D-Link **DI-804V**

Broadband VPN Router

Manual



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Package Contents



Contents of Package:

- D-Link DI-804V Broadband VPN Router
- Manual
- Quick Installation Guide
- Power Adapter 5V DC, 2A*

*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

System Requirements:

Internet Explorer 4.0 or higher or Netscape Navigator 4.0 or higher, with JavaScript enabled

One computer with an installed 10Mbps, 100Mbps or 10/100 Mbps Ethernet adapter

One Modem or ISDN TA (if a dial-up connection is needed) One RJ-45 DSL/Cable Modem for Internet connection

Introduction

The D-Link DI-804V Broadband VPN Router enables your network to connect to the Internet via a secure, private connection using a Cable/DSL modem, such as the D-Link DCM-200 Cable Modem. The Virtual Private Network that is created on the Internet between your home and your office (with a VPN server) is secure from interference when you use the DI-804V.

It is an ideal way to connect your computer to a Local Area Network (LAN). After completing the steps outlined in the Quick Install Guide (included in your package) you will have the ability to share information and resources, such as files and printers, and take full advantage of a "connected" environment for work or play!

Connect the WAN port on the DI-804V to the Cable/DSL modem (e.g., the DCM-200) using an Ethernet cable. Your entire LAN can now access the Internet using just one Internet account. The DI-804V has 4 LAN ports. That means that 4 computers can share the benefits of the DI-804V- equipped network.

For the price of one Internet account, the DHCP-capable DI-804V will automatically provide unique IP Addresses for all the computers on the network. (DHCP stands for Dynamic Host Configuration Protocol. It is a protocol for assigning IP Addresses automatically. With a DHCP router like the DI-804V, there is no need to assign static IP Addresses, or purchase multiple addresses from the ISP - Internet Service Provider.)

Everyone in your home can access the Internet on his or her own computer, at the same time, without any noticeable decrease in speed.

With the serial port, you can connect an analog modem (dial-up modem) as a back up in case of any difficulties that may arise with the Cable or DSL connection.

With Firewall Protection, Hacker attack logging, and Virtual Private Networking, the DI-804V provides a level of security suitable for many businesses.

This manual provides a quick introduction to network technology. Please take a moment to read through this manual and get acquainted with your DI-804V.

Front View

Front Panel



LED Indicators

| LAN (1-4) | LINK (Green) | Green LED will LIGHT when link is |
|-----------|--------------|--|
| | | established. |
| Link/Act | ACT (Green) | Green LED will BLINK when packet is |
| | | transmitting or receiving. |
| Serial | (Green) | Green LED will LIGHT when a good link is |
| | | established. |
| WAN | (Green) | Green LED will LIGHT when a good link is |
| | | established. |
| Status | (Yellow) | Yellow LED will BLINK when started up |
| | | and when firmware is upgraded. |
| Power | (Red) | Red LED will LIGHT when powered ON. |

Rearview

Rear Panel



| Power (5V DC) | Connect the DC power adapter to the Power port |
|---------------|--|
| WAN | Connect DSL/Cable modem to the WAN Ethernet port |
| Serial | Connect a 56k modem/ISDN TA to the serial port |
| Ports 1-4 | Connect networked devices such as computers and ftp |
| | servers to the four LAN ports, which support auto |
| | crossover |
| Reset | To reload the factory default settings, press the reset button |
| | for 5-6 seconds. Pressing the Reset button will clear the |
| | current data. |

Product Features

VPN

Provides Virtual Private Networking when communicating with a VPN serverequipped office, or with another DI-804V-equipped network. Supports PPTP and L2TP pass through function.

DSL/Cable Modem support

The DI-804V can connect any DSL/Cable Modem to the network.

DHCP

The DI-804V is a DHCP-capable router. It automatically assigns unique IP Addresses to each network users that is connected to the DI-804V, for the price of one Internet account.

Firewall Protection

Supports general hacker attack pattern monitoring and logging

PPPoE Client

Supports PPPoE client function to connect to the remote PPPoE server.

Virtual Server

Allows the internal server to be accessible from the Internet

Upgradeable New Features

Allows new features to be added in the future

High Performance 32 bit RISC CPU Engine

With the most advanced 32 bit RISC CPU Engine, DI-804V guarantees full compatibility with future DSL/Cable technologies

IPSec Security

(DES, 3DES, MD5, SHA-1)

Idle Timer

Set a specified idle-time before automatically disconnecting

Dial-on Demand

Eliminates the need for Dial-up. Automatically logs in to your ISP

Serial port

May connect to a 56k modem or ISDN TA (should a Cable/DSL connection be unavailable or fail.)

Web-Based Configuration

No software installation required. Can be configured through a web browser making it OS independent

IP Address Settings and Computer Settings

In order to install the DI-804V you will need to check your computer's settings and the values from your ISP.

The information offered by your ISP:

- Dynamic IP settings
- Your fixed IP address for the gateway
- Your subnet mask for the gateway
- Your default gateway IP address
- Your DNS IP address

If you would like to use PPPoE, you will need the following values from your ISP in order to install your router:

- User Name
- Password

The static IP settings for the PC:

- Your PC's fixed IP address
- Your PC's subnet mask
- Your PC's default gateway
- Your PC's primary DNS IP address

Note: The router's default IP address setting is 192.168.0.1.

Dynamic IP Settings:

The dynamic IP settings for the PC. It is recommended that you leave your IP settings as automatically assigned. By default, the gateway is a DHCP server, and it will give your computer the necessary IP settings.

Using the Configuration Utility

Launch your web browser and type the device IP address (http:// 192.168.0.1) in the browser's address box. This IP address is the default value of your gateway. Press Enter.

Note: Please make sure that the computer's IP Address is in the same IP Address range as the DI-804V. The IP Address of the DI-804V is 192.168.0.1. All computers on your network must be within that range, for instance, the computer IP Address could be 192.168.0.x. All computers on the network must have the same subnet mask.



The main menu appears showing all the settings available.



Basic Setup

Basic setup is a step-by-step process that will let you input all the basic settings. Connect to 192.168.0.1



A username and password screen will appear. Leave the password box empty and type **admin** (the default username) in the username box. Click **OK**

The Setup Wizard's page will appear.

Note: If you choose to input a password at any time, please remember it. If you should lose the password, you will need to reset the unit. After you reset the DI-804V, all your settings will be lost and will need to be re-input.

? ×

Y

Cancel

OK

Time Settings

Please choose your local time zone.



Device IP Settings

You have to give your VPN Gateway an IP address on your network. This is not the IP address from your ISP but the local internal LAN IP address. The IP address "192.168.0.1" is the default value of your gateway.

Device IP Address: **VPN Router** DI-804V **D**-Link The internal LAN IP DEVICE ADVANCED BASIC HEL address of your VPN Main menu DEVICE LAN IP SETTINGS Gateway. TIME SETTINGS The device LAN IP address and subnet Mask settings DEVICE IP Device IP Subnet Mask: IP Address: 192 . 168 . 0 . 1 CABLE/DSL ISP SETTINGS The subnet mask can IP Subnet Mask: 255 255 255 0 usually be left as its SP ADDITIONAL SETTINGS default entry < BACK NEXT > MODEM "255 255 255 0" VPN SETTINGS NOTE: Please click 'Next' to accept the settings. SAVE & RESTART opyright © 2000

Cable/DSL ISP Settings

To use the xDSL/Cable ISP settings, you must configure the router. ISP use either static or dynamic IP addresses. Check with your ISP if you are not certain which one it uses. If your ISP uses a static IP address, it means that the IP address of your router is always the same. Most ISPs use dynamic IP addresses. They assign you a new IP address every time you connect to the Internet.

If you have a static IP address, do the following:

Enter the IP address that your ISP provided. Enter the IP subnet mask. Enter the ISP gateway address. Enter the DNS IP address.



ISP Additional Settings (PPPoE Settings)

You can configure the router to use additional ISP settings. Some ISPs require PPPoE for authentication purposes.

Do the following to set up PPPoE:

User name: Enter the user name of your ISP account.

Password: Enter the password of your ISP account.

Retype password: Enter the password of your ISP account again to reconfirm.

Some ISPs use Host Name and Domain Name to authenticate the user; if this is the case, you need to enter:

Host Name: Enter the name of the gateway.

Domain Name: Enter the domain name provided by your ISP

Some ISP require you input the LAN card Mac address; if this is the case, you need to enter:

Mac Address: Enter this LAN card Mac address.

Note: Some ISPs may recognize your LAN card Mac address as a legal user; in this case, you have to copy the LAN card Mac address in the Mac address field.

For WIN 95/98 you can run winipcfg to see the LAN card Mac address. For WIN/NT you can run ipconfig/all to see the LAN card Mac address.

| DEVICE INFORMATION DEVICE SETUP ADVANCED SYSTEM HELP Main menu ISP ADDITIONAL SETTINGS ISP ADDITIONAL SETTINGS ISP ADDITIONAL SETTINGS DEVICE IP SETTINGS 'Your ISP requires you to input the username/password (PPPOE Settings) User Name: Image: Comparison of the set of the | D-Link | VPN Router DI-804V | | | | | | | |
|---|----------------------------|------------------------|------------------|----------------------|----------------------|-----------------|------|--|--|
| Main menu ISP ADDITIONAL SETTINGS TIME SETTINGS Your ISP requires you to input the username/password (PPPoE Settings) DEVICE IP SETTINGS User Name: ISP ADDITIONAL SETTINGS Password: ISP ADDITIONAL SETTINGS Password: ISP ADDITIONAL SETTINGS Password: Modem Settings Idle Time: no idle timeout I Your ISP requires you to input the Host Computer Name Host Name: VP204 SAVE & RESTART Your ISP requires you to input the WAN Ethernet Mac | | DEVICE INFORMATION | DEVICE STATUS | BASIC Setup | ADVANCED SETTINGS | SYSTEM TOOLS | HELP | | |
| TIME SETTINGS Your ISP requires you to input the username/password (PPPoE Settings) User Name: Password: Password: Password: Iser Name: Password: Iser Name: Password: Iser Name: Password: Ide Time: no idle timeout Imput the Host Computer Name Host Name: VP204 SAVE & RESTART Your ISP requires you to input the WAN Ethernet Mac | Main menu | ISP ADDITIC | ONAL SETTI | NGS | | | | | |
| DEVICE IP SETTINGS (PPPOE Settings) User Name: Password: Password: ISP ADDITIONAL SETTINGS ISP ADDITIONAL SETTINGS Password: Idle Time: no idle timeout I MODEM SETTINGS Idle Time: No idle timeout I MODEM SETTINGS I Your ISP requires you to input the Host Computer Name Host Name: VP204 SAVE & RESTART I Your ISP requires you to input the WAN Ethernet Mac | TIME SETTINGS | C Your ISP | requires y | ou to input | the usernan | ne/passwo | rd | | |
| CABLE/DSL ISP ADDITIONAL SETTINGS Password: ISP ADDITIONAL SETTINGS Ide Time: MODEM SETTINGS Ide Time: MODEM SETTINGS I Your ISP requires you to input the Host Computer Name Host Name: VPN SETTINGS I Your ISP requires you to input the WAN Ethernet Mac | DEVICE IP SETTINGS | (PPPoE Sett User Na | tings) ame: | B | | | | | |
| ISP ADDITIONAL SETTINGS Idle Time: no idle timeout • MODEM SETTINGS • Your ISP requires you to input the Host Computer Name VPN SETTINGS Host Name: VP204 SAVE & RESTART • Your ISP requires you to input the WAN Ethernet Mac | CABLE/DSL ISP SETTINGS | Passw Retype Passw | vord: | | | | | | |
| MODEM Vour ISP requires you to input the Host Computer Name VPN Host Name: VP204 SAVE & RESTART Your ISP requires you to input the WAN Ethernet Mac | ISP ADDITIONAL SETTINGS | Idle I | īme: no idle | e timeout 💌 | | | | | |
| VPN SETTINGS Host Name: VP204 SAVE & RESTART I Your ISP requires you to input the WAN Ethernet Mac | MODEM | □ Your ISP | requires y | ou to input | the Host Co | mputer Nai | me | | |
| SAVE & RESTART | VPN SETTINGS | HostNa | ame: VP204 | 1 | | | | | |
| 00 12 21 45 78 53 | SAVE & RESTART | C Your ISP | requires y | ou to input 12 21 | 45 78 | 53 | | | |

Modem Settings

The modem dialup can be used as a backup for the xDSL/Cable connection. If you would like to use the modem dialup or VPN features you must enable the modem settings. Click on the Advanced Settings tab and enter the ISP account information.

Note: If you would like to change the baud rate settings, please click on the "ADVANCED SETTINGS". Then click on the MODEM SETTINGS button.



Note: When your Cable/DSL connection comes back on-line, you will need to return to this page and uncheck the backup dial-up modem setting in order to use your Cable/DSL Broadband connection again.

VPN Settings

Use this screen to enable the IPSec feature. This feature allows a secure connection between two parties. The connection is made over the Internet. To enable the VPN function, check the Enable VPN checkbox and enter a string into the connection name field, then click the "ADD" button.



Enabled NetBIOS Broadcast

Computers running Microsoft Windows can communicate with one another using NetBIOS. Users can access remote network resources by browsing the Window Network Neighborhood. You can uncheck the Enabled NetBIOS Broadcast checkbox. The Secure Association (SA) can be created using IKE (auto-mode) or Manual Mode. The default value is Internet Key Exchange (IKE). If you would like to use Manual Key, check the Manual radio box and required input fields will be shown.

| Secure Association | O IKE 💿 Manual | |
|-------------------------|----------------|------|
| Incoming SPI | 3000 | |
| Outgoing SPI | 3000 | |
| Encryption Protocol | DES 💌 | |
| Encryption Key | 123456 | |
| Authentication Protocol | MD5 💌 | |
| Authentication Key | abcdef | SAVE |

Incoming SPI

Enter the Incoming SPI that the remote VPN Gateway will use to identify this SA.

Outgoing SPI

Enter the Outgoing SPI that the local VPN Gateway will use identify this SA

Encryption Protocol

VPN Internet Gateway supports three encryption algorithms (Null, DES, or 3DES); user can select an appropriate encryption algorithm.

Encryption Key

This string is used as a key to encrypt and decrypt the data transmitted.

Authentication Protocol

VPN Internet Gateway supports two authentication algorithms (MD5 or SHA-1); user can select an appropriate authentication algorithm.

Authentication Key

This string is used as key authentication.

Save & Restart

After you have finished making all the changes on the various pages, please click Save & Restart to save the settings and restart the device. After the restart, the device will function according to the saved settings.



During the startup process the LED of the device will blink. Please wait until the blinking of the device stops before proceeding.



Device Information

Device information displays the current settings of the VPN Internet Gateway.



Device Name

This is the host name of the VPN Internet Gateway.

IP Address

This is the IP address of the VPN Internet Gateway.

Private LAN Mac Address

This is the Mac address of the VPN Internet Gateway LAN port.

Public WAN (xDSL/Cable) Mac Address

This is the Mac Address of the VPN Internet Gateway WAN Ethernet port.

Firmware version

Displays the Firmware Version of the DI-804V and its release date

Device Status

Device status displays the current connection status of the VPN Gateway.



Modem Dialup

The modem can be used as a dialup backup for the xDSL/Cable connection. If modem dialup is connected, it will show "**Modem: Active**," otherwise it will show "**Not Active**".

Device IP

Shows the Device IP address, private LAN Mac address and public WAN Mac address of the VPN Internet Gateway.

Release and Renew

Click **Release** button, the VPN Internet Gateway will disconnect with the xDSL/Cable modem.

Click the **Renew** button, the VPN Internet Gateway will connect with the xDSL/Cable modem again.

DHCP Log

Click **DHCP Log** button, the screen will display the current DHCP client information.

VPN Status

Click **VPN Status** button, the screen will display the current VPN connection information.

Advanced Settings

Advanced settings include DHCP server, virtual server static routing, dynamic routing, filter settings, modem string settings and administration settings.

A username and password will appear. Type "**admin**" in the user name box, and type the password that you have set the device (the default is no password) Click **OK** The Advanced Settings page will appear.

| Connect to 192 | .168.0.1 |
|------------------------------|----------------------|
| R | |
| Login as admin User name: | 😰 admin 🗸 🗸 |
| <u>P</u> assword: | |
| | Remember my password |

DHCP Server Settings

The VPN Internet Gateway's DHCP server is enabled by default. If you would like to disable the DHCP server, unclick on the square circle below.

| D-I im le | | | | VPN Rout | ter <mark>DI-8</mark> | 804V) | | |
|--------------------------|-----------------------|---------------------------|-----------------|------------------------------|-----------------------|----------|--|--|
| L'LINK | DEVICE INFORMATION | DEVICE Status | BASIC Setup | ADVANCED Settings | SYSTEM TOOLS | HELP | | |
| Main menu | | | 0 | | | | | |
| DHCP SERVER SETTINGS | DHCP SERVI | ERSETTING | 5 | | | | | |
| | 🗹 Enable D | HCP Serve | r Functions | | | | | |
| SETTINGS | IP Address Pr | nol Range | | | | | | |
| | From: 192.168.2. | | | | | | | |
| | To: 192.168.2.100 | | | | | | | |
| ROUTING | ID Address D | | | | | | | |
| FILTER | 1 Computer N | eservation | | ddroco: 100 | 169.2 0 | 1 | | |
| SETTINGS | 2 Computer N | ame: | | ddress: 192. .ddress: 192 | 168.2.19 168.2.10 | - | | |
| MODEM STRING SETTINGS | 3. Computer N | ame: | IP A | .ddress: 192. | 168.2.0 | 1 | | |
| | 4. Computer N | ame: | IP A | .ddress: 192. | 168.2.0 | | | |
| SETTINGS | | | | | | | | |
| SYSTEM PARAMETERS | | | SUBMI | | | | | |
| | NOTE: Please | click <mark>'Submi</mark> | t' to accept th | e settings. | | | | |
| Copyright © 2000 | | | | | | <u> </u> | | |

IP Address Pool Range

The IP address pool contains the range of the IP address that will automatically be assigned to the clients of your network. Default setting is from **192.168.2.2** to 192.168.2.100.

IP Address Reservation

You can use IP address reservation option to give particular computers on your network the same static IP address every time the computer is turned on.

Virtual Server Settings

Virtual server settings allow clients on the Internet to access your LAN via the Internet. You can use the IP mapping function to access an FTP server or Telnet server etc. remotely through Internet.

DMZ function can be applied to a single client behind the VPN Gateway to expose it to the Internet and ensure complete Internet application compatibility even if specific ports are not known. If you would like to enable DMZ function, enter an IP address into the DMZ IP field. The value of '0' means that the DMZ function is disabled.

| | DEVICE | DEVICE | BASIC | ADVANCED SETTINGS | SYSTEM TOOLS | HELP |
|------------|---------------|-----------|-------------|----------------------|-----------------|-------|
| Main menu | 1010300 0.100 | | contrate of | | | |
| HCP SERVER | VIRTUAL SI | ERVER SET | TINGS | | | |
| SETTINGS | DMZ 192.16 | 8.2.0 | | | | |
| SETTINGS | Int | ernal IP | Service | Port Range | | |
| | 01.192.168 | 2 0 | 0 | _0 | FTP | 20,21 |
| ROUTING | 02 192 168 | 2 0 | 6 | ~6 | NetMeeting | 1720 |
| ANNEALIS | 02 102 100 | 0.0 | 6 | | SMTP | 13 |
| ROUTING | 05, 192, 168 | 2. p | N | ~ 0 | TFTP | 69 |
| | 04. 192.168 | 2. P | p | ~ 0 | HTTP | 80 |
| SETTINGS | 05.192.168 | 2.0 | 0 | ~ 0 | POP3 | 110 |
| | 06. 192.168 | 2.0 | 0 | ~0 | News | 144 |
| SETTINGS | 07.192.168 | 2.0 | 0 | ~0 | SNMP-trap | 162 |
| | 08 192 168 | 2 0 | 0 | -0 | | |
| SETTINGS | 09 192 168 | 2 0 | 6 | -0 | | |
| SYSTEM | 10 192 168 | 2 0 | 0 | -0 | | |
| PARAMETERS | 11 192 168 | 2 0 | 0 | ~ 0 | | |
| | 12 192 168 | 2 0 | 0 | ~ 0 | | |
| | 13 192 168 | 2 0 | 0 | ~0 | | |
| | 14 192 168 | 2 0 | 0 | ~0 | | |
| | 15 192 16R | 2 0 | 6 | ~0 | | |
| | 16 100 160 | 2 0 | 6 | | | |
| | 10. 192.100 | .4 · P | p. | ~ 12 | | |

Static Routing

Static routing settings allow the VPN Internet Gateway to route IP packets to another network. The routing table stores the routing information so that your network device knows where to redirect the IP packets to the proper network.

Destination IP Address

The destination IP is the address of the remote network to which you want to assign a static route.

Subnet Mask

The subnet mask of your network IP address.

Gateway IP Address

The IP address of the interface used to link to the remote network.

Dynamic Routing

Dynamic Routing Settings allow the VPN Internet Gateway to route IP packets to another network automatically. The RIP protocol is applied, and broadcasts the routing information to other routers on the network regularly.

| D-Link | | | | VPN Rout | er <mark>DI-</mark> | BO4V |
|----------------------------|------------|-----------------------------|----------------|----------------------|---------------------|----------|
| L'LIIIK | DEVICE | DEVICE STATUS | BASIC SETUP | ADVANCED SETTINGS | SYSTEM TOOLS | HELP |
| Main menu | | | | | | |
| DHCP SERVER SETTINGS | DYNAMIC | SETTINGS | | | | |
| VIRTUAL SERVER SETTINGS | CEND (| | | | | |
| STATIC ROUTING | SEND 0 | • DOiOsOa • | RIP1 | C RIP1 Comp | atible 🥬 RIP | 2 |
| DYNAMIC ROUTING | RECEIVE | Disable C | RIP1 Only | C RIP2 Only | C Bot | h RIP1/2 |
| FILTER SETTINGS | | | | | | |
| MODEM STRING SETTINGS | | | SUE | инт) | | |
| ADMINISTRATION SETTINGS | NOTE: Plea | se click <mark>'Subr</mark> | nit' to accept | the settings. | | |
| SYSTEM PARAMETERS | | | | | | |

For the SEND option choosing the proper protocol by which you transmit the data on the network.

For the RECEIVE option choosing the proper protocol by which the VPN Internet Gateway receive the data on the network.

Filter Settings – LAN Filter Settings

LAN Filter Settings allow administrator to define whether local user has the permission to access Internet. To activate this feature, check LAN Side Filter Enabled. Then, you can define the filtering policy by entering an IP address range, network port number and select the protocol(s).

For example, to prevent the local user of IP address range (from 101 to 200) to access port 80 (HTTP), the settings are as follows,

LAN Side Filter Enabled: Enabled Default LAN Side Filter: Pass Filter: Block Protocol: TCP IP Address Range: 101 ~ 200 Destination Port Range: 80 ~ 80 (HTTP)

| D-Link | | | | VPN Rout | er <mark>Ol-</mark> | B04V) |
|------------------------|-----------------------|-----------------------------|---|----------------------|---------------------|-------|
| | DEVICE INFORMATION | DEVICE Status | BASIC Setup | ADVANCED SETTINGS | SYSTEM TOOLS | HELP |
| Back | □ LAN Sid | e Filter Fnah | lad | | | |
| LAN FILTER SETTINGS | Default LA | N Side Filter | Block Block State State | C H | Pass | |
| WAN FILTER SETTINGS | Filter Entry | | | | | |
| | Block | C Pas | s | | | |
| | Protocols | | | | | |
| | IP Addres | s Range | | | | |
| | From: To: | | | | | |
| | Destinatio | n Port Range | | | | |
| | | | AD | D | | |
| | LAN Side | Filter Table: | | | | |
| | Del Typ | e Proto | col Fror | n To | Port Ra | nge |
| | | | | | | |
| | | | Sue | т | | |
| | NOTE: Pleas | se click <mark>'Subr</mark> | nit' to enter in | putted data. | | |

Filter Settings – WAN Filter Settings

WAN Filter Settings allow administrator to define whether remote/outside user has the permission to access the local network. To activate this feature, check **WAN Side Filter Enabled**. Then, you can define the filtering policy by entering IP address range, the port range and select the protocol(s).

| D-I in k | i I | | | VPN Route | r Ol- | 804V) |
|------------------------|--|----------------------------|------------------|----------------------|-----------------|-------|
| | DEVICE INFORMATION | DEVICE STATUS | BASIC Setup | ADVANCED Settings | SYSTEM TOOLS | HELP |
| Back | T WAN SId | e Filter Fnal | hled | | | |
| LAN FILTER SETTINGS | Default W | AN Side Filte | r 💿 Block | O Pa | ass | |
| WAN FILTER SETTINGS | Filter Entry | | | | | |
| | Block Block Compared State State | O Pas | s | | | |
| | Protocols: | All 💌 | | | | |
| | IP Address | s Range | | | | |
| | From: | | | | | |
| | To: | | | | | |
| | Destinatio | n Port Range | - | - | | |
| | | | AD | D | | |
| | WAN Side | Filter Table: | | | | |
| | Del Typ | e Proto | col Fror | m To | Port Ra | nge |
| | | | | | | |
| | | | Sue | міт | | |
| | NOTE: Pleas | e click <mark>'Subr</mark> | nit' to enter in | putted data. | | |

For example, to prevent the remote user of IP address range (211.21.0.1 to 211.29.0.1) to access virtual WEB server (port 80), the setting are as follows,

WAN Side Filter Enabled: Enabled Default WAN Side Filter: Pass Filter: Block Protocol: TCP IP Address Range: 211.21.0.1 to 211.29.0.1 Destination Port Range: 80 ~ 80 (HTTP)

Modem String Settings

Modem string settings allow user to input detail settings for the analog modem. If you would like to change the baud rate settings, please check the initial string. (You can refer to the manual for your modem.)

| D-I in le | | | | VPN Rout | er 🕕 8 | 04V |
|--------------------------------------|-----------------------|------------------------------|----------------|----------------------|-----------------|---------|
| L'LIIIK | DEVICE INFORMATION | DEVICE Status | BASIC Setup | ADVANCED Settings | SYSTEM TOOLS | HELP |
| Main menu DHCP SERVER SETTINGS | MODEM SE | TTINGS | | | | |
| VIRTUAL SERVER SETTINGS | Baudrate | Settings : 1 | 15200bps(28.8 | 3K/33/6K/56K r | modem or ISDI | N TA) 🔻 |
| STATIC ROUTING | Pre-Initi Initi | al String: 🗚 al String: 🗚 | T T S0=1 | | | |
| DYNAMIC Routing | Dialu | ıp String: 🗚 | TDT | | | |
| FILTER SETTINGS | • | Вивміт | | | | |
| MODEM STRING SETTINGS | NOTE: Plea: | se click <mark>'Subr</mark> | nit' to accept | the settings. | | |
| ADMINISTRATION SETTINGS | | | | | | |
| SYSTEM PARAMETERS | | | | | | |
| Copyright © 2000 | | | | | | - |

Administration Settings

PASSWORD SETTINGS

You can give your VPN Gateway a new password. This password will be required the next time you configure your VPN Gateway. To enter a password, type your password in the new password field and type it again in the retype password field.

Note: it is important to remember your password. If for any reason you lose or forget your password, press the small reset button located on the back of the device for 5 to 6 seconds. Reset action will re-initialize the settings. All configurations, including password, will be reset and require re-entering.



SYSTEM ADMINISTRATION

Here, remote users can be set up to configure and administrate the VPN Internet Gateway through Internet. The default value of HTTP port is 80. The default IP address of remote administration host is: 0.0.0.0. (IP address of 0.0.0.0 means that any PC on the network can remote access and manage the VPN Internet Gateway).

If you use this function, you have to enable the feature "Allow remote user to configure the device" first. Once you have enabled this function, type the VPN Internet Gateway WAN IP address (http://192.168.100.1:1023) into the browser of any or specific PC on the network.



Note: Once HTTP port no (*NOT PORT 80*) is changed and the users of the LAN terminal want to configure the VPN Internet Gateway, the users have to type the VPN Internet Gateway LAN IP address with port number (<u>http://192.168.0.1:1023</u>).

System Parameters

System Parameters allows user to setup the MTU value (Maximum Transmission Unit). The default MTU value is 1500 Bytes. User can setup a proper MTU for your network device.

For some areas, the ISPs set the limit packet size for PPPoE connection. User has to change MTU setting for surfing the net.

| D-Link | VPN Router DI-804V | | | | | |
|--------------------------------------|--|------------------|----------------|----------------------|-----------------|------|
| | DEVICE INFORMATION | DEVICE STATUS | BASIC Setup | ADVANCED SETTINGS | SYSTEM TOOLS | HELP |
| Main menu DHCP SERVER SETTINGS | SYSTEM PA | RAMETERS | | | | |
| VIRTUAL SERVER SETTINGS | MTU Setting 0 | | | | | |
| STATIC ROUTING | | | | | | |
| DYNAMIC Routing | | | | | | |
| FILTER SETTINGS | | | | | | |
| MODEM STRING SETTINGS | NOTE: Please click 'Submit' to accept the settings. | | | | | |
| ADMINISTRATION SETTINGS | | | | | | |
| SYSTEM PARAMETERS | | | | | | |
| Copyright © 2000 | | | | | | 0 |

Save & Restart

If you have finished making all the changes on the various pages, please click Save & Restart to save the settings and restart the device. If you would like to configure the setting again, you can browse those functions then click them. After the restart, the device will function according to the saved settings.

Save & Restart lets you save the input settings to the VPN Internet Gateway (so as to be retrieved at a later time) and then restart it.



System Tools

System Tools

Detects the status of the VPN Internet Gateway.

Intruder Detection Log

The event messages show the possible hacker attacks that have occurred on your VPN Gateway. Up to 32 hacker attacks may be logged in this manner.



Display Routing Table

The Display Routing Table shows the current static routing configuration.



System Diagnostics

System diagnostics shows your VPN Gateway's information. It will perform a check-up on your VPN Gateway to make sure that everything is functioning properly.



Save Settings

This allows you to save the configuration to a file. If you would like to do this, click Save File to save your current settings to a file. Then click save this file to disk in the browsing wizard.



Load Settings - Load Default Settings

This allows you to load the original default settings of your VPN Internet Gateway.



Load Settings - Load Settings From File

This allows you to load the settings from a file.



Upgrade Firmware

The upgrade firmware option allows you to upgrade the latest firmware to your VPN Internet Gateway.



Reset Device

Resetting the device will restart it. Click on the START button to restart.



Configuring Your PCs to Connect to the DI-804V Router

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, 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.

| Network ? 🗙 | | | |
|---|--|--|--|
| Configuration Identification Access Control | | | |
| | | | |
| The following network components are installed: | | | |
| Microsoft Network Monitor Driver -> Dial-Up Adapter | | | |
| TCP/IP -> Dial-Up Adapter | | | |
| TCP/IP -> PCI 10/100 Fast Ethernet Adapter | | | |
| File and printer sharing for Microsoft Networks | | | |
| | | | |
| Add Berrove Properties | | | |
| | | | |
| Primary Network Logon: | | | |
| Client for Microsoft Networks | | | |
| Eile and Print Sharing | | | |
| | | | |
| TCP/IP is the protocol you use to connect to the Internet and | | | |
| wide-area networks. | | | |
| | | | |
| | | | |
| OK Cancel | | | |

Click the **Properties** button, then choose the **IP ADDRESS** tab. Select **Obtain an IP automatically**.

| TCP/IP Properties | | ? × |
|--|--|--|
| Bindings | Advanced | NetBIOS |
| DNS Configuration | Gateway WINS Confi | guration IP Address |
| An IP address can If your network doe your network admir the space below. | be automatically assigne s not automatically assign iistrator for an address, ar | d to this computer. n IP addresses, ask nd then type it in |
| Obtain an IP | address automatically | |
| Specify an IP | address: | |
| [P Address: | | |
| S <u>u</u> bnet Masl | k: | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | OK | Cancel |

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.

| IP Configuration Ethernet Adapter Informat | ion | | <u>_</u> | |
|--|-------------|----------------|----------------------|------|
| | I | PCI 10/10 | 00 Fast Ethernet Ada | pt - |
| Adapter Ad | dress [| 00-90 | CC-A2-F6-04 | |
| IP Address | | 192.168.0.100 | | |
| Subnet N | Subnet Mask | | 255.255.255.0 | |
| Default Gateway | | 19 | 2.168.0.1 | |
| OK | Rel | ease | Renew | |
| Release All | Ren | e <u>w</u> All | More Info >> | |

• IPCONFIG (for Windows 2000/NT/XP)

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

| 🖾 nv cdffdfffrge | |
|---|----------|
| G:\>ipconfig Windows 2000 IP Configuration | |
| Ethernet adapter Local Area Connection: | |
| Connection-specific DNS Suffix .: IP Address | ad |
| G:\> | ▼ |
| | 1 |

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 <u>http://www.homenethelp.com</u> and <u>http://www.microsoft.com/windows2000</u> 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.

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

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

| Network Setup Wizard | | | |
|--|--|--|--|
| Give this computer a description and name. | | | |
| Computer description: Mary's Computer Examples: Family Room Computer or Monica's Computer | | | |
| Computer name: Office Examples: FAMILY or MONICA | | | |
| The current computer name is Office | | | |
| Learn more about <u>computer names and descriptions</u> . | | | |
| < Back Next > Cancel | | | |

Click Next

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



Click Next

Please wait while the wizard applies the changes.



When the changes are complete, Click Next.

Please wait while the wizard configures the computer. This may take a few minutes.



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.

Please wait while the 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

| Network Setup Wizard |
|--|
| To run the wizard with the Network Setup Disk |
| Complete the wizard and restart this computer. Then, use the Network Setup Disk to run the Network Setup Wizard once on each of the other computers on your network. Here's how: 1. Insert the Network Setup Disk into the next computer you want to network. 2. Open My Computer and then open the Network Setup Disk. 3. Double-click "netsetup." |
| < Back Next > Cancel |

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

Network Setup Wizard



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



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.

Naming your Computer

Naming your computer is optional. If you would like 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**



 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,

• Click Change



- In this window, enter the **Computer name**.
- Select **Workgroup** and enter the name of the **Workgroup**.
- All computers on your network must have the same Workgroup name.
- Click OK

| Computer Name Changes | | | |
|---|--|--|--|
| You can change the name and the membership of this computer. Changes may affect access to network resources. | | | |
| Computer name: | | | |
| Office | | | |
| Full computer name: Office | | | |
| <u>M</u> ore | | | |
| Member of | | | |
| O <u>D</u> omain: | | | |
| | | | |
| ⊙ <u>W</u> orkgroup: ▲ | | | |
| Accounting | | | |
| | | | |
| OK Cancel | | | |

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

Highlight Internet Protocol (TCP/IP)

Click Properties



| Local Area Connection 7 Properties | ? 🗙 | | |
|--|------|--|--|
| General Advanced | | | |
| Connect using: | | | |
| B D-Link DWL-A650 | | | |
| Configure | | | |
| This connection uses the following items: | _ | | |
| Client for Microsoft Networks Ele and Printer Sharing for Microsoft Networks Ele and Printer Sharing for Microsoft Networks Ele QoS Packet Scheduler Thernet Protocol (TCP/IP) | | | |
| Install Uninstall Properties | | | |
| Description | | | |
| Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks. | | | |
| Sho <u>w</u> icon in notification area when connected | | | |
| ОК Са | ncel | | |

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.)

| Internet Proto | ocol (TCP/IP) Prope | erties | ? 🗙 | | | |
|---|---|---------------------|------|--|--|--|
| General | | | | | | |
| You can get I this capability. the appropriat | You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. | | | | | |
| O <u>O</u> btain a | O Dbtain an IP address automatically | | | | | |
| _⊙ U <u>s</u> e the I | following IP address: — | | | | | |
| <u>I</u> P address: | | 192.168.0.2 | | | | |
| S <u>u</u> bnet ma: | sk: | 255 . 255 . 255 . 0 | | | | |
| <u>D</u> efault gat | eway: | | | | | |
| O D <u>b</u> tain DNS server address automatically | | | | | | |
| 🔷 💿 Us <u>e</u> the I | following DNS server ad | dresses: | | | | |
| Preferred D | NS server: | | | | | |
| <u>A</u> lternate D | NS server: | · · · | | | | |
| | | Advar | iced | | | |
| OK Cancel | | | | | | |

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.)

Contacting Technical Support

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

D-Link provides free technical support for customers within the United States for the duration of the warranty period on this product.

U.S. customers can contact D-Link technical support through our web site, or by phone.

D-Link Technical Support over the Telephone:

(800) 758-5489

24 hours a day, seven days a week.

D-Link Technical Support over the Internet:

http://support.dlink.com

When contacting technical support, please provide the following information:

Serial number of the unit Model number or product name Software type and version number

Limited Warranty and Registration



Limited Warranty

1-Year

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 with 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 (including power supplies and fans) One (1) Year
- 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 (or defective media) with software that substantially conforms to D-Link's functional specifications for the 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-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:

Registration is conducted via a link on our Web Site (<u>http://www.dlink.com/</u>). Each product purchased must be individually registered for warranty service within ninety (90) days after it is purchased and/or licensed.

FAILURE TO PROPERLY TO REGISTER MAY AFFECT THE WARRANTY FOR THIS PRODUCT.

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.
- 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., 53 Discovery Drive, Irvine CA 92618.

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: TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE 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 BEACH 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.

Register Your D-Link Product Online at http://www.dlink.com/sales/reg