



User Manual

Wireless N 150 Easy Router

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	March 08, 2013	• Second release version

Trademarks

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

Copyright © 2013 by D-Link Systems, Inc.

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

Table of Contents

Preface	i	Network Settings	23
Manual Revisions	i	DHCP Server Settings	24
Trademarks	i	DHCP Reservation	25
Product Overview	1	Advanced	26
Package Contents.....	1	Virtual Server	26
System Requirements	2	Port Forwarding	28
Features.....	3	Application Rules.....	29
Hardware Overview	4	Traffic Control.....	30
Connections	4	Network Filters.....	31
LEDs	5	Website Filters.....	32
Installation	6	Firewall Settings	33
Before you Begin.....	6	Advanced Wireless Settings.....	34
Wireless Installation Considerations.....	7	Wi-Fi Protected Setup	35
Connect to Cable/DSL/Satellite Modem	8	Advanced Network Settings.....	37
Connect to Another Router	9	Tools	38
Configuration	11	Administrator Settings.....	38
Setup.....	11	Time Settings	39
Easy Setup Wizard	12	System Settings	40
Internet Configuration	15	Update Firmware	41
Dynamic (Cable)	15	DDNS.....	42
Dynamic IP Address (DHCP).....	16	Status	43
PPPoE (DSL).....	17	Device Information	43
Static IP Address.....	19	Log	44
Wireless Settings.....	20	Statistics	45
Manual Wireless Network Setup	21	Internet Sessions.....	46
		Wireless	47
		Support	48

Table of Contents

Wireless Security	49
What is WPA?	49
Configure WPA-Personal (PSK).....	50
Connect to a Wireless Network	51
Using Windows® 7	51
Using Windows® XP	54
Configure WPA-PSK.....	55
Troubleshooting	57
Wireless Basics	61
Tips.....	64
Wireless Modes.....	65
Networking Basics	66
Check your IP address.....	66
Statically Assign an IP address	67
Technical Specifications	68
Safety Statements	69

Package Contents

- D-Link GO-RT-N150
- Power Adapter
- Ethernet Cable

Note: Using a power supply with a different voltage rating than the one included with the D-Link GO-RT-N150 will cause damage and void the warranty for this product.

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



System Requirements

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

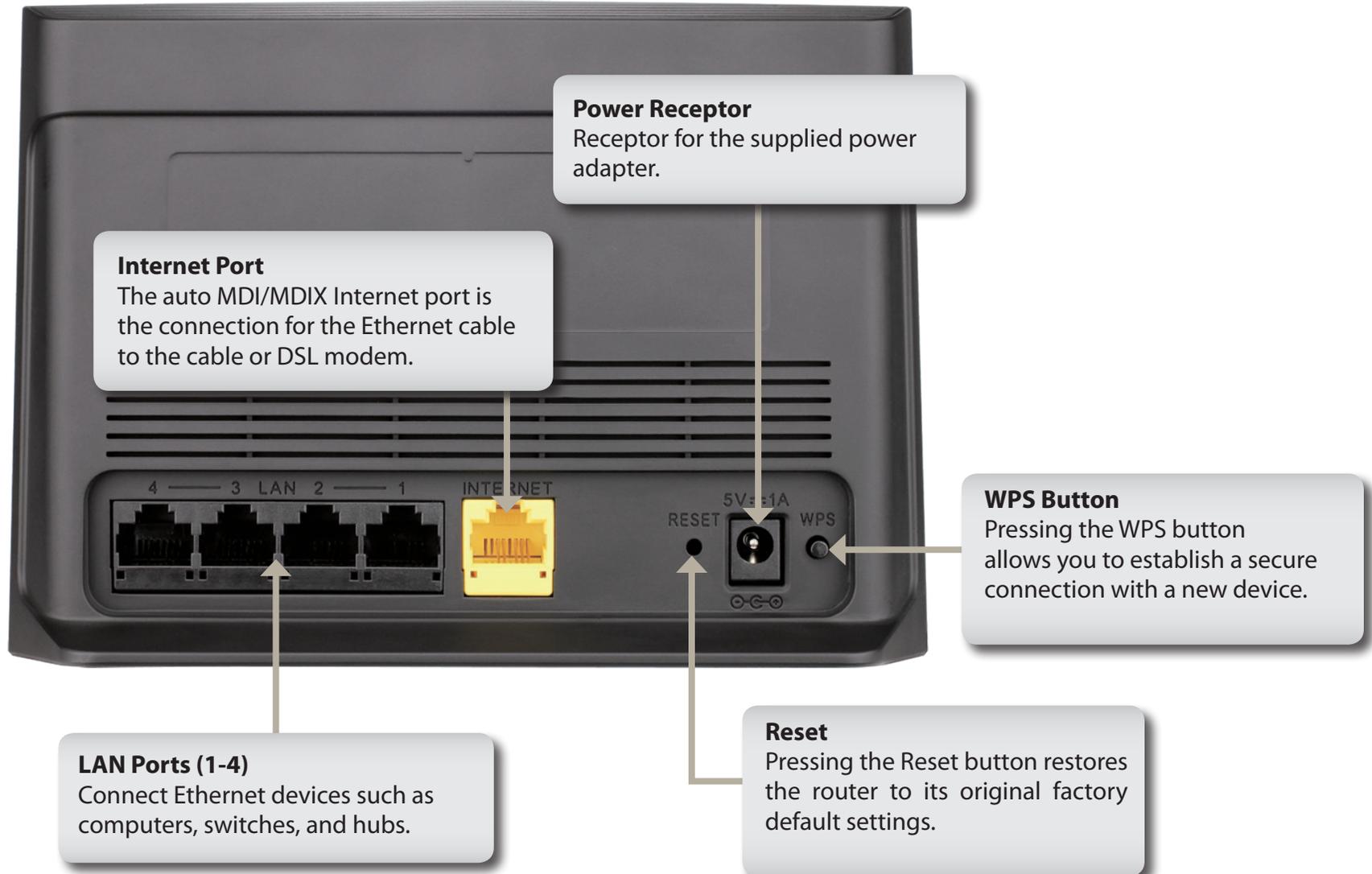
Features

- **Faster Wireless Networking** - The D-Link GO-RT-N150 provides up to 150Mbps* wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio.
- **Compatible with 802.11g Devices** - The D-Link GO-RT-N150 is still fully compatible with the IEEE 802.11g standard, so it can connect with existing 802.11g PCI, USB and Cardbus adapters.
- **Advanced Firewall Features** - The Web-based user interface displays a number of advanced network management features including:
 - **Content Filtering** - Easily applied content filtering based on URL, and/or Domain Name.
 - **Secure Multiple/Concurrent Sessions** - The D-Link GO-RT-N150 can pass through VPN sessions. It supports multiple and concurrent IPsec and PPTP sessions, so users behind the D-Link GO-RT-N150 can securely access corporate networks.
- **Easy Setup Wizard** - Through its easy-to-use Web-based user interface, the D-Link GO-RT-N150 lets you control what information is accessible to those on the wireless network, whether from the Internet or from your company's server. Configure your router to your specific settings within minutes.

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

Hardware Overview

Connections



Hardware Overview

LEDs



Installation

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

Before you Begin

- Please configure the router with the computer that was last directly connected 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 the connection type from 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 be unable to connect to the Internet.

Wireless Installation Considerations

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

1. Keep the number of walls and ceilings between the router and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

Connect to Cable/DSL/Satellite Modem

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

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

Connect to Another Router

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

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

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

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

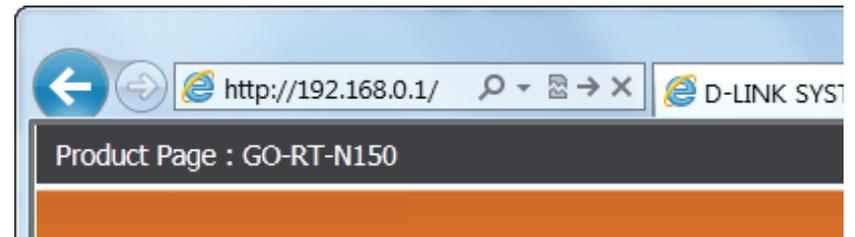
6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.
7. Connect an Ethernet cable to one of the LAN ports on the router and connect it to your other router. Do not plug anything into the Internet port of the D-Link router.
8. You may now use the other 3 LAN ports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

Configuration

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

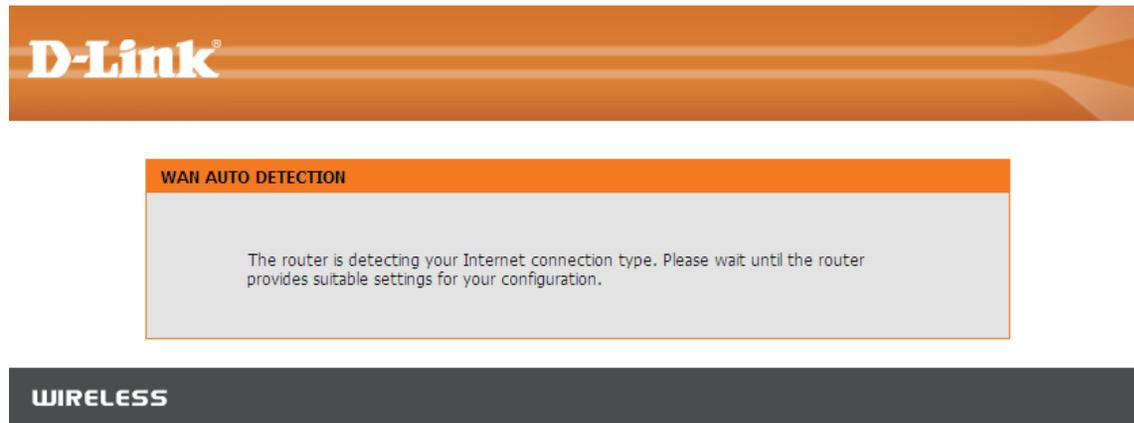
Setup

To access the Easy Setup Wizard or configuration utility, open a web browser such as Internet Explorer and enter the IP address of the router (**http://192.168.0.1**).



Easy Setup Wizard

Once logged into the web interface of the router, the Easy Setup Wizard will appear and perform WAN auto detection to obtain the type of Internet connection you are using.



Section 3 - Configuration

According to the detection result, the wizard will indicate the type of Internet connection that you are currently using.

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

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

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

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

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

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

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

Security : Disabled

Your current wireless security setting is not safe. We recommend that you security setting needs to be changed.

Admin Settings

User Name : admin Status : Unsecured

Password : (blank)

Your current admin security setting is not safe. We recommend that you can synchronize your admin password with the wireless network key by clicking the checkbox below.

: Set the password of device to wireless network key

[Cancel](#) [Manual Setup](#) [Save the setting to my desktop](#)

CONFIGURE YOUR INTERNET CONNECTION

Please fill out the required fields and click "Connect"

Internet Connection : PPPoE [What is this?](#)

User Name : (is required field)

*Password :

[Connect](#)

CONFIGURE YOUR INTERNET CONNECTION

Please fill out the required fields and click "Connect"

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

IP Address : 0.0.0.0 (is required field)

*Subnet Mask : 255.255.255.0

*Gateway Address : 0.0.0.0

*Primary DNS Server : 0.0.0.0

Secondary DNS Server : 0.0.0.0

[Connect](#)

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

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

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

Wireless Network Name (SSID) : dlink **Status** : **Unsecured**

Security : Disabled

Your current wireless security setting is not safe. We recommend that you security setting needs to be changed.

Admin Settings

User Name : admin **Status** : **Unsecured**

Password : (blank)

Your current admin security setting is not safe. We recommend that you can synchronize your admin password with the wireless network key by clicking the checkbox below.

: Set the password of device to wireless network key

Internet Configuration

Dynamic (Cable)

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

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

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

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

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
EASY SETUP	WAN				Helpful Hints... <ul style="list-style-type: none"> • Internet Connection: When configuring the router to access the Internet, be sure to choose the correct Internet Connection Type from the drop down menu. If you are unsure of which option to choose, please contact your Internet Service Provider (ISP). • Support: If you are having trouble accessing the Internet through the router, double check any settings you have entered on this page and verify them with your ISP if needed.
INTERNET	Use this section to configure your Internet Connection type. There are several connection types to choose from: Static IP, DHCP and PPPoE. If you are unsure of your connection method, please contact your Internet Service Provider. Note : If using the PPPoE option, you will need to remove or disable any PPPoE client software on your computers. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WIRELESS SETTINGS	ACCESS POINT MODE Use this to disable NAT on the router and turn it into an Access Point. <input type="checkbox"/> Enabled Access Point Mode				
NETWORK SETTINGS	INTERNET CONNECTION TYPE Choose the mode to be used by the router to connect to the Internet. My Internet Connection is : <input type="text" value="Dynamic IP (DHCP)"/>				
	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 : <input type="text" value="dlinkrouter"/> Primary DNS Server : <input type="text"/> Secondary DNS Server : <input type="text"/> MTU : <input type="text" value="1500"/> MAC Address : <input type="text"/> <input type="button" value="Clone Your PC's MAC Address"/> <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WIRELESS					

Dynamic IP Address (DHCP)

My Internet Connection: Select **Dynamic IP (DHCP)** to obtain IP Address information automatically from your ISP. Select this option if your ISP did not provide you with 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.

DNS Addresses: Enter the Primary DNS server IP address assigned by your ISP.

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

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

The screenshot shows the 'INTERNET CONNECTION TYPE' configuration page. The 'My Internet Connection is' dropdown menu is set to 'Dynamic IP (DHCP)'. Below this, the 'DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE' section is active, showing fields for 'Host Name' (DIR-600), 'Primary DNS Server', 'Secondary DNS Server', 'MTU' (1500), and 'MAC Address'. A 'Clone Your PC's MAC Address' button is located below the MAC Address field. At the bottom, there are 'Save Settings' and 'Don't Save Settings' buttons.

INTERNET CONNECTION TYPE

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

My Internet Connection is :

DYNAMIC IP (DHCP) INTERNET CONNECTION TYPE :

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

Host Name :

Primary DNS Server :

Secondary DNS Server :

MTU :

MAC Address :

PPPoE (DSL)

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

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

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

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

User Name: Enter your PPPoE user name.

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

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

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

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

DNS Addresses: Enter the Primary and Secondary DNS Server Addresses (Static PPPoE only).
You may need to change the Maximum

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 INTERNET CONNECTION TYPE :

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

Address Mode : Dynamic IP Static IP

IP Address :

Username :

Password :

Verify Password :

Service Name : (optional)

Reconnect Mode : Always on
 On demand Manual

Maximum Idle Time : (minutes, 0=infinite)

DNS Mode : Receive DNS from ISP Enter DNS Manually

Primary DNS Server :

Secondary DNS Server :

MTU :

MAC Address :

MTU: Transmission Unit for optimal performance with
MAC Address: your specific ISP (default MTU is 1492).

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

MAC Address :

Clone Your PC's MAC Address

Static IP Address

Choose Static IP Address if all Internet ports' 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 format, which is four octets each separated by a dot (x.x.x.x). The router will not accept the IP address if it is not in this format.

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

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

Default Gateway: Enter the Gateway assigned by your ISP.

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

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

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

INTERNET CONNECTION TYPE

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

My Internet Connection is :

STATIC IP ADDRESS INTERNET CONNECTION TYPE :

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

IP Address :

Subnet Mask :

Default Gateway :

Primary DNS Server :

Secondary DNS Server :

MTU :

MAC Address :

Wireless Settings

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
EASY SETUP	WIRELESS SETTINGS				Helpful Hints... <ul style="list-style-type: none"> • If you already have a wireless network setup with Wi-Fi Protected Setup, click on Add Wireless Device with WPS to add new device to your wireless network. • 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.
INTERNET	The following Web-based wizard are designed to assist you in your wireless network setup and wireless device connection. Before launching these wizards, please make sure you have followed all steps outlined in the Quick Installation Guide included in the package.				
WIRELESS SETTINGS	ADD WIRELESS DEVICE WITH WPS (WI-FI PROTECTED SETUP) WIZARD This wizard is designed to assist you in connecting your wireless device to your wireless router. It will guide you through step-by-step instructions on how to get your wireless device connected. Click the button below to begin. <div style="text-align: center;"> <input type="button" value="Add Wireless Device with WPS"/> </div>				
NETWORK SETTINGS	MANUAL WIRELESS NETWORK SETUP If you would like to configure the wireless settings of your new D-Link Systems Router manually, then click on the Manual Wireless Network Setup button below. <div style="text-align: center;"> <input type="button" value="Manual Wireless Network Setup"/> </div>				

Manual Wireless Network Setup

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

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

802.11 Mode: Select one of the following:
802.11n Only - Select if you are using both 802.11b and 802.11g wireless clients.
802.11 Mixed(g/b)- Select if you are using both 802.11b and 802.11g wireless clients.
802.11 Mixed(n/g/b) - Select if you are using a mix of 802.11n, 11g, and 11b wireless clients.

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

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

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

WIRELESS NETWORK SETTINGS	
Wireless Band :	2.4GHz Band
Enable Wireless :	<input checked="" type="checkbox"/>
Wireless Network Name :	GO-RT-N150 (Also called the SSID)
802.11 Mode :	802.11 Mixed(n/g/b)
Enable Auto Channel Selection :	<input checked="" type="checkbox"/>
Wireless Channel :	2
Transmission Rate :	Best (automatic) (Mbit/s)
Channel Width :	20/40 MHz(Auto)
Enable Hidden Wireless :	<input type="checkbox"/> (Also called the SSID Broadcast)
WIRELESS SECURITY MODE	
Security Mode :	Disable Wireless Security (not recommended)

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

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

Enable Hidden Wireless : <input type="checkbox"/> (Also called the SSID Broadcast)
WIRELESS SECURITY MODE
Security Mode : <input type="text" value="Disable Wireless Security (not recommended)"/> ▼

Network Settings

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

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

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

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

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT															
EASY SETUP	NETWORK SETTINGS				Helpful Hints... <ul style="list-style-type: none"> If you already have a DHCP server on your network or are using static IP addresses on all the devices on your network, uncheck Enable DHCP Server to disable this feature. If you have devices on your network that should always have fixed IP addresses, add a DHCP Reservation for each such device. 															
INTERNET	Use this section to configure the internal network settings of your router and also to configure the built-in DHCP server to assign IP addresses to computers on your network. The IP address that is configured here is the IP address that you use to access the Web-based management interface. If you change the IP address in this section, you may need to adjust your PC's network settings to access the network again.																			
WIRELESS SETTINGS	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.																			
NETWORK SETTINGS	<input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>																			
	ROUTER SETTINGS																			
	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.																			
	Router IP Address : <input type="text" value="192.168.0.1"/> Default Subnet Mask : <input type="text" value="255.255.255.0"/> Enable DNS Relay : <input type="checkbox"/>																			
	DHCP SERVER SETTINGS																			
	Use this section to configure the built-in DHCP server to assign IP address to the computers on your network.																			
	Enable DHCP Server : <input checked="" type="checkbox"/> DHCP IP Address Range : <input type="text" value="100"/> to <input type="text" value="199"/> (addresses within the LAN subnet) DHCP Lease Time : <input type="text" value="10080"/> (minutes)																			
	DHCP RESERVATIONS LIST																			
	<table border="1"> <thead> <tr> <th>Host Name</th> <th>IP Address</th> <th>MAC Address</th> <th>Expired Time</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Host Name	IP Address	MAC Address	Expired Time												
Host Name	IP Address	MAC Address	Expired Time																	
	NUMBER OF DYNAMIC DHCP CLIENTS																			
	<table border="1"> <thead> <tr> <th>Host Name</th> <th>IP Address</th> <th>MAC Address</th> <th>Expired Time</th> </tr> </thead> <tbody> <tr> <td>07654NBWIN7</td> <td>192.168.0.100</td> <td>00:21:70:f1:df:ae</td> <td>< 1 Minute</td> </tr> </tbody> </table>				Host Name	IP Address	MAC Address	Expired Time	07654NBWIN7	192.168.0.100	00:21:70:f1:df:ae	< 1 Minute								
Host Name	IP Address	MAC Address	Expired Time																	
07654NBWIN7	192.168.0.100	00:21:70:f1:df:ae	< 1 Minute																	
	24 - DHCP RESERVATION																			
	Remaining number of rules that can be created: 10																			
	<table border="1"> <thead> <tr> <th>Computer Name</th> <th>IP Address</th> <th>MAC Address</th> <th></th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><< Computer Name</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><< Computer Name</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><< Computer Name</td> </tr> </tbody> </table>				Computer Name	IP Address	MAC Address		<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name
Computer Name	IP Address	MAC Address																		
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name																	
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name																	
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<< Computer Name																	

DHCP Server Settings

DHCP stands for Dynamic Host Control Protocol. The D-Link GO-RT-N150 has a built-in DHCP server. The DHCP Server will automatically assign an IP address to the computers on the LAN/private network. Be sure to set your computers to be DHCP clients by setting their TCP/IP settings to **Obtain an IP Address Automatically**. When you turn your computers on, they will automatically load the proper TCP/IP settings provided by the router. The DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

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

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

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

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

DHCP SERVER SETTINGS

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

Enable DHCP Server :

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

DHCP Lease Time : (minutes)

DHCP Reservation

If you want a computer or device to always have the same IP address assigned, you can create a DHCP reservation. The router will assign the IP address only to that computer or device.

Note: This IP address must be within the DHCP IP Address Range.

Computer Name: Enter the computer name or select from the drop-down menu and click <<.

IP Address: Enter the IP address you want to assign to the computer or device. This IP Address must be within the DHCP IP Address Range.

MAC Address: Enter the MAC address of the computer or device.

Save: Click **Save** to save your entry. You must click **Save Settings** at the top to activate your reservations.

Number of Dynamic DHCP Clients: In this section, you can see what LAN devices are currently leasing IP addresses.

Reserve: The Reserve option converts this dynamic IP allocation into a DHCP Reservation and adds the corresponding entry to the DHCP Reservations List.

24 - DHCP RESERVATION

Remaining number of rules that can be created: 10

	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 ▾
<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 ▾

Advanced Virtual Server

The D-Link GO-RT-N150 can be configured as a virtual server so that remote users accessing Web or FTP services via the public IP address can be automatically redirected to local servers in the LAN (Local Area Network).

The D-Link GO-RT-N150 firewall feature filters out unrecognized packets to protect your LAN so all computers networked with the router are invisible to the outside world. If you wish, you can make some of the LAN computers accessible from the Internet by enabling Virtual Server. Depending on the requested service, the router redirects the external service request to the appropriate server within the LAN.

The D-Link GO-RT-N150 is also capable of port-redirection meaning incoming traffic to a particular port may be redirected to a different port on the server computer.

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

Go-RT-N150 // **SETUP** **ADVANCED** **TOOLS** **STATUS** **SUPPORT**

VIRTUAL SERVER

The Virtual Server option allows you to define a single public port on your router for redirection to an internal LAN IP Address and Private LAN port if required. This feature is useful for hosting online services such as FTP or Web Servers.

Save Settings Don't Save Settings

24 - VIRTUAL SERVERS LIST

Remaining number of rules that can be created: 24

	Name	Application Name	Port	Traffic Type
<input type="checkbox"/>		<< Application Name	Public 0	Protocol All
	IP Address 0.0.0.0	<< Computer Name	Private 0	
<input type="checkbox"/>		<< Application Name	Public 0	Protocol All
	IP Address 0.0.0.0	<< Computer Name	Private 0	
<input type="checkbox"/>		<< Application Name	Public 0	Protocol All
	IP Address 0.0.0.0	<< Computer Name	Private 0	
<input type="checkbox"/>		<< Application Name	Public 0	Protocol All
	IP Address 0.0.0.0	<< Computer Name	Private 0	

Helpful Hints...

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

Section 3 - Configuration

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

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

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

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

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

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

Port Forwarding

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

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

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

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

Example: 24,1009,3000-4000

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	PORT FORWARDING				Helpful Hints... <ul style="list-style-type: none"> • Check the Application Name drop-down menu for a list of pre-defined applications that you can select from. If you select one of the pre-defined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields. • You can select your computer from the list of DHCP clients in the Computer Name drop-down menu, or enter the IP address manually of the computer you would like to open the specified port.
PORT FORWARDING	This option is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network. This feature allows you to enter ports in the format, Port Ranges (100-150). This option is only applicable to the INTERNET session. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
APPLICATION RULES	24 -- PORT FORWARDING RULES				
TRAFFIC CONTROL	Remaining number of rules that can be created: 24				
NETWORK FILTER	<input type="checkbox"/>	Name	Ports to Open	Traffic Type	
WEBSITE FILTER		<< Application Name	Public Port ~	All	
FIREWALL SETTINGS	<input type="checkbox"/>	IP Address	Private Port ~		
ADVANCED WIRELESS		<< Computer Name	~		
WI-FI PROTECTED SETUP	<input type="checkbox"/>	Name	Public Port ~	Traffic Type	
ADVANCED NETWORK		<< Application Name	~	All	
	<input type="checkbox"/>	IP Address	Private Port ~		
		<< Computer Name	~		
	<input type="checkbox"/>	Name	Public Port ~	Traffic Type	
		<< Application Name	~	All	
	<input type="checkbox"/>	IP Address	Private Port ~		
		<< Computer Name	~		

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). Special Applications helps some of these applications work with the router. If you need to run applications that require multiple connections, specify the port normally associated with an application in the "Trigger Port" field, select the protocol type as TCP or UDP, then enter the firewall (public) ports associated with the trigger port to open them for inbound traffic.

The D-Link GO-RT-N150 provides some predefined applications in the table on the bottom of the web page. Select the application you want to use and enable it.

Name: Enter a name for the rule. You may select a predefined application from the drop-down menu and click <<.

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

Traffic Type: Select the protocol of the trigger port (TCP, UDP, or All).

Firewall: This is the port number on the Internet 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 the protocol of the firewall port (TCP, UDP, or All).

Schedule: The schedule of time when the Application Rule 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 in the Tools > Schedules section.

The screenshot shows the 'APPLICATION RULES' configuration page in the D-Link GO-RT-N150 web interface. The page is divided into tabs: SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The ADVANCED tab is selected, showing the 'APPLICATION RULES' section. A table lists predefined applications with columns for Name, Application, Trigger, Firewall, and Traffic Type. The table is currently empty, and a message indicates 'Remaining number of rules that can be created: 24'. A 'Helpful Hints...' sidebar on the right provides instructions on how to use the predefined applications.

Name	Application	Trigger	Firewall	Traffic Type
<input type="checkbox"/>	<input type="text"/> << Application Name	<input type="text"/>	<input type="text"/>	Protocol All
<input type="checkbox"/>	<input type="text"/> << Application Name	<input type="text"/>	<input type="text"/>	Protocol All
<input type="checkbox"/>	<input type="text"/> << Application Name	<input type="text"/>	<input type="text"/>	Protocol All
<input type="checkbox"/>	<input type="text"/> << Application Name	<input type="text"/>	<input type="text"/>	Protocol All

Remaining number of rules that can be created: 24

Helpful Hints...
 • Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected.
 • Use the Application Name drop-down menu to view a list of predefined applications that you can select from. If you select one of the predefined applications, click the arrow button next to the drop-down menu to fill out the appropriate fields.

Traffic Control

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

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

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

Manual Uplink Speed: Key in the value to setup the uplink bandwidth manually.

Manual Downlink Speed: Key in the value to setup the downlink bandwidth manually.

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

TRAFFIC CONTROL SETUP

User can setup the traffic control rules manually.

TRAFFIC CONTROL SETUP

Enable Traffic Control :

Auto BandWidth Equal :

Manual Uplink Speed : kbps

Manual Downlink Speed : kbps

32 -- RULE OF TRAFFIC CONTROL

Remaining number of rules that can be created: 32

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

Network Filters

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

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

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

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

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

The screenshot displays the configuration interface for the Go-RT-N150 router. The 'ADVANCED' tab is active, and the 'MAC ADDRESS FILTER' section is highlighted. The interface includes a 'Save Settings' and 'Don't Save Settings' button. Below this, there is a section for 'MAC FILTERING RULES' with a dropdown menu set to 'Turn MAC Filtering Off'. A table with 12 rows allows for adding rules, with columns for 'MAC Address' and 'DHCP Client List'. A sidebar on the right contains 'Helpful Hints...' regarding MAC filtering.

MAC Address	DHCP Client List
<input type="checkbox"/>	Computer Name

Website Filters

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

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

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

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

The screenshot displays the 'WEBSITE FILTER' configuration page in the D-Link Go-RT-N150 web interface. The page is organized into three main sections:

- Left Sidebar:** A vertical menu with options: VIRTUAL SERVER, PORT FORWARDING, APPLICATION RULES, TRAFFIC CONTROL, NETWORK FILTER, WEBSITE FILTER (highlighted), FIREWALL SETTINGS, ADVANCED WIRELESS, WI-FI PROTECTED SETUP, and ADVANCED NETWORK.
- Main Content Area:**
 - WEBSITE FILTER:** An orange header section containing the text: "The Website Filter option allows you to set up a list of Web sites you would like to allow or deny through your network." Below this text are two buttons: "Save Settings" and "Don't Save Settings".
 - 40 -- WEBSITE FILTERING RULES:** A section with the heading "Configure Website Filter below:" and a dropdown menu labeled "Turn OFF WEBSITE FILTERING". Below the dropdown, it states "Remaining number of rules that can be created: 40".
 - Table:** A table with the heading "Website URL" and a column of checkboxes. The table is currently empty, showing only the header and the checkbox column.
- Right Sidebar:** A section titled "Helpful Hints..." containing two bullet points:
 - Create a list of Websites that you would like the devices on your network to be allowed or denied access to.
 - Keywords can be entered in this list in order to block any URL containing the keyword entered.

Firewall Settings

A firewall protects your network from the outside world. The D-Link GO-RT-N150 offers a firewall type functionality. The SPI feature helps prevent cyber attacks. Sometimes you may want a computer exposed to the outside world for certain types of applications. If you choose to expose a computer, you can enable DMZ (Demilitarized Zone). This option will completely expose the chosen computer to the outside world.

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

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

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	FIREWALL & DMZ SETTINGS				Helpful Hints... <ul style="list-style-type: none"> • DMZ: Only enable the DMZ option as a last resort. If you are having trouble using an application from a computer behind the router, first try opening ports associated with the application in the Advanced Port Forwarding section. • Firewall: Firewall Rules are an advanced feature used to deny or allow traffic from passing through the device. You can create detailed rules for the device. Please refer to the manual for more details and examples.
PORT FORWARDING	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 at 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. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
APPLICATION RULES	FIREWALL SETTINGS				
TRAFFIC CONTROL	Enable SPI : <input type="checkbox"/>				
NETWORK FILTER	DMZ HOST				
WEBSITE FILTER	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. Note: 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. Enable DMZ : <input type="checkbox"/> DMZ IP Address : <input type="text"/> << Computer Name <input type="text"/> <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
FIREWALL SETTINGS					
ADVANCED WIRELESS					
WI-FI PROTECTED SETUP					
ADVANCED NETWORK					

Advanced Wireless Settings

Transmit Power: Set the transmit power of the antennas.

WMM Enable: WMM is QoS (Quality of Service) for your wireless network. This will improve the quality of video and voice applications for your wireless clients.

Short Guard Interval: Check this box to reduce the guard interval time, therefore increasing the data capacity. However, it is less reliable and may create higher data loss.

HT20/40

Coexistence: Select **Enable** or **Disable** for this feature.

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	ADVANCED WIRELESS SETTINGS				Helpful Hints... <ul style="list-style-type: none"> It is recommended that you leave these parameters with their default values. Adjusting them could limit the performance of your wireless network. Use 802.11n only for countries where it is required.
PORT FORWARDING	These options are for users that wish to change the behavior of their 802.11n wireless radio from the standard settings. We do not recommend changing these settings from the factory defaults. Incorrect settings may impact the performance of your wireless radio. The default settings should provide the best wireless radio performance in most environments. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
APPLICATION RULES	ADVANCED WIRELESS SETTINGS				
TRAFFIC CONTROL	Wireless Band : 2.4GHz Band Transmit Power : High <input type="button" value="v"/> WMM Enable : <input checked="" type="checkbox"/> (Wireless QoS) Short Guard Interval : <input checked="" type="checkbox"/> HT20/40 Coexistence : <input checked="" type="radio"/> Enable <input type="radio"/> Disable <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
NETWORK FILTER					
WEBSITE FILTER					
FIREWALL SETTINGS					
ADVANCED WIRELESS					
WI-FI PROTECTED SETUP					
ADVANCED NETWORK					

Wi-Fi Protected Setup

Wi-Fi Protected Setup (WPS) System is a simplified method for securing your wireless network during the “Initial Setup” and “Add New Device” processes. The Wi-Fi Alliance (WFA) has certified it across different products and manufacturers. The process is as quick and easy as simply pushing a button (the Push-Button Method) or entering the correct 8-digit code (the Pin-Code Method). The most effective security setting, WPA2, is used automatically.

Enable: Enable the Wi-Fi Protected Setup feature.

Lock Wireless Security Settings: Locking the wireless security settings prevents the settings from being changed by the Wi-Fi Protected Setup feature of the router. Devices can still be added to the network using Wi-Fi Protected Setup. However, the settings of the network will not change once this option is checked.

PIN Settings: A PIN is a unique number that can be used to add the router to an existing network or to create a new network. The default PIN may be printed on the bottom of the router. For extra security, a new PIN can be generated. You can restore the default PIN at any time. Only the Administrator (“admin” account) can change or reset the PIN.

PIN: Shows the current value of the router’s PIN.

Reset PIN to Default:

Restore the default PIN of the router.

Generate New PIN: Create a random number that is a valid PIN. This becomes the router’s PIN. You can then copy this PIN to the user interface of the registrar. This wizard helps you add wireless devices to the wireless network.

The screenshot shows the router's configuration interface for Wi-Fi Protected Setup. The left sidebar lists various settings categories, with 'WI-FI PROTECTED SETUP' selected. The main content area is divided into three sections:

- WI-FI PROTECTED SETUP:** Contains an 'Enable' checkbox which is checked. Below it, the status is 'Wifi Protected Setup : Enable/Configured'. There is also a 'Lock Wireless Security Settings' checkbox which is unchecked. A 'Reset to Unconfigured' button is present.
- PIN SETTINGS:** Shows the current PIN as '12383634'. There are buttons for 'Reset PIN to Default' and 'Generate New PIN'.
- ADD WIRELESS STATION:** Features a 'Connect your Wireless Device' button.

On the right side, a 'Helpful Hints...' section provides additional information:

- Enable if other wireless devices you wish to include in the local network support Wi-Fi Protected Setup.
- Only "Admin" account can change security settings.
- Click **Connect your Wireless Device** to use Wi-Fi Protected Setup to add wireless devices to the wireless network.

Connect Your Wireless Device: The wizard will either display the wireless network settings to guide you through manual configuration, prompt you to enter the PIN for the device, or ask you to press the configuration button on the device. If the device supports Wi-Fi Protected Setup and has a configuration button, you can add it to the network by pressing the configuration button on the device and then the on the router within 60 seconds. The status LED on the router will flash three times if the device has been successfully added to the network. There are several ways to add a wireless device to your network. A “registrar” controls access to the wireless network. A registrar only allows devices onto the wireless network if you have entered the PIN, or pressed a special Wi-Fi Protected Setup button on the device. The router acts as a registrar for the network, although other devices may act as a registrar as well.



Advanced Network Settings

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

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

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	ADVANCED NETWORK SETTINGS				Helpful Hints... <ul style="list-style-type: none"> • For added security, it is recommended that you disable the WAN Ping Response option. Ping is often used by malicious Internet users to locate active networks or PCs. • The WAN speed is usually detected automatically. If you are having problems connecting to the WAN, try selecting the speed manually.
PORT FORWARDING	These options are for users that wish to change the LAN settings. We do not recommend changing these settings from factory default. Changing these settings may affect the behavior of your network. <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
APPLICATION RULES	UPNP Universal Plug and Play(UPnP) supports peer-to-peer Plug and Play functionality for network devices. Enable UPnP : <input checked="" type="checkbox"/>				
TRAFFIC CONTROL	WAN PING 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. Enable WAN Ping Response : <input type="checkbox"/>				
NETWORK FILTER	WAN PORT SPEED WAN Port Speed : Auto 10/100Mbps <input type="button" value="v"/> <input type="button" value="Save Settings"/> <input type="button" value="Don't Save Settings"/>				
WEBSITE FILTER					
FIREWALL SETTINGS					
ADVANCED WIRELESS					
WI-FI PROTECTED SETUP					
ADVANCED NETWORK					

Tools

Administrator Settings

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

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

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

Remote Admin Port: The port number used to access the router.

The screenshot displays the D-Link GO-RT-N150 web management interface. At the top, it shows 'Product Page : GO-RT-N150', 'Hardware Version : B1', and 'Firmware Version : 2.00'. The D-Link logo is prominently displayed. Below the logo is a navigation menu with tabs for 'GO-RT-N150 //', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The 'TOOLS' tab is selected, and the 'ADMINISTRATOR SETTINGS' page is shown. The page includes a sidebar with links for ADMIN, TIME, SYSTEM, FIRMWARE, and DYNAMIC DNS. The main content area is divided into sections: 'ADMINISTRATOR SETTINGS' with explanatory text and 'Save Settings'/'Don't Save Settings' buttons; 'ADMIN PASSWORD' with a confirmation prompt and two password input fields; and 'ADMINISTRATION' with checkboxes for 'Enable Remote Management', a 'Remote Ip Address' field (set to 0.0.0.0), and a 'Remote Admin Port' dropdown menu. A 'Helpful Hints...' section on the right provides security advice. The bottom of the page features a 'WIRELESS' section header.

Time Settings

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

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

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

Sync your

Computer's Time Settings: Press this button to set the device's time to match a local PC.

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

NTP Server Used: Enter the NTP server or select one from the drop-down menu. The router will sync the same time to D-Link Internet time server.

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

The screenshot shows the D-Link GO-RT-N150 web interface. The top navigation bar includes 'GO-RT-N150', 'SETUP', 'ADVANCED', 'TOOLS', 'STATUS', and 'SUPPORT'. The left sidebar lists 'ADMIN', 'TIME', 'SYSTEM', 'FIRMWARE', and 'DYNAMIC DNS'. The main content area is titled 'TIME AND DATE' and contains the following sections:

- TIME AND DATE:** A text box explaining the configuration options and two buttons: 'Save Settings' and 'Don't Save Settings'.
- TIME AND DATE CONFIGURATION:** A section with a 'Time' field showing '2000/01/01,02:33:27', a 'Time Zone' dropdown menu set to '(GMT+08:00) Taipei', and an 'Enable Daylight Saving' checkbox with a 'Sync your computer's time settings' button.
- AUTOMATIC TIME AND DATE CONFIGURATION:** A section with an unchecked checkbox for 'Automatically synchronize with D-Link's Internet time server', an 'NTP Server Used' dropdown menu, and an 'Update Now' button.
- SET THE TIME AND DATE MANUALLY:** A section with dropdown menus for Year (2013), Month (Mar), Day (4), Hour (17), Minute (13), and Second (51), and 'Save Settings' and 'Don't Save Settings' buttons.

A 'Helpful Hints...' sidebar on the right provides additional instructions: 'Either enter the time manually by clicking the Sync Your Computers Time Settings button, or use the Automatic Time Configuration option to have your router synchronize with a time server on the Internet.'

System Settings

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

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

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

Reboot Device: Click to reboot the router.

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

The screenshot shows the D-Link GO-RT-N150 web interface. The top navigation bar includes 'GO-RT-N150 //', 'SETUP', 'ADVANCED', 'TOOLS' (selected), 'STATUS', and 'SUPPORT'. The left sidebar lists 'ADMIN', 'TIME', 'SYSTEM', 'FIRMWARE', and 'DYNAMIC DNS'. The main content area is titled 'SAVE AND RESTORE SETTINGS' and contains the following text and controls:

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

Save Settings To Local Hard Drive :

Load Settings From Local Hard Drive : No file chosen

Restore To Factory Default Settings :

Reboot The Device :

Clear Language Pack :

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

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

Update Firmware

You can upgrade the firmware of the router here. Make sure the firmware file 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 at <http://support.dlink.com> for firmware updates. You can download firmware upgrades to your hard drive from the D-Link support site.

Firmware

Information: Displays the current firmware version and date.

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

Language Pack Upgrade: This function allows the user to change the language of GUI from the default English to another language by upgrading the language pack.

The screenshot shows the D-Link GO-RT-N150 web interface. The top navigation bar includes tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The left sidebar lists menu items: ADMIN, TIME, SYSTEM, FIRMWARE, and DYNAMIC DNS. The main content area is titled 'FIRMWARE UPDATE' and contains the following sections:

- FIRMWARE UPDATE:** A message stating 'There may be new firmware for your router to improve functionality and performance. Click here to check for an upgrade on our support site.' Below this, instructions are provided for upgrading the firmware and the language pack, both requiring the user to browse for a file and click 'Upload'.
- FIRMWARE INFORMATION:** Displays 'Current Firmware Version : 2.00' and 'Current Firmware Date : Mon 14 Jan 2013'. It includes a 'Check Online Now for Latest Firmware Version' button with a 'Check Now' link.
- FIRMWARE UPGRADE:** A note in red text states: 'Note: Some firmware upgrades reset the configuration options to the factory defaults. Before performing an upgrade, be sure to save the current configuration.' Below this, it instructs the user to ensure a wired connection and click 'Upload' after selecting a file.
- LANGUAGE PACK UPGRADE:** Similar to the firmware upgrade section, it includes an 'Upload' button and a 'Choose File' link.

On the right side of the interface, there is a 'Helpful Hints...' section with a bullet point: 'Firmware Update are released periodically to improve the functionality of your router and also to add features. If you run into a problem with a specific feature of the router, check our support site by clicking on the Click here to check for an upgrade on our support site and see if an updated version of firmware is available for your router.'

DDNS

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

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

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

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

User Account: Enter the Username for your DDNS account.

Password: Enter the Password for your DDNS account.

Product Page : GO-RT-N150 Hardware Version : B1 Firmware Version : 2.00

D-Link

GO-RT-N150 // SETUP ADVANCED TOOLS STATUS SUPPORT

ADMIN
TIME
SYSTEM
FIRMWARE
DYNAMIC DNS

DYNAMIC DNS

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.

[Sign up for D-Link's Free DDNS service at www.DLinkDDNS.com.](http://www.DLinkDDNS.com)

Save Settings Don't Save Settings

DYNAMIC DNS SETTINGS

Enable DDNS :

Server Address : dlinkddns.com(Free) ▾

Host Name :

User Account :

Password :

Update Now

Save Settings Don't Save Settings

Helpful Hints...

- To use this feature, you must first have a Dynamic DNS account from one of the providers in the drop down menu.

WIRELESS

Status

Device Information

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

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

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

See the following for more information.

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

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

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

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
DEVICES INFO	DEVICE INFORMATION				Helpful Hints... • All of your LAN, Internet, and WIRELESS 802.11 n connection details are displayed here.
LOGS	All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here.				
STATISTICS	GENERAL				
INTERNET SESSIONS	Time : 2000/01/01,01:21:30 Firmware Version : 1.00 Thu 01 Dec 2011				
WIRELESS	WAN				
	Connection Type : DHCP Client Cable Status : Disconnected Network Status : Disconnected <input type="button" value="Renew"/> <input type="button" value="Release"/> Connection Up Time : 0 Day 0 Hour 0 Min 0 Sec MAC Address : 14:D6:4D:C6:5C:C7 IP Address : 0.0.0.0 Subnet Mask : 0.0.0.0 Default Gateway : 0.0.0.0 Primary DNS Server : 0.0.0.0 Secondary DNS Server : 0.0.0.0				
	LAN				
	MAC Address : 14:D6:4D:C6:5C:C6 IP Address : 192.168.0.1 Subnet Mask : 255.255.255.0 DHCP Server : Enabled				
	WIRELESS				
	Wireless Radio : Enabled MAC Address : 14:D6:4D:C6:5C:C6 802.11 Mode : 802.11 Mixed(n/g/b) Channel Width : 20/40MHz Channel : 2 Network Name (SSID) : dlink Wi-Fi Protected Setup : Enabled/Unconfigured Security : Disabled				

Log

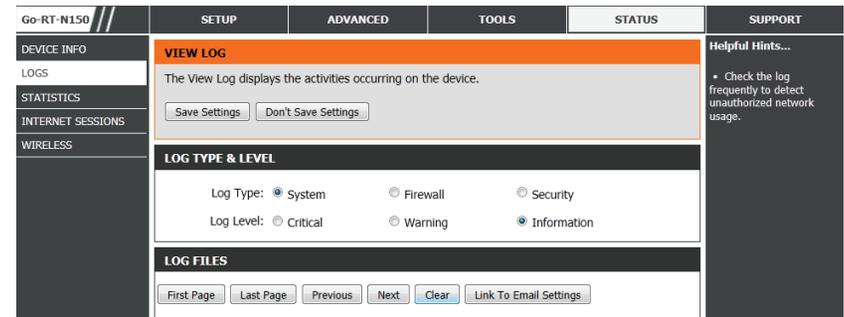
The router automatically logs (records) events of possible interest in its internal memory. If there is not enough internal memory for all events, logs of older events are deleted while logs of the latest events are retained. The **Logs** option allows you to view the router logs. You can define what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

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

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

Clear: Clears all of the log contents.

Link to Email Settings: The user can click **Link To Email Settings** and send the logs to the designated e-mail account.



Statistics

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT											
DEVICE INFO	TRAFFIC STATISTICS				Helpful Hints... <ul style="list-style-type: none"> This is a summary displaying the number of packets that have passed between the Internet and the LAN since the router was last initialized. 											
LOGS	Traffic Statistics displays Receive and Transmit packets passing through the device.															
STATISTICS	TRAFFIC STATISTICS															
INTERNET SESSIONS	<input type="button" value="Refresh"/> <input type="button" value="Reset"/>															
WIRELESS	<table border="1"> <thead> <tr> <th></th> <th>Receive</th> <th>Transmit</th> </tr> </thead> <tbody> <tr> <td>Internet</td> <td>0 Packets</td> <td>2158 Packets</td> </tr> <tr> <td>LAN</td> <td>12947 Packets</td> <td>9363 Packets</td> </tr> <tr> <td>WIRELESS 11n</td> <td>0 Packets</td> <td>8605 Packets</td> </tr> </tbody> </table>						Receive	Transmit	Internet	0 Packets	2158 Packets	LAN	12947 Packets	9363 Packets	WIRELESS 11n	0 Packets
	Receive	Transmit														
Internet	0 Packets	2158 Packets														
LAN	12947 Packets	9363 Packets														
WIRELESS 11n	0 Packets	8605 Packets														

Internet Sessions

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

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

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

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT											
DEVICE INFO	TRAFFIC STATISTICS				Helpful Hints... • This is a summary displaying the number of packets that have passed between the Internet and the LAN since the router was last initialized.											
LOGS	Traffic Statistics displays Receive and Transmit packets passing through the device.															
STATISTICS	TRAFFIC STATISTICS															
INTERNET SESSIONS	<input type="button" value="Refresh"/> <input type="button" value="Reset"/>															
WIRELESS	<table border="1"> <thead> <tr> <th></th> <th>Receive</th> <th>Transmit</th> </tr> </thead> <tbody> <tr> <td>Internet</td> <td>0 Packets</td> <td>2179 Packets</td> </tr> <tr> <td>LAN</td> <td>13070 Packets</td> <td>9450 Packets</td> </tr> <tr> <td>WIRELESS 11n</td> <td>0 Packets</td> <td>8674 Packets</td> </tr> </tbody> </table>						Receive	Transmit	Internet	0 Packets	2179 Packets	LAN	13070 Packets	9450 Packets	WIRELESS 11n	0 Packets
	Receive	Transmit														
Internet	0 Packets	2179 Packets														
LAN	13070 Packets	9450 Packets														
WIRELESS 11n	0 Packets	8674 Packets														

Wireless

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

Go-RT-N150	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT							
DEVICE INFO	CONNECTED WIRELESS CLIENT LIST				Helpful Hints... <ul style="list-style-type: none"> This is a list of all wireless clients that are currently connected to your wireless router. 							
LOGS	View the wireless clients that are connected to the router. (A client might linger in the list for a few minutes after an unexpected disconnect.)											
STATISTICS												
INTERNET SESSIONS	NUMBER OF WIRELESS CLIENTS: 0											
WIRELESS	<table border="1"> <thead> <tr> <th>SSID</th> <th>MAC Address</th> <th>IP Address</th> <th>Mode</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>					SSID	MAC Address	IP Address	Mode			
SSID	MAC Address	IP Address	Mode									

Support

The screenshot displays the D-Link Go-RT-N150 web interface. At the top, the D-Link logo is visible on an orange background. Below the logo is a navigation bar with tabs for SETUP, ADVANCED, TOOLS, STATUS, and SUPPORT. The SUPPORT tab is currently selected. On the left side, there is a vertical menu with options: MENU, SETUP, ADVANCED, TOOLS, and STATUS. The main content area is titled 'SUPPORT MENU' and contains several sections of help links:

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

At the bottom of the interface, there is a dark grey bar with the word 'WIRELESS' in white capital letters.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The D-Link GO-RT-N150 offers the following types of security:

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

What is WPA?

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

The 2 major improvements over WEP:

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

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

Configure WPA-Personal (PSK)

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

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

The screenshot shows the 'WIRELESS SECURITY MODE' section of a router's web interface. It features a dropdown menu for 'Security Mode' set to 'Enable WPA/WPA2 Wireless Security (enhanced)'. Below this is the 'WPA/WPA2' section, which includes a note: 'WPA/WPA2 requires stations to use high grade encryption and authentication.' There are two fields: 'Cipher Type' with a dropdown menu set to 'AUTO(TKIP/AES)', and 'Network Key' with an empty text input box. A note below the key field states '(8~63 ASCII or 64 HEX)'.

Connect to a Wireless Network Using Windows® 7

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

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



Wireless Icon

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

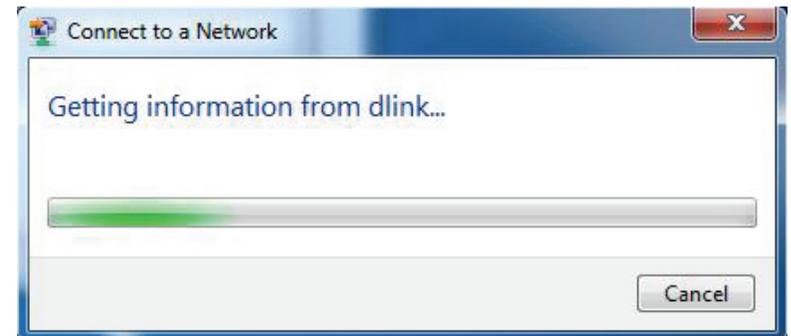


3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

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



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



Section 5 - Connecting to a Wireless Network

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

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



Using Windows® XP

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

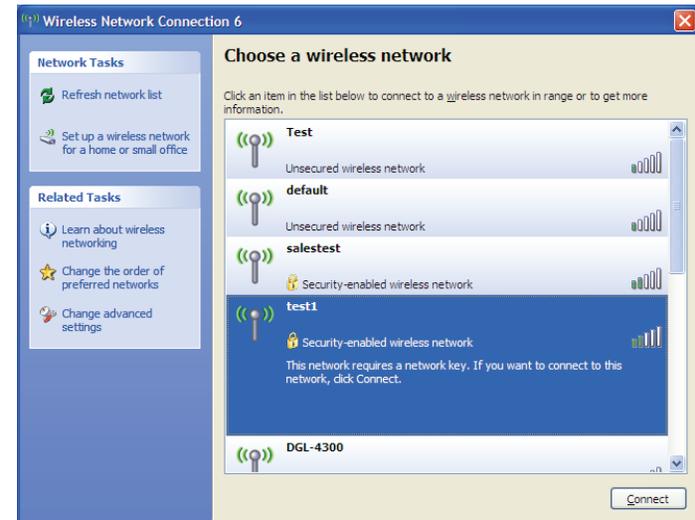
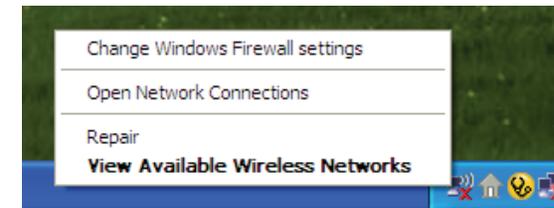
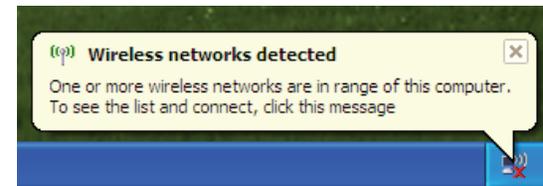
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

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

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

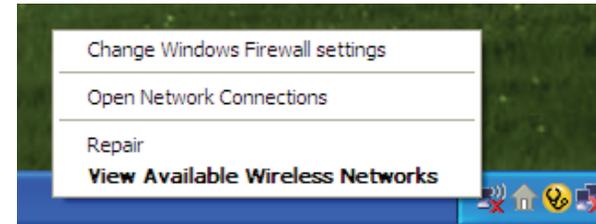
If you get a good signal but cannot access the Internet, check you TCP/IP settings for your wireless adapter. Refer to the Networking Basics section in this manual for more information.



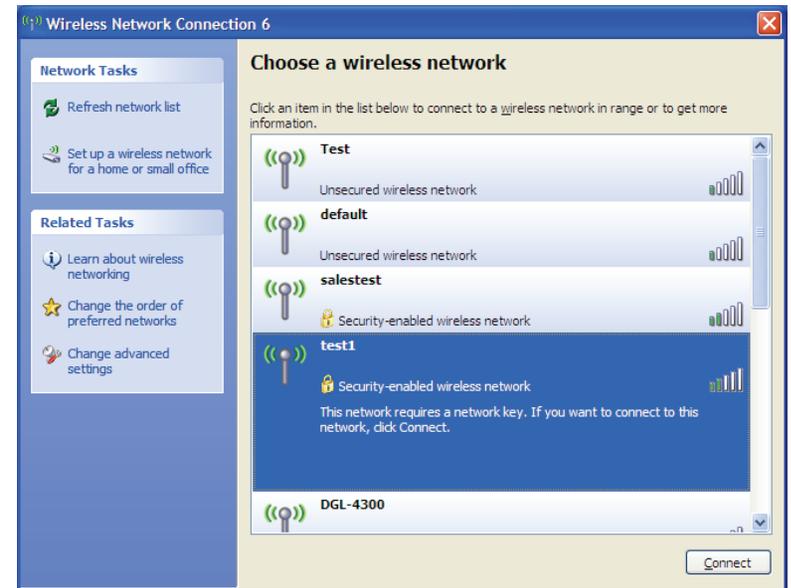
Configure WPA-PSK

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

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

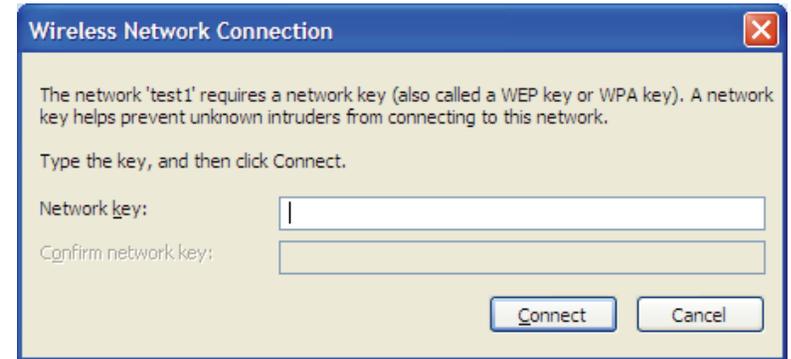


2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.



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

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



Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the D-Link GO-RT-N150. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screen shots on your computer will look similar to the following examples.)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

C:\>
```

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

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

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

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

Wireless Basics

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

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

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

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

What is Wireless?

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

Why D-Link Wireless?

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

How does wireless work?

Wireless works similarly to how cordless phones work; through radio signals transmitting data from point A to point B. However, 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, 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 with a range of up to 30 feet.

The speed and wireless operation range of Bluetooth are both less than those of 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, or business, D-Link has a wireless solution for it.

Home

- Gives everyone at home broadband access
- Surf the web, check e-mail, send instant messages, etc.
- Eliminates the need for cables around the house
- Simple and easy to use

Small Office and Home Office

- Stay on top of everything at home as you would in the 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 in the office. People like the freedom of mobility and its popularity means that more and more public facilities now provide wireless access to attract people. The wireless connection points in public places are usually called "hotspots".

Using a D-Link USB Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations such as 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 and 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 will significantly reduce any interference that appliances operating on the same frequency might cause.

Security

Don't let your 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 the product manual for detailed information on how to set it up.

Wireless Modes

There are two basic modes of networking:

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

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

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

Networking Basics

Check your IP address

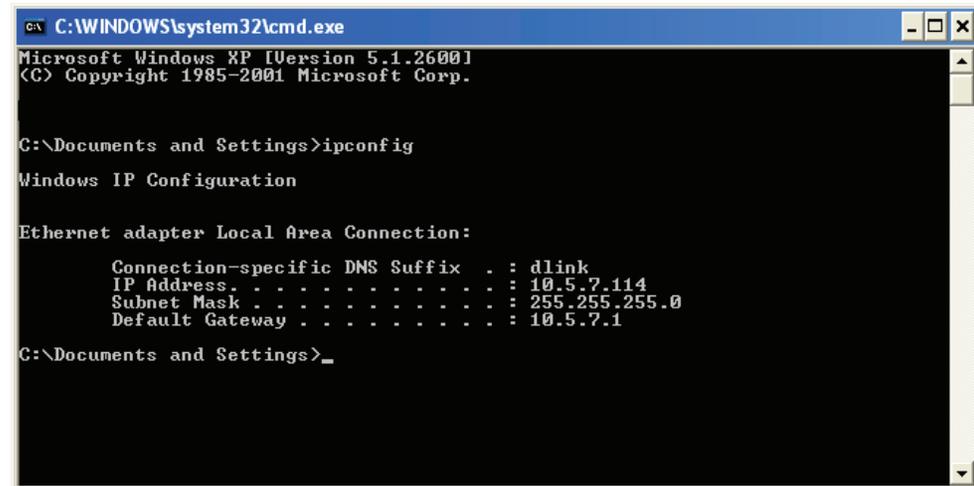
After you install your adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

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

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

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

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



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

C:\Documents and Settings>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

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

C:\Documents and Settings>_
```

Statically Assign an IP address

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

- Step 1**
- Windows Vista® - Click on **Start > Control Panel > Network and Internet > Network and Sharing Center > Manage Network Connections.**
 - Windows® XP - Click on **Start > Control Panel > Network Connections.**
 - Windows® 2000 - From the desktop, right-click **My Network Places > Properties.**

Step 2
Right-click on the **Local Area Connection** which represents your network adapter and select **Properties.**

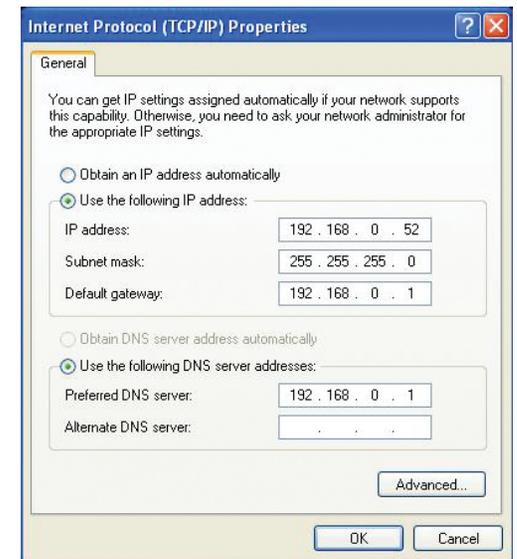
Step 3
Highlight **Internet Protocol (TCP/IP)** and click **Properties.**

Step 4
Click **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.

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

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

Step 5
Click **OK** twice to save your settings.



Technical Specifications

Standards

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

Security

- WPA-Personal
- WPA2-Personal

Wireless Signal Rates*

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

Frequency Range

- 2.4GHz to 2.483GHz

LEDs

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

Operating Temperature

- 32°F to 104°F (0°C to 40°C)

Operating Humidity

- 10%-90% non-condensing

Storage Humidity

- 5%-95% non-condensing

Safety & Emissions

- CE

Dimensions

- L = 5.83 inches
- W = 4.45 inches
- H = 1.3 inches

POWER INPUT

- 5 V DC/1 A Through External Power Adapter

WEIGHT

- 198 grams (0.44 lb)

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

Safety Statements

CE Mark Warning:

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