

D-Link *AirPlus Xtreme G*

DI-824VUP

High-Speed Enhanced 2.4 GHz
Wireless VPN Router

Manual

D-Link[®]

Building Networks for People

10/01/2003

Contents

Package Contents	3
Introduction	4
Wireless Basics	6
Getting Started	9
Using the Configuration Menu	11
Installing the Print Server Software	65
Configuring on Windows 98se/Me Platforms	67
Networking Basics	69
Reset to Factory Default Settings	98
Technical Specifications	99
Frequently Asked Questions	100
Contacting Technical Support	149
Warranty and Registration	150

Package Contents



Contents of Package:

- **D-Link AirPlus Xtreme G DI-824VUP** High-Speed Enhanced 2.4GHz Wireless VPN Router
- Power Adapter – 5V DC / 2.5A
- Manual on CD
- Quick Installation Guide

Note: Using a power supply with a different voltage rating than the one included with the DI-824VUP will cause damage and void the warranty for this product.

If any of the above items are missing, please contact your reseller.

System Requirements For Configuration:

- Ethernet-Based Cable or DSL Modem
- Computer with Windows, Macintosh, or Linux-based operating system with an installed Ethernet adapter
- Internet Explorer version 6.0 or Netscape Navigator version 6.0 and above, with JavaScript enabled

Introduction

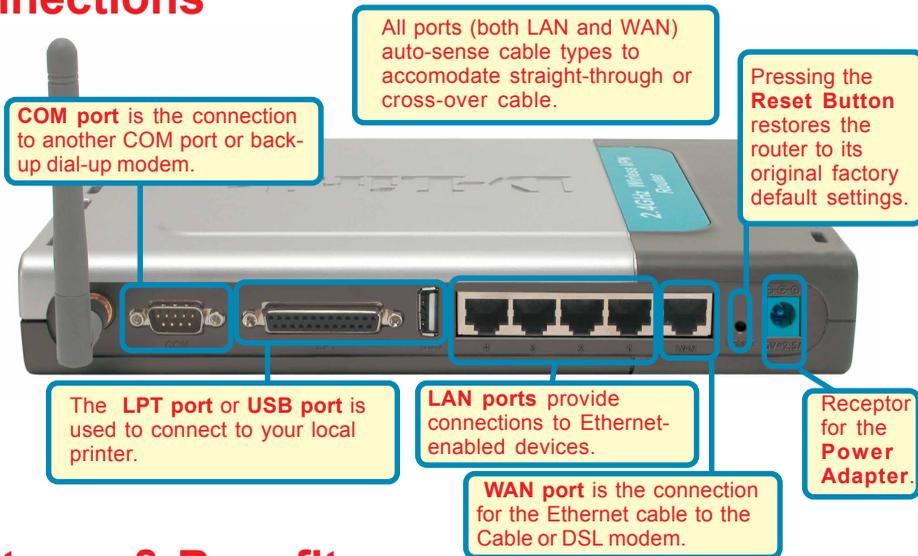
The D-Link *AirPlus Xtreme G* DI-824VUP Wireless Broadband Router is an enhanced 802.11b high-performance, wireless router with a printer port. It is an ideal way to extend the reach and number of computers connected to your wireless network.

Unlike most 802.11g routers, the DI-824VUP is capable of data transfer speeds up to 54 Mbps (compared to the standard 11 Mbps) when used with other D-Link *AirPlus Xtreme G* products such as the DWL-G650 and DWL-G520 Wireless Adapters.

After completing the steps outlined in the *Quick Installation Guide* (included in your package) you will have the ability to share information and resources, as well as share a printer wirelessly on your network.

The DI-824VUP is compatible with most popular operating systems, including Macintosh, Linux and Windows, and can be integrated into a large network. This Manual is designed to help you connect the Router and D-Link *AirPlus* 2.4GHz Wireless Adapters into a network in Infrastructure mode. *Please take a look at the **Getting Started** section in this manual to see an example of an Infrastructure network using the DI-824VUP.*

Connections



Features & Benefits

- Connects multiple computers to an Ethernet Broadband (Cable or DSL) modem to share the Internet connection
- Supports VPN pass-through, providing added security
- Advanced Firewall features for added network security
- DHCP server support enables all networked computers to automatically receive IP addresses
- Wireless connection of up to 54Mbps
- Web-based interface for Management
- Access Control to manage users on the network
- Maximum reliability, throughput and connectivity with automatic data rate switching
- Stronger network security with 256-bit encryption
- Printer port enables connection to a network printer
- WAN and LAN ports auto detect cable types (straight-through or cross-over)
- UPnP supported



Note: Please refer to the *Resetting the DI-824VUP to the Factory Default Settings* section in this manual for instructions on how to use the Reset button.

LEDS

LED stands for **L**ight-**E**mitting **D**iode. The **DI-824VUP** has the following LEDs as described below:

LED	LED Activity
Power	A steady light indicates a connection to a power source
WAN	A solid light indicates connection on the WAN port. This LED blinks during data transmission
Status	Flashes once per second to indicate the unit is working properly
COM	A steady light indicates a connection to COM port or back-up dial-up modem
USB	A steady light indicates a connection to a USB device
LPT	A steady light indicates a connection to a parallel printer port
WLAN	A blinking light indicates that the wireless segment is ready. This LED blinks during wireless data transmission.
LOCAL NETWORK (Ports 1-4)	A solid light indicates a connection to an Ethernet-enabled computer on ports 1-4. This LED blinks during data transmission.

Wireless Basics

D-Link *AirPlus* 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 *AirPlus* 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 Basics

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.

People use wireless LAN technology for many different purposes:

Mobility - Productivity increases when people have access to data in any location within the operating range of the WLAN. Management decisions based on real-time information can significantly improve worker efficiency.

Low Implementation Costs – WLANs (Wireless Local Area Networks) are easy to set up, manage, change, and relocate. Networks that frequently change, both physically and logically, can benefit from WLANs ease of implementation. WLANs can operate in locations where installation of wiring may be impractical.

Installation Speed and Simplicity - Installing a wireless LAN system can be fast, easy, and can eliminate the need to pull cable through walls and ceilings.

Network Expansion - Wireless technology allows the network to go where wires cannot.

Scalability – Wireless Local Area Networks (WLANs) can be configured in a variety of topologies to meet the needs of specific applications or existing infrastructure. Configurations are easily changed and range from peer-to-peer networks suitable for a small number of users to larger infrastructure networks to accommodate hundreds or thousands of users, depending on the number of wireless devices deployed.

Wireless Basics

The DI-824VUP is compatible with other **D-Link AirPlus Xtreme G 802.11g** products, which include:

- ◆ Enhanced 2.4GHz Wireless Cardbus Adapters used with laptop computers (DWL-G650)
- ◆ Enhanced 2.4GHz Wireless PCI cards used with desktop computers (DWL-G520)

Standards-Based Technology

Based on the IEEE **802.11g** standard, the DI-824VUP is interoperable with existing compatible 2.4GHz wireless technology with data transfer speeds of up to 54Mbps (with the D-Link *AirPlus* family of wireless devices,) as well as standard 802.11b technology (the D-Link *Air* family of wireless devices), with speeds of up to 11Mbps.

Installation Considerations

The D-Link *AirPlus Xtreme G+* DI-824VUP lets you access your network, using a wireless connection, from virtually anywhere. 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 DI-824VUP and your receiving device (e.g., the DWL-G650) to a minimum—each wall or ceiling can reduce your D-Link *AirPlus* wireless product's range from 3-90 feet (1-30 meters.) Position your receiving devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between routers and computers. 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! Try to make sure that devices are positioned so that the signal will travel straight through a wall or ceiling 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 wireless devices and computers with wireless adapters so that the signal passes through drywall or open doorways and not other materials.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.

Getting Started

With its default settings, the DI-824VUP will connect with other D-Link *Air* or *AirPlus* products, right out of the box.

With a single IP Address from your Broadband Internet Service provider you can share the Internet with all the computers on your local network, without sacrificing speed or security, using D-Link *Air* networking products.

IP ADDRESS

Note: If you are using a DHCP-capable router in your network setup, such as the DI-824VUP, you will not need to assign a static IP Address.

If you need to assign IP Addresses to the computers on the network, please remember that the **IP Address for each computer must be in the same IP Address range as all the computers in the network**, and the Subnet Mask must be exactly the same for all the computers in the network.

For example: If the first computer is assigned an IP Address of 192.168.0.2 with a Subnet Mask of 255.255.255.0, then the second computer can be assigned an IP Address of 192.168.0.3 with a Subnet Mask of 255.255.255.0, etc.

IMPORTANT: If computers or other devices are assigned the same IP Address, one or more of the devices may not function properly on the network.

An **Infrastructure** wireless network contains an Access Point. The **Infrastructure Network** example, shown here, contains the following D-Link network devices:

- A wireless Broadband Router -
D-Link AirPlus Xtreme G DI-824VUP
- A laptop computer with a wireless adapter -
D-Link AirPlus Xtreme G DWL-G650
- A desktop computer with a wireless adapter -
D-Link AirPlus Xtreme G DWL-G520
- A Cable modem -
D-Link DCM-201

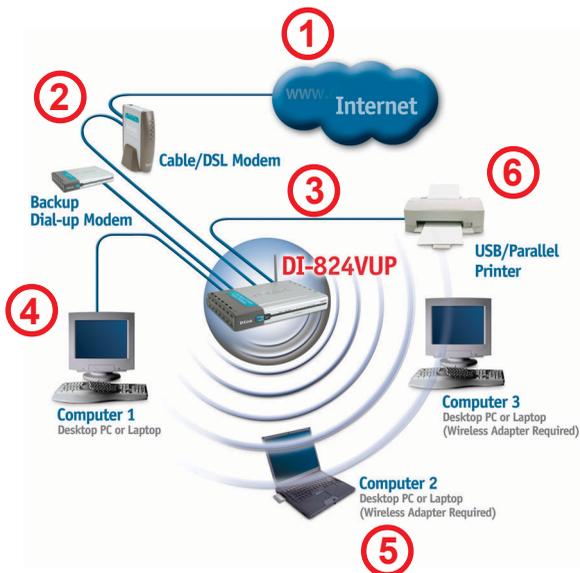
Getting Started

Please refer to the following sections of this manual for additional information about setting up a network:

Networking Basics - learn how to check and assign your IP Address; share printers and files.

Using the Configuration Menu - learn the settings for the DI-824VUP, using the web-based interface.

Troubleshooting - learn how to check for common installation issues and other tips for troubleshooting.



Please remember that **D-Link AirPlus** wireless devices are pre-configured to connect together, right out of the box, with their default settings.

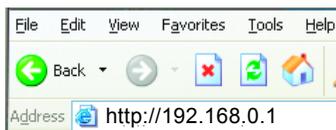
For a typical wireless setup at home (as shown above), please do the following:

- 1** You will need broadband Internet access (a Cable or DSL subscription line into your home or office).
- 2** Consult with your Cable or DSL provider for proper installation of the modem.
- 3** Connect the Cable or DSL modem to the DI-824VUP wireless broadband router (See the Quick Installation Guide included with the DI-824VUP.)
- 4** If you are connecting a desktop computer to your network, you can install the D-Link AirPlus Xtreme G DWL-G520 wireless PCI adapter into an available PCI slot. (See the Quick Installation Guide included with the DWL-G520.)
- 5** If you are connecting a laptop computer to your network, install the drivers for the wireless cardbus adapter (e.g., D-Link AirPlus Xtreme G DWL-G650) into a laptop computer. (See the Quick Installation Guide included with the DWL-G650.)
- 6** Connect your printer to the printer port on the DI-824VUP. Please refer to the quick installation guide for loading the print server software.

Using the Configuration Menu

Whenever you want to configure your network or the DI-824VUP, you can access the Configuration Menu by opening the web-browser and typing in the IP Address of the DI-824VUP. The DI-824VUP default IP Address is shown below:

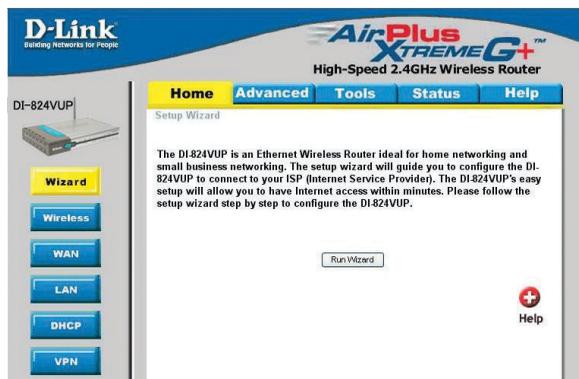
- Open the web browser
- Type in the **IP Address** of the DI-824VUP



Note: if you have changed the default IP Address assigned to the DI-824VUP, make sure to enter the correct IP Address.

The factory default **User name** is **admin** and the default **Password** is blank (empty). It is recommended that you change the admin password for security purposes. Please refer to **Tools > Admin** to change the admin password.

Home > Wizard



The Home>Wizard screen will appear. Please refer to the *Quick Installation Guide* for more information regarding the Setup Wizard.



Clicking **Apply** will save changes made to the page.



Clicking **Cancel** will clear changes made to the page.



Clicking **Help** will bring up helpful information regarding the page.

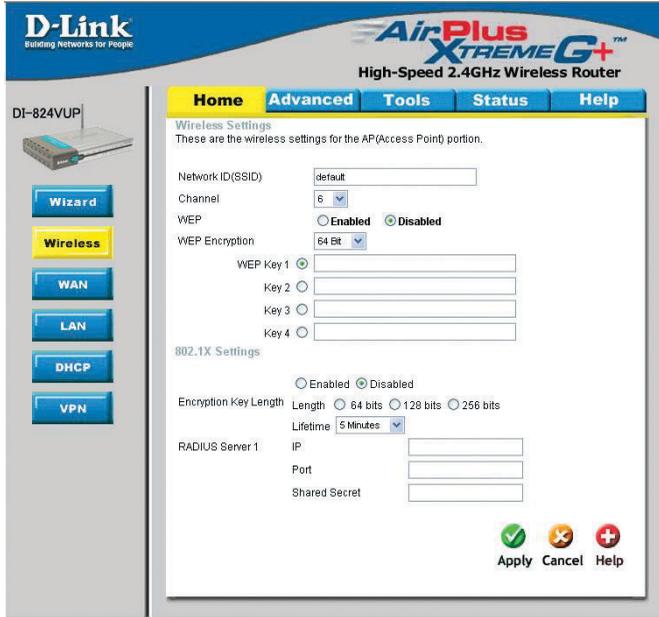


Clicking **Restart** will restart the router. (Necessary for some changes.)

Restart

Using the Configuration Menu

Home > Wireless



SSID

default is the default setting. All devices on the network must share the same SSID. If you change the default setting, the SSID may be up to 32 characters long.

Channel

6 is the default channel. All devices on the network must share the same channel.

WEP

Click *Enabled* or *Disabled* (default).

WEP Encryption

Select the level of encryption desired: 64, 128, or 256-bit.

- 64-bit** Requires 10 digits
- 128-bit** Requires 26 digits
- 256-bit** Requires 58 digits

Keys 1-4

Input up to 4 WEP keys using Hexadecimal format; select the one you wish to use.

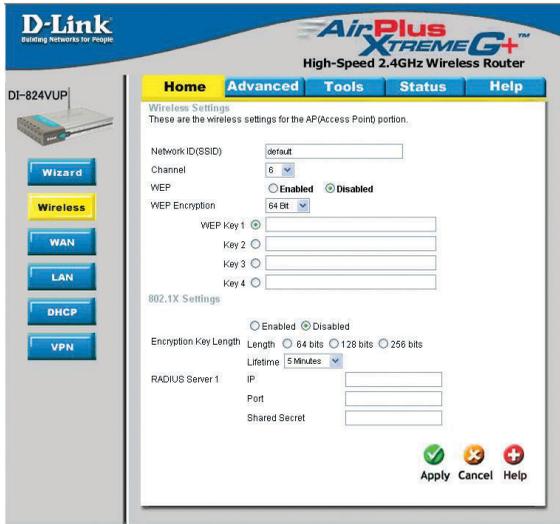
Hexadecimal digits consist of the numbers 0-9 and the letters A-F.



WEP (Wired Equivalent Privacy) If you enable encryption on the DI-824VUP, make sure to also enable encryption on all 802.11b wireless clients, or wireless connection will not be established.

Using the Configuration Menu

Home > Wireless (Continued)



802.1x

The 802.1x is an authentication method which is designed to compliment the existing WEP encryption. During the authentication process, the server verifies the identity of the client attempting to connect to the network. With the proper client account and encryption key, access to the network is granted. Unfamiliar encryption key or clients are denied from accessing the wireless network. This feature will help safe guard a Local Area Network (LAN) from unwanted visitors.

To take the full advantage of the 802.1x in DI-824VUP, all of the wireless devices on your network must be 802.1x compatible and must have the 802.11x feature enabled to communicate with the router. (Note: Windows 2000 users will find a few downloads to enable 802.1x clients on the Microsoft website.)

Encryption Key Selection for Encryption Key

* Dynamic Keying is a technique for changing the WEP Key used between the supplicant (wireless client) and the access point.

- 64 bits – This will generate a 10 digit Dynamic Key value for encryption.
- 128 bits – This will generate a 26 digit Dynamic Key value for encryption.
- 256bits – This will generate a 58 digit Dynamic Key value for encryption.
- Lifetime – Select the period of time before a new Dynamic Key is generated.

RADIUS Server Enter the IP address and port number of the RADIUS server that will be used as the 802.1x authenticator. Enter the secret key that has also been entered into the RADIUS server's configuration.

Using the Configuration Menu

Home > WAN > Dynamic IP Address

The screenshot shows the configuration interface for a D-Link AirPlus Xtreme G+ High-Speed 2.4GHz Wireless Router. The page is titled "WAN Settings" and includes a navigation menu with "Home", "Advanced", "Tools", "Status", and "Help". The "Home" tab is selected. On the left, there is a sidebar with buttons for "Wizard", "Wireless", "WAN" (highlighted in yellow), "LAN", "DHCP", and "VPN". The main content area is titled "WAN Settings" and contains the following options:

- Dynamic IP Address: Choose this option to obtain an IP address automatically from your ISP. (For most Cable modem users)
- Static IP Address: Choose this option to set static IP information provided to you by your ISP.
- PPPoE: Choose this option if your ISP uses PPPoE. (For most DSL users)
- Dial-up Network: To surf the Internet via PSTN/ISDN.
- Others: PPTP and BigPond Cable.

Below these options, the "Dynamic IP Address" section is expanded, showing the following fields:

- Host Name: [] (Optional)
- MAC Address: [00] [-80] [-C8] [-C2] [-BD] [-44]
- Clone MAC Address: []
- Primary DNS Address: [0.0.0.0]
- Secondary DNS Address: [0.0.0.0]
- MTU: [1500]
- Auto-reconnect: Enabled Disabled
- Auto-backup: Enabled Disabled

At the bottom right of the configuration area, there are three status icons: a green checkmark, a yellow warning icon, and a red plus icon.

Most Cable modem users will select this option to obtain an IP Address automatically from their ISP (Internet Service Provider).

Host Name

This is optional, but may be required by some ISPs. The host name is the device name of the Router.

Renew IP Forever

Enable this feature to allow the router to automatically reconnect to the ISP if the connection drops.

MAC Address

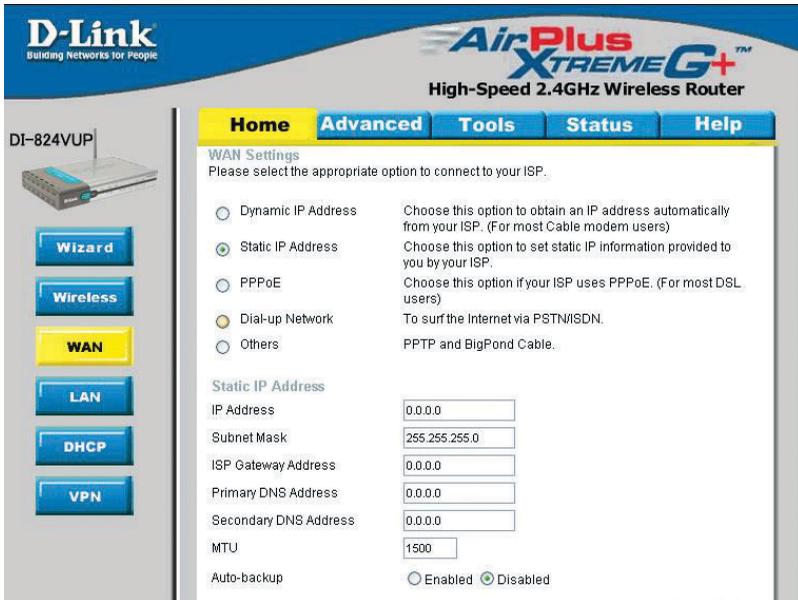
The default MAC Address is set to the WAN's physical interface MAC address on the Router.

Clone MAC Address

This feature will copy the MAC address of the Ethernet card, and replace the WAN MAC address of the Router with this Ethernet card MAC address. It is not recommended that you change the default MAC address unless required by your ISP.

Using the Configuration Menu

Home > WAN > Static IP Address



The screenshot shows the configuration interface for a D-Link DI-824VUP router. The page title is "AirPlus Xtreme G+ High-Speed 2.4GHz Wireless Router". The navigation menu includes Home, Advanced, Tools, Status, and Help. The "WAN Settings" section is active, with a sub-header "Please select the appropriate option to connect to your ISP." The options are: Dynamic IP Address, Static IP Address (selected), PPPoE, Dial-up Network, and Others. Below this, the "Static IP Address" section contains input fields for IP Address (0.0.0.0), Subnet Mask (255.255.255.0), ISP Gateway Address (0.0.0.0), Primary DNS Address (0.0.0.0), and Secondary DNS Address (0.0.0.0). The MTU is set to 1500, and the Auto-backup feature is disabled.

If you use a Static IP Address, you will input information here that your ISP has provided to you.

WAN IP Address Input the IP Address provided by your ISP.

WAN Subnet Mask Input the Subnet Mask provided by your ISP.

WAN Gateway Input the Gateway address provided by your ISP.

Primary DNS Input the primary DNS address provided by your ISP.

Secondary DNS (Optional) Input the Secondary DNS address provided by your ISP.

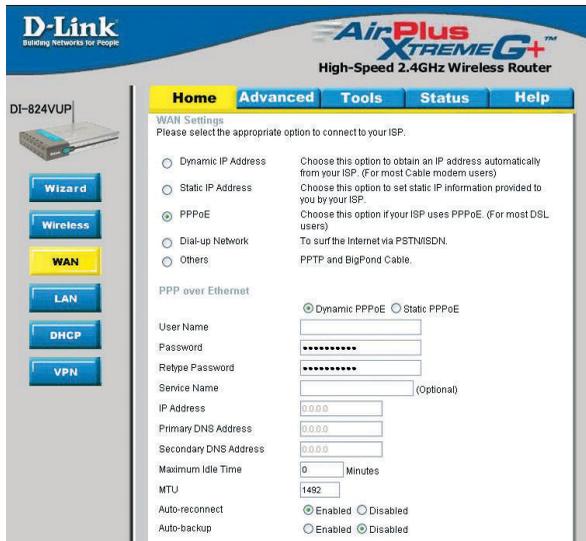
MTU *Maximum Transmission Unit*; default is 1500; you may need to change the MTU to conform to your ISP.

Auto-backup Enabling this feature will connect your router to the Internet using a dial-up service if your broadband connection becomes unavailable. A subscription to a dial-up service is required for the auto-backup to work.

Using the Configuration Menu

Home > WAN > PPPoE

Most DSL users will select this option to obtain an IP address automatically from their ISP through the use of PPPoE.



User Name

Your PPPoE username provided by your ISP.

Password

Your PPPoE password provided by your ISP.

Service Name

(Optional) Check with your ISP for more information if they require the use of service name.

IP Address

(Optional) Enter in the IP Address if you are assigned a static PPPoE address.

Primary DNS

You will get the DNS IP automatically from your ISP but you may enter a specific DNS address that you want to use instead.

Secondary DNS

(Optional) Input the secondary DNS address.

Maximum Idle Time

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

MTU

Maximum Transmission Unit; default is 1492; you may need to change the MTU to conform to 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.

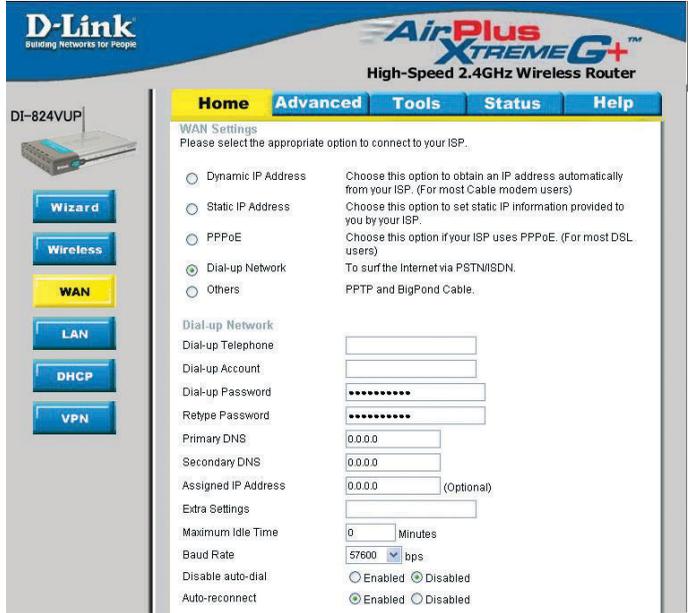
Auto-backup

Enabling this feature will connect your router to the Internet using a dial-up service if your broadband connection becomes unavailable. A subscription to a dial-up service is required for the auto-backup to work.

Using the Configuration Menu

Home > WAN > Dial-up Network

Most Dial-up users will select this option to connect to their ISP through an analog dial-up modem. This feature can be used as a back-up when your broadband connectivity is unavailable.



Dial-up Telephone

Telephone number to connect to your ISP

Dial-up Account

Username provided by your ISP

Dial-up Password

Password provided by your ISP

Primary DNS/ Secondary DNS

If the settings are configured as “0.0.0.0,” they will be automatically assigned upon connection.

Assigned IP Address

(Optional) Enter in the IP Address if you are assigned a static PPPoE address.

Extra Settings

This setting is used to optimize the communication quality between the ISP and your analog dial-up modem. (Initialization string) - optional.

Maximum Idle Time

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

Baud Rate

The communication speed between the DI-824VUP and your modem.

Auto-reconnect

If enabled, the Broadband Router will automatically connect to your ISP after your system is restarted or if the connection is dropped.

Using the Configuration Menu

Home > WAN > Others > PPTP

The screenshot shows the configuration interface for a D-Link AirPlus Xtreme G+ router. The 'WAN' tab is selected, and the 'Others' option is chosen under 'WAN Settings'. The 'PPTP' sub-option is selected. The configuration fields are as follows:

Field	Value
My IP Address	0.0.0.0
My Subnet Mask	255.255.255.0
Server IP Address	0.0.0.0
PPTP Account	
PPTP Password	*****
Retype Password	*****
Connection ID	
Maximum Idle Time	0 Minutes
Auto-reconnect	Enabled
Auto-backup	Enabled

Point-to-Point Tunneling Protocol (PPTP) is a WAN connection used in Europe.

My IP Address Enter the IP Address.

My Subnet Mask Enter the Subnet Mask.

Server IP Address Enter the Server IP Address.

PPTP Account Enter the PPTP account name.

PPTP Password Enter the PPTP password.

Connection ID (Optional) Enter the connection ID if required by your ISP.

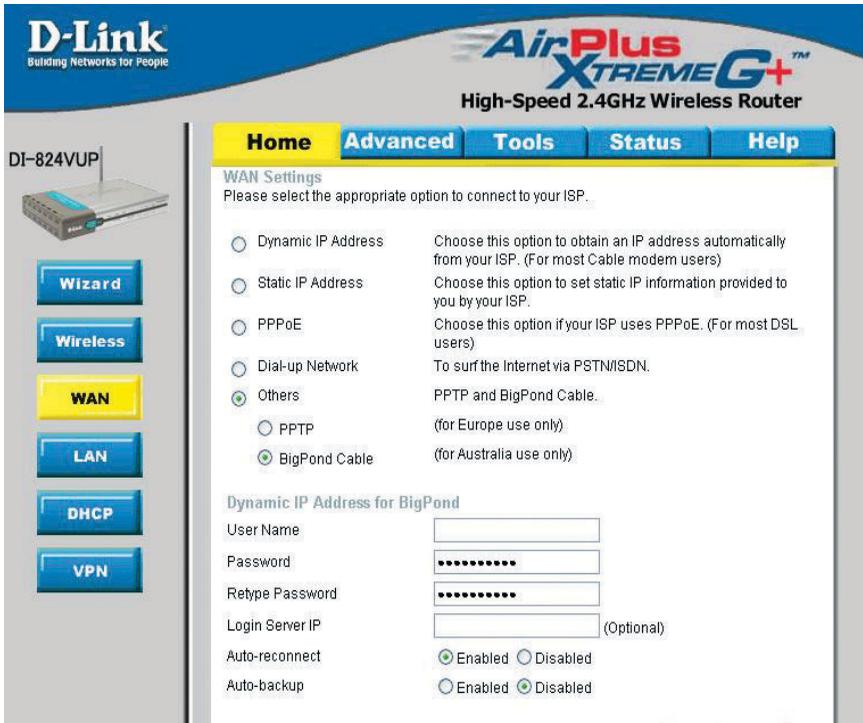
Maximum Idle Time Enter a maximum idle time during which Internet connection is maintained during inactivity. To disable this feature, enable *Auto-reconnect*.

Auto-reconnect If enabled, the Broadband Router will automatically connect to your ISP after your system is restarted or if the connection is dropped.

Auto-backup Enabling this feature will connect your router to the Internet using a dial-up service if your broadband connection becomes unavailable. A subscription to a dial-up service is required for the auto-backup to work.

Using the Configuration Menu

Home > WAN > Others > BigPond Cable



Dynamic IP Address for BigPond is a WAN connection used in Australia.

User Name Enter in the user name for the BigPond account.

Password Enter the password for the BigPond account.

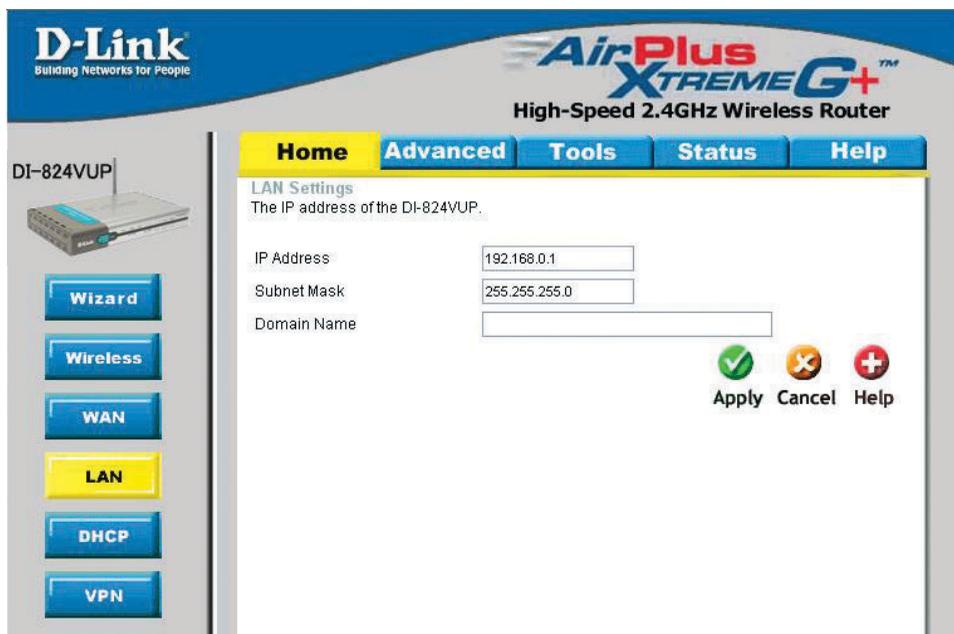
Login Server IP (Optional) Enter the Login Server IP if required.

Auto-reconnect If enabled, the Broadband Router will automatically connect to your ISP after your system is restarted or if the connection is dropped.

Auto-backup Enabling this feature will connect your router to the Internet using a dial-up service if your broadband connection becomes unavailable. A subscription to a dial-up service is required for the auto-backup to work.

Using the Configuration Menu

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-824VUP. 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**.

Domain Name

(Optional) The name of your local domain.

Using the Configuration Menu

Home > DHCP

The screenshot shows the configuration page for the DHCP server on a D-Link DI-824VUP router. The page has a blue header with the D-Link logo and 'AirPlus Xtreme G+ High-Speed 2.4GHz Wireless Router'. On the left, there is a sidebar with navigation buttons: Wizard, Wireless, WAN, LAN, DHCP (highlighted), and VPN. The main content area is titled 'DHCP Server' and contains the following settings:

- DHCP Server:** Enabled (radio button selected), Disabled (radio button unselected).
- Starting IP Address:** 192.168.0.100
- Ending IP Address:** 192.168.0.199
- Lease Time:** 1 WEEK (dropdown menu)

Below these settings is the 'Static DHCP' section, which is currently disabled. It includes fields for Name, IP Address (192.168.0.), MAC Address, and a DHCP Client dropdown menu with a 'Clone' button. At the bottom right of this section are 'Apply', 'Cancel', and 'Help' buttons.

At the bottom of the page, there are two tables:

Static DHCP Clients List			
Name	IP Address	MAC Address	

Dynamic DHCP Clients List			
Host Name	IP Address	MAC Address	Expired Time
M	192.168.0.119	00-00-39-A3-51-32	Tue Sep 30 00:13:30 2003

DHCP stands for *Dynamic Host Control Protocol*. The DI-824VUP 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-824VUP. 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.

DHCP Server Enable or disable the DHCP service.

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 DHCP lease.

Static DHCP Used to allow the DHCP server to assign the same IP address to a specific MAC address. Enter the name, IP address, and MAC address into the fields. Select which DHCP client to clone.

DHCP Clients List Lists the DHCP clients connected to the DI-824VUP. Click **Refresh** to update the list. The table will show the Host Name, IP Address, and MAC Address of the DHCP client computer.

Using the Configuration Menu

Home > VPN Settings

VPN Settings are settings that are used to create virtual private tunnels to remote VPN gateways. The tunnel technology supports data confidentiality, data origin, authentication, and data integrity of network information by utilizing encapsulation protocols, encryption algorithms, and hashing algorithms.

DI-824VUP

VPN

VPN Settings

Item	Setting
VPN	<input type="checkbox"/> Enable
NetBIOS broadcast	<input type="checkbox"/> Enable
Max. number of tunnels	<input type="text" value="0"/>

ID	Tunnel Name	Method
1	<input type="text"/>	IKE More
2	<input type="text"/>	IKE More
3	<input type="text"/>	IKE More
4	<input type="text"/>	IKE More
5	<input type="text"/>	IKE More

[Previous page](#) [Next page](#)

[Dynamic VPN Settings...](#) [L2TP Server Setting...](#) [PPTP Server Setting...](#)

[Apply](#) [Cancel](#) [Help](#)

VPN

Click Enable to enable VPN tunnels. When you are not using the VPN feature, it is best to keep VPN disabled.

NetBIOS broadcast

Enable this to allow NetBIOS broadcast over the VPN tunnels.

Max. number of tunnels

Select the maximum number of allowable tunnels.

Tunnel Name

Create a name for the tunnel.

Method

IPSec VPN supports two kinds of key-obtained methods: manual key and automatic key exchange. Manual key approach indicates that the two endpoint VPN gateways require setting up authentication and encryption key by the Administrator manually. However, IKE approach will perform automatic Internet key exchange. Admins of both endpoint gateways will only need to set the same pre-shared key.

More

For more in depth configuration to adjust manual key or IKE method settings, click **More**.

Using the Configuration Menu

Home > VPN Settings > Tunnel > Method > IKE



- Tunnel Name** Current tunnel name.
- Aggressive Mode** Enabling this mode will accelerate establishing tunnel, but the device will have less security.
- Local Subnet** The subnet of the VPN gateway's local network. It can be a host, a partial subnet or a whole subnet.
- Local Netmask** Local netmask combined with local subnet to form a subnet domain.
- Remote Subnet** The subnet of the remote VPN gateway's local network. It can be a host, a partial subnet, or a whole subnet.
- Remote Netmask** The subnet of the remote VPN gateway's local network. It can be a host, a partial subnet, or a whole subnet.
- Remote Gateway** The WAN IP address of remote VPN gateway.
- Preshared Key** The first key that supports IKE mechanism of both VPN gateways for negotiating further security keys. The pre-shared key must be the same for both endpoint gateways.
- IKE Proposal index** Click the button to setup a set of frequent-used IKE proposals and select from the set of IKE proposals for the tunnel.
- IPSec Proposal index** Click the button to setup a set of frequent-used IPSec proposals and select from the set of IKE proposals for the tunnel.

Using the Configuration Menu

Home > VPN Settings > Tunnel > Method > IKE > Select IKE Proposal



IKE Proposal index A list of selected proposal indexes from the IKE proposal pool listed below.

Proposal Name This is the name used to classify the IKE proposal.

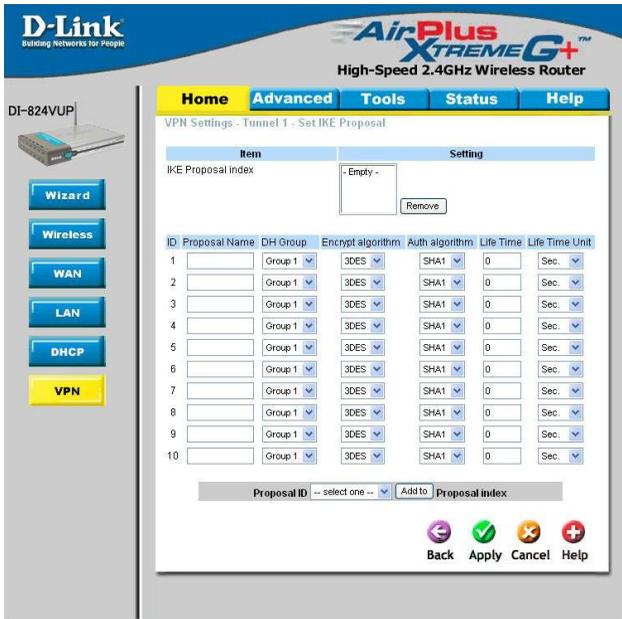
DH Group There are three groups that can be selected: group 1 (MODP768), group 2 (MODP1024), and group 5 (MODP1536).

Encrypt algorithm There are two algorithms that can be selected: 3DES and DES.

Auth algorithm There are two algorithms that can be selected: SHA1 and MD5.

Using the Configuration Menu

Home > VPN Settings > Tunnel > Method > IKE > Select IKE Proposal
Continued...



Life Time

Enter in the life time value.

Life Time Unit

There are two units that can be selected: second and KB.

Proposal ID

The identifier of IKE proposal can be chosen for adding the corresponding proposal to the dedicated tunnel.

Add to

Click it to add the chosen proposal indicated by proposal ID to IKE Proposal index.

Using the Configuration Menu

Home > VPN Settings > Tunnel > Method > IKE > Select IPSEC Proposal



IPSec Proposal index

A list of selected proposal indexes from the IPsec proposal pool listed below.

Proposal Name

This is the name used to classify the IPsec Proposal

DH Group

There are three groups that can be selected: group 1 (MODP768), group 2 (MODP1024), and group 5 (MODP1536).

Encap protocol

There are two protocols that can be selected: ESP and AH.

Encrypt algorithm

There are two algorithms that can be selected: 3DES and DES.

Auth algorithm

There are two algorithms that can be selected: SHA1 and MD5.

Using the Configuration Menu

Home > VPN Settings > Tunnel > Method > IKE > Select IPSEC Proposal
Continued...



Life Time

Enter in a life time value.

Life Time Unit

There are two units that can be selected: second and KB.

Proposal ID

The identifier of IPsec proposal can be chosen for adding the corresponding proposal to the dedicated tunnel.

Add to

Click it to add the chosen proposal indicated by proposal ID to IPsec Proposal index list.