USER MANUAL DIR-825

VERSION 1.0



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	July 2, 2008	DIR-825 Revision A1 with Firmware version 1.00	

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Package Contents



Note: Using a power supply with a different voltage rating than the one included with the DIR-825 will cause damage and void the warranty for this product.

System Requirements

Network Requirements	An Ethernet-based Cable or DSL modem IEEE 802.11n-draft or 802.11g wireless clients IEEE 802.11a wireless clients 10/100/1000 Ethernet
Web-based Configuration Utility Requirements	Computer with the following: • Windows®, Macintosh, or Linux-based operating system • An installed Ethernet adapter Browser Requirements: • 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 Windows® Users: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.
CD Installation Wizard Requirements	Computer with the following: • Windows® XP with Service Pack 2 or Vista® • An installed Ethernet adapter • CD-ROM drive

Introduction

TOTAL PERFORMANCE

Combines award winning router features and IEEE 802.11a/g/Draft 802.11n wireless technology to provide the best wireless performance.

TOTAL SECURITY

The most complete set of security features including Active Firewall and WPA/WPA2 to protect your network against outside intruders.

TOTAL COVERAGE

Provides greater wireless signal rates even at farther distances for best-in-class Whole Home Coverage.

ULTIMATE PERFORMANCE

The D-Link Xtreme N[™] Dual Band Gigabit Router (DIR-825) is a draft 802.11n/802.11a compliant device that delivers real world performance of up to 14x faster than an 802.11g wireless connection (also faster than a 100Mbps wired Ethernet connection). Create a secure wireless network to share photos, files, music, video, printers, and network storage throughout your home. Connect the DIR-825 router to a cable or DSL modem and share your high-speed Internet access with everyone on the network. In addition, this Router includes a Quality of Service (QoS) engine that keeps digital phone calls (VoIP) and online gaming smooth and responsive, providing a better Internet experience.

EXTENDED WHOLE HOME COVERAGE

Powered by Xtreme N[™] Duo[™] technology, this high performance router provides superior Whole Home Coverage while reducing dead spots. The router is designed for use in bigger homes and for users who demand higher performance networking. Add a Xtreme N[™] notebook or desktop adapter and stay connected to your network from virtually anywhere in your home.

TOTAL NETWORK SECURITY

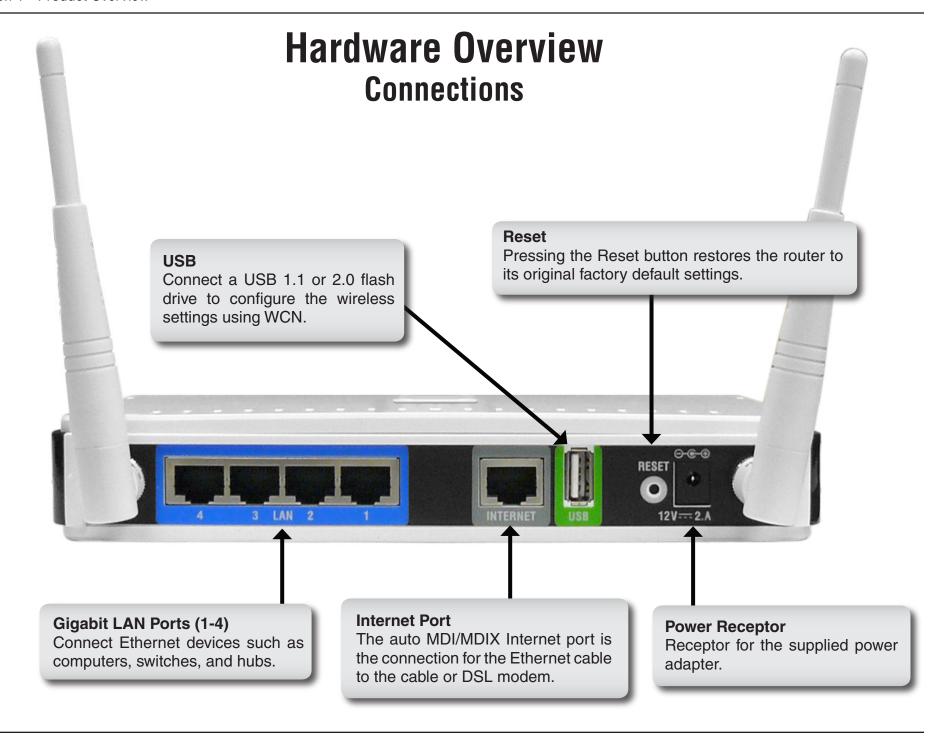
The Xtreme N^{TM} router supports all of the latest wireless security features to prevent unauthorized access, be it from over the wireless network or from the Internet. Support for WPA/WPA2 standards ensure that you'll be able to use the best possible encryption method, regardless of your client devices. In addition, this router utilizes dual active firewalls (SPI and NAT) to prevent potential attacks from across the Internet.

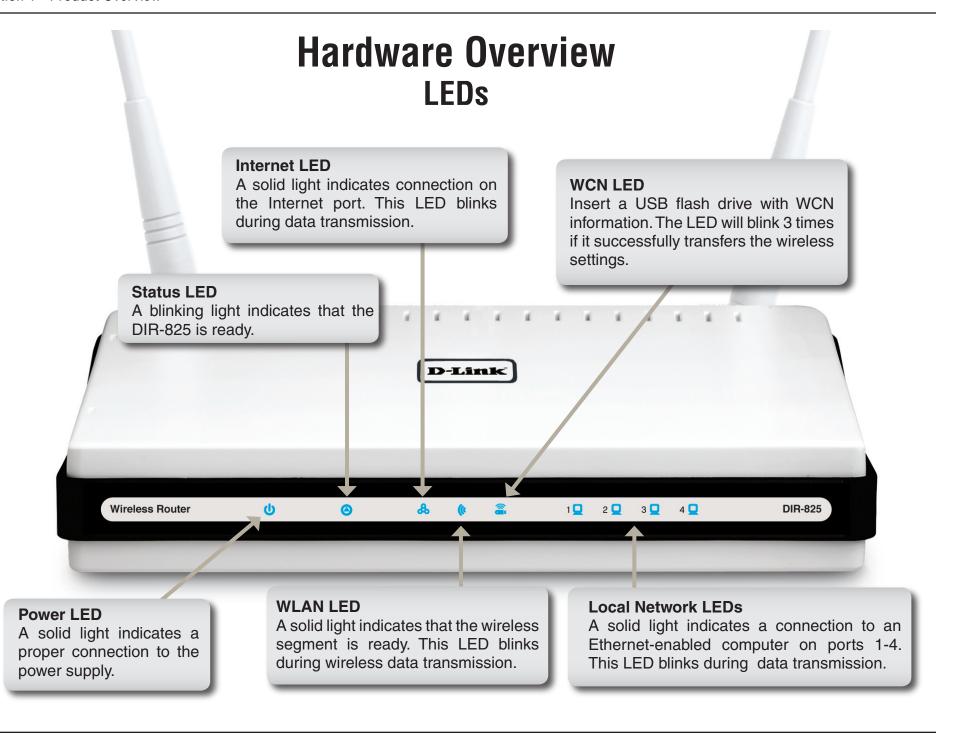
^{*} Maximum wireless signal rate derived from IEEE Standard 802.11a, 802.11g and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual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

Features

- Faster Wireless Networking The DIR-825 provides up to 300Mbps* 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. The performance of this 802.11n wireless router gives you the freedom of wireless networking at speeds 650% faster than 802.11g.
- Compatible with 802.11a/g Devices The DIR-825 is still fully compatible with the IEEE 802.11g and 802.11a standards, so it can connect with existing 802.11g and 802.11a 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 MAC Address, URL, and/or Domain Name.
 - Filter Scheduling These filters can be scheduled to be active on certain days or for a duration of hours or minutes.
 - Secure Multiple/Concurrent Sessions The DIR-825 can pass through VPN sessions. It supports multiple and concurrent IPSec and PPTP sessions, so users behind the DIR-825 can securely access corporate networks.
- **User-friendly Setup Wizard** Through its easy-to-use Web-based user interface, the DIR-825 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, 802.11a, and Draft 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.





Installation

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

Before you Begin

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

Wireless Installation Considerations

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

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

Connect to Cable/DSL/Satellite Modem

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

- 1. Place the router in an open and central location. Do not plug the power adapter into the router.
- 2. Turn the power off on your modem. If there is no on/off switch, then unplug the modem's power adapter. Shut down your computer.
- 3. Unplug the Ethernet cable (that connects your computer to your modem) from your computer and place it into the Internet port on the router.
- 4. Plug an Ethernet cable into one of the four LAN ports on the router. Plug the other end into the Ethernet port on your computer.
- 5. Turn on or plug in your modem. Wait for the modem to boot (about 30 seconds).
- 6. Plug the power adapter to the router and connect to an outlet or power strip. Wait about 30 seconds for the router to boot.
- 7. Turn on your computer.
- 8. Refer to page 12 to configure your router.

Connect to Another Router

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

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

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

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

- 6. Disconnect the Ethernet cable from the router and reconnect your computer to your network.
- 7. Connect an Ethernet cable in one of the **LAN** ports of the router and connect it to your other router. Do not plug anything into the Internet (WAN) 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.

Getting Started

The DIR-825 includes a Quick Router Setup Wizard CD. Follow the simple steps below to run the Setup Wizard to guide you quickly through the installation process.

Insert the **Quick Router Setup Wizard CD** in the CD-ROM drive. The step-by-step instructions that follow are shown in Windows® XP. The steps and screens are similar for the other Windows operating systems.

If the CD Autorun function does not automatically start on your computer, go to **Start** > **Run**. In the run box type "**D:\DIR825.exe**" (where **D:** represents the drive letter of your CD-ROM drive).

When the autorun screen appears, click Install Router.



Note: It is recommended to write down the SSID and Security Key, followed by the login password on the provided CD holder.

Configuration

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

Web-based Configuration Utility

To access the configuration utility, open a web-browser such as Internet Explorer and enter the IP address of the router (192.168.0.1).

You may also connect using the NetBIOS name in the address bar (http://dlinkrouter).



Select **Admin** from the drop-down menu and then enter your password. Leave the password blank by default.

If you get a **Page Cannot be Displayed** error, please refer to the **Troubleshooting** section for assistance.



Setup Wizard

D-Link

SETUP

Step 1: Set your Password
 Step 2: Select your Time Zone
 Step 3: Configure your Internet Connection
 Step 4: Save Settings and Connect

DIR-825

WIRELESS SETTINGS

NETWORK SETTINGS

Click Launch Internet Connection Setup Wizard to begin.

If you want to enter your settings without running the wizard, click **Manual Configuration** and skip to page 18.

MANUAL INTERNET CONNECTION OPTIONS

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

Manual Internet Connection Setup be produced by the click of the button below.

WELCOME TO THE D-LINK INTERNET CONNECTION SETUP WIZARD

This wizard will guide you through a step-by-step process to configure your new D-Link router and connect to the Internet.

Create a new password and then click **Next** to continue.



Connect

There are two ways to set up your Internet connection: you can use the Web-based Internet

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

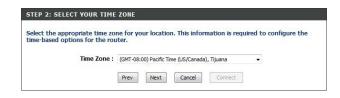
Internet Connection Sebup Wizard

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

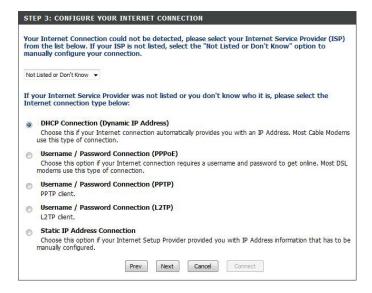
Connection Setup Wizard, or you can manually configure the connection

INTERNET CONNECTION SETUP WIZARD

Select your time zone from the drop-down menu and then click **Next** to continue.

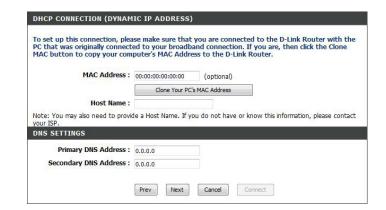


Select the type of Internet connection you use and then click **Next** to continue.



If you selected **Dynamic**, you may need to enter the MAC address of the computer that was last connected directly to your modem. If you are currently using that computer, click **Clone Your PC's MAC Address** and then click **Next** to continue.

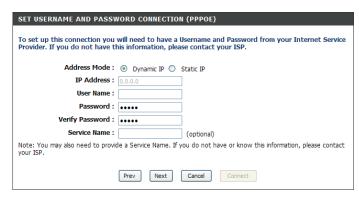
The Host Name is optional but may be required by some ISPs. The default host name is the device name of the router and may be changed.



If you selected **PPPoE**, enter your PPPoE username and password. Click **Next** to continue.

Select **Static** if your ISP assigned you the IP address, subnet mask, gateway, and DNS server addresses.

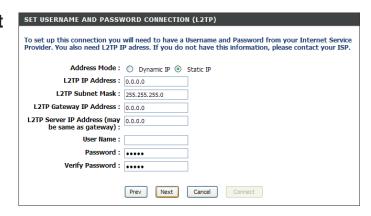
Note: Make sure to remove your PPPoE software from your computer. The software is no longer needed and will not work through a router.



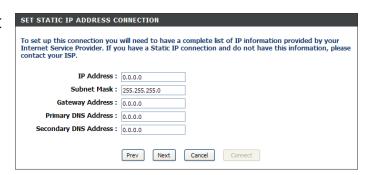
If you selected **PPTP**, enter your PPTP username and password. Click **Next** to continue.



If you selected **L2TP**, enter your L2TP username and password. Click **Next** to continue.



If you selected **Static**, enter your network settings supplied by your Internet provider. Click **Next** to continue.



Click **Connect** to save your settings.



Click **Reboot Now** to reboot the router so the new settings can take effect. Once the router is finished rebooting, click **Continue**. Please allow 1-2 minutes to connect.

Your changes have been saved. The router must be rebooted for the changes to take effect. You can reboot now, or you can continue to make other changes and reboot later.

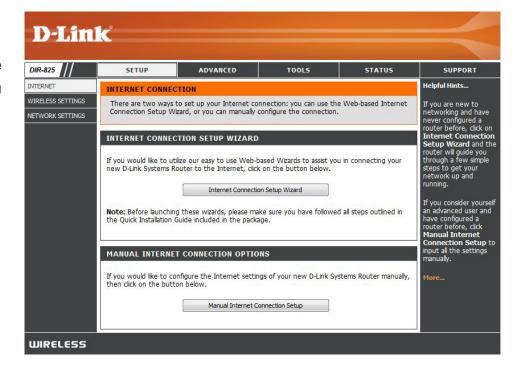
Reboot Now Reboot Later

Close your browser window and reopen it to test your Internet connection. It may take a few tries to initially connect to the Internet.

Manual Internet Connection Setup

Click Manual Internet Connection Setup to begin.

If you want to configure your router to connect to the Internet using the wizard, click **Internet Connection Setup Wizard** and refer to page 14.



Dynamic (Cable)

My Internet Select Dynamic IP (DHCP) to obtain IP Address Connection: 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 such as Comcast and Cox.

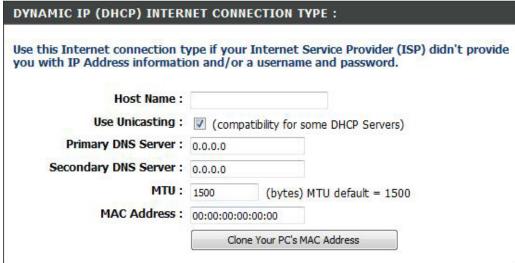
Host Name: The Host Name is optional but may be required by some ISPs. Leave blank if you are not sure.

Use Unicasting: Check the box if you are having problems obtaining an IP address from your ISP.

Primary/ Enter the Primary and secondary DNS server
Secondary DNS IP addresses assigned by your ISP. These
Server: addresses are usually obtained automatically from your ISP. Leave at 0.0.0.0 if you did not specifically receive these from 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 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.

Internet Setup PPPoE (DSL)

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

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

Address Mode: Select **Static IP** 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 Enter a maximum idle time during which the Internet connection is

Time: maintained during inactivity. To disable this feature, enable Auto-

reconnect.

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

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

default MTU.

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

MAC Address button to replace the Internet port's MAC address with the MAC address of your Ethernet card.

