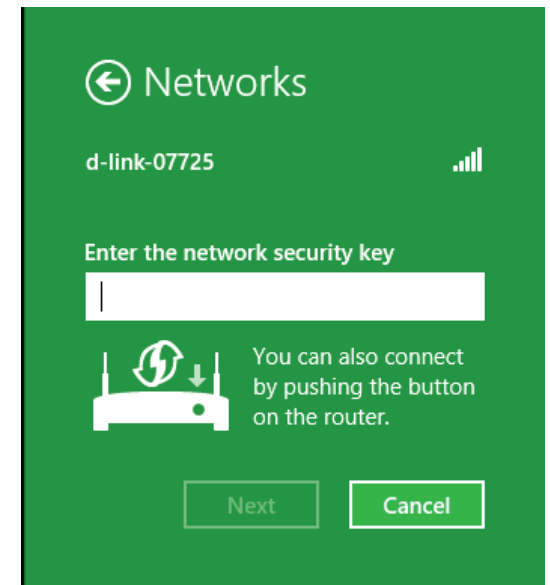


Clicking on this icon will display a list of wireless networks which are within connecting proximity of your computer. Select the desired network by clicking on the network name.

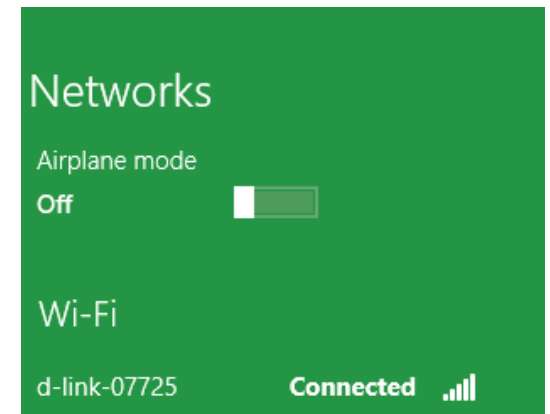


You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

If you wish to use Wi-Fi Protected Setup (WPS) to connect to the router, you can also press the WPS button on your router at this point to enable the WPS function.



When you have established a successful connection to a wireless network, the word **Connected** will appear next to the name of the network to which you are connected.

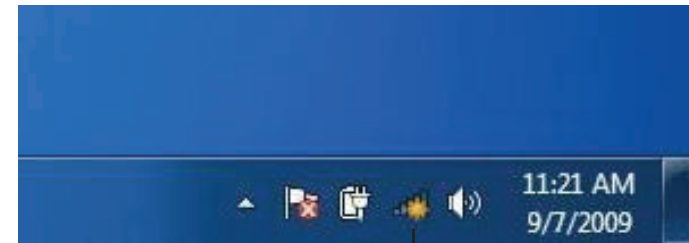




# Using Windows® 7

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.

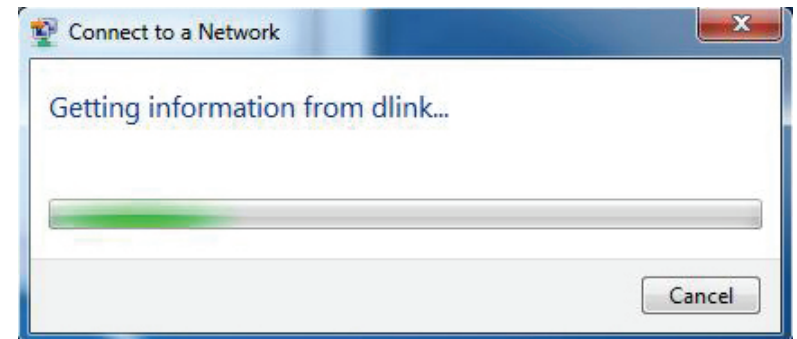


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

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.

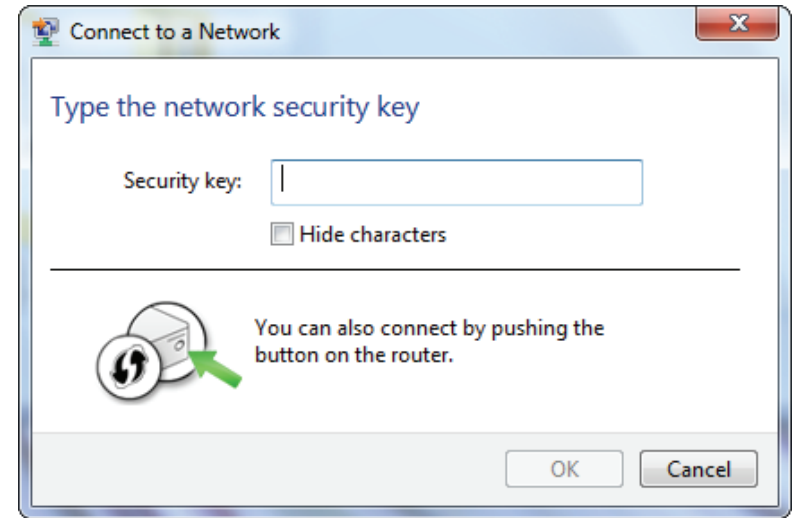


4. The following window appears while your computer tries to connect to the router.



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 Vista®

Windows Vista® users may use the built-in wireless utility. 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 Vista® utility as seen below.

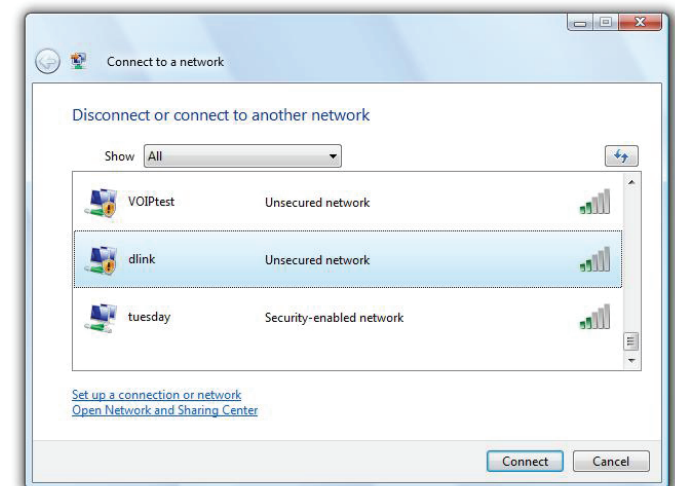
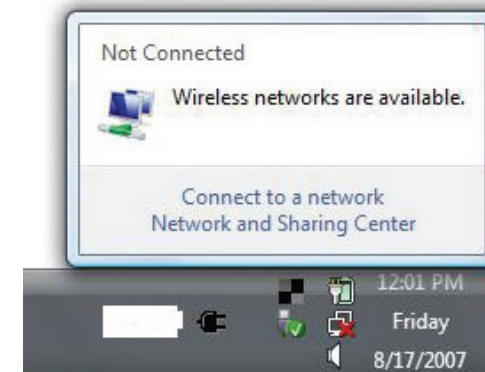
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.

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.



# 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.

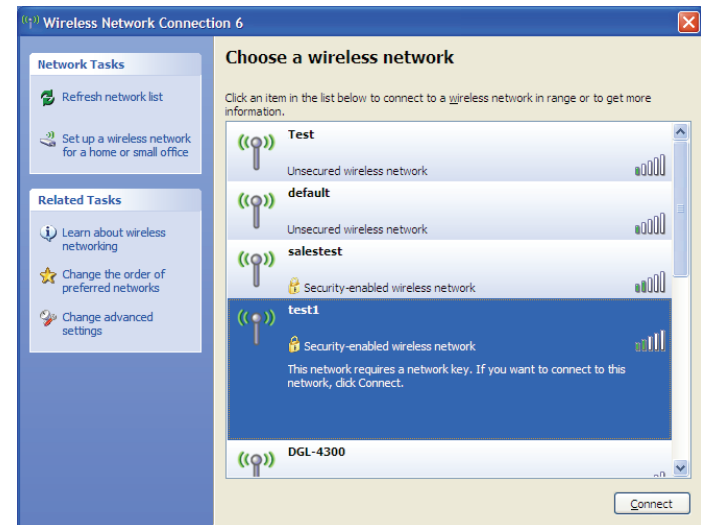
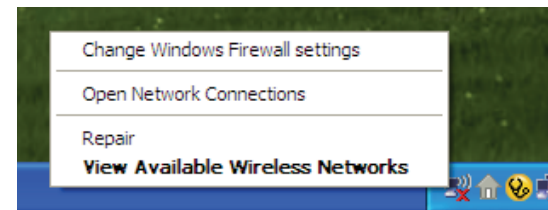
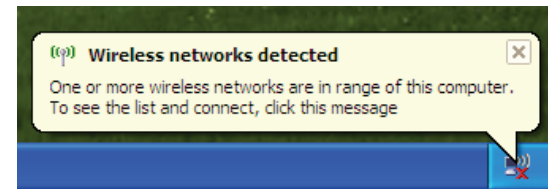
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

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.



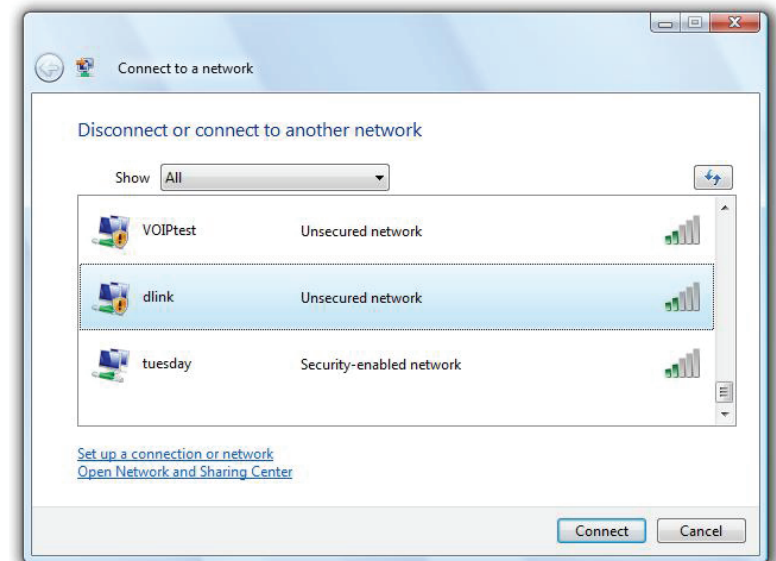
## Configure Wireless Security

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. Open the Windows Vista® Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.



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



3. Enter the same security key or passphrase that is on your router and click **Connect**.

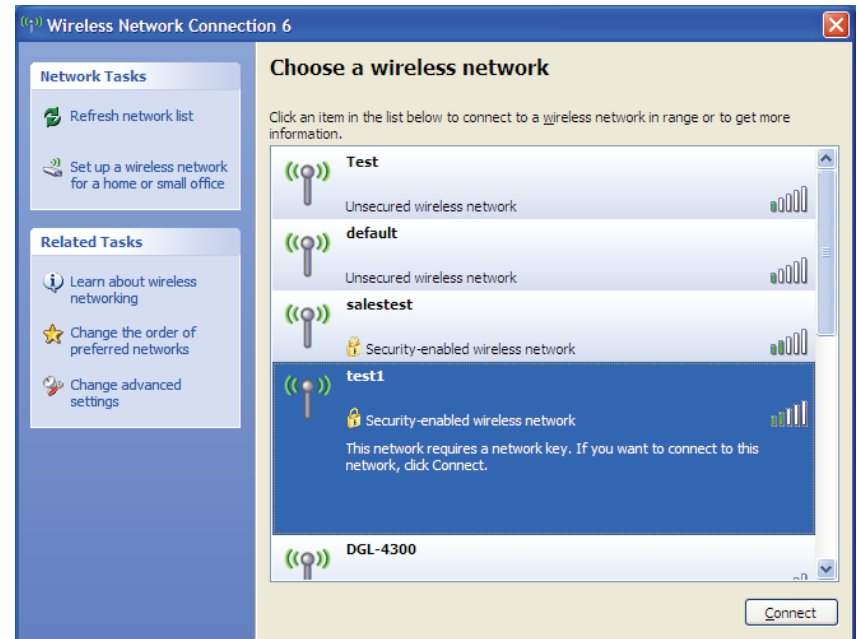
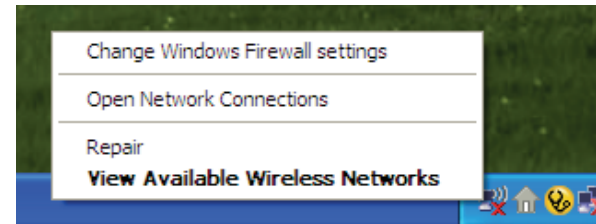
It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.



## Configure WPA-PSK

It is recommended to enable WPA 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 WPA key being used.

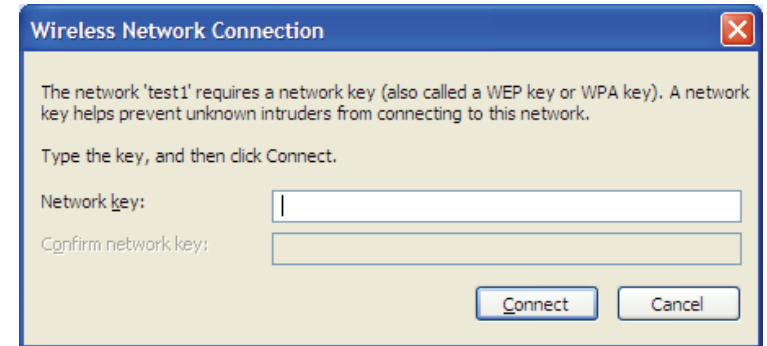
1. Open the Windows® XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.
2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.





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-605L. 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 screenshots 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 nor do you 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:
  - Microsoft Internet Explorer® 6.0 and higher
  - Mozilla Firefox 3.0 and higher
  - Google™ Chrome 2.0 and higher
  - Apple Safari 3.0 and 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. Open your Web browser and go to **http://dlinkrouter/** and the Setup Wizard will run.

### 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** 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, let's 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 (the default is 192.168.0.1) and click **OK**.
- Enter your username and password. Click **OK** to enter the web configuration page for the device.
- Click on **Setup** then click **Manual Setup**.
- To change the MTU enter the number in the MTU field and click the **Save Settings** button 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 are usually called "hotspots".

Using a D-Link Cardbus Adapter with your laptop, you can access the hotspot to connect to the 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 DIR-605L wireless network Cardbus 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

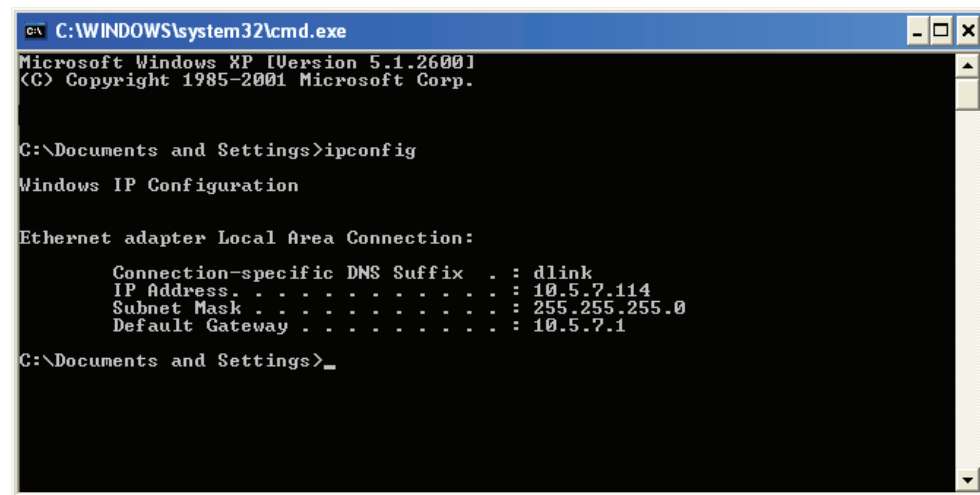
After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start > Run**. In the run box type **cmd** and click **OK**. (Windows® 7/Vista® users type **cmd** 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® 7** - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Change Adapter Setting.**

**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

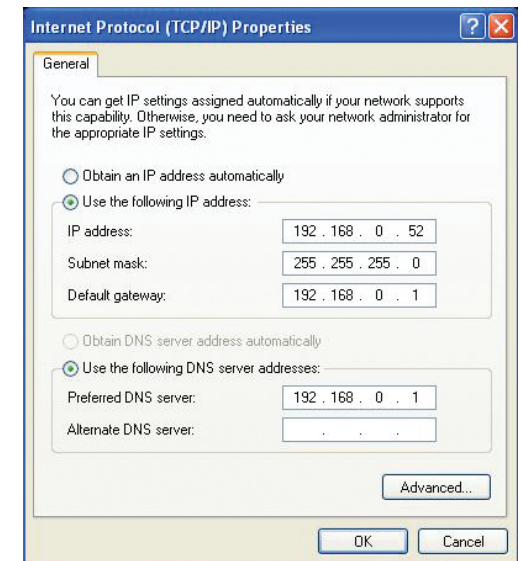
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

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

## Wireless Signal Rates\*

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

## Security

- WPA - Wi-Fi Protected Access (TKIP, MIC, IV Expansion, Shared Key Authentication)
- 64/128-bit WEP

## Modulation Technology

- 802.11b : DSSS / DBPSK / DQPSK / CCK
- 802.11g : 16QAM / 64QAM / BPSK / QPSK with OFDM
- 802.11n : 16QAM / 64QAM / BPSK / QPSK with OFDM

## VPN Passthrough/ Multi-Sessions

- PPTP
- IPSec

## Device Management

- Web-based Internet Explorer 8 or later; Netscape Navigator v6 or later; or other Java-enabled browsers
- DHCP Server and Client

## Wireless Frequency Range

- 2.4 GHz to 2.497 GHz (802.11b)
- 2.4 GHz to 2.4835 GHz (802.11g and 802.11n)

## Wireless Operating Range

- Indoors - up to 328 ft. (100 meters)
- Outdoors- up to 1312 ft. (400 meters)

## Wireless Transmit Power (AVG Power)

- 802.11b:17 dBm (Max)
- 802.11g:16 dBm (Max)
- 802.11n:13 dBm (Max)

## External Antenna Type

- Two fixed external antenna

## Advanced Firewall Features

- NAT with VPN Pass-through (Network Address Translation)
- MAC Filtering
- IP Filtering

- URL Filtering
- Scheduling

### LEDs

- Power
- Status
- Internet
- WLAN (Wireless Connection)
- LAN (10/100)

### Operating Temperature

- 0 °C to 40 °C (32 °F to 129 °F)

### Humidity

- 95% maximum (non-condensing)

### Safety and Emissions

- FCC Part 15B/ 15C/ MPE

- CE
- C-tick
- NCC
- CCC

### Dimensions

- L = 135 mm (5.31 inches)
- W = 99.8 mm (3.92 inches)
- H = 31.5 mm (1.24 inches)

### Weight

- 246 grams (8.67 ounces)

\* Maximum wireless signal rate derived from IEEE Standard 802.11b, 802.11g and 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.