# D-Link Express EtherNetwork ${ }^{\text {TM }}$ DI-604 4-Port Ethernet Broadband Router 

Manual

## D-Link

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## Introduction

The D-Link Express EtherNetwork DI-604 is a 4-port Ethernet Broadband Router. The D-Link DI-604 enables users to quickly and easily share a high speed Internet connection. The D-Link DI-604 also incorporates many advanced features, traditionally found in more expensive routers.

After completing the steps outlined in the Quick Installation Guide (included in your package) you will have the ability to share a single Internet connection as well as sharing information and resources such as files and printers.

The DI-604 is compatible with most popular operating systems, including Macintosh, Linux and Windows, and can be integrated into an existing network. This Manual is designed to help you connect the D-Link Express EtherNetwork DI-604 to a high speed Internet connection and 4 Ethernet PC connections.

This manual provides a quick introduction to Broadband Router Technology, Firewalls, and Local Area Networking. Please take a moment to read through this manual and get acquainted these various technologies.

## Features and Benefits

## Broadband Modem and IP Sharing

Connects multiple computers to a Broadband (Cable or DSL) modem to share the Internet connection.

## Ethernet Switch

Allows you to quickly and easily share an Internet connection with multiple computers and devices.

## VPN supported

Supports multiple and concurrent IPSec and PPTP pass-through sessions, so multiple users behind the DI-604 can access corporate networks through various VPN clients more securely.

## Advanced Firewall \& Parental Control Features

The Web-Based user interface displays a number of advanced network management features including:

## Content Filtering

Easily applied content filtering based on Mac Address, IP Address, URL and/or Domain Name.

## Filter Scheduling

These filters can also be scheduled to be active on certain days or for a duration of hours or minutes.

## Network Address Translation

NAT allows you to share a single IP Address and protects you from outside intruders gaining access to your private network.

## DHCP Server Supported

All of the networked computers can retrieve TCP/IP settings automatically from the DI-604.

## Web-Based Management

DI-604 is configurable through any network computer's web browser using Netscape or Internet Explorer.

## Access Control Supported

Allows you to assign different access rights for different users.

## Virtual Server Supported

Enables you to expose WWW, FTP and other services on your LAN to be accessible to Internet users.

## Special Application Supported

Special applications requiring multiple connections, like Internet gaming, video conferencing, Internet telephony and so on. The DI-604 can sense the application type and open a multi-port tunnel for it.

## DMZ Host Supported

Allows a networked computer to be fully exposed to the Internet. This function is used when the Special Application feature is insufficient to allow an application to function correctly.

## Technology Introduction

## Introduction to Broadband Router Technology

A router is a device that forwards data packets from a source to a destination. Routers forward data packets using IP addresses and not a MAC address. A router will forward data from the Internet to a particular computer on your LAN.
The information that makes up the Internet gets moved around using routers. When you click on a link on a web page, you send a request to a
server to show you the next page. The information that is sent and received from your computer is moved from your computer to the server using routers. A router also determines the best route that your information should follow to ensure that the information is delivered properly.
A router controls the amount of data that is sent through your network by eliminating information that should not be there. This provides security for the computers connected to your router, because computers from the outside cannot access or send information directly to any computer on your network. The router determines which computer the information should be forwarded to and sends it. If the information is not intended for any computer on your network, the data is discarded. This keeps any unwanted or harmful information from accessing or damaging your network.

## Introduction to Firewalls

A firewall is a device that sits between your computer and the Internet that prevents unauthorized access to or from your network. A firewall can be a computer using firewall software or a special piece of hardware built specifically to act as a firewall. In most circumstances, a firewall is used to prevent unauthorized Internet users from accessing private networks or corporate LAN's and Intranets.
A firewall watches all of the information moving to and from your network and analyzes each piece of data. Each piece of data is checked against a set of criteria that the administrator configures. If any data does not meet the criteria, that data is blocked and discarded. If the data meets the criteria, the data is passed through. This method is called packet filtering.
A firewall can also run specific security functions based on the type of application or type of port that is being used. For example, a firewall can be configured to work with an FTP or Telnet server. Or a firewall can be configured to work with specific UDP or TCP ports to allow certain applications or games to work properly over the Internet.

## Introduction to Local Area Networking

Local Area Networking (LAN) is the term used when connecting several computers together over a small area such as a building or group of buildings. LAN's can be connected over large areas. A collection of LAN's connected over a large area is called a Wide Area Network (WAN).
A LAN consists of multiple computers connected to each other. There are many types of media that can connect computers together. The most common media is CAT5 cable (UTP or STP twisted pair wire.) On the other hand, wireless networks do not use wires; instead they communicate over radio waves. Each computer must have a Network Interface Card (NIC), which communicates the data between computers. A NIC is usually
a 10Mbps network card, or 10/100Mbps network card, or a wireless network card.
Most networks use hardware devices such as hubs or switches that each cable can be connected to in order to continue the connection between computers. A hub simply takes any data arriving through each port and forwards the data to all other ports. A switch is more sophisticated, in that a switch can determine the destination port for a specific piece of data. A switch minimizes network traffic overhead and speeds up the communication over a network.
Networks take some time in order to plan and implement correctly. There are many ways to configure your network. You may want to take some time to determine the best network set-up for your needs.

## Package Contents



- DI-604 Ethernet Broadband Router
- Power Adapter
- Ethernet Cable
- Quick Installation Guide
- Manual on CD

Note: Using a power supply with a different voltage rating will damage and void the warranty for this product. If any of the above items are missing, please contact your reseller.

## Hardware Description

## Front Panel



Power Power indicator will light Green.
WAN WAN status indicator will light Green when there is good physical WAN connection.

LAN Link status indicators light Green. The LED flickers when the Link/Act. corresponding port is sending or receiving data.

## Hardware Description

## Rear Panel



Reset Used to restore the DI-604 back to factory default settings.

LAN LAN port sockets (CAT5 Ethernet RJ-45 cable). The LED PORTS* glows steadily when a port is connected to a hub, switch or 1-4 network-adapter-equipped computer in your local area network (LAN.)
WAN* WAN port socket (CAT5 Ethernet RJ-45 cable). This is where you will connect your Cable or DSL modem.
Power Connect one end of your included power adapter to the power port and the other end into your power outlet.
*All ports (both LAN \& WAN) are Auto-MDIX. All ports auto-sense cable types to accommodate Straight-through or Cross-over cable.

## Reset

To reset the system settings to factory defaults, please follow these steps:

1. Leave the device powered on, do not disconnect the power
2. Press the reset button and hold (use a paper-clip)
3. Keep the button pressed about 10 seconds
4. Release the button

The DI-604 will then automatically reboot itself.

## Getting Started

## Installation Location

The DI-604 can be positioned at any convenient place in your office or house. No special wiring or cooling requirements are needed. However, you should comply with the following guidelines:

- Place the DI-604 on a flat horizontal plane.
- Keep away from any heating devices.
- Do not place in a dusty or wet environment.

The recommended operational specifications of the DI-604 are:

| Temperature | $32^{\circ} \mathrm{F} \sim 131^{\circ} \mathrm{F}$ |
| :---: | ---: |
| Humidity | $5 \% \sim 90 \%$ |

In addition, remember to turn off the power, remove the power cord from the outlet, and keep your hands dry when you install the hardware.

## Network Settings

To use the DI-604 correctly, you have to properly configure the network settings of your computers. The default IP address of the DI-604 is 192.168.0.1, and the default subnet mask is 255.255.255.0. These addresses can be changed as needed, but the default values are used in this manual. If the TCP/IP environment of your computer has not yet been configured, you can refer to Configuring Your PCs to Connect to the DI-604 to configure it.
For example:

1. Configure your computer IP as 192.168.0.3, subnet mask as 255.255.255.0 and gateway as 192.168.0.1

Or more conveniently
2. Configure your computers to obtain TCP/IP settings automatically from the DHCP server feature of the DI-604
Since the IP address of the DI-604 is 192.168.0.1, the IP address of your computer must be 192.168.0. X (where " X " is a number between 2 and 254.) Each computer on your network must have a different IP address within that range. The default gateway must be 192.168.0.1 (the IP address of the DI-604).

## Configuring the DI-604

The DI-604 provides an embedded Web-based management utility making it operating system independent. You can configure your DI-604 through the Netscape Communicator or Internet Explorer browser in MS Windows, Macintosh, Linux or UNIX based platforms. All that is needed is a web browser such as Internet Explorer or Netscape Navigator version 4 and higher with Java Script enabled.

## Start-up and Log in

Activate your web browser and type in the IP address of the DI-604 into the Location (for Netscape) or Address (for IE) field and press "Enter." The default IP address of the DI-604 is 192.168.0.1

For example: http://192.168.0.1

http:///192.168.0.1

After the connection is established, the logon screen will pop up.
To log in as an administrator, enter the username of "admin" and the password (there are no default password, leave it blank). Click the OK button. If the password is correct, the web-management interface will appear.

## Using the Configuration Wizard

The Setup Wizard screen will appear. Follow the Wizard step by step to quickly configure the DI-604.

| DetinkDl-604-Microsoft Internet Explorer <br> Welcome to the DI-604 Setup Wizard. The Wizard will guide you <br> through these four quick steps. Begin by clicking on Next. <br> Step 1. Set your new password <br> Step 2. Choose your time zone <br> Step 3. Set Internet connection <br> Step 4. Restart |
| :--- |
| Next Exit |


| PeLink | Microsoft Internet Explorer |
| :---: | :---: |
| Dl-604 Selup Wheard |  |
| Set Password |  | change the admin password for security purposes. Enter in your new password. Enter it in a second time for verification.

Click Next
You may change the admin account password by entering in a new password. Click Next to continue.


There will be three options to select from. Please select the appropriate option that is used by your ISP.

Dynamic IP Address: (ex:
Cable users) Select this option to obtain an IP address automatically from your ISP. Please see Dynamic IP Address section.
Static IP Address: Select this option to manually input the IP address that your ISP assigned to you. Please see Static IP Address section.

## PPP over Ethernet (PPPoE):


(ex: DSL users) Select this option if your ISP requires the use of PPPoE to connect to their services. Please see PPPoE section.
Once you have made the appropriate selection, click Next.

## Dynamic IP Address

If you selected Dynamic IP Address, you will see the following page.
If your ISP requires you to enter a specific host name or specific MAC address, please enter it in. The CLONE MAC Address button is used to copy the MAC address of your Ethernet adapter to the DI-604 WAN interface.

Click Next



## Static IP Address

If you selected Static IP Address, you will see the following page.

Enter in the IP address information provided to you by your ISP. You will need to enter in WAN IP Address, WAN Subnet Mask, WAN Gateway, and Primary DNS.

Click Next


## PPPoE

If you select PPP over Ethernet (PPPoE), you will see the following page.

Enter in the username and password provided to you by your ISP.

Enter in the Service Name if your ISP uses a Service Name for the PPPoE connection.

## Click Next

NOTE: Please be sure to remove any existing PPPoE client software installed on your computers.

At this point, the Setup Wizard has completed. Click Restart to save the settings and reboot the DI-604.

## D-Link Dl-604 Setup Wireard <br> Setup Completed

The Setup Wizard has completed. Click on Back to modify changes or mistakes. Click Restart to save the current settings and reboot the DI-604

## D-Link <br> Di-604 Setup Wizeard

Saving Changes and Restarting.


Your setup of the DI-604 is now complete. You should be able to access the Internet.

## Using the Configuration Menu

## Setup Wizard

The Setup Wizard page is the first page that appears when logging into the web-based management interface. The Setup Wizard is a utility used to quickly configure the DI-604. It will guide you through four quick and basic steps to help you connect to your ISP. You will be connected to your ISP (Internet Service Provider) and have Internet access within minutes.


## WAN

WAN is short for Wide Area Network. The WAN settings can be referred to as the Public settings. All IP information in the WAN settings are public IP addresses which are accessible on the Internet.
The WAN settings consist of three options: Dynamic IP Address, Static IP Address, and PPPoE. Select the appropriate option and fill in the information needed to connect to your ISP.


Choose Dynamic IP Address to obtain IP address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for Cable modem services.

Host Name: The Host Name field is optional but may be required by some ISPs. The host name is the device name of the Broadband Router.

MAC Address: The default MAC address is set to the WAN's physical interface MAC address on the Broadband Router. You can use the "Clone MAC Address" button to copy the MAC address of the Ethernet Card installed by your ISP and replace the WAN MAC address with this MAC address. It is not recommended that you change the default MAC address unless required by your ISP.


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

IP Address: Public IP address provided by your ISP.
Subnet Mask: Subnet mask provided by your ISP.
ISP Gateway Address: Public IP address of your ISP that you are connecting to.

Primary DNS Address: Primary DNS (Domain Name Server) IP provided by your ISP

Secondary DNS Address: optional


Choose PPPoE (Point to Point Protocol over Ethernet) if you're ISP uses PPPoE connection. Your ISP will provide you with a username and password. This option is typically used for DSL services. Select Dynamic PPPoE to obtain an IP address automatically for your PPPoE connection. Select Static PPPoE to use a static IP address for your PPPoE connection.

Dynamic PPPoE: PPPoE connection where you will receive an IP address automatically from your ISP
Static PPPoE: PPPoE connection where you have an assigned (static) IP address
User Name: Your PPPoE username provided by your ISP
Password: Your PPPoE password provided by your ISP
Retype Password: Re-enter PPPoE password
Service Name: Enter the service name provided by your ISP. (optional)
IP Address: This option is only available for Static PPPoE. Enter in the static IP address for the PPPoE connection.

## Primary DNS Address: Primary DNS IP provided by your ISP <br> Secondary DNS Address: optional

Maximum Idle Time: The amount of time of inactivity before disconnecting your PPPoE session. Enter a Maximum Idle Time (in minutes) to define a maximum period of time for which the Internet connection is maintained during inactivity. If the connection is inactive for longer than the defined Maximum Idle Time, then the connection will be dropped. Either set this to zero or enable Auto-reconnect to disable this feature.
MTU: MTU stands for Maximum Transmission Unit. For PPPoE connections, you may need to change the MTU settings in order to work correctly with your ISP.
Auto-Reconnect: If enabled, the Broadband Router will automatically connect to your ISP after your system is restarted or if the connection is dropped.
HOME > LAN


LAN is short for Local Area Network. This is considered your internal network. These are the IP settings of the LAN interface for the DI-604. These settings may be referred to as Private settings. You may change the LAN IP address if needed. The LAN IP address is private to your internal network and cannot be seen on the Internet.
IP Address: The IP address of the LAN interface. The default IP address is 192.168.0.1.
Subnet Mask: The subnet mask of the LAN interface. The default subnet mask is 255.255.255.0.
Local Domain Name: This field is optional. Enter in the your local domain name.


DHCP stands for Dynamic Host Configuration Protocol. The DI-604 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 DI-604. 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.

Starting IP Address: The starting IP address for the DHCP server's IP assignment.
Ending IP Address: The ending IP address for the DHCP server's IP assignment.
Lease Time: The length of time for the IP lease.

## ADVANCED > VIRTUAL SERVER



The DI-604 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 network.

The DI-604 firewall feature filters out unrecognized packets to protect your LAN network so all computers networked with the DI-604 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 DI-604 redirects the external service request to the appropriate server within the LAN network.
The DI-604 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. There are already pre-defined virtual services already in the table. You may use them by enabling them and assigning the server IP to use that particular virtual service.

Name: The name referencing the virtual service.
Private IP: The server computer in the LAN network that will be providing the virtual services.
Private Port: The port number of the service used by the Private IP computer.
Protocol Type: The protocol used for the virtual service.
Public Port: The port number on the WAN side that will be used to access the virtual service.
Schedule: The schedule of time when the virtual service will be enabled. The schedule may be set to Always, which will allow the particular service to always be enabled. If it is set to Time, select the time frame for the service to be enabled. If the system time is outside of the scheduled time, the service will we disabled.

Example \#1:
If you have a Web server that you wanted Internet users to access at all times, you would need to enable it. Web (HTTP) server is on LAN computer 192.168.0.25. HTTP uses port 80, TCP.

Name: Web Server

Private IP: 192.168.0.25
Protocol Type: TCP
Private Port: 80
Public Port: 80
Schedule: always

## Virtual Servers List

| Name | Private IP | Protocol | Schedule |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 区 Virtual Server HTTP | 192.168 .0 .25 | TCP 80/80 | always | 06II |

Click on this icon to edit the virtual service.
Click on this icon to delete the virtual service.

Example \#2:
If you have an FTP server that you wanted Internet users to access by WAN port 2100 and only during the weekends, you would need to enable it as such. FTP server is on LAN computer 192.168.0.30. FTP uses port 21, TCP.

## Name: FTP Server

Private IP: 192.168.0.30
Protocol Type: TCP
Private Port: 21
Public Port: 2100
Schedule: From: 01:00AM to 01:00AM, Sat to Sun
All Internet users who want to access this FTP Server must connect to it from port 2100. This is an example of port redirection and can be useful in cases where there are many of the same servers on the LAN network.

## ADVANCED > APPLICATIONS



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 makes some of these applications work with the DI-604. 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 public ports associated with the trigger port to open them for inbound traffic. The DI-604 provides some predefined applications in the table on the bottom of the web page. Select the application you want to use and enable it.
Note! Only one PC can use each Special Application tunnel.
Trigger Name: This is the name referencing the special application.
Trigger Port: This is the port used to trigger the application. It can be either a single port or a range of ports.
Trigger Type: This is the protocol used to trigger the special application.
Public Port: This is the port number on the WAN side that will be used to access the application. You may define a single port or a range of ports. You can use a comma to add multiple ports or a hyphen to add port ranges.
Public Type: This is the protocol used for the special application.


## Filters

Filters are used to deny or allow LAN computers from accessing the Internet. The DI-604 can be setup to deny internal computers by their IP or MAC addresses. The DI-604 can also block users from accessing restricted web sites.

## IP Filters

Use IP Filters to deny LAN IP addresses from accessing the Internet. You can deny specific port numbers or all ports for the specific IP address.
IP: The IP address of the LAN computer that will be denied access to the Internet.
Port: The single port or port range that will be denied access to the Internet.
Schedule: This is the schedule of time when the IP Filter will be enabled.

## ADVANCED > FILTERS > MAC FILTERS



Use MAC Filters to allow or deny LAN computers by their MAC addresses from accessing the Internet. You can either manually add a MAC address or select the MAC address from the list of clients that are currently connected to the Broadband Router.

## ADVANCED > FILTERS > URL BLOCKING



URL Blocking is used to deny LAN computers from accessing specific web sites by its URL. A URL is a specially formatted text string that defines a location on the Internet. If any part of the URL contains the blocked word, the site will not be accessible and the web page will not display.

## ADVANCED > FILTERS > DOMAIN BLOCKING



Domain Blocking is used to allow or deny LAN computers from accessing specific domains on the Internet. Domain blocking will deny all requests to a specific domain such as http and ftp. It can also allow computers to access specific sites and deny all other sites.

## ADVANCED > FILTERS > FIREWALL



Firewall Rules is an advance feature used to deny or allow traffic from passing through the Broadband Router. It works in the same way as IP Filters with additional settings. You can create more detailed access rules for the DI-604. When virtual services are created and enabled, it will also display in Firewall Rules. Firewall Rules contains all network firewall rules pertaining to IP (Internet Protocol).

In the Firewall Rules List at the bottom of the screen, the priorities of the rules are from top (the highest priority) to the bottom (the lowest priority.)

## Note: The DI-604 MAC Address filtering rules have precedence over the Firewall Rules.



If you have a client PC that cannot run Internet applications properly from behind the DI-604, then you can set the client up to unrestricted Internet access. It allows a computer to be exposed to the Internet. This feature is useful for gaming purposes. Enter the IP address of the internal computer that will be the DMZ host. Adding a client to the DMZ (Demilitarized Zone) may expose your local network to a variety of security risks, so only use this option as a last resort.


## Admin

At this page, the DI-604 administrator can change the system password. There are two accounts that can access the Broadband Router's Web-Management interface. They 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.

## Remote Management

Remote Management allows the DI-604 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.

IP Address: Internet IP address of the computer that has access to the Broadband Router. If the IP address is set to * (star). This allows any Internet IP address to access the Broadband Router. It is not
recommended that you set the IP address to * (star), because this allows any Internet IP address to access the Broadband Router, which could result in a loss of security for your network. If you elect to enable Remote Management, enter the IP Address of your remote location.

Port: The port number used to access the Broadband Router. (Select from the pull-down menu.)

Example: http://x.x.x.x:8080 where x.x.x.x is the WAN IP address of the Broadband Router and 8080 is the port used for the Web-Management interface.

## TOOLS > TIME



## Time

The system time is the time used by the DI-604 for scheduling services. You can manually set the time or connect to a NTP (Network Time Protocol) server. If an NTP server is set, you will only need to set the time zone. If you manually set the time, you may also set Daylight Saving dates and the system time will automatically adjust on those dates.


## System Settings

The current system settings can be saved as a file onto the local hard drive. The saved file or any other saved setting file can be loaded back on the Broadband Router. To reload a system settings file, click on Browse to browse the local hard drive and locate the system file to be used. You may also reset the Broadband Router back to factory settings by clicking on Restore.

## TOOLS > FIRMWARE



## Firmware Upgrade

You can upgrade the firmware of the Broadband Router at this page. Make sure the firmware you want to use is on the local hard drive of the computer. Click on Browse to browse the local hard drive and locate the firmware to be used for the update. Please check the D-Link support site for firmware updates at http://support.dlink.com.


## Miscellaneous Items

These are additional tools and features of the Broadband Router.

## Ping Test

This useful diagnostic utility can be used to check if a computer is on the Internet. It sends ping packets and listens for replies from the specific host.

## Restart Device

If for any reason the Broadband Router is not responding correctly, you may want to restart the Broadband Router.

## Block WAN Ping

When you "Block WAN Ping", you are causing the public WAN IP address on the Broadband Router to not respond to ping commands. Pinging public WAN IP addresses is a common method used by hackers to test whether your WAN IP address is valid.

Discard PING from WAN side: By enabling this option, the DI-604 will not reply to ping (ICMP) request packets from the Internet.

## VPN Pass-Through

The Broadband Router supports VPN (Virtual Private Network) pass-through for both PPTP (Point-to-Point Tunneling Protocol) and IPSec (IP Security). Once VPN pass-through is enabled, there is no need to open up virtual services. Multiple VPN connections can be made through the Broadband Router. This is useful when you have many VPN clients on the LAN network.

## TOOLS > VCT



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

Ports - The Ethernet port names associated to the physical ports.
Link Status - The current link status of the Ethernet cable connected to the respective Ethernet port.
More Info - Click on More Info for detailed information about the cable link status.

Refresh - Click on Refresh to run the VCT test. Allow the router a few seconds to complete the test.


This page displays the current information for the Broadband Router. It will display the WAN, LAN, and MAC address information.
If your WAN connection is set up for Dynamic IP address, there will be a Release button and Renew button. Use Release to disconnect from your ISP and use Renew to connect to your ISP.
If your WAN connection is set up for PPPoE, there will be a Connect button and Disconnect button. Use Disconnect to drop the PPPoE connection and use Connect to establish the PPPoE connection.

## WAN

MAC Address 00-40-05-B2-D5-9A
 IP Address 0.0.0.0

Subnet Mask 255.0.0.0
Default Gateway 0.0.0.0

This page allows you to observe the DI-604's working status:

## WAN

- IP Address: WAN/Public IP Address
- Subnet Mask: WAN/Public Subnet Mask
- Gateway: WAN/Public Gateway IP Address
- Domain Name Server: WAN/Public DNS IP Address
- Wan Status: WAN Connection Status

LAN

- IP Address: LAN/Private IP Address of the DI-604
- Subnet Mask: LAN/Private Subnet Mask of the DI-604

Firmware version: Displays the current firmware version
WAN MAC Address: Displays the WAN port MAC/hardware address LAN MAC Address: Displays the LAN port MAC/hardware address


## Log

The Broadband Router keeps a running log of events and activities occurring on the Router. If the device is rebooted, the logs are automatically cleared. You may save the log files under Log Setting.
First Page - The first page of the log.
Last Page - The last page of the log.
Previous - Moves back one log page.
Next - Moves forward one log page.
Clear - Clears the logs completely.
Log Settings - Brings up the page to configure the logs.

## Log Settings

Not only does the Broadband Router display the logs of activities and events, it can be setup to send these logs to another location. The logs can be sent via email to an email account.

SMTP Server - The address of the SMTP server that will be used to send the logs.
Send to - The email address the logs will be sent to. Click on Email Log Now to send the email.


## Traffic Statistics

The Broadband Router keeps statistic of traffic that passes through it. You are able to view the amount of packets that passes through the Router on both the WAN port and the LAN port. The traffic counter will reset if the device is rebooted.

## Troubleshooting

If you do not wish to set the static IP address on your PC, you will need to configure your PC to request an IP address from the gateway.

## Click the Start button, select Settings, and select Control Panel.

 Double-click the Network icon. In the configuration tab, select the TCP/IP protocol line that has been associated with your network card/adapter. If there is no TCP/IP line listed, you will need to install TCP/IP now.

Click the Properties button.

Choose the IP ADDRESS tab. Select Obtain an IP automatically.


After clicking OK, windows might ask you to restart the PC. Click Yes.

## CONFIRM YOUR PC'S IP CONFIGURATION

There are two tools which are great for finding out a computer's IP configuration: MAC address and default gateway.

## WINIPCFG (for Windows 95/98)

Inside the windows 95/98 Start button, select Run and type winipcfg. In the example below this computer has an IP address of 192.168.0.100 and the default gateway is 192.168.0.1. The default gateway should be the network device IP address. The MAC address in windows 95/98 is called the Adapter Address.

NOTE: You can also type winipcfg in the DOS command prompt.


## IPCONFIG (for Windows 2000/NT/XP)

At the command prompt type IPCONFIG and press Enter. Your PC IP information will be displayed as shown below.


## Assigning a Static IP Address

Note: Residential Gateways/Broadband Routers will automatically assign IP Addresses to the computers on the network, using DHCP (Dynamic Host Configuration Protocol) technology. If you are using a DHCP-capable Gateway/Router you will not need to assign Static IP Addresses.

If you are not using a DHCP capable Gateway/Router, or you need to assign a Static IP Address, please follow these instructions:

## Go to START

Double-click on
Control Panel


Double-click on
Network
Connections


## Right-click on Local Area Connections.

Double-click Properties


- Local Area Connection 7 Properties


## ? ${ }^{x}$

General Advanced
Connect using:
畔总 D-Link DWL-A650

Configure.
This connection uses the following items:


Install.. $\square$ Uninstall
Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.Show icon in notification area when connected

Select Use the following IP address in the Internet Protocol (TCP/IP) Properties window.
Input your IP address and subnet mask. (The IP Addresses on your network must be within the same range. For example, if one computer has an IP Address of 192.168.0.2, the other computers should have IP Addresses that are sequential, like 192.168.0.3 and 192.168.0.4. The subnet mask must be the same for all the computers on the network.) Input your DNS server addresses.
The DNS server information will be provided by your ISP (Internet Service Provider.)


## Click OK

You have completed the assignment of a Static IP Address. (You do not need to assign a Static IP Address if you have a DHCP-capable Gateway/Router.)

## Networking Basics

Using the Network Setup Wizard in Windows XP

In this section you will learn how to establish a network at home or work, using Microsoft Windows XP.
Note: Please refer to websites such as http://www.homenethelp.com and http://www.microsoft.com/windows2000 for information about networking computers using Windows 2000, ME or 98.

Go to Start>Control Panel>Network Connections Select Set up a home or small office network


When this screen appears, Click Next.

## Networking Basics

Please follow all the instructions in this window:


## Click Next

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


Click Next

## Networking Basics

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



## Click Next

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

Network Setup Wizard
Name your network.

Name your network by specifying a workgroup name below. All computers on your network should have the same workgroup name.

Workgroup name
Accounting
Examples: HOME or OFFICE

```
<Back N| Next>
```

Click Next

## Networking Basics

Please wait while the Network Setup Wizard applies the changes.


When the changes are complete, click Next.

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


## Networking Basics

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


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


Format the disk if you wish, and click Next.

## Networking Basics

Please wait while the Network Setup Wizard copies the files.


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


## Networking Basics

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


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

## System Settings Change

You must restart your computer before the new settings will take effect.
Do you want to restart your computer now?


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

## Networking Basics

## Naming your Computer

To name your computer, please follow these directions:

## In Windows XP:

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


| System Properties |
| :--- |
| System Restore Automatic Updates Remote <br> General Computer Name  |

Windows uses the following information to identify your computer on the network.

Computer description: $\square$

> For example: 'Kitchen Computer" or "Mary's Computer".

Full computer name: Office
Workgroup: Accounting

To use the Network Identification Wizard to join a domain and create a local user account, click Network Network ID ID.

To rename this computer or join a domain, click Change.


System Properties


Remote Advanced


Tornaich

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

You may enter a Computer description if you wish, this field is optional.
To rename the computer and join a domain,

## Networking Basics

Naming your Computer

- In this window, enter the Computer name.
- Select Workgroup and enter the name of the Workgroup.


## Computer Name Changes <br> ? 区

## You can change the name and the membership of this computer. Changes may affect access to network resources <br>  <br> Office

Full computer name
Office

Member of
Domain:
© Workgroup:
Accounting

- Click OK


## Checking the IP Address in Windows XP/2000

Go to Start > All Programs > Accessories > Command Prompt


## Networking Basics

## Checking the IP Address in Windows XP/2000

## Type Command



## Click OK

Checking the IP Address in Windows XP/2000

Type ipconfig /all at the prompt. Click Enter. All the configuration settings are displayed as shown below.


## Networking Basics

Checking the IP Address in Windows XP/2000
Type ipconfig/renew at the prompt to get a new IP Address. Click Enter. The new IP Address is shown below.

(Windows 98/ME users: go to Start > Run. Type Command. Type winipcfg at the prompt. Click Release and Renew to obtain a new IP Address.)

## Assigning a Static IP Address

Note: Residential Gateways/Broadband Routers will automatically assign IP Addresses to the computers on the network, using DHCP (Dynamic Host Configuration Protocol) technology. If you are using a DHCP-capable Gateway/Router you will not need to assign Static IP Addresses.
If you are not using a DHCP capable Gateway/Router, or you need to assign a Static IP Address, please follow these instructions:

- Go to Start
- Double-click on Control Panel

- Double-click on Network Connections
- Right-click on Local Area Connections.
- Double-click Properties




## Assigning a Static IP Address

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



## Networking Basics

## Adding and Sharing Printers in Windows XP

After you have run the Network Setup Wizard on all the computers in your network (please see the Network Setup Wizard section at the beginning of Networking Basics,) you can use the Add Printer Wizard to add or share a printer on your network.
Whether you want to add a local printer (a printer connected directly to one computer,) share an LPR printer (a printer connected to a print server) or share a network printer (a printer connected to your network through a Gateway/Router,) use the Add Printer Wizard, you can find the directions below:
First, make sure that you have run the Network Setup Wizard on all of the computers on your network.

We will show you 3 ways to use the Add Printer Wizard

1. Adding a local printer
2. Sharing an network printer
3. Sharing an LPR printer

## Adding a local printer <br> (A printer connected directly to a computer)

A printer that is not shared on the network and is connected directly to one computer is called a local printer. If you do not need to share your printer on a network, follow these directions to add the printer to one computer.

Windows Movie Maker


Files and Settings Transfer
Wizard

Notepad


All Programs

Log Off

Control Panel

Printers and Faxes
(?) Help and Support
Search
FiFun...

1) start

- Click on Add a printer

- Click Next
- Select Local printer attached to this computer
- (Deselect Automatically detect and install my Plug and Play printer if it has been selected.)

Add Printer Wizard


Welcome to the Add Printer Wizard

This wizard helps you install a printer or make printer connections.

If you have a Plug and Play printer that connects through a USB port (or any other hot pluggable port, such as IEEE 1394, infrared, and so on), you do not need to use this wizard. Click Cancel to close the wizard, and then plug the printer's cable into your computer or point the printer toward your computer's infrared port, and turn the printer on. Windows will automatically install the printer for you.

To continue, click Next.

## Add Printer Wizard

## Local or Network Printer

The wizard needs to know which type of printer to set up.

Select the option that describes the printer you want to use:

- Local printer attached to this computer
$\square$ Automatically detect and install my Plug and Play printer
A network printer, or a printer attached to another computerTo set up a network printer that is not attached to a print server, use the 'Local printer" option.



## Add Printer Wizard

Select a Printer Port
Computers communicate with printers through ports.

Select the port you want your printer to use. If the port is not listed, you can create a new port.

- Ulse the following port: LPT1: [Recommended Printer Port] $\vee$

Note: Most computers use the LPT1: port to communicate with a local printer. The connector for this port should look something like this:


O Create a new port:


## Networking Basics Adding a local printer

- Select and highlight the correct driver for your printer.


## - Click Next

(If the correct driver is not displayed, insert the CD or floppy disk that came with your printer and click Have Disk.)

- At this screen, you can change the name of the printer (optional.)
- Select Yes, to print a test page. A successful printing will confirm that you have chosen the correct driver.
- Click Next


## Add Printer Wizard

Install Printer Software
The manufacturer and model determine which printer software to use.

Select the manufacturer and model of your printer. If your printer came with an installation disk, click Have Disk. If your printer is not listed, consult your printer documentation for compatible printer software.


Add Printer Wizard
Name Your Printer
You must assign a name to this printer

Type a name for this printer. Because some programs do not support printer and server name combinations of more than 31 characters, it is best to keep the name as short as possible.

Printer name:
HP DeskJet 500


## Add Printer Wizard

## Print Test Page

To confirm that the printer is installed properly, you can print a test page.

Do you want to print a test page?

- Yes

○№


## Networking Basics

## Adding a local printer

This screen gives you information about your printer.

## Add Printer Wizard



## Click Finish

When the test page has printed,

## HP DeskJet 500

A test page is now being sent to the printer. Depending on the speed of your printer, it may take a minute or two before the page is printed.

The test page briefly demonstrates the printer's ability to print graphics and text, and it provides technical information about the printer driver.

If the test page printed, click OK.
If the test page did not print, click Troubleshoot.


## Networking Basics

Adding a local printer

- Go to Start> Printers and Faxes

A successful installation will display the printer icon as shown at right.

You have successfully added a local printer.


## Sharing a network printer

After you have run the Network Setup Wizard on all the computers on your network, you can run the Add Printer Wizard on all the computers on your network. Please follow these directions to use the Add Printer Wizard to share a printer on your network:

- Go to Start> Printer and Faxes



Add Printer Wizard
Welcome to the Add Printer
This wizard helps you install a printer or make printer
connections.

Add Printer Wizard

## Local or Network Printer

The wizard needs to know which type of printer to set up.

Select the option that describes the printer you want to use:
Local printer attached to this computer
Automatically detect and install my Plug and Play printer

- A network printer, or a printer attached to another computer
i) To set up a network printer that is not attached to a print server, use the 'Local printer" option.

- Select Browse for a printer
- Click Next
- $\quad$ Select the printer you would like to share.
- Click Next




## Networking Basics

Sharing a network printer
To check for proper installation:

- Go to Start> Printers and Faxes
A. Windows Movie Maker Tour Windows XP Control Panel

The printer icon will appear at right, indicating proper installation.

You have completed adding the printer.

To share this printer on your network:

- Remember the printer name
- Run the Add Printer Wizard on all the computers on your network.
- Make sure you have already run the Network Setup Wizard on all the network computers.

After you run the Add Printer Wizard on all the computers in the network, you can share the printer.


To share an LPR printer (using a print server,) you will need a Print Server such as the DP-101P+. Please make sure that you have run the Network Setup Wizard on all the computers on your network. To share an LPR printer, please follow these directions:

- Go to Start> Printers and Faxes
- Click on Add a Printer

The screen to the right will display.

- Click Next



## Add Printer Wizard

Local or Network Printer
The wizard needs to know which type of printer to set up.

Select the option that describes the printer you want to use:
( Local printer attached to this computel
Automatically detect and install my Plug and Play printer
A network printer, or a printer attached to another computer
i. To set up a network printer that is not attached to a print server, use the 'Local printer" option.

- Click Next

- Select Create a new port
- From the pull-down menu, select Standard TCP/IP Port, as shown.
- Click Next
- Please read the instructions on this screen.
- Click Next



Enter the Printer Name or IP address, and a port name for the desired device.

| Printer Name or IP Address: | 192.170 .0 .20 |
| :--- | :--- |
| Port Name: | IP_192.170.0.20 |



- In this screen, select Custom.


## Additional Port Information Required

The device could not be identified.

The detected device is of unknown type. Be sure that:

1. The device is properly configured.
2. The address on the previous page is correct.

- Click Settings

Either correct the address and perform another search on the network by returning to the previous wizard page or select the device type if you are sure the address is correct.

## Device Type

Ostandard Generic Network Card
© Custom
Settings.

- Enter the Port Name and the Printer Name or IP Address.
- Select LPR
- Enter a Queue Name (if your Print-Server/ Gateway has more than one port, you will need a Queue name.)
- Click OK

- This screen will show you information about your printer.
- Click Finish
- Select the printer you are adding from the list of Printers.
- Insert the printer driver disk that came with your printer.
- Click Have Disk

If the printer driver is already installed,

- Select Keep existing driver



## Networking Basics <br> Sharing an LPR printer

- You can rename your printer if you choose. It is optional.

Please remember the name of your printer. You will need this information when you use the Add Printer Wizard on the other computers on your network.

- Click Next


Add Printer Wizard

- Select Yes, to print a test page.
- Click Next

This screen will display information about your printer.

- Click Finish to complete the addition of the printer.
- Please run the Add Printer Wizard on all the computers on your network in order to share the printer.



Note: You must run the Network Setup Wizard on all the computers on your network before you run the Add Printer Wizard.

## Other Tasks

For help with other tasks in home or small office networking, see Using the Shared Documents folder and Sharing files and folders in the Help and Support Center in Microsoft Windows XP.

## Technical Specifications

Standards

- IEEE 802.3 10Base-T Ethernet
- IEEE 802.3u 100Base-TX Fast Ethernet
- IEEE 802.3 Nway Auto-Negotiation

VPN Pass Through / Multi-Sessions

- PPTP
- L2TP
- IPSec


## Device Management

Web-Based - requires at least Microsoft Internet Explorer v5 or later,
Netscape Navigator v4 or later, or other Java-enabled browsers.

## Media Access Control

CMSA/CA with ACK

## LEDS

- Power
- WAN
- Local Network - 10/100

Operating Temperature
$32^{*} \mathrm{~F}$ to $131^{*} \mathrm{~F}$ (0*C to $55^{*} \mathrm{C}$ )
Humidity
95\% maximum (non-condensing)

## Power Input

External power Supply
DC 5V, 2.0A

## Safety \& Emissions

- FCC
- UL


## Dimensions

- $L=5.6 \mathrm{in}(142 \mathrm{~mm})$
- $W=4.3 \mathrm{in}(109 \mathrm{~mm})$
- $\mathrm{H}=1.2 \mathrm{in}(31 \mathrm{~mm})$


## Weight

0.44 lbs (200g)

## Warranty

One Year

## Technical Support

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

D-Link provides free technical support for customers within the United States and within Canada for the duration of the warranty period on this product.
U.S. and Canadian customers can contact D-Link Technical Support through our website, or by phone.

Tech Support for customers within the United States:
D-Link Technical Support over the Telephone:
(877) 453-5465

24 hours a day, seven days a week.
D-Link Technical Support over the Internet:
http://support.dlink.com
email:support@dlink.com
Tech Support for customers within Canada:
D-Link Technical Support over the Telephone: (800) 361-5265

Monday to Friday 8:30am to 9:00pm EST
D-Link Technical Support over the Internet:
http://support.dlink.ca
email:support@dlink.ca

## Warranty

D-Link Systems, Inc. ("D-Link") provides this 1-Year warranty for its product only to the person or entity who originally purchased the product from:

- D-Link or its authorized reseller or distributor.
- Products purchased and delivered within the fifty United States, the District of Columbia, US Possessions or Protectorates, US Military Installations, addresses with an APO or FPO.
1-Year Limited Hardware Warranty: D-Link warrants that the hardware portion of the D-Link products described below ("Hardware") will be free from material defects in workmanship and materials from the date of original retail purchase of the Hardware, for the period set forth below applicable to the product type ("Warranty Period").


## 1-Year Limited Warranty for the Product(s) is defined as follows

- Hardware (excluding power supplies and fans)
- Spare parts and spare kits Ninety (90) days.

D-Link's sole obligation shall be to repair or replace the defective Hardware at no charge to the original owner. Such repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement Hardware need not be new or of an identical make, model or part; D-Link may in its discretion replace the defective Hardware (or any part thereof) with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. The Warranty Period shall extend for an additional ninety (90) days after any repaired or replaced Hardware is delivered. If a material defect is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware (or part thereof) that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

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

## What You Must Do For Warranty Service:

Submitting A Claim. Any claim under this limited warranty must be submitted in writing before the end of the Warranty Period to an Authorized D-Link Service Office.

- The customer must submit as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same.
- The original product owner must obtain a Return Material Authorization (RMA) number from the Authorized D-Link Service Office and, if requested, provide written proof of purchase of the product (such as a copy of the dated purchase invoice for the product) before the warranty service is provided.
- $\quad$ After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package.
- The customer is responsible for all shipping charges to and from D-Link (No CODs allowed). Products sent COD will become the property of D-Link Systems, Inc. Products should be fully insured by the customer and shipped to D-Link Systems Inc., 17595 Mt. Herrrmann, Fountain Valley, CA 92708.
D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.


## What Is Not Covered:

This limited warranty provided by D-Link does not cover: Products that have been subjected to abuse, accident, alteration, modification, tampering, negligence,
misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; and Any hardware, software, firmware or other products or services provided by anyone other than D-Link.
Disclaimer of Other Warranties: except for the 1-year limited warranty specified HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO NINETY (90) DAYS. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.
Limitation of Liability: то тне maximum extent pernitted by Lan, o-LINk is not lable under ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NON-CONFORMING PRODUCT.
GOVERNING LAW: This 1-Year Warranty shall be governed by the laws of the state of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This limited warranty provides specific legal rights and the product owner may also have other rights which vary from state to state.

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## CE Mark Warning

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

## FCC Statement

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

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

Rev. 101404

Version 206

