USER MANUAL

DSL-225 11N VDSL2+ 4-PORT FAST ETHERNET ROUTER

VERSION 1.00

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Product Overview

Package Contents

This product should contain all of the below mentioned items within its packaging:

- One DSL 225 11N VDSL2+ Wireless Router
- One Power Adapter
- One Printed User Manual (in Hebrew)
- One RJ-11 telephone cable
- One CAT-5 Ethernet cable
- One Quick Installation Guide

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

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



System Requirements

Network Requirements:	10/100Mbps Ethernet Adapter.IEEE 802.11 b/g/n Wireless Adapter
Web User Interface Requirements:	 Windows[®], Macintosh, or Linux-based Operating System. Internet Explorer 7 or higher, Firefox 3.5 or higher, Safari 4 or higher, or Chrome 8 or higher.
Internet Requirements:	VDSL Internet Connection Service from an ISP.

Features

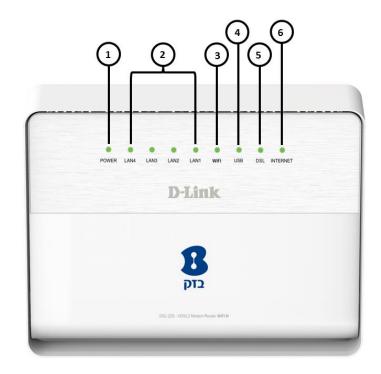
- Faster Wireless Networking The router provides up to 100Mbps* for the 2.4GHz band wireless connection with other 802.11n wireless clients. This capability allows users to participate in real-time activities online, such as video streaming, online gaming, and real-time audio.
- Compatible with 802.11b, 802.11g and 802.11n Devices The router is fully compatible with the IEEE 802.11b and IEEE 802.11g standards, so it can connect with existing 802.11b, 802.11g, and 802.11n PCI, USB and Cardbus adapters.
- **DHCP Support** Dynamic Host Configuration Protocol automatically and dynamically assigns all LAN IP settings to each host on your network. This eliminates the need to reconfigure every host whenever changes in network topology occur.
- Network Address Translation (NAT) For small office environments, the router allows multiple users on the LAN to access the Internet concurrently through a single Internet account. This provides Internet access to everyone in the office for the price of a single user. NAT improves network security in effect by hiding the private network behind one global and visible IP address. NAT address mapping can also be used to link two IP domains via a LAN-to-LAN connection.
- Precise ATM Traffic Shaping Traffic shaping is a method of controlling the flow rate of ATM data cells. This function helps to establish the Quality of Service for ATM data transfer.
- High Performance Very high rates of data transfer are possible with the router. Up to 100Mbps downstream bit rate using the G.dmt standard. (For VDSL2+)
- Full Network Management The router incorporates SNMP (Simple Network Management Protocol) support for web-based management and text-based network management via a Telnet connection.
- Easy Installation The router uses a web-based graphical user interface program for convenient management access and easy set up. Any common web browsing software can be used to manage this router.
- USB Support- The router provides a 3.0 USB port to easily share files and printers. The router supports a USB storage option that shares files through a SAMBA file server and in addition also supports sharing USB printers to network members. Please note that the USB storage device is not included in this package and must be bought separately.

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

Hardware Overview

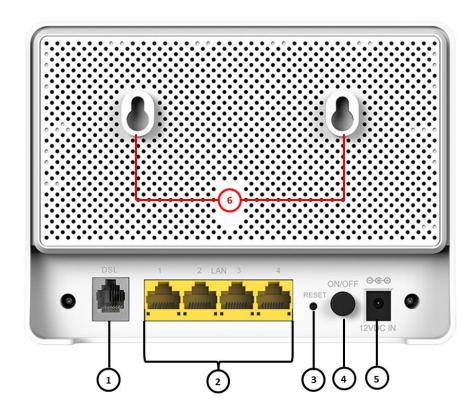
Front Panel

Number	Description
1	Power - A steady green light indicates the unit is powered on. When the device is powered off this remains dark. During the Power-On Self-Test this light will be red. If this light remains red after the POST, a malfunction has occurred.
2	LAN - A solid light indicates a valid link on startup. This light will blink when there is activity currently passing through the Ethernet port. A green light will be illuminated for a 10/100Mbps connection.
3	2.4GHz WLAN - Steady green light indicates a wireless connection. A blinking green light indicates activity on the WLAN
4	USB - Steady green light indicates a successful USB connection. A blinking green light indicates activity on the USB. Dark if no USB device is connected.
5	DSL - Steady green light indicates a valid VDSL connection. This will light after the VDSL negotiation process has been settled. A blinking green light indicates activity on the WAN (VDSL) interface.
6	Internet - Steady green light indicates a successful Internet connection. Steady red light indicates failed Internet connection. Dark if no WAN protocol is configured.



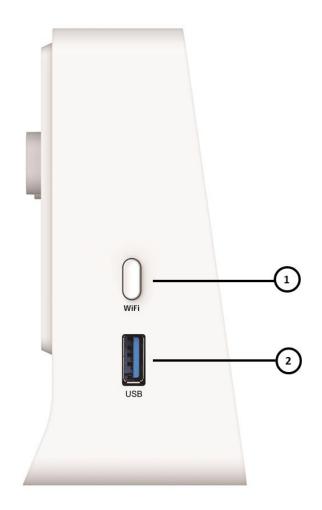
Rear Panel

Number	Description
1	VDSL Port - Use the DSL cable to connect to your telephone line (RJ-11 port).
2	Ethernet Ports - Use the Ethernet ports to connect the router to your Ethernet LAN or Ethernet devices.
3	Reset Button - Press and hold the button 5 seconds to restore the device to its original factory default settings.
4	Power Button - Push in to power-on the router. Push again to power-off the router.
5	Power Receptor - Receptor for the supplied power adapter.
6	Wall-Mount Slots – Wall-mount slots to mount the router on the wall.



Side Panel

Number	Description
1	2.4GHz Wireless On/Off Switch Button - Please press and hold the WiFi button for 3 seconds to turn on/turn off.
2	USB Port - Use the USB port to connect your USB device.



Basic 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 read and make sure you understand all the prerequisites for proper installation of your new router. Have all the necessary information and equipment on hand before beginning the installation.

Installation Notes

In order to establish a connection to the Internet it will be necessary to provide information to the router that will be stored in its memory. For some users, only their account information (Username and Password) is required. For others, various parameters that control and define the Internet connection will be required.

Low Pass Filters

Since VDSL and telephone services share the same copper wiring to carry their respective signals, a filtering mechanism may be necessary to avoid mutual interference. A low pass filter device can be installed for each telephone that shares the line with the VDSL line. These filters are easy to install passive devices that connect to the VDSL device and/or telephone using standard telephone cable. Ask your service provider for more information about the use of low pass filters with your installation.

Operating Systems

The router uses an HTML-based web interface for setup and management. The Web configuration manager may be accessed using any operating system capable of running web browser software, including Windows[®], Macintosh, and Linux-based Operating Systems.

Web Browser

Any common Web browser can be used to configure the router using the Web configuration management software. The program is designed to work best with more recently released browsers such as Internet Explorer 7 or higher, Firefox 3.5 or higher, Safari 4 or higher, or Chrome 8 or higher. The Web browser must have JavaScript enabled. JavaScript is enabled by default on many browsers. Make sure JavaScript has not been disabled by other software (such as virus protection or web user security packages) that may be running on your computer.

Ethernet Port (NIC Adapter)

Any computer that uses the router must be able to connect to it through one of the Ethernet ports on the router. This connection is an Ethernet connection and therefore requires that your computer be equipped with an Ethernet port as well. Most notebook computers are now sold with an Ethernet port already installed. Likewise, most fully assembled desktop computers come with an Ethernet adapter as standard equipment. If your computer does not have an Ethernet port, you must install an Ethernet NIC adapter before you can use the router. If you must install an adapter, follow the installation instructions that come with the Ethernet NIC adapter.

Additional Software

It may be necessary to install software on your computer that enables the computer to access the Internet. Additional software must be installed if you are using the device a simple bridge. For a bridged connection, the information needed to make and maintain the Internet connection is stored on another computer or gateway device, not in the router itself.

If your VDSL service is delivered through a PPPoE or PPPoA connection, the information needed to establish and maintain the Internet connection can be stored in the router. In this case, it is not necessary to install software on your computer. It may however be necessary to change some settings in the device, including account information used to identify and verify the connection.

All connections to the Internet require a unique global IP address. For bridged connections, the global IP settings must reside in a TCP/IP enabled device on the LAN side of the bridge, such as a PC, a server, a gateway device such as a router or similar firewall hardware. The IP address can be assigned in a number of ways. Your network service provider will give you instructions about any additional connection software or NIC configuration that may be required.

Information you will need from your VDSL service provider

<u>Username</u>

This is the Username used to log on to your VDSL service provider's network. Your VDSL service provider uses this to identify your account.

Password

This is the Password used, in conjunction with the Username above, to log on to your VDSL service provider's network. This is used to verify the identity of your account.

WAN Setting / Connection Type

These settings describe the method your VDSL service provider uses to transport data between the Internet and your computer. Most users will use the default settings. You may need to specify one of the following WAN Setting and Connection Type configurations (Connection Type settings listed in parenthesis):

- PPPoE/PPPoA (PPPoE LLC, PPPoE VC-Mux, PPPoA LLC or PPPoA VC-Mux)
- Static IP Address (1483 Routed IP LLC or 1483 Routed IP VC-Mux)
- Bridge Mode (1483 Bridged IP LLC or 1483 Bridged IP VC Mux)

Modulation Type

VDSL uses various standardized modulation techniques to transmit data over the allotted signal frequencies. Some users may need to change the type of modulation used for their service. The default DSL modulation (Autosense) used for the router automatically detects all types of VDSL, VDSL2, and VDSL2+ modulation.

Security Protocol

This is the method your VDSL service provider will use to verify your Username and Password when you log on to their network. Your router supports the PAP and CHAP protocols.

<u>VPI</u>

Most users will not be required to change this setting. The Virtual Path Identifier (VPI) is used in conjunction with the Virtual Channel Identifier (VCI) to identify the data path between your VDSL service provider's network and your computer. If you are setting up the router for multiple virtual connections, you will need to configure the VPI and VCI as instructed by your VDSL service provider for the additional connections. This setting can be changed in the WAN Settings window of the web management interface.

<u>VCI</u>

Most users will not be required to change this setting. The Virtual Channel Identifier (VCI) used in conjunction with the VPI to identify the data path between your VDSL service provider's network and your computer. If you are setting up the router for multiple virtual connections, you will need to configure the VPI and VCI as instructed by your VDSL service provider for the additional connections. This setting can be changed in the WAN Settings window of the web management interface.

Information you will need about this Router

<u>Username</u>

This is the username needed access the router's web management interface. When you attempt to connect to the device through a web browser you will be prompted to enter this username. The default username for the router is "Admin". Alternatively, you can also try "user"

Password

This is the password you will be prompted to enter when you access the router's web management interface. The default password is "Admin". Alternatively, you can also try "user"

LAN IP Addresses for the Router

This is the IP address you will enter into the Address field of your web browser to access the router's configuration Graphical User Interface (GUI) using a web browser. The default IP address is **10.0.0.138**. This may be changed to suit any IP address scheme the user desires. This address will be the base IP address used for DHCP service on the LAN when DHCP is enabled.

LAN Subnet Mask for the Router

This is the subnet mask used by the Router, and will be used throughout your LAN. The default subnet mask is **255.255.255.0**. This can be changed later.

Information you will need about your LAN or computer

Ethernet NIC

If your computer has an Ethernet NIC, you can connect the router to this Ethernet port using an Ethernet cable. You can also use the Ethernet ports on the router to connect to other computer or Ethernet devices.

DHCP Client status

Your VDSL router is configured, by default, to be a DHCP server. This means that it can assign an IP address, subnet mask, and a default gateway address to computers on your LAN. The default range of IP addresses the unit will assign are from **10.0.0.139** to **10.0.0.254**. Your computer (or computers) needs to be configured to obtain an IP address automatically (that is, they need to be configured as DHCP clients.)

Once you have the above information, you are ready to setup and configure your VDSL router.

Device Installation

The router connects two separate physical interfaces, a VDSL (WAN) and an Ethernet (LAN) interface. Place the router in a location where it can be connected to the various devices as well as to a power source. The router should not be located where it will be exposed to moisture or excessive heat. Make sure the cables and power cord are placed safely out of the way so they do not create a tripping hazard. As with any electrical appliance, observe common sense safety procedures.

The router can be placed on a shelf or desktop, ideally you should be able to see the LED indicators on the front if you need to view them for troubleshooting.

Power on Router

The router must be used with the power adapter included with the device.

- 1. Insert the AC Power Adapter cord into the power receptacle located on the rear panel of the router and plug the adapter into a suitable nearby power source.
- 2. Press the Power button into the on position. You should see the Power LED indicator light up and remain lit.
- 3. If the Ethernet port is connected to a working device, check the Ethernet LED indicators to make sure the connection is valid. The router will attempt to establish the VDSL connection, if the VDSL line is connected and the router is properly configured this should light up after several seconds. If this is the first time installing the device, some settings may need to be changed before the router can establish a connection.

Factory Reset Button

The router may be reset to the original factory default settings by using a ballpoint pen or paperclip to gently push down the reset button in the following sequence:

- 1. Press and hold the reset button while the device is powered on for 10-15 seconds.
- 2. Release the reset button.

Remember that this will wipe out any settings stored in flash memory including user account information and LAN IP settings. The device settings will be restored to the factory default IP address **10.0.0.138** and the subnet mask is **255.255.255.0.** The default management username is "**user**" and the default password is "**user**".

Network Connections

Connect VDSL Line

Use the VDSL cable included with the router to connect it to a telephone wall socket or receptacle. Plug one end of the cable into the VDSL port (RJ-11 receptacle) on the rear panel of the router and insert the other end into the RJ-11 wall socket. If you are using a low pass filter device, follow the instructions included with the device or given to you by your service provider. The VDSL connection represents the WAN interface, the connection to the Internet. It is the physical link to the service provider's network backbone and ultimately to the Internet.

Connect Router to Ethernet

The router may be connected to a single computer or Ethernet device through the Ethernet ports on the rear panel. Any connection to an Ethernet concentrating device such as a switch or hub must operate at a speed of 10/100Mbps. When connecting the router to any Ethernet device that is capable of operating at speeds higher than 10Mbps, be sure that the device has auto-negotiation (NWay) enabled for the connecting port. Use standard twisted-pair cable with RJ-45 connectors. The RJ-45 ports on the router are a crossed port (MDI-X). Follow standard Ethernet guidelines when deciding what type of cable to use to make this connection. When connecting the router directly to a PC or server use a normal straight-through cable. You should use a crossed cable when connecting the router to a normal (MDI-X) port on a switch or hub. Use a normal straight-through cable when connecting it to an uplink (MDI-II) port on a hub or switch. The rules governing Ethernet cable lengths apply to the LAN to router connection. Be sure that the cable connecting the LAN to the router does not exceed 100 meters.

Hub or Switch to Router Connection

Connect the router to an uplink port (MDI-II) on an Ethernet hub or switch with a straight-through cable. If you wish to reserve the uplink port on the switch or hub for another device, connect to any on the other MDI-X ports (1x, 2x, etc.) with a crossed cable.

Computer to Router Connection

You can connect the router directly to an Ethernet adapter card (NIC) installed on a PC using the Ethernet cable provided.

Getting Started

This section will show you how to set up and configure your new D-Link router using the Web-based configuration utility.

How to connect to the Web User Interface

Connect to the Router

To configure the WAN connection used by the router it is first necessary to communicate with the router through its management interface, which is HTML-based and can be accessed using a web browser. The easiest way to make sure your computer has the correct IP settings is to configure it to use the DHCP server in the router.

To access the web user interface, open a web-browser such as Internet Explorer and enter the IP address of the router (**10.0.0.138**) into the address bar and press the *Enter* key on your keyboard.



Type "Admin" in the User Name field and "Admin" in the Password field, and enter
the validation code. Click the Login button to proceed. If you get a <i>Page Cannot be</i>
<i>Displayed</i> error, please refer to the Troubleshooting section for assistance.

Tick the *Remember my login info on this computer* option to allow the browser to remember the login information for the next login.

/indows Security		x
The server 10.0.0 password.	.138 at Broadband Router requires a username and	
	rver is requesting that your username and password be ire manner (basic authentication without a secure	_
	Admin ••••• Remember my credentials	
	OK Cancel	

Web User Interface Configuration

After successfully logging into the Web User Interface, the following page will be displayed. This page is divided into clickable components that make the configuration of this device easier and more understandable.

The top menu lists out the **Categories** available for configuration. The categories available to configure on this device are **Setup**, **Advanced**, **Maintenance**, **Status** and **Help**.

The left menu lists out the **Pages** available, for each individual category, for configuration. In this example, we observe the pages available in the **Setup** category.

Every category will have a **Logout** option at the bottom of all the pages. This option can be used to log out from the web user interface and also close the browser.

D-Lini	1 ₁₂				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wan Service	WAN SETTINGS	АТМ			
Wireless 2.4G			ATM Interface		
Local Network			Amintenace		
IPv6 Autoconfig	WAN SETTINGS	ртм			
Time and Date					
Logout			PTM Interface		
	WAN SETTINGS	WAN			
			PPPoE WAN		
	WAN SETTINGS	OTHER WAN			
			Other WAN		

Setup Category

The **Setup** category is designed to assist the user with essential configurations, concerning the initial setup of this product.

The following pages can be found in the **Setup** category:

- **Wan Service** On this page the user can configure services related to the WAN connectivity of this product.
- Wireless 2.4G On this page the user can configure services related to the Wireless 2.4GHz connectivity of this product.
- Local Network On this page the user can configure services related to the Local Area Network connectivity of this product. Services available for configuration are LAN Interface configuration and DHCP configuration.
- **IPv6 Autoconfig** On this page the user can configure services related to the IPv6 connectivity of this product.
- **Time and Date** On this page the user can configure services related to the time and date feature of this product. **Time Servers** and a **Time Zone** can be specified here.
- Logout On this page the user can log out of the router.

D-Lini	¢				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wan Service	WAN SETTINGS	АТМ			
Wireless 2.4G			ATM Interface		
Local Network					
IPv6 Autoconfig	WAN SETTINGS	РТМ			
Logout			PTM Interface		
	WAN SETTINGS	WAN			
			PPPoE WAN		
	WAN SETTINGS	OTHER WAN			
			Other WAN		

WAN Service

To access the **WAN Service** page, click on the **Setup** menu link, at the top, and then click on the **WAN Services** menu link, on the left.

On this page the user can configure services related to the WAN connectivity of this product.

D-Lini	e				
	~				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wan Service	WAN SETTINGS	ATM			
Wireless 2.4G Local Network			ATM Interface		
IPv6 Autoconfig		DTM			
Time and Date	WAN SETTINGS	PIM	PTM Interface		
	WAN SETTINGS	WAN			
			PPPoE WAN		
	WAN SETTINGS	OTHER WAN			
			Other WAN		

ATM Interface

Click the **ATM Interface** button to access the ATM Interface WAN Settings configuration page.

WAN SETTINGS ATM	
	ATM Interface

After clicking the **ATM Interface** button, the DSL ATM Interface Configuration page will be available.

	SETUP		A	DVANCED	MAINTENAN	CE S	TATUS	HEL
	DSL ATM INT	FERFA	CE CO	NFIGURATION				
	Choose Add, or R	emove t	o configu	re DSL ATM interface	S.			
	ATM INTERF	ACE C	DNFIG	JRATION				
	Interface	Vpi	Vci	DSL Latency	Category	Link Type	Conn Mode	Remo
	atm0	8	48	Path0	UBR	EoA	VlanMuxMode	
	atm1	8	83	Path0	UBR	EoA	DefaultMode	

In the **ATM Interface Configuration** section, here, we can view a list of existing interfaces configured.

Click the **Add** button to add a new interface.

Select the **Remove** option and click the **Remove** button to remove the specific interface.

Interface	Vpi	Vci	DSL Latency	Category	Link Type	Conn Mode	Remove
atm0	8	48	Path0	UBR	EoA	VlanMuxMode	
atm1	8	88	Path0	UBR	EoA	DefaultMode	

After clicking the **Add** button, the ATM PVC Configuration page will be available.

ATM PVC CONFIGURATION

Select DSL Link Type (EoA is

for PPPoE, IPoE, and Bridge.):

۲

Encapsulation Mode: LLC/SNAP-BRIDGING -

This screen allows you to configure an ATM PVC identifier (VPI and VCI), select DSL latency, select a service category.

Enter the correct VPI and VCI values. These can also be changed if requested to do so by the Internet Service Provider (ISP).

Select the appropriate DSL Latency option. Options to choose from are Path0 (Fast) and Path1 (Interleaved).

CONFIGURATION	
VPI: [0-255] :	0
VCI: [32-65535] :	35
Select DSL Latency:	Path0 (Fast) Path1 (Interleaved)

PPPoA

IPoA

Here we can select the **DSL Link Type** used. The **Encapsulation Mode** will change depending on the **DSL Link Type** selected. Options to choose from are **EoA**, **PPPoA**, and **IPoA**.

After selecting the EoA option, select the Encapsulation Mode. Options to choose from are LLC/SNAP-BRIDGING and VC/MUX.

After selecting the **PPPoA**, select the **Encapsulation Mode**. Options to choose from are **VC/MUX** and **LLC/ENCAPSULATION**.

After select the **IPoA** option, select the **Encapsulation Mode**. Options to choose from are **LLC/SNAP-ROUTING** and **VC/MUX**.

Here we can select the **Service Category**. Options to choose from are **UBR Without PCR**, **UBR With PCR**, **CBR**, **Non Realtime VBR**, and **Realtime VBR**.

After selecting **UBR Without PCR**, the **Minimum Cell Rate** field will be available. Enter the **Minimum Cell Rate** value here.

 Select DSL Link Type (EoA is for PPPoE, IPoE, and Bridge.):

 Encapsulation Mode:
 VC/MUX
 Encapsulation Mode:
 Encapsulation Mode:
 Encapsulation Mode:
 Encapsulation Mode:

 PPPoA
 IPoA

 Select DSL Link Type (EoA is for PPPoE, IPoE, and Bridge.):

 Encapsulation Mode:
 Encapsulation Mode:
 LLC/SNAP-ROUTING ▼

 ILC/SNAP-ROUTING ▼

Service Category: UBR Without PCR 🔻

Service Category: UBR Without PCR

Minimum Cell Rate: -1 [cells/s] (-1 indicates no shaping)

After selecting **UBR With PCR**, the **Peak Cell Rate** field will be available. Enter the **Peak Cell Rate** value here.

Service Category: UBR With PC	R 🔻
Peak Cell Rate: [cells/s] :	

After selecting **CBR**, the **Peak Cell Rate** field will be available. Enter the **Peak Cell Rate** value here.

After selecting Non Realtime VBR, the Peak Cell Rate, Sustainable Cell Rate, and Maximum Burst Size fields will be available. Enter the Peak Cell Rate, Sustainable Cell Rate, and Maximum Burst Size values here.

Peak Cell Rate: [cells/s] :

Service Category:	Non Realtime VBR 🔻
Peak Cell Rate: [cells/s] :	
Sustainable Cell Rate: [cells/s]	
Maximum Burst Size: [cells] :	

After selecting **Realtime VBR**, the **Peak Cell Rate**, **Sustainable Cell Rate**, and **Maximum Burst Size** fields will be available. Enter the **Peak Cell Rate**, **Sustainable Cell Rate**, and **Maximum Burst Size** values used here.

Select the Select Scheduler for Queues of Equal Precedence as the Default Queue option here. Options to choose from are Weighted Round Robin and Weighted Fair Queuing.

Also enter the **Default Queue Weight**, **Default Queue Precedence**, **VC WRR Weight**, and **VC Precedence** value used here.

Click the **Back** button to return to the previous page.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

Service Category:	Realtime VBR
Peak Cell Rate: [cells/s] :	
Sustainable Cell Rate: [cells/s]	
Maximum Burst Size: [cells] :	

Select Scheduler for Queues of Equal Precedence as the Default Queue	 Weighted Round Robin Weighted Fair Queuing
Default Queue Weight:	1 [1-63]
Default Queue Precedence:	8 [1-8] (lower value, higher priority)
VC WRR Weight:	1 [1-63]
VC Precedence	8 [1-8] (lower value, higher priority)
	Back Apply/Save Cancel

PTM Interface

Click the **PTM Interface** button to access the PTM Interface WAN Settings configuration page.

WAN SETTINGS PTM	
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PTM Interface

After clicking the **PTM Interface** button, the DSL PTM Interface Configuration page will be available.

Here you can view the Interface, DSL Latency, PTM Priority, Connection Mode, and IP QoS settings. You can remove the configuration option by clicking the **Remove** checkbox.

Click the Add button to add a new interface.

Select the **Remove** option and click the **Remove** button to remove the specific interface.

5 111						
25 ///	SETUP	ADVANCED	MAINTENA	ICE STAT	rus	HELP
rvice	DSL PTM INTER	RFACE CONFIGURAT	ION			
s 2.4G	Choose Add, or Remo	ove to configure DSL PTM inf	terfaces.			
etwork						
utoconfig	PTM INTERFAC	E CONFIGURATION				
nd Date	Interface	DSL Latency	PTM Priority	Conn Mode	IP QoS	Remove
	ptm0	Path0	Normal&High	VlanMuxMode	Support	
			Add Remov	/e		

DTM CONFICURATIO

After clicking the Add button, the PTM Configuration page will be available.

Select the DSL latency option here. Options to choose from are **Path0 (Fast)** and **Path1 (Interleaved)**.

Select the Select Scheduler for Queues of Equal Precedence as the Default Queue option here. Options to choose from are Weighted Round Robin and Weighted Fair Queuing.

Next, you have the option to edit any of the following settings: Select a value to enter under **Default Queue Weight**. Select a value to enter under **Default Queue Precedence**. Select a value to enter under **Default Queue Minimum Rate** Select a value to enter under **Default Queue Shaping Rate** Select a value to enter under **Default Queue Shaping Burst Size**

Click the **Back** button to return to the previous page.

Click the Apply/Save button to accept the changes.

Click the **Cancel** button to discard the changes made and return to the main page.

This screen allows you to configure a PTM flow.					
CONFIGURATION					
Select DSL Latency: V Path0 (Fas (Interleaved)	t) 🔲 Path1				
Select Scheduler for Queues of Equal Precedence as the Default Queue	 Weighted Round Robin Weighted Fair Oueuing 				
Default Queue Weight:	1 [1-63]				
Default Queue Precedence:	8 [1-8] (lower value, higher priority)				
Default Queue Minimum Rate:	-1 [1-0 Kbps] (-1 indicates no shaping)				
Default Queue Shaping Rate:	-1 [1-0 Kbps] (-1 indicates no shaping)				
Default Queue Shaping Burst Size:	3000 [bytes] (shall be >=1600)				

PPPoE WAN

Click the **PPPoE WAN** button to access the PPPoE WAN Settings configuration page.

WAN SETTINGS -- PPPOE WAN

PPPoE WAN

After clicking the **PPPoE WAN** button, the following page will be available. In the **Wide Area Network (WAN) Service Setup** section, a list of configured PPPoE WAN interfaces will be displayed.

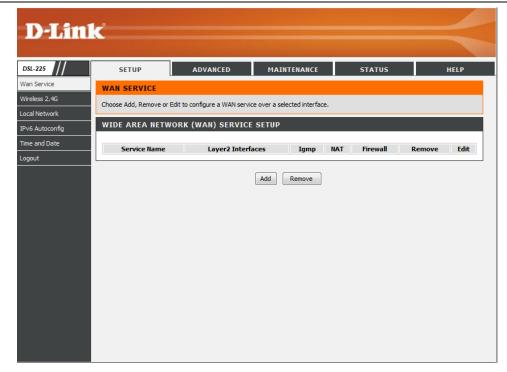
Click the **Add** button to add a new interface.

Click the **Edit** button to reconfigure an interface.

Select the **Remove** option and click the **Remove** button to remove the specific interface.

D-Lin	K				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
/an Service	WAN SERVICE				
ireless 2.4G	Choose Add, Remove or I	Edit to configure a WAN servi	ce over a selected interface.		
ocal Network		-			
Pv6 Autoconfig	WIDE AREA NETW	ORK (WAN) SERVICE	SETUP		
ime and Date	Service Name	Layer2 Interf	aces Igmp	NAT Firewall	Remove Edit
ogout	·				
			Add Remove		

After clicking the **Add** button, the **WAN Service Interface Configuration** page is displayed.



Select either **ATM/PTM Auto Detected** or **ptm0/(0_1_1)**, or both. If you select neither, you will be prompted to select either one.

Click **Next** to continue.

D -Lin	k							
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP			
Wan Service	WAN SERVICE INTERFACE CONFIGURATION							
Wireless 2.4G		Select a layer 2 interface for this service						
Local Network	Note: For ATM interface,	Note: For ATM interface, the descriptor string is (portId_vpi_vci)						
IPv6 Autoconfig	WAN SERVICE INT	WAN SERVICE INTERFACE CONFIGURATION						
Time and Date	For PTM interface, the descriptor string is (portId_high_low)							
	Where portId=0> DSL Latency PATH0 portId=1> DSL Latency PATH1 portId=4> DSL Latency PATH0&1 low = 0> Low PTM Priority not set low = 1> Low PTM Priority set Migh = 0> High PTM Priority not set high = 1> High PTM Priority set Image: Mathematical Action Pathamatical Action Priority Set Image: Mathematical Action Prior							
			Back Next					

After clicking the **Next** button, the following page will be displayed. Here we can configure the **WAN Service Configuration**.

Select the WAN service type.

Click **IP over Ethernet** or click **Bridge**. When you click **IP over Ethernet**, the **Enter Service Description** field changes to **ipoe_0_1_1**. When you click **Bridge**, the **Enter Service Description** field changes to **br_0_1_1**.

For tagged service, enter valid 802.1P Priority and 802.1Q VLAN ID. For untagged service, set -1 to both 802.1P Priority and 802.1Q VLAN ID.

Enter a value in the Enter 802.1P Priority [07] field.

Enter a value in the Enter 802.1Q VLAN ID [0-4094] field.

Select a **TPID VLAN** from the drop-down menu. Select either **0x8100**, **0x88A8**, or **0x9100**.

Select the Internet Protocol Selection from the drop-down menu. Select either IPv4 Only, IPv4&IPv6(Dual Stack), or IPv6 Only.

Click the **Back** button to return to the previous page. Click the **Next** button to continue to the next page.

D-Lini	e						
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP		
Wan Service	WAN SERVICE CO	NFIGURATION					
Wireless 2.4G	WAN Service Configurati	ion					
Local Network							
IPv6 Autoconfig	WAN SERVICE CO	ONFIGURATION					
Time and Date	9	Select WAN service type:					
Logout	PPP over Ethernet (PPPoE)						
	E	nter Service Description:	pppoe_0_1_1				
		nter valid 802.1P Priority , set -1 to both 802.1P Pri	and 802.1Q VLAN ID. ority and 802.1Q VLAN ID.				
	Ent	ter 802.1P Priority [0-7]:	-1				
	Enter 8	02.1Q VLAN ID [0-4094]:	-1				
		Select VLAN TPID:	Select a TPID 💌				
	Inte	ernet Protocol Selection:	IPV4 Only 💌				
			Back Next				

The PPP Username and Password Configuration window opens.

The following parameters can be configured:

PPP Username: Enter the username provided by your ISP

- PPP Password: Enter the password provided by your ISP
- PPPoE Service Name: Enter the PPPoE service name provided by your ISP
- Authentication Method: From the drop-down list select either AUTO, PAP, CHAP, MSCHAP

Enable Fullcone NAT: Tick this option to enable the full-cone NAT feature. If checked, a warning message appears, ONLY IF REQUIRED—DISABLES NETWORK ACCELERATION AND SOME SECURITY

Dial on demand (with idle timeout timer): Tick this option to enable the dial-ondemand feature. After selecting this option, enter the **Inactivity Timeout** value used here. This value must be between 1 and 4320 minutes. By default, this value is **0**.

PPP IP extension: Tick this option to enable the PPP IP extension feature.

Use Static IPv4 Address: Tick this option to manually enter and use a Static IPv4 Address.

Enable PPP Debug Mode: Tick this option to enable the PPP debug mode feature.

Bridge PPPoE Frames Between WAN and Local Ports: Tick this option to enable the bridging of PPPoE frames between WAN and the local ports. Enable IGMP Multicast Proxy: Tick this option to enable the IGMP multicast proxy feature.

Click the **Back** button to return to the previous page.

Click the **Next** button to continue to the next page.

PPP USERNAME AND PASSWORD

PPP usually requires that you have a user name and password to establish your connection. In the boxes below, enter the user name and password that your ISP has provided to you.

CONFIGURATION	
PPP Username:	Bezeg69@RMS
PPP Password:	•••••
PPPoE Service Name :	
Authentication Method:	AUTO
Enable Fullcone NAT:	
Dial on demand (with idle timeout timer):	
PPP IP extension: Use Static IPv4 Address:	
Enable PPP Debug Mode:	
Bridge PPPoE Frames Between WAN and Local Ports :	
Enable IGMP Multicast Proxy:	
NAT: Firewall :	
	Back Next

Once you selected from the options above, click the **Next** button, the following page will be displayed. Here we can configure the interface's parameters.

In the **Routing –Default Gateway** section, select the **Default Gateway Interface**. Click **Next**.

//					
SET	UP ADVA	NCED M#	AINTENANCE	STATUS	н
ROUTIN	G DEFAULT GATEW	AY			
to the prior changed by	eway interface list can have r ity with the first being the hig removing all and adding then ED WAN INTERFACE	est and the last one the			
Select a pro	eferred wan interface as the Default Gateway Interfac		/. ble Routed WAN Int	erfaces	
	ррр0.2	->			
		<-			
		Bad	k Next		

The **DNS Server Configuration** window appears.

The option **Select DNS Server Interface** from available WAN interfaces is already selected.

Select the Selected DNS Server Interfaces.

Choose Use the following Static DNS IP address.

Enter a **Primary DNS server** in the field provided and/or **Secondary DNS**. Click the **Next** button to continue.

	SETUP	ADVANCED	MAINTENANCE	STATUS	HE
vice	DNS SERVER CONF	IGURATION			
2.4G work oconfig Date	only a single PVC with IPo DNS Server Interfaces according to the priori	or static IPoE protocol is can have multiple WA ty with the first being	rfaces OR enter static DNS serve configured, Static DNS server IP N interfaces served as syste the higest and the last one ti removing all and adding the	addresses must be entered. m dns servers but only on he lowest priority if the W	ne will be use
Date	CONFIGURATION				
	Select DNS Server I available W	nterface from 💿 AN interfaces:			
	Selected DNS Serv	ver Interfaces	Available WAN I	interfaces	
	ppp0.2		*		
	Use the following	Static DNS IP			
		address: 🔍			
	Primary	DNS server:			
	Secondary	DNS server:			

After clicking the **Next** button, the following page will be displayed. Here we can view a summary of the interface's parameters.

Click the **Back** button to return to the previous page. Click the **Apply/Save** button to accept the changes.

DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
an Service	WAN SETUP - SU	MMARY			
/ireless 2.4G	Males are that the esti	ngs below match the settings	and ideal burning TCD		
ocal Network			ve. Click "Back" to make any mod	difications.	
Pv6 Autoconfig	SYSTEM INFO				
ime and Date					
oqout	Connection Type:			PPPoE	
	NAT:			Enabled	
	Full Cone NAT:			Enabled	
	Firewall:			Enabled	
	IGMP Multicast:			Enabled	
	Quality Of Service:			Disabled	

Other WAN Interface

Click the **Other WAN** button to access the Other WAN Settings configuration page.

WAN SETTINGS -- OTHER WAN

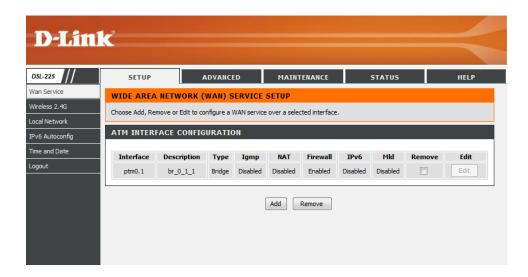
Other WAN

After clicking the **Other WAN** button, the following page will be available. In the **Wide Area Network (WAN) Service Setup** section, a list of configured WAN interfaces will be displayed.

Click the **Add** button to add a new interface.

Click the **Edit** button to reconfigure an interface.

Select the **Remove** option and click the **Remove** button to remove the specific interface.



Wireless 2.4G

To access the Wireless 2.4G page, click on the Setup menu link, at the top, and then click on the Wireless 2.4G menu link, on the left.

On this page the user can configure services related to the Wireless 2.4GHz connectivity of this product.

// SET	JP	ADVANCED	M	AINTENA	NCE S	STATUS	HELP	
WIRELE	SS BASICS							
k the network requirement	This page allows you to configure basic features of the wireless LAN interface. You can enable or disable the wireless LAN interface, h the network from active scans, set the wireless network name (also known as SSID) and restrict the channel set based on country requirements. Click "Apply/Save" to configure the basic wireless options.							
WIRELE	SS BASICS							
			Enable	Wireless				
					lotspot2.0			
			Hide Ac	cess Poin	t			
			Clients	Isolation				
				Disable WMM Advertise				
				Enable Wireless Multicast Forwarding (WMF)				
	SSID :			: Bezeq WiFi				
			: 02:10:00:00:41:8B					
		Country :				•		
			7					
		Max Clients :	16					
Wireless -	Guest/Virtua	Access Points:						
Enabled		SSID		Hidden	Isolate Clients	Enable HSPOT	Max Clients	
	Bezeq Free	004188				5	N/A	
	wl0_Guest2					16	N/A	
	wl0_Guest3					16	N/A	

- In this section we can configure the following parameters.
- **Enable Wireless:** Tick this option to enable the wireless feature on this router.
- Enable Wireless Hotspot 2.0: Check this option to enable wireless hotspot 2.0.
- Hide Access Point: Here we can choose to hide the Wireless SSID by selecting clicking the checkbox.
- Clients Isolation: Click the checkbox to enable.
- **Disable WMM Advertise:** Click the checkbox to enable the Wi-Fi Multimedia (WMM) advertisement feature
- Enable Wireless Multicast Forwarding (WMF): Click the checkbox to enable the Wireless Multimedia Forwarding (WMF) feature.
- SSID: Enter the Wireless name (SSID) here. This name will be available when wireless clients scan for available wireless networks. However, when the Hide Access Point option is enabled, this name will not be visible to wireless clients
- **BBSID:** The ID is automatically set.
- **Country:** This parameter will display the country information.
- Country RegRev: Enter the country registration number here.
- Max Clients: Set the number of users that can access the device.
- Wireless Guest/Virtual Access Points: Click the checkbox to enable one of the guest Access Points
- Enabled Select this option to enable the Guest/Virtual Access Point option for the entry specified.
- **SSID** When available enter the SSID for the Virtual Access Point (VAP) here.
- Hidden Select this option to hide the SSID of the selected VAP.
- Isolate Clients Select this option to isolate the wireless clients of the selected VAP from the rest of the network.
- Enable HSPOT Set the hotspot value per SSID
- Max Clients Enter the maximum number of wireless clients that can connect to the select VAP.
- Click the Apply/Save button to accept the changes made.

-							
VIRELES	S BASICS						
		Enable	Wireless				
		Enable	Wireless H	lotspot2.0			
		Hide Ac	cess Poin	t			
		Clients	Isolation				
		Disable	WMM Ad	vertise			
		Enable Wireless Multicast Forwarding (WMF)					
	SSID :	Bezeg \	NiFi				
	BSSID :	02:10:00):00:41:8B				
	Country :	ISRAEL			•		
	Country RegRev :	7					
	Max Clients :	16					
Vireless - G	Suest/Virtual Access Points:						
Enabled	SSID		Hidden	Isolate Clients	Enable HSP	OT Max Clients	
	Rezea Eree 004199				-	NI/A	

Enabled	SSID	Hidden	Isolate Clients	Enable HSPOT	Max Clients
	Bezeq Free 004188			5	N/A
	wl0_Guest2			16	N/A
	wl0_Guest3			16	N/A

Apply/Save

Local Network

To access the Local Network page, click on the Setup menu link, at the top, and then click on the Local Network menu link, on the left.

On this page the user can configure services related to the Local Area Network connectivity of this product. Set the IP address and Subnet Mask here.

-225 ///	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
n Service			TRAINTENANCE	514105	Helpful Hints
reless 2.4G tal Network 6 Autoconfig	This section allows you to optional and you should n		ettings of your router. Please settings here to get your net		The IP address of your router is the same IPaddress you will use to access the web management interface o your router.
ne and Date	Configure the DSL Router	IP Address : 10.0.0.13 Subnet Mask : 255.255.	2255.0 MP Snooping Mode		If you already have a DHCP server on your network or are using sta IP addresses on all the devices on your network click on Disable DHCP Server to disable this feature. If you have devices on your network that shoul always have fixed IP addresses, add a Static
	L	Apply/Save	N side firewall		DHCP for each such device. More

In this section we can configure the Local Area Network (LAN) parameters.

- IP Address: Enter the local IP address for this router here. This IP address is also used to connect to this device's Web User Interface. Please note that after changing this IP address you'll be forced to log into the Web User Interface again, using the new IP address.
- Subnet Mask: Enter the subnet mask used here.
- **Enable IGMP Snooping:** Select this option to enable the IGMP snooping option.
- **Standard Mode:** Select this option to enable the IGMP Snooping standard mode.
- **Blocking Mode:** Select this option to enable the IGMP Snooping blocking mode.
- Enable LAN side firewall: Click the checkbox to enable this option.

LOCAL AREA NETWORK (LAN) SETUP

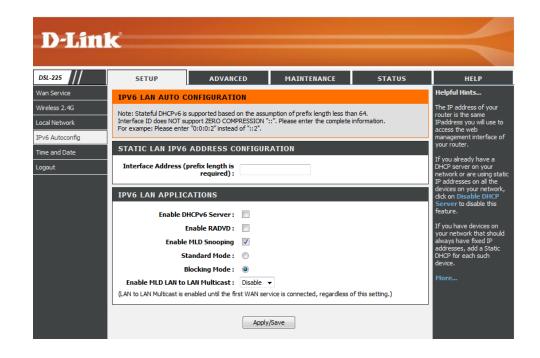
Configure the DSL Router IP Address and Subnet Mask for LAN interface.GroupName

IP Address :	10.0.0.138
Subnet Mask :	255.255.255.0
	Enable IGMP Snooping
\odot	Standard Mode
۲	Blocking Mode
	Enable LAN side firewall
Ap	oply/Save Cancel

IPv6 Autoconfig

To access the IPv6 Autoconfig page, click on the Setup menu link, at the top, and then click on the IPv6 Autoconfig menu link, on the left.

On this page the user can configure services related to the **IPv6** connectivity of this product.



In this section we can enter the Interface Address used here.

STATIC LAN IPV6 ADDRESS CONFIGURATION Interface Address (prefix length is required):

Enable IPv6 LAN Applications.

Enable DHCPv6 Server: Click the checkbox to enable the DHCPv6 Server.

Enable RADVD: Click the checkbox to enable RADVD.

- Enable MLD Snooping: Click the checkbox to enable MLD Snooping. There are two options to choose from, Standard Mode and Blocking Mode.
- **Enable MLD LAN to LAN Multicast:** Select Disable or Enable. Please read the precaution about enabling and disabling the service.

Click the **Apply/Save** button to accept the changes made.

IPV6 LAN APPLICATIONS

Enable DHCPv6 Server :	
Enable RADVD :	
Enable MLD Snooping	
Standard Mode :	•
Blocking Mode :	۲
Enable MLD LAN to LAN Multicast :	Disable 👻
(LAN to LAN Multicast is enabled until the fire	st WAN service is connected, regardless of this setting.)

Apply/Save

Time and Date

To access the **Time and Date** page, click on the **Setup** menu link, at the top, and then click on the **Time and Date** menu link, on the left.

On this page the user can configure services related to the time and date feature of this product. **Time Servers** and a **Time Zone** can be specified here.

D-Lin	K				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wan Service	TIME AND DATE				Helpful Hints
Wireless 2.4G	This page allows you to the r	nodem's time configuratio	n.		Good timekeeping is important for accurate logs
IPv6 Autoconfig	TIME SETTINGS				More
Time and Date	[] [Automatically syr	chronize with Internet tim	ne servers	
Logout	First NTP time serve	er: time.nist.gov	V		
	Second NTP time serve	er: ntp1.tummy.com	-		
	TIME CONFIGURATIO	DN			
	Time zone offse	et : (GMT-08:00) Pacific	Time, Tijuana	~	
		Apply/Save	Cancel		

In this section we can configure the **Time Settings** for this router.

Select the **Automatically synchronize with Internet time server** option and then select the **First NTP time server** and **Second NTP time server** form the list here.

When the option **Other** is selected, manually enter the time server's URL or IP address in the space provided.

TIME SETTINGS			
	Automatically syn	chronize with	Internet time servers
First NTP time server :	time.nist.gov	•	
Second NTP time server :	Other	-	time-nw.nist.gov

In this section we can select and configure the appropriate **Time Zone Offset**.

In this section we can configure the following parameters.

Time zone offset: Select the appropriate time zone offset here.

Click the **Apply/Save** button to accept the changes made. Click the **Cancel** button to discard the changes made.

TIME CONFIGURATION	
Time zone offset :	(GMT+02:00) Jerusalem 👻
	Apply/Save Cancel

Advanced Category

The Advanced category is designed to assist the user with more advanced configurations, concerning the other features found on this product.

The following pages can be found in the Advanced category:

- Advanced Wireless 2.4G On this page the user can configure advanced services related to the Wireless 2.4 GHz connectivity of this product. Services available for configuration are Advanced Settings, MAC Filtering, and Wireless Station Information.
- **Port Forwarding** On this page the user can configure services related to the port forwarding feature of this product.
- **Port Triggering** On this page the user can configure services related to the port triggering feature of this product.
- **DMZ** On this page the user can configure services related to the DMZ feature of this product.
- **Parental Control** On this page the user can configure services related to the parental control feature of this product. Services available for configuration are **Time Restriction** and **URL Filtering**.
- Filtering Options On this page the user can configure services related to the port triggering feature of this product. Services available for configuration are Inbound, Outbound, and Bridge Filtering.

D-Lini	2				_
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	ADVANCED WIRELE	SS ADVANCED S	ETTINGS		
Port Forwarding	Allows you to configure adv	vanced features of the wire	less LAN interface.		
Port Triggering		_			
DMZ			Advanced Settings		
Parental Control					
Filtering Options	ADVANCED WIRELE	SS MAC FILTERI	NG		
DNS	Allows you to configure wire	eless firewall by denying or	allowing designated MAC addre	esses.	
Dynamic DNS			MAC Filtering		
Network Tools					
Routing	ADVANCED WIRELE	SS SECURITY SE	TTINGS		
DLNA	Allows you to configure sec	urity features of the wirele	ss LAN interface.		
Storage Service					
IP Tunnel			Security Settings		
Print Server					
Samba	ADVANCED WIRELE				
Logout	This page shows authentica	ited wireless stations and t	neir status.		
			Station Info		
	WIRELESS BRID	GE			
	Allows you to configure wire	eless bridge (also known as	Wireless Distribution System) f	eatures of the wireless LAN ir	nterface.
			Bridge		

- **DNS** On this page the user can configure services related to the DNS feature of this product.
- Dynamic DNS On this page the user can configure services related to the Dynamic DNS feature of this product.
- Network Tools On this page the user can configure services related to the Network Tools available on this product. Services available for configuration are Port Mapping, Quality of Service, Queue Configuration, QoS Classification, UPnP, DSL Settings, and IGMP.
- Routing On this page the user can configure services related to the Routing feature of this product. Services available for configuration are Static Route, Default Gateway, and RIP.
- **DLNA** On this page the user can configure services related to the Digital Living Network Alliance (DLNA) media server.

- Storage Service On this page the user can configure services related to the Storage Services of this product.
- **IP Tunnel** On this page the user can configure services related to IP Tunneling used on this product.
- **Print Server** On this page the user can configure services related to the print server on this product.
- **Samba** On this page the user can configure services related to the Samba connectivity of this product.

Advanced Wireless 2.4G

To access the Advanced Wireless 2.4G page, click on the Advanced menu link, at the top, and then click on the Advanced Wireless 2.4G menu link, on the left.

On this page the user can configure advanced services related to the Wireless 2.4Ghz connectivity of this product.

D T See					
D-Lin	<u>(</u>				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	ADVANCED WIREL	ESS ADVANCED S	ETTINGS		
Port Forwarding		lvanced features of the wirel			
Port Triggering	Allows you to configure ac	ivanceu reacures or une wirei	ess can interface.		
DMZ			Advanced Settings		
Parental Control					
Filtering Options	ADVANCED WIREL	ESS MAC FILTERI	NG		
DNS	Allows you to configure wi	reless firewall by denying or a	allowing designated MAC addre	esses.	
Dynamic DNS			MAC Filtering		
Network Tools					
Routing	ADVANCED WIREL	ESS SECURITY SE	TTINGS		
DLNA	Allows you to configure se	curity features of the wireles	ss LAN interface.		
Storage Service		ſ			
IP Tunnel		l	Security Settings		
Print Server	ADVANCED WIREL	ESS STATION INFO	0		
Samba					
Logout	This page shows authentic	ated wireless stations and th	ieir status.		
			Station Info		
	WIRELESS BRID	GE			
			Wireless Distribution System) f	eatures of the wireless LAN in	nterface.
			Bridge		
	L				

Advanced Settings

Click the **Advanced Settings** button to access the **Advanced Wireless Settings** configuration page.

ADVANCED WIRELESS -- ADVANCED SETTINGS

Allows you to configure advanced features of the wireless LAN interface.

Advanced Settings

After clicking the **Advanced Settings** button the following page is available.

ADVANCED SETTINGS

This page allows you to configure advanced features of the wireless LAN interface. You can select a particular channel on which to operate, force the transmission rate to a particular speed, set the fragmentation threshold, set the RTS threshold, set the wakeup interval for clients in power-save mode, set the beacon interval for the access point, set XPress mode and set whether short or long preambles are used.

Click "Apply/Save" to configure the advanced wireless options.

In this section we can configure the advanced wireless settings.

Band: This parameter will display the current wireless band being configured.

Channel: Automatically select a channel or manually select the channel.

Auto Channel Timer: Enter the auto-channel timer value used here.

802.11n/EWC: Select this 802.11n/EWC option used here. Options to choose from are **Auto** and **Disabled**.

Bandwidth: Select between 20MHz or Auto 20/40MHz.

802.11n Rate: Select the 802.11n rate used here.

802.11n Protection: Select this 802.11n protection option used here. Options to choose from are **Auto** and **Off**.

Support 802.11n Client Only: Select the support for 802.11n clients only option used here. Options to choose from are On and Off.

ADVANCED WIRELESS SETTINGS Band: 2.4GHz -1 Channel: Current: 1 (interference: acceptable) Auto Channel Timer(min) : 802.11n/EWC: Auto Bandwidth : Current: 20MHz 802.11n Rate : Auto 802.11n Protection : Auto -Support 802.11n Client Only : Off -RIFS Advertisement : Auto -OBSS Coexistence : Enable RX Chain Power Save : Enable -Power Save status : Low Power RX Chain Power Save Quiet Time: 10

RIFS Advertisement: Select the RIFS advertisement option used here. Options to choose from are Auto and Off.

- **OBSS Co-Existence:** Select the OBSS co-existence state here. Options to choose from are **Enable** and **Disable**.
- **RX Chain Power Save:** Select the RX chain power save state here. Options to choose from are **Enable** or **Disable**.
- Power Save status: This parameter will display the power save status.
- **RX Chain Power Save Quiet Time:** Enter the RX chain power save quiet time value used here. This option becomes available after the **RX Chain Power Save** was enabled.

OBSS Co-Existance :	Enable 🔻
Support 802.11n Client Only :	Off 🔻
RX Chain Power Save :	Disable 🔻
Power Save status :	Full Power
RX Chain Power Save Quiet Time :	10
RX Chain Power Save PPS :	10
54g™ Rate :	1 Mbps 🛛 🔻
Multicast Rate :	Auto 🔻

RX Chain Power Save PPS: Enter the RX chain power save PPS value used here. This option becomes available after the **RX Chain Power Save** was enabled.

54g[™] Rate: Select the 54g[™] rate value used here. This option becomes available after the 802.11n/EWC option was disabled.

Multicast Rate: Select the multicast rate used here.

Basic Rate: Select the basic wireless rate used here.

Fragmentation Threshold: Enter the fragmentation threshold value used here.

RTS Threshold: Enter the RTS threshold value used here.

DTIM Interval: Enter the DTIM Interval value used here.

Beacon Interval: Enter the beacon interval value used here.

Global Max Clients: Enter the maximum global wireless client value used here.

XPress™ Technology: Select the XPress™ technology state here. Options to choose from are **Enabled** and **Disabled**.

WMM (Wi-Fi Multimedia): Select the WMM (Wi-Fi Multimedia) state here.	Options
to choose from are Auto, Enabled and Disabled.	

WMM No Acknowledgement: Select the WMM No Acknowledgement state here. Options to choose from are **Enabled** and **Disabled**.

WMM APSD: Select the WMM APSD state here. Options to choose from are **Enabled** and **Disabled**.

Basic Rate :	Default
Fragmentation Threshold :	2346
RTS Threshold :	2347
DTIM Interval :	1
Beacon Interval :	100
Global Max Clients :	16
XPress™ Technology :	Enabled 🔻

WMM(Wi-Fi Multimedia) : Enabled 🔻
WMM No Acknowledgement : Disabled 🔻
WMM APSD : Enabled 🔻

Wireless Mode: Select between Access Point and Wireless Ethernet from the dropdown menu

URE : OFF - URE Mode : Bridge (Range Ext	
	ender) 🔻
STA Retry Time(sec): 10	
Beamforming Transmission (BFR): Disabled 👻	
Beamforming Reception (BFE): Disabled -	

URE Mode: Select On or Off

STA Retry Time (sec): Select between Bridge (Range Extender) and Routed (Travel Router)

Beamforming Transmission (BFR): By default this is greyed out and disabled.

Beamforming Reception (BFE): By default this is greyed out and disabled.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made.

In the next section we'll discuss the Wireless **MAC Filtering** configurations.

D-Lini					
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	ADVANCED WIREL	ESS ADVANCED S	ETTINGS		
Port Forwarding	Allows you to configure a	dvanced features of the wirel	ess LAN interface.		
Port Triggering					
DMZ			Advanced Settings		
Parental Control					
Filtering Options		ESS MAC FILTERI			
DNS	Allows you to configure w	ireless firewall by denying or a	allowing designated MAC addre	esses.	
Dynamic DNS			MAC Filtering		
Network Tools					
Routing	ADVANCED WIREL	ESS SECURITY SE	TTINGS		
DLNA	Allows you to configure se	ecurity features of the wireles	s LAN interface.		
Storage Service		ſ	0		
IP Tunnel		l	Security Settings		
Print Server	ADVANCED WIREL	ESS STATION INFO	2		
Samba					
Logout	This page shows authenti	cated wireless stations and th	er status.		
			Station Info		
	WIRELESS BRI	DGE			
	Allows you to configure w	ireless bridge (also known as	Wireless Distribution System) f	eatures of the wireless LAN in	nterface.
			Bridge		
	L				

MAC Filtering

Click the MAC Filtering button to access the Advanced Wireless MAC Filtering configuration page.

ADVANCED WIRELESS -- MAC FILTERING Allows you to configure wireless firewall by denying or allowing designated MAC addresses.

MAC Filtering

After clicking the **MAC Filtering** button the following page is available.

WIRELESS -- MAC FILTER

MAC Filter

- In this section we can configure the Wireless MAC Filtering parameters.
 - Select SSID: Select the appropriate SSID used here.

MAC Restrict Mode: Select the MAC restrict mode used here. Options to choose from are **Disabled**, **Allow**, and **Deny**.

WIRELESS -- MAC FILTER

Select SSID:	Be	zegNGN_890569_2.4GHz_1
MAC Restrict Mode:		
	\bigcirc	Allow
	\bigcirc	Deny

Remove

In this section a list of **DHCP Leases** will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

	• • • • • · · ·		
After clicking the	Add button	the following	page is available.

MAC FILTERING

DHCP LEASES

00:11:22:33:44:55

Enter the MAC address and click "Apply" to add the MAC address to the wireless MAC address filters.

MAC Address

In this section we can enter a **MAC Address** used in the MAC filtering rule here. The MAC address must use the *00:11:22:33:44:55* format.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

MAC FILTERING	
MAC Address:	
Apply/Save Cancel	

Add Remove

Security Settings

Click the **Advanced Settings** button to access the **Security Settings** configuration page.

ADVANCED WIRELESS -- SECURITY SETTINGS

Allows you to configure security features of the wireless LAN interface.

Security Settings

After clicking the **Security Settings** button the following page is available.

SECURITY SETTINGS

This page allows you to configure security features of the wireless LAN interface. You may setup configuration manually

In the Manual Setup AP section, you can configure the following:

Select SSID: Select the SSID from the drop-down list

Network Authentication: Select the network authentication method. Options to choose from are Open, Shared, 802.1X, WPA2, WPA2-PSK, Mixed WPA2/WPA, and Mixed WPA2/WPA-PSK.

Protected Management Frames: Select between Disabled, Capable, or Required. **WEP Encryption:** Select to enable or disable WEP encryption.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

1ANUAL SETUP AP

You can set the network authentication method, selecting data encryption, specify whether a network key is required to authenticate to this wireless network and specify the encryption strength. Click "Apply/Save" when done.

Select SSID :	Bezeq WiFi 🔹
Network Authentication :	Open 👻
Protected Management Frames:	Disabled 🔻
WEP Encryption :	Disabled 💌
	Apply/Save

Wireless Security Mode – Shared

Wired Equivalent Privacy (WEP) is any entry level wireless security method that we can use to prevent unauthorized wireless access to this router. WEP is not a very secure option, but it is better than no wireless security.

After selecting to use **Shared** network authentication and enabling the WEP encryption option as your wireless security mode, the following parameters will be available to configure:

Protected Management Frames: Select to Disable, Capable, or Required.

WEP Encryption: By default it's disabled.

- Encryption Strength: Select the WEP key length value used here. Options to choose from are 128 bit (26 hex digits) and 64 bit (10 hex digits).
- **Current Network Key:** Select one of the 4 key options available and enter a wireless security key in the appropriate space provided. This key must be configured on all the wireless clients for them to be able to connect to your wireless network.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

MANUAL SETUP AP

You can set the network authentication method, selecting data encryption, specify whether a network key is required to authenticate to this wireless network and specify the encryption strength. Click "Apply/Save" when done.

Select SSID :	Bezeg Free 004188 👻
Network Authentication :	Shared 👻
Protected Management Frames:	Disabled 👻
WEP Encryption :	Enabled 👻
Encryption Strength :	128-bit 🔻
Current Network Key :	1 -
Network Key 1 :	1234567890123
Network Key2 :	1234567890123
Network Key 3 :	1234567890123
Network Key 4 :	1234567890123
Enter 13 ASCII characters or 26 hexadecimal d	ligits for 128-bit encryption key
Enter 5 ASCII characters or 10 hexadecimal di	gits for 64-bit encryption keys
	Apply/Save

Wireless Security Mode – 802.1X

After selecting to use **802.1X** network authentication and enabling the WEP encryption option as your wireless security mode, the following parameters will be available to configure:

- Protected Management Frames: Select to Disable, Capable, or Required.
- **RADIUS Server IP Address:** Enter the IP address of the external RADIUS server used here.
- **RADIUS Port:** Enter the external RADIUS server port number used here.
- **RADIUS Key:** Enter the RADIUS server Shared Secret here. This key must be configured on all the wireless clients for them to be able to connect to your wireless network.
- **WEP Encryption:** Select to enable or disable WEP encryption.
- Encryption Strength: Select the WEP key length value used here. Options to choose from are 128 bit (26 hex digits) and 64 bit (10 hex digits).
- **Current Network Key:** Select one of the 4 key options available and enter a wireless security key in the appropriate space provided. This key must be configured on all the wireless clients for them to be able to connect to your wireless network.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

MANUAL SETUP AP

You can set the network authentication method, selecting data encryption, specify whether a network key is required to authenticate to this wireless network and specify the encryption strength. Click "Apply/Save" when done.

Select SSID: Bezeq Free 004188 ▼ Network Authentication: 802.1X ▼ Protected Management Frames: Disabled ▼ RADIUS Server IP Address: 0.0.00 RADIUS Port: 1812
Protected Management Frames: Disabled RADIUS Server IP Address: 0.0.0.0
RADIUS Server IP Address: 0.0.0.0
RADIUS Port : 1812
RADIUS Key :
WEP Encryption : Enabled -
Encryption Strength: 128-bit -
Current Network Key: 2 -
Network Key 1: 1234567890123
Network Key2: 1234567890123
Network Key 3: 1234567890123
Network Key 4: 1234567890123
Enter 13 ASCII characters or 26 hexadecimal digits for 128-bit encryption ke
Enter 5 ASCII characters or 10 hexadecimal digits for 64-bit encryption keys

Wireless Security Mode – WPA2

Wi-Fi Protected Access (WPA2) is the most advanced wireless security method that we can use to prevent unautherized wireless access to this router. WPA2-Enterprise requires the use of an external RADIUS server.

After selecting to use **WPA2** network authentication as your wireless security mode, the following parameters will be available to configure:

- Protected Management Frames: Select to Disable, Capable, or Required.
- **WPA2 Preauthentication:** Select to enable or disable the WPA2 pre-authentication option here.
- **Network Re-auth Interval:** Enter the network re-authentication interval value here.
- WPA Group Rekey Interval: Enter the group key update interval value here.
- **RADIUS Server IP Address:** Enter the IP address of the external RADIUS server used here.
- **RADIUS Port:** Enter the external RADIUS server port number used here.
- **RADIUS Key:** Enter the RADIUS server Shared Secret here. This key must be configured on all the wireless clients for them to be able to connect to your wireless network.
- **WPA Encryption:** Select the WPA2 encryption method here. Options to choose from are **TKIP**, **AES**, and **TKIP+AES**.
- **WEP Encryption:** By default this is disabled.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

MANUAL SETUP AP

You can set the network authentication method, selecting data encryption, specify whether a network key is required to authenticate to this wireless network and specify the encryption strength.

-

Click	"Apply	/Save'	'when	done
-------	--------	--------	-------	------

Select SSID :	Bezeq WiFi 🔹 👻
Network Authentication :	WPA2
Protected Management Frames:	Disabled 👻
WPA2 Preauthentication :	Disabled 👻
Network Re-auth Interval :	36000
WPA Group Rekey Interval :	0
RADIUS Server IP Address :	0.0.0.0
RADIUS Port :	1812
RADIUS Key :	
WPA Encryption :	AES 🔻
WEP Encryption :	Disabled 👻
	Apply/Save

Wireless Security Mode – WPA2-PSK

Wi-Fi Protected Access (WPA2) is the most advanced wireless security method that we can use to prevent unautherized wireless access to this router. WPA2 PSK does not require an authentication server.

After selecting to use **WPA2-PSK** network authentication as your wireless security mode, the following parameters will be available to configure:

Protected Management Frames: Select to Disable, Capable, or Required.

WPA/WAPI passphrase: Enter the WPA2-PSK wireless Pre-Shared Key here. This key must be configured on all the wireless clients for them to be able to connect to your wireless network. Click the '*Click here to display*' option to display the pass-phrase entered.

WPA Group Rekey Interval: Enter the group key update interval value here.

WPA Encryption: Select the WPA2 encryption method here. Options to choose from are **TKIP**, **AES**, and **TKIP+AES**.

WEP Encryption: By default this is disabled.

MANUAL SETUP AP		
You can set the network authentication method, select this wireless network and specify the encryption stren Click "Apply/Save" when done.		y whether a network key is required to authenticate to
Select SSID :	Bezeq WiFi 🔹	
Network Authentication :	WPA2 -PSK	•
Protected Management Frames:	Disabled 👻	
WPA/WAPI passphrase :	•••••	<u>Click here to display</u>
WPA Group Rekey Interval :	0	
WPA Encryption :	AES 👻	
WEP Encryption :	Disabled 👻	
	Apply/Save	

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

Wireless Security Mode – Mixed WPA2/WPA

Wi-Fi Protected Access (WPA) is a more advanced wireless security method that we can use to prevent unautherized wireless access to this router. Wi-Fi Protected Access (WPA2) is the most advanced wireless security method that we can use to prevent unautherized wireless access to this router. This option allows us to have both WPA and WPA2 available for client connectivity.

After selecting to use **Mixed WPA2/WPA** network authentication as your wireless security mode, the following parameters will be available to configure:

Protected Management Frames: Select to Disable, Capable, or Required.

WPA2 Preauthentication: Select to enable or disable the WPA2/WPA preauthentication option here.

Network Re-auth Interval: Enter the network re-authentication interval value here.

WPA Group Rekey Interval: Enter the group key update interval value here.

RADIUS Server IP Address: Enter the IP address of the external RADIUS server used here.

RADIUS Port: Enter the external RADIUS server port number used here.

- **RADIUS Key:** Enter the RADIUS server Shared Secret here. This key must be configured on all the wireless clients for them to be able to connect to your wireless network.
- **WPA Encryption:** Select the WPA2/WPA encryption method here. Options to choose from are **TKIP**, **AES**, and **TKIP+AES**.

WEP Encryption: By default this is disabled.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

MANUAL SETUP AP

You can set the network authentication method, selecting data encryption, specify whether a network key is required to authenticate to this wireless network and specify the encryption strength. Click "Apply/Save" when done.

Select SSID :	Bezeq WiFi 🔹
Network Authentication :	Mixed WPA2/WPA 🔹
Protected Management Frames:	Disabled 🔻
WPA2 Preauthentication :	Disabled 👻
Network Re-auth Interval :	36000
WPA Group Rekey Interval :	0
RADIUS Server IP Address :	0.0.0.0
RADIUS Port :	1812
RADIUS Key :	
WPA Encryption :	TKIP+AES 🔻
WEP Encryption :	Disabled 👻
	Apply/Save

Wireless Security Mode – Mixed WPA2/WPA-PSK

Wi-Fi Protected Access (WPA) is a more advanced wireless security method that we can use to prevent unautherized wireless access to this router. Wi-Fi Protected Access (WPA2) is the most advanced wireless security method that we can use to prevent unautherized wireless access to this router. This option allows us to have both WPA and WPA2 available for client connectivity.

After selecting to use **Mixed WPA2/WPA-PSK** network authentication as your wireless security mode, the following parameters will be available to configure:

Protected Management Frames: Select to Disable, Capable, or Required.

- **WPA/WAPI passphrase:** Enter the WPA2/WPA-PSK wireless Pre-Shared Key here. This key must be configured on all the wireless clients for them to be able to connect to your wireless network. Click the '*Click here to display*' option to display the pass-phrase entered.
- WPA Group Rekey Interval: Enter the group key update interval value here.
- **WPA Encryption:** Select the WPA2 encryption method here. Options to choose from are **TKIP**, **AES**, and **TKIP+AES**.
- **WEP Encryption:** By default this is disabled.

Click the Apply/Save button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

MANUAL SETUP AP	
You can set the network authentication method, select this wireless network and specify the encryption stren Click "Apply/Save" when done.	ting data encryption,specify whether a network key is required to authenticate to gth.
Select SSID :	Bezeq WiFi 👻
Network Authentication :	Mixed WPA2/WPA -PSK -
Protected Management Frames:	Disabled 👻
WPA/WAPI passphrase :	••••••
WPA Group Rekey Interval :	0
WPA Encryption :	TKIP+AES 🔻
WEP Encryption :	Disabled 👻
	Apply/Save

In the next section we'll discuss the Wireless Station Information configurations.

D-Lini	-				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	ADVANCED WIREL	ESS ADVANCED SE	TTINGS		
Port Forwarding		avanced features of the wirele			
Port Triggering	Allows you to comigate at		as province ruce.		
DMZ			Advanced Settings		
Parental Control					
Filtering Options	ADVANCED WIREL	ESS MAC FILTERI	IG		
DNS	Allows you to configure w	ireless firewall by denying or a	llowing designated MAC addre	esses.	
Dynamic DNS			MAC Filtering		
Network Tools					
Routing	ADVANCED WIREL	ESS SECURITY SET	TTINGS		
DLNA	Allows you to configure se	curity features of the wireles	s LAN interface.		
Storage Service		ſ			
IP Tunnel			Security Settings		
Print Server		ESS STATION INFO			
Samba					
Logout	This page shows authenti	cated wireless stations and the	eir status.		
			Station Info		
	WIRELESS BRID				
	Allows you to configure w	ireless bridge (also known as \	Vireless Distribution System) f	eatures of the wireless LAN in	nterface.
			Bridge		

Station Info

Click the **Advanced Settings** button to access the **Advanced Wireless Station Info** configuration page.

ADVANCED WIRELESS STATION INFO	
This page shows authenticated wireless stations and their status.	
Station Info	

After clicking the **Station Info** button the following page is available.

WIRELESS -- STATION INFO

This page shows authenticated wireless stations and their status.

In this section a list of wireless Authenticated Stations are displayed.

Click the **Refresh** button to refresh the information in this table.

MAC	Associated	Authorized	SSID	Interfac
00:21:91:80:95:74	Yes		BezegNGN_890569_2.4GHz_1	wl0

Port Forwarding

To access the Port Forwarding page, click on the Advanced menu link, at the top, and then click on the Port Forwarding menu link, on the left.

On this page the user can configure services related to the port forwarding feature of this product.

Click the **Add** button to add a new entry. Click the **Remove** button to remove an entry.

D-Link DSL-225 SETUP ADVANCED MAINTENANCE STATUS HELP Advanced Wireless 2.4G PORT FORWARDING Port Forwarding Virtual Server allows you to direct incoming traffic from WAN side (identified by Protocol and External port) to the Internal server with private IP address on the LAN side. The Internal port is required only if the external port needs to be converted to a different port Port Triggering number used by the server on the LAN side. A maximum 32 entries can be configured. Add Remove Parental Control Filtering Options PORT FORWARDING ENTRIES Dynamic DNS Server External Port External Port Protocol Internal Port Internal Port Server IP WAN Remove Start End Start End Address Interface Name Network Tools Routing Storage Service IP Tunnel Print Server Samba Logout

After clicking the **Add** button, the following page is available.

PORT FORWARDING

Select the service name, and enter the server IP address and click "Apply/save" to forward IP packets for this service to the specified server. NOTE: The "Internal Port End" cannot be modified directly. Normally, it is set to the same value as "External Port End". However, if you modify "Internal Port Start", then "Internal Port End" will be set to the same value as "Internal Port Start".

Remaining number of entries that can be configured:

In this section we can configure Port Forwarding rules.

- **Use Interface:** Select an existing interface from the list that will be associated with this rule.
- **Select a Service:** Select a service from the list. These pre-defined services will contain all the parameters needed to create a successful rule.
- **Custom Service:** If the service is not located in the list, we can create our own service. Enter the service name for the rule here.
- Server IP Address: Enter the server IP address here.
- External Port Start: Enter the external starting port number here.
- External Port End: Enter the external ending port number here.
- Protocol: Select the appropriate protocol used here. Options to choose from are TCP/UDP, TCP, and UDP.
- Internal Port Start: Enter the internal starting port number here.
- Internal Port End: Enter the internal ending port number here.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

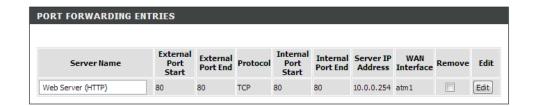
Use Inter	ipoe_8_88_1/atm1						
Service N		Select One		1			
Select a Service:		Select One					
Custom Se							
Server IP Add	iress :	10.0.0.					
External Port Start	Extern	al Port End	Prot	ocol	Internal Port Start	Internal Port End	
			TCP	-			
			TCP	-			
			TCP	-			
			TCP	•			
			TCP	•			
			TCP	•			
			TCP	•			
			TCP	•			
			TCP	-			
			TCP	-			
			TCP	•			
			TCP	-			
			-			, L	

Apply/Save Cancel

In this section a list of port forwarding rules will be displayed.

Click the **Edit** button to modify an existing entry.

Select the **Remove** option and click the **Remove** button to remove the specific interface.



Port Triggering

To access the Port Triggering page, click on the Advanced menu link, at the top, and then click on the Port Triggering menu link, on the left.

On this page the user can configure services related to the port triggering feature of this product.

Click the **Add** button to add a new interface. Click the **Remove** button to remove an entry.

After clicking the **Add** button, the following page is available.

D-Lini	K						\prec			
DSL-225	SETUP	ADVANC	ED M	AINTENANC	E	STATUS	HELP			
Advanced Wireless 2.4G	PORT FORWARDING	3								
Port Forwarding Port Triggering DMZ	Some applications require that specific ports in the Router's firewall be opened for access by the remote parties. Port Trigger dynamically opens up the 'Open Ports' in the firewall when an application on the LAN initiates a TCP/LDP connection to a remote party using the Triggering Ports'. The Router allows the remote party from the WAN side to establish new connections back to the application on the LAN side using the 'Open Ports'. A maximum 32 entries can be configured.									
Parental Control	Add Remove									
Filtering Options										
DNS	PORT FORWARDING	ENTRIES								
Dynamic DNS										
Network Tools	Application Name	Т	rigger Port Range	Оре		nge WAN Inter	rface Remove			
Routing	Application name	Protocol	Start End	Protocol		End	Nace Remove			
DLNA										
Storage Service										
IP Tunnel										
Print Server										
Samba										
Logout										

PORT TRIGGERING

Some applications such as games, video conferencing, remote access applications and others require that specific ports in the Router's firewall be opened for access by the applications. You can configure the port settings from this screen by selecting an existing application or creating your own (Custom application) and click "Apply/Save" to add it.

Remaining number of entries that can be configured:32

In this section we can create a new port triggering rule.

- Use Interface: Select the interface that will be associated with this rule here.
- **Select an application:** Select an application from the list here. These pre-defined applications will contain all the parameters needed to create a successful rule.
- **Custom application:** If the application is not located in the list, we can create our own application. Enter the custom application name for the rule here.
- Trigger Port Start: Enter the starting trigger port number here.
- Trigger Port End: Enter the ending trigger port number here.
- Trigger Protocol: Select the trigger protocol used here. Options to choose from are TCP/UDP, TCP, and UDP.
- Open Port Start: Enter the starting open port number here.
- **Open Port End:** Enter the ending open port number here.
- **Open Protocol:** Select the open protocol used here. Options to choose from are **TCP/UDP**, **TCP**, and **UDP**.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

Vse Interface : ipoe_8_38_1/atm1 Application Name : • • Select an application : Custom application : •							
Trigger Port Start	Trigger Port End	Trigger Protocol	Open Port Start	Open Port End	Open Protocol		
		TCP 💌			TCP 💌		
		TCP			TCP 💌		
		TCP 💌			TCP 💌		
		TCP 💌			TCP 💌		
		TCP 💌			TCP 💌		
		TCP 💌			TCP		
		TCP 💌			TCP 💌		
		TCP 💌			TCP 💌		

Apply/Save Cancel

In this section a list of	port triggering rules will be displayed.	

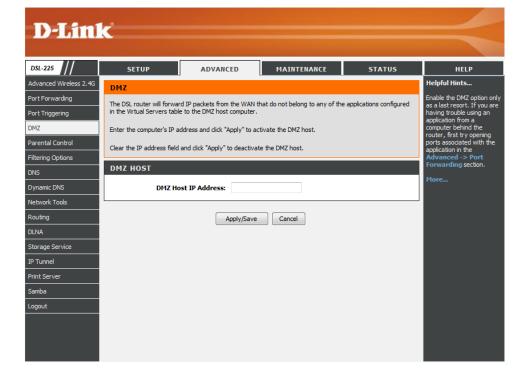
Select the **Remove** option and click the **Remove** button to remove the specific interface.

PORT TRIGGERING ENTRIES								
	Ti	Trigger)pen		WAN Interface	Remove
Application Name	Protocol	Port Range		Protocol	Port Range			
	Protocol	Start	End	Protocol	Start	End		
Net2Phone	UDP	6801	6801	UDP	6801	6801	atm1	

DMZ

To access the DMZ page, click on the Advanced menu link, at the top, and then click on the DMZ menu link, on the left.

On this page the user can configure services related to the DMZ feature of this product.



In this section we can configure the **DMZ Host** by entering the **DMZ Host IP Address** here.

Click the **Apply/Save** button to accept the changes made.

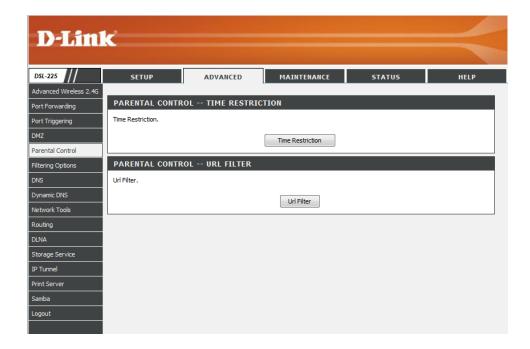
Click the **Cancel** button to discard the changes made and return to the main page.

DMZ HOST	
DMZ Host IP Address:	
	Apply/Save Cancel

Parental Control

To access the Parental Control page, click on the Advanced menu link, at the top, and then click on the Parental Control menu link, on the left.

On this page the user can configure services related to the parental control feature of this product.



Time Restriction

Click the **Time Restriction** button to access the **Parental Control Time Restriction** configuration page.

PARENTAL CONTROL TIME RESTRICTION					
Time Restriction.					
	Time Restriction				

After clicking the **Time Restriction** button the following page is available.

ACCESS TIME RESTRICTION

A maximum 16 entries can be configured.

In this section a list of Time Restriction entries will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

After clicking the **Add** button the following page is available.

TIME RESTRICTION

Username

ACCESS TIME RESTRICTION ENTRIES

This page adds time of day restriction to a special LAN device connected to the Router. The 'Browser's MAC Address' automatically displays the MAC address of the LAN device where the browser is running. To restrict other LAN device, dick the "Other MAC Address" button and enter the MAC address of the other LAN device. To find out the MAC address of a Windows based PC, go to command window and type "ipconfig /all".

MAC Mon Tue Wed Thu Fri Sat Sun Start Stop

Remove

Add

n this section we can	configure the Access	Time Restriction	settings for thi	s router.
Lleen Newsey Enter th				

- **User Name:** Enter the user name used here.
- Browser's MAC Address: Enter the browser's MAC address here.
- Other MAC Address: Enter the other MAC address here.
- Days of the Week: Select which days of the week to include in this rule.
- Start Blocking Time: Enter the time value that will be used to start blocking.
- End Blocking Time: Enter the time value that will be used to end blocking.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

ACCESS TIME RESTRICTION									
User Name : Image: Browser's MAC Address : Image: Other MAC Address (xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx									
Days of the week Click to select Start Blocking T End Blocking T	Wed	Thu	Fri	Sat	Sun				
	Apply/Save Cancel								

Remove

In this section a list of Time Restriction entries will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

Username	MAC	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Start	Stop	Remove
NeekdayUser	00:11:22:33:44:55	x	x	x	x	x			0:0	23:59	

URL Filter

Click the **URL Filter** button to access the **Parental Control URL Filter** configuration page.

D-Lini	K				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G		-			
Port Forwarding	PARENTAL CONTR	OL TIME RESTRIC	TION		
Port Triggering	Time Restriction.				
DMZ			Time Restriction		
Parental Control					
Filtering Options	PARENTAL CONTR	OL URL FILTER			
DNS	Url Filter.				
Dynamic DNS			Url Filter		
Network Tools			Contracts		
Routing					
DLNA					
Storage Service					
IP Tunnel					
Print Server					
Samba					
Logout					

After clicking the **URL Filter** button the following page is available.

URL FILTER

Please select the list type first then configure the list entries. Maximum 100 entries can be configured.

In this section a list of **URL Filter** entries will be displayed. Select to **Exclude** or **Include** these rules from the **URL List Type**.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

URL FILTER		
URL List Type:	◎ Exclude ◎	Include
Address	Port	Remove
	Add Remove	

After clicking the **Add** button the following page is available.

URL FILTERURL FILTER

Enter the URL address and port number then click "Apply/Save" to add the entry to the URL filter.

n this section we can create a new URL Filter rule by entering the URL Address	
and Port Number.	

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

URL FILTER ADD	
URL Address : Port Number :	(Default 80 will be applied if leave blank.)
	Apply/Save Cancel

In this section a list of URL Filter entries will be displayed. Select to **Exclude** or **Include** these rules from the **URL List Type**.

Click the Add button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

URL List Type 🔘 Deny 🍭 Allow	1
Address	Port Remove
filter.com	80

Filtering Options

To access the **Filtering Options** page, click on the **Advanced** menu link, at the top, and then click on the **Filtering Options** menu link, on the left.

On this page the user can configure services related to the port triggering feature of this product.

D-Lini	r				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G					
Port Forwarding	FILTERING OPTION	IS INBOUND IP FI	LTERING		
Port Triggering	Manage incoming traffic.				
DMZ			Inbound IP Filtering		
Parental Control					
Filtering Options	FILTERING OPTION	IS OUTBOUND IP F	ILTERING		
DNS	Manage outgoing traffic.				
Dynamic DNS					
Network Tools			Outbound IP Filtering		
Routing	FILTERING OPTION	IS BRIDGE FILTER	ING		
DLNA		ement filtering. Usefull only ir			
Storage Service		inche interingi oberaironiy i			
IP Tunnel			Bridge Filtering		
Print Server					
Samba					
Logout					

Inbound IP Filtering

Click the **Inbound IP Filtering** button to access the **Inbound IP Filtering** rule configuration page.

FILTERING OPTIONS INBOUND IP	FILTERING
Manage incoming traffic.	
	Inbound IP Filtering

After clicking the **Inbound IP Filtering** button the following page is available.

INCOMING IP FILTERING SETUP

When the firewall is enabled on a WAN or LAN interface, all incoming IP traffic is BLOCKED. However, some IP traffic can be ACCEPTED by setting up filters.

Choose Add or Remove to configure incoming IP filters.

In this section a list of Inbound IP filtering rules will be displayed.

Click the **Add** button to add a new rule.

Select the **Remove** option and click the **Remove** button to remove the specific rule.

After clicking the **Add** button the following page is available.

INCOMING IP FILTERING

Filter Name Interfaces IP Version Protocol SrcIP/ PrefixLength SrcPort DstIP/ PrefixLength DstPort Remove

Add Remove

ADD IP FILTER -- INCOMING

The screen allows you to create a filter rule to identify incoming IP traffic by specifying a new filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect. Click 'Apply/Save' to save and activate the filter. In this section we can create a new Inbound Filtering rule.

- Filter Name: Enter the Inbound filtering rule name here.
- IP Version: Select the IP version from the list. Options to choose from are IPv4 and IPv6.
- Protocol: Select the protocol used from the list. Options to choose from are TCP/UDP, TCP, UDP, and ICMP.
- Source IP address: Enter the source IP address here.
- **Source Port:** Enter the source port number here.
- **Destination IP address:** Enter the destination IP address here.
- **Destination Port:** Enter the destination port number here.
- **WAN Interfaces:** Select the WAN interface that will be used for this incoming IP filter rule.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

INCOMING IP FILTERING	
Filter Name :	
IP Version :	IPv4 🔹
Protocol:	
Source IP address[/prefix length] :	
Source Port (port or port:port) :	
Destination IP address[/prefix length] :	
Destination Port (port or port:port):	
WAN Interfaces (Configured in Routing mode an Select one or more WAN/LAN interfaces displayed below	
	Select All
	br_0_1_1/ptm0.1
	pppoe_0_1_1/ppp0.2
	br0/br0

Apply/Save Cancel

In this section a list of Inbound IP filtering rules will be displayed.

Click the **Add** button to add a new rule.

Select the **Remove** option and click the **Remove** button to remove the specific rule.

Filter Name	Interfaces	IP Version	Protocol	SrcIP/ PrefixLength	SrcPort	DstIP/ PrefixLength	DstPort	Remove
Filter	ppp0.1,ppp1.1,atm	4	TCP/UDP	10.0.0.5	21	192.168.0.5	21	

Outbound IP Filtering

Click the **Outbound IP Filtering** button to access the **Outbound IP Filtering** rule configuration page.

D-Lini	ĸ				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G					
Port Forwarding	FILTERING OPTION	S INBOUND IP FI	ILTERING		
Port Triggering	Manage incoming traffic.				
DMZ		[Inbound IP Filtering		
Parental Control		L	income in Fridaining		
Filtering Options	FILTERING OPTION	S OUTBOUND IP	FILTERING		
DNS	Manage outgoing traffic.				
Dynamic DNS		_			
Network Tools			Outbound IP Filtering		
Routing	FILTERING OPTION	S BRIDGE FILTER	RING		
DLNA		ment filtering. Usefull only			
Storage Service	Caca Fixe address to imple	inche intering. Oscial only	in bridge mode.		
IP Tunnel			Bridge Filtering		
Print Server					
Samba					
Logout					

After clicking the **Outbound IP Filtering** button the following page is available.

OUTGOING IP FILTERING SETUP

By default, all outgoing IP traffic from LAN is allowed, but some IP traffic can be **BLOCKED** by setting up filters.

The screen allows you to create a filter rule to identify outgoing IP traffic by specifying a new filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect. Click 'Apply/Save' to save and activate the filter. In this section a list of Outbound IP filtering rules will be displayed.

Click the Add button to add a new rule.

Select the **Remove** option and click the **Remove** button to remove the specific rule.

After clicking the **Add** button the following page is available.

OUTGOING IP FILTERING

Filter Name IP Version Protocol SrcIP/ PrefixLength SrcPort DstIP/ PrefixLength DstPort Remove

Add Remove

ADD IP FILTER -- OUTGOING

The screen allows you to create a filter rule to identify outgoing IP traffic by specifying a new filter name and at least one condition below. All of the specified conditions in this filter rule must be satisfied for the rule to take effect. Click 'Apply/Save' to save and activate the filter.

In this section we can create a new Outbound IP filter rule. Filter Name: Enter the Outbound filtering rule name here.	ADD IP FILTER OUTGOING		
 IP Version: Select the IP version from the list. Options to choose from are IPv4 and IPv6. Protocol: Select the protocol used from the list. Options to choose from are TCP/UDP, TCP, UDP, and ICMP. Source IP address: Enter the source IP address here. Source Port: Enter the source port number here. Destination IP address: Enter the destination IP address here. Destination Port: Enter the destination port number here. 	Filter Name : IP Version : Protocol : Source IP address[/prefix length] : Source Port (port or port:port) : Destination IP address[/prefix length] :	IPv4 ▼	•
Click the Apply/Save button to accept the changes made. Click the Cancel button to discard the changes made and return to the main page.	Destination Port (port or port:port) : Apply/Save		

In this section a list of Outbour	nd IP filtering rules	will be displayed.
-----------------------------------	-----------------------	--------------------

Click the Add button to add a new rule.

Select the **Remove** option and click the **Remove** button to remove the specific rule.

OUTGOING 1	IP FILTERII	IG					
Filter Name	IP Version	Protocol	SrcIP/ PrefixLength	SrcPort	DstIP/ PrefixLength	DstPort	Remove
Filter	4	TCP/UDP	10.0.0.5	21	192.168.0.1	21	

D-Link

Bridge Filtering

Click the **Bridge Filtering** button to access the **Bridge Filtering** rule configuration page.

DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G					
Port Forwarding	FILTERING OPTION	IS INBOUND IP FI	LTERING		
Port Triggering	Manage incoming traffic.				
DMZ			Inbound IP Filtering		
Parental Control			Inbound I Finding		
Filtering Options	FILTERING OPTION	S OUTBOUND IP	FILTERING		
DNS	Manage outgoing traffic.				
Dynamic DNS		_			
Network Tools			Outbound IP Filtering		
Routing	FILTERING OPTION	IS BRIDGE FILTER	ING		
DLNA		ement filtering. Usefull only i			
Storage Service	USES MAC address to imple	ament intering. Osefull Only I	n onage moue.		
IP Tunnel			Bridge Filtering		
Print Server					
Samba					
Logout					

After clicking the **Bridge Filtering** button the following page is available.

MAC Filtering is only effective in Bridge mode. **FORWARDED** means that all MAC layer frames will be **FORWARDED** except those matching with any of the specified rules in the following table. **BLOCKED** means that all MAC layer frames will be **BLOCKED** except those matching with any of the specified rules in the following table.

MAC FILTERING SETUP

MAC Filtering is only effective in Bridge mode. FORWARDED means that all MAC layer frames will be FORWARDED except those matching with any of the specified rules in the following table. BLOCKED means that all MAC layer frames will be BLOCKED except those matching with any of the specified rules in the following table.

MAC Filtering Policy For Each Interface:

WARNING: Changing from one policy to another of an interface will cause all defined rules for that interface to be REMOVED AUTOMATICALLY! You will need to create new rules for the new policy.

In this section we will find the current **Policy** status as well the option to change this option.

Select the **Change** tick box and click the **Change Policy** button, to change the Bridge MAC filtering policy.

	Interface	Policy	Change
	Interface	-	
itm0		FORWARD	

After selecting the **Change** option and clicking the **Change Policy** button. The policy will be changed.

WARNING: Changing from one policy to another of an interface will cause all defined rules for that interface to be **REMOVED AUTOMATICALLY**! You will need to create new rules for the new policy.

In this section we can see a list of MAC filtering rule created.

Click the **Add** button to add a new rule.

Select the **Remove** option and click the **Remove** button to remove the specific rule.

CHANGE POLICY						
Interface	Policy	Change				
atm0	BLOCKED					
	Change Policy					

CHOOSE ADD OR REMOVE TO CONFIGURE MAC FILTERING RULES								
Interface	Destination MAC	Source MAC	Remove					
Add Remove								

After clicking the **Add** button, the following page will be available.

D -Lini	k				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G Port Forwarding Port Triggering DMZ Parental Control Filtering Options DNS Dynamic DNS Network Tools Routing DLNA Storage Service	ADD MAC FILTER Create a filter to identify th conditions are specified, all ADD MAC FILTER Pr Destination M Source M Fran WAN Interfaces (Configured	otocol Type: AC Address: AC Address: Direction: LAN<=> I in Bridge mode only) I Interfaces: br_0_1_1	offying at least one condition b Apply" to save and activate th	elow. If multiple	Helpful Hints Create a list of MAC addresses that you would either like to allow or deny access to your network depending on the current Global Policy. Note : You must first create a Bridged connection to use Bridge connection to use Bridged connection by going to Setup -> WAII Service. More
IP Tunnel Print Server Samba					

In this section we can configure the MAC filtering rule.

Parameters available for configuration are:

- **Protocol Type:** Select the protocol type option that will be associated with this rule. Options to choose from are **PPPoE**, **IPv4**, **IPv6**, **IPX**, and **IGMP**.
- Destination MAC Address: Enter the destination MAC address used here.
- Source MAC Address: Enter the source MAC address used here.
- Frame Direction: Select the Frame Direction from the drop-down menu. Select between LAN /WAN, WAN/LAN, or LAN to WAN.

WAN Interface: Select the WAN interface that will be associated with this rule here.

Click the **Save/Apply** button to accept the changes made.

After the rule was added, it will be displayed in this section.

ADD MAC FILTER

Protocol Type:		•
Destination MAC Address:		
Source MAC Address:		
Frame Direction:	LAN<=>WAN 👻	
WAN Interfaces (Configured in Bridge mode	only)	
WAN Interfaces:	br_0_1_1/ptm0.1	-

Interface	Destination MAC	Source MAC	Remove
atm0.2	00:11:22:33:44:55	00:22:33:44:55:66	

DNS

To access the **DNS** page, click on the **Advanced** menu link, at the top, and then click on the **DNS** menu link, on the left.

On this page the user can configure services related to the DNS feature of this product.

D-Lini	<				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	DNS				Helpful Hints
Port Forwarding	Select the configured WAI	N interface for DNS serve	information OR enter the static	DNS server IP Addresses	If Obtain DNS info from a WAN interface
Port Triggering	for single PVC with IPoA, s				automatically is selected, this router will
DMZ	DNS SERVER CON	IGURATION			accept the first received DNS assignment from one
Parental Control		Obtair	DNS info from a WAN interf		of the PPPoA, PPPoE or MER/DHCP enabled PVC(s)
Filtering Options	Selected DNS Serv	0	Available WAN I		during the connection establishment. If Use the
DNS					following Static DNS IP address is selected, enter
Dynamic DNS	ppp0.2				the Primary and Secondary DNS server IP
Network Tools		ſ	->		addresses. Only do so if you are having problems
Routing					with your DNS servers.
DLNA			<-		More
Storage Service					
IP Tunnel		Use the second secon	e following Static DNS IP ad	dress	
Print Server	Primar	y DNS server :			
Samba	Secondar	y DNS server :			
Logout					
	IPV6 DNS				
	Select the configure IPv6 DNS server Addre		v6 DNS server information (OR enter the static	
	Note that selecting a interface.	WAN interface for IP	/6 DNS server will enable DH	CPv6 Client on that	
		Obtain	1 IPv6 DNS info from a WAN i	nterface	
	WAN Inter	ace selected : pppoe	_0_1_1/ppp0.2 🔻		
			e following Static IPv6 DNS	address	
	-	6 DNS server :			
	Secondary IPv	6 DNS server :			
	<u>.</u>				
		Apply/Sa	ve Cancel		

In this section we can configure the DNS Server Configuration.

- **Obtain DNS info from a WAN interface:** Select this option to obtain DNS information from the WAN interface.
- Selected DNS Server Interfaces: Select the DNS Server Interface from the available list in the left-hand column. Use the arrow button to move the selected DNS back and forth from the WAN Interfaces.
- Available WAN Interfaces: If needed, add a WAN Interface.
- Use the following Static DNS IP address: Select this option to us static DNS IP addresses.

Primary DNS server: Enter the primary DNS server IP address here.

Secondary DNS server: Enter the secondary DNS server IP address here.

DNS SERVER CONFIGURATION

۲	Obtain DNS info from a WAN interface
elected DNS Server Interfaces	Available WAN Interfaces
ppp0.2	
	->
	<-
0	Use the following Static DNS IP address
Primary DNS server :	
Secondary DNS server :	

In this section we can configure the IPv6 DNS Server Configuration.

- **Obtain IPv6 DNS info from a WAN interface:** Select this option to obtain IPv6 DNS information from the WAN interface.
- **WAN Interface selected:** Select the WAN interface, used to obtain the IPv6 DNS information, here.
- Use the following Static IPv6 DNS address: Select this option to use static IPv6 DNS addresses.

Primary IPv6 DNS server: Enter the primary IPv6 DNS server address here.

Secondary IPv6 DNS server: Enter the secondary IPv6 DNS server address here.

Click the **Apply/Save** button to accept the changes made.

IPV6 DNS

Select the configured WAN interface for IPv6 DNS server information OR enter the static IPv6 DNS server Addresses.

Note that selecting a WAN interface for IPv6 DNS server will enable DHCPv6 Client on that interface.

Obtain IPv6 DNS info from a WAN interface

WAN Interface selected : NO CONFIGURED INTERFACE -

 \bigcirc

Use the following Static IPv6 DNS address

Primary IPv6 DNS server :

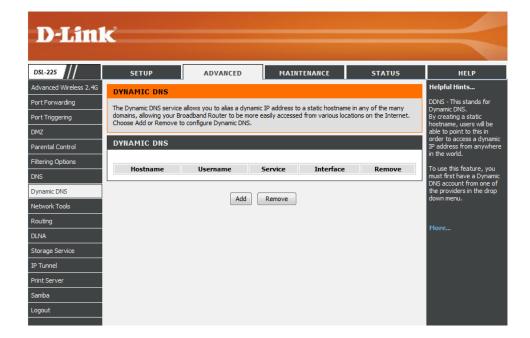
Secondary IPv6 DNS server :

Apply/Save Cancel

Dynamic DNS

To access the Dynamic DNS page, click on the Advanced menu link, at the top, and then click on the Dynamic DNS menu link, on the left.

On this page the user can configure services related to the Dynamic DNS feature of this product.



In this section a list of Dynamic DNS entries will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

DYNAMIC DNS ENTRIES								
Hostname	Username	Service	Interface	Remove				
	Add	Remove						

After clicking the Add button, the following page is available.

ADD DYNAMIC DNS

This page allows you to add a Dynamic DNS address from DynDNS.org ,TZO, freedns.afraid.org or DNSdynamic.org.

In this section we can create a Dynamic DNS entry.

- **D-DNS provider:** Select a Dynamic DNS provider from the list here. Options to choose from are **DynDNS.org** and **TZO**.
- Hostname: Enter the hostname for this account here.
- Interface: Select the interface that will be used together with this Dynamic DNS entry.
- **Username:** Enter the Dynamic DNS account's username here.
- Password: Enter the Dynamic DNS account's password here.
- Click the **Apply/Save** button to accept the changes made.
- Click the **Cancel** button to discard the changes made and return to the main page.
- In this section a list of Dynamic DNS entries will be displayed.
- Click the **Add** button to add a new entry.
- Select the **Remove** option and click the **Remove** button to remove the specific entry.

ADD DYNAMIC DNS						
D-DNS provider :	DynDNS.org(Custom) -					
Hostname :						
Interface :	ipoe_8_88_1/atm1					
Username :						
Password :						
A	pply/Save Cancel					

Username	Service	Interface	Remove
Username	dyndns	atm1	

Network Tools

To access the **Network Tools** page, click on the **Advanced** menu link, at the top, and then click on the **Network Tools** menu link, on the left.

On this page the user can configure services related to the Network Tools available on this product.

D-Lini					
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	NETWORK TOOLS	QUEUE MANAGEME	NT		
Port Forwarding	If Enable QoS checkbox is	selected, choose a default D	SCP mark to automatically mar	k incoming traffic without refe	erence to a particular
Port Triggering	classifier. Click 'Apply/Sav	e' button to save it.		-	
DMZ		ſ	Quality of Service		
Parental Control					
Filtering Options	NETWORK TOOLS	QUEUE CONFIG			
DNS	Allows you to add Classifi	cation Queue precedence for	QoS.		
Dynamic DNS			_		
Network Tools			Queue Config		
Routing					
DLNA		QUALITY OF SERV			
Storage Service	Allows you to manually co	nfigure different priority to di	fferent interfaces.		
IP Tunnel		[Qos Classification		
Print Server]
Samba	NETWORK TOOLS				
Logout					
	Allows you to enable or di	sable UPnP.			
			UPnP		
	NETWORK TOOLS	DSL			
	Allows you to configure a	dvanced settings for DSL.			
			DSL Settings		

Queue Management

Click the **Quality of Service** button to access the **Queue Management** configuration page.

NETWORK TOOLS -- QUEUE MANAGEMENT

D-Link

If Enable QoS checkbox is selected, choose a default DSCP mark to automatically mark incoming traffic without reference to a particular classifier. Click 'Apply/Save' button to save it.

Quality of Service

After clicking the **Quality of Service** button the following page is available.

DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	QOS QUEUE MA	NAGEMENT CONFIGU	RATION		Helpful Hints
Port Forwarding			SCP mark to automatically mar	k incoming traffic without	You can give multimedia applications a higher
Port Triggering	reference to a particular o	lassifier. Click 'Apply/Save' b	utton to save it.		quality of service and priority in a wireless
DMZ	Note: If Enable Qos check	box is not selected, all QoS v	vill be disabled for all interfaces	5.	network so applications such as videos will be of
Parental Control	Note: The default DSCP m	ark is used to mark all egress	packets that do not match an	y classification rules.	higher quality.
Filtering Options					Enabling WMM may delay the network traffic of other
DNS	QUEUE MANAGEME	ENT CONFIGURATION			lower assigned quality applications.
Dynamic DNS		Enable QoS : 🛛 🔍			More
Network Tools	Select Defaul	t DSCP Mark : No Chang	ne(-1) ▼		
Routing					
DLNA		Apply/Save	Cancel		
Storage Service		hppsycare	Curreer		
IP Tunnel					
Print Server					
Samba					
Logout					

In this section we can configure the Queue Management configuration.

Enable QoS: Select this option to enable the QoS queue management feature. **Select Default DSCP Mark:** Select the default DSCP mark option here.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

Queue Config

Click the **Queue Config** button to access the **Queue** configuration page.

QUEUE MANAGEMENT CONFIGURATION
Enable QoS : 🔽
Select Default DSCP Mark : No Change(-1)
Apply/Save Cancel

NETWORK TOOLS QUEUE CONFIG
Allows you to add Classification Queue precedence for QoS.
Queue Config
Quar comy

After clicking the **Queue Config** button the following page is available.

												1
D-Lini	C											
-225 ///	SETUP	,		AD	VANCED	MAIN	TENANCE		STATUS			HELP
anced Wireless 2.4G	OOS OUEU	E										
Forwarding Friggering stal Control ng Options mic DNS ork Tools	In PTM mode, For each Ether For each Ether To add a queu To remove que The Enable bi enable-checkb The enable-ch	maxin rnet ir rnet V le, dic eues, utton ox un eckbo et LA	A queue: terface, may /AN interface, k the Add bu check their n will scan thro -checked will x also shows N queue co	s can kimur e, ma utton emov ugh be d stat	e-checkboxes, the every queues in the	n be configu n click the R e table. Que er page relo	emove bu sues with en bad.	able-ched				
ing A age Service	Name	Key	Interface	Qid	Prec/Alg/Wght	DSL Latency	PTM	Min Bit Rate	Shaping Rate(bps)	Burst Size	Enable	Remov
innel	WMM Voice Priority	1	wl0	8	1/SP	Lucchey	i noncy	(bps)	Ruccupsy	(bytes)	Enabled	
Server	WMM Voice Priority	2	wl0	7	2/SP						Enabled	
ut	WMM Video Priority	3	wl0	6	3/SP						Enabled	
	WMM Video Priority	4	wl0	5	4/SP						Enabled	
	WMM Best Effort	5	wl0	4	5/SP						Enabled	
	WMM Background	6	wl0	3	6/SP						Enabled	
	WMM Background	7	wl0	2	7/SP						Enabled	
	WMM Best Effort	8	wl0	1	8/SP						Enabled	
	WMM Voice	33	wl1	8	1/SP						Enabled	
	Priority				1/51						Enabled	

In this section a list of QoS queue configurations will be displayed.

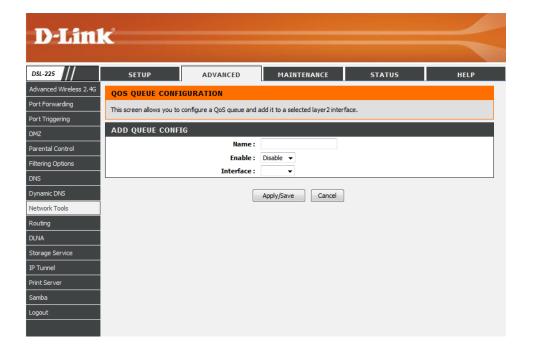
Click the **Add** button to add a new entry.

Click the **Enable** button to enable an entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

Name	Key	Interface	Qid	Prec/Alg/Wght	DSL Latency	PTM Priority	Min Bit Rate (bps)	Shaping Rate(bps)	Burst Size (bytes)	Enable	Remove
WMM Voice Priority	1	wl0	8	1/SP						Enabled	
WMM Voice Priority	2	wl0	7	2/SP						Enabled	
WMM Video Priority	3	wl0	6	3/SP						Enabled	
WMM Video Priority	4	wl0	5	4/SP						Enabled	
WMM Best Effort	5	wl0	4	5/SP						Enabled	
WMM Background	6	wl0	3	6/SP						Enabled	
WMM Background	7	wl0	2	7/SP						Enabled	
WMM Best Effort	8	wl0	1	8/SP						Enabled	
WMM Voice Priority	33	wl1	8	1/SP						Enabled	
WMM Voice Priority	34	wl1	7	2/SP						Enabled	
WMM Video Priority	35	wl1	6	3/SP						Enabled	
WMM Video Priority	36	wl1	5	4/SP						Enabled	
WMM Best Effort	37	wl1	4	5/SP						Enabled	
WMM Background	38	wl1	3	6/SP						Enabled	
WMM Background	39	wl1	2	7/SP						Enabled	
WMM Best Effort	40	wl1	1	8/SP						Enabled	
Default Queue	65	atm0	1	8/WRR/1	Path0					V	
Default Queue	66	atm1	1	8/WRR/1	Path0					V	
Default Queue	67	ptm0	1	8/WRR/1	Path0	Low					
•											

After clicking the **Add** button, the following page is available.



In this section we can create a QoS queue configuration entry.

Name: Enter the QoS queue configuration entry name here.

Enable: Select this option to enable or disable this entry. Options to choose from are **Enable** or **Disable**.

Interface: Select the interface that will be associated with this entry.

ADD QUEUE CONFIG	
Name :	
Enable :	Disable 💌
Interface :	

After selecting an **ATM** interface, the following parameters will be available.

Scheduler Algorithm: Select the queue schedule method used here. Options to choose from are Weighted Round Robin and Weighted Fair Queuing.

Queue Weight: Enter the queue weight value used here.

DSL Latency: Select the DSL latency option here. The only option available is Path0.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

Name :	
Enable :	Disable 🔻
Interface :	atm0 🔻
Scheduler Algorithm :	
۲	Weighted Round Robin
0	Weighted Fair Queuing
Queue Weight :	1 [1-63]
DSL Latency:	Path0 🔻

After selecting an **Ethernet** interface, the following parameters will be available.

Minimum Rate: Enter the minimum rate value used here.

Shaping Rate: Enter the shaping rate value used here.

PTM Priority: Select the PTM priority option here.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

ADD QUEUE CONFIG	
Name :	
Enable :	Disable 🔻
Interface :	eth0 🔻
Minimum Rate:	-1 [1-0 Kbps] (-1 indicates no shaping)
Shaping Rate:	-1 [1-0 Kbps] (-1 indicates no shaping)
Shaping Burst Size:	3000 [bytes] (shall be >=1600)
PTM Priority:	
	Apply/Save Cancel

Quality of Service Classification

Click the **Qos Classification** button to access the **Quality of Service** configuration page.

NETWORK TOO	DLS QUAL	ITY OF SERVIC
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Allows you to manually configure different priority to different interfaces.

Qos Classification

After clicking the **Qos Classification** button the following page is available.

DSL-225	SETUP		ADV	ANCED		MAINT	FENANCE		STAT	US		HELP
dvanced Wireless 2.4G	QOS CLASSIFIC	OITAC	N									
ort Triggering MZ	maximum 32 rules To add a rule, dick th To remove rules, dhe The Enable button w checkbox un-checked The enable-checkbox	e Add b ck their r ill scan t will be d	utton. emove-d hrough e lisabled.	neckboxes, ti very rules in s of the rule ;	the table after pa	le. Rules v age reload	vith enable	-checkbo>		ll be enabled. R	ules with	enable-
Itering Options	If you disable WMM fi	unction i		5,	sification	related to	o wireless (will not tak	e effects		_	
arental Control Iltering Options NS ynamic DNS	If you disable WMM fi	unction i	N ENTF	RIES			o wireless v					1
Itering Options	If you disable WMM fi	CATIO	N ENTR	RIES	DN CRIT	TERIA	Queue Key			N RESULTS Rate Limit (kbps)	Enable	Remov
tering Options IS Inamic DNS stwork Tools	If you disable WMM fi	Order	N ENTF CLA	RIES	DN CRIT	TERIA	Queue	CLASS DSCP	SIFICATIO 802.1P	Rate Limit	Enable	Remov
tering Options IS Innamic DNS ttwork Tools Uting NA	If you disable WMM fi	Order	N ENTF CLA Class Intf	RIES SSIFICATIO Ether Type IP	ON CRIT	TERIA	Queue Key	CLASS DSCP	SIFICATIO 802.1P	Rate Limit (kbps)		Remov
tering Options NS mamic DNS etwork Tools puting	If you disable WMM fit	Order	N ENTR CLAS Class Intf wi0.1	RIES SSIFICATIO Ether Type IP	ON CRIT	TERIA	Queue Key 65	CLASS DSCP	SIFICATIO 802.1P	Rate Limit (kbps) 128	7	Remov

In this section a list of QoS classification entries will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

		CLA	SSIFICAT	ION CR	ITERIA		CLASS	IFICATION	RESULTS		
Class Name	Order	Class Intf	Ether Type	Proto	802.1P Check	Queue Key	DSCP Mark	802.1P Mark	Rate Limit (kbps)	Enable	Remove
openwifi_up_atm	1	wl0.1	IP			65			128	\checkmark	
openwifi_down_atm	2	ppp0.1	IP			16			1024	\checkmark	
openwifi_up_ptm	3	wl0.1	IP			67			128	\checkmark	
openwifi_down_ptm	4	ppp 1. 1	IP			16			2048	\checkmark	

Add Enable Remove

After clicking the **Add** button, the following page is available.

QUALITY OF SERVICE

QOS CLASSIFICATION ENTRIES

The screen creates a traffic class rule to classify the upstream traffic, assign queue which defines the precedence and the interface and optionally overwrite the IP header DSCP byte. A rule consists of a class name and at least one condition below. All of the specified conditions in this classification rule must be satisfied for the rule to take effect. Click 'Apply/Save' to save and activate the rule.

In this section we can create a QoS classification entry.

Traffic Class Name: Enter the traffic class name here.

Rule Order: Select the rule order option here. Options to choose from are 1 and Last.

Rule Status: Select the rules state here. Options to choose from are Enable and Disable.

NETWORK TRAFFIC CLASS RULE Traffic Class Name : Rule Order : Last • Rule Status : Disable •

In this section we can specify the classification criteria for the QoS classification entry here. Make the appropriate modifications here.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

SPECIFY CLASSIFICATION CRITERIA(A BLANK CRITERION INDICATES IT IS NOT USED FOR CLASSIFICATION.)

Class Interface :	LAN 👻
Ether Type :	
Source MAC Address :	
Source MAC Mask :	
Destination MAC Address :	
Destination MAC Mask :	
Specify Classification Results (A blank value indica	tes no operation.)
Specify Class Queue (Required) :	
Packets classified into a queue that exit through an inte s not specified to exist, will instead egress to the default Specify Classification Results (A blank value indica	queue on the interface.
Mark Differentiated Service Code Point (DSCP) :	
Mark 802.1p priority(only for bridge mode) :	•
 Class non-vlan egress packets will be tagged with VID Class vlan egress packets will be tagged with VID 0 ar 	
Set Rate Limit:	[Kbits/s]
Apply/Save	Cancel

<u>UPnP</u>

Click the **UPnP** button to access the **UPnP** configuration page.

NETWORK TOOLS UPNP	
Allows you to enable or disable UPnP.	
	UPnP

After clicking the **UPnP** button the following page is available.

D -Linl	k				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	UPNP				Helpful Hints
Port Forwarding	NOTE: UPnP is activated of	only when there is a live WAN	I service with NAT enabled.		UPnP helps other UPnP LAN hosts interoperate with the
Port Triggering					router. Leave the UPnP option enabled as long as
DMZ	UPNP CONFIGURAT	TION			the LAN has other UPnP applications.
Parental Control					More
Filtering Options	Enable UPnP				riore
DNS					
Dynamic DNS		Apply/Save	Cancel		
Network Tools					
Routing					
DLNA					
Storage Service					
IP Tunnel					
Print Server					
Samba					
Logout					

In this section we can **Enable** the UPnP protocol option by selecting this option or **Disable** the UPnP protocol by leaving this option blank.

Click the **Apply/Save** button to accept the changes made.

UPNP CONFIGURATION	
Enable UPnP	
	Apply/Save Cancel

DSL Settings

Click the **DSL Settings** button to access the **DSL Settings** configuration page.

NETWORK TOOLS -- DSL

Allows you to configure advanced settings for DSL.

DSL Settings

After clicking the **DSL Settings** button the following page is available.

D-Lin	k				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	DSL SETTINGS	1			Helpful Hints
Port Forwarding					Do not change these
Port Triggering	Select the profile below.				settings unless directed by your ISP.
OMZ	DSL SETTINGS				More
					PIOPE
arental Control	Select the modulation	below.			
iltering Options		Dmt Enabled			
NS		ite Enabled			
ynamic DNS		.413 Enabled SL2 Enabled			
letwork Tools		inext Enabled			
outing		SL2+ Enabled			
	Ar	inexM Enabled			
DLNA	VI.	SL2 Enabled			
torage Service	Select the profile belo	w.			
° Tunnel		Enabled			
rint Server	✓ 8b	Enabled			
amba		Enabled			
oqout		Enabled			
byour		a Enabled			
		b Enabled			
		'a Enabled Ia Enabled			
		a chableu			
	USO 🗸 En	abled			
	Select the phone line				
		ner pair ter pair			
		ter pair			
	Capability	and the later			
		tswap Enable A Enable			

In this section we can configure the DSL settings for this router.

- **Select the modulation below:** To enable the DSL modulation type, tick the checkbox next to it. To disable the DSL modulation type, leave the checkbox next to it empty.
- **Select the profile below:** To enable the specific profile, tick the checkbox next to it. To disable the specific profile, leave the checkbox next to it empty.
- **US0:** To enable this option, tick the checkbox next to it. To disable this option, leave the checkbox next to it empty.
- Select the phone line pair below: Select the phone line pair option here. Options to choose from are Inner pair and Outer pair.
- Capability: Select the DSL capability option here. Options to choose from are Bitswap Enable and SRA Enable.

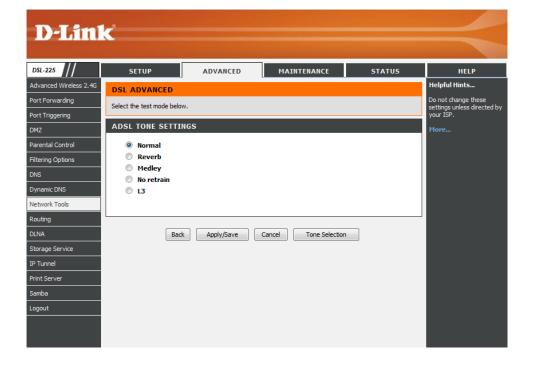
Click the **Apply/Save** button to accept the changes made.

Click the **Advanced Settings** button to configure more advanced parameters, concerning the DSL settings.

DSL	SETTI	IGS

Select the	modulation below. G.Dmt Enabled
	Glite Enabled
	✓ G.IITE ENABLED ✓ T1.413 Enabled
	ADSL2 Enabled
	AnnexL Enabled
	AnneyM Enabled
	VDSL2 Enabled
Select the	profile below.
	✓ 8a Enabled
	8b Enabled
	8c Enabled
	✓ 8d Enabled
	12a Enabled
	12b Enabled
	I7a Enabled
	30a Enabled
U50	
	Enabled
Select the	phone line pair below.
	Inner pair
	Outer pair
Casability	
Capability	☑ Bitswap Enable
	SRA Enable

After clicking the **Advanced Settings** button the following page is available.



In this section we can configure the VDSL tone settings. Only one option can be selected. Options to choose from are **Normal**, **Reverb**, **Medley**, **No retrain**, and **L3**.

Click the **Back** button to return to the previous page.

Click the Apply/Save button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page. Click the **Tone Selection** button to open a new page where we can manually select the tone.

ADSL	TONE SETTINGS
۲	Normal
\odot	Reverb
\odot	Medley
\odot	No retrain
\odot	L3
	Back Apply/Save Cancel Tone Selection

After clicking the **Tone Selection** button the following page is available.

Here we can select the tone manually. Options to choose from are **Upstream Tones** and **Downstream Tones**.

								-								
			_	_	_			ream To					_		-	
~	0 🗸	1 🗸	2 🗸	3 🗸	4 🗸	5 🗸	6 🗸	7 🔽	8 🗸	9 🗸	10 🔽	11 🗸	12 🗸	13 🔽	14 🗸	15
V	16 🔽	17 🗸	18 🔽	19 🗹	20 🔽	21 🗸			24 🔽	25 🗸	26 🗸	27 🗸	28 🔽	29 🗸	30 🔽	31
								stream T								
V	32 🗸	33 🗸	34 🗸	35 🔽	36 🔽	37 🔽	38 🔽	39 🗸	40 🗸	41 🗸	42 🗸	43 🗸	44 🔽	45 🗸	46 🔽	47
V	48 🗸	49 🗸	50 🔽	51 🔽	52 🔽	53 🔽	54 🗸	55 🔽	56 🔽	57 🔽	58 🔽	59 🔽	60 🔽	61 🗸	62 🔽	63
V	64 🗸	65 🗸	66 🔽	67 🗸	68 🔽	69 🔽	70 🗸	71 🗸	72 🗸	73 🗸	74 🗸	75 🗸	76 🔽	77 🔽	78 🔽	79
V	80 🗸	81 🗸	82 🗸	83 🗸	84 🗸	85 🔽	86 🗸	87 🗸	88 🗸	89 🗸	90 🔽	91 🗸	92 🗸	93 🗸	94 🗸	95
			_	v	V	V	V	7	7	7	v	7	V	v	V	
V	96 🔽	97 🗸	98 🔽	⁹⁹ 100	101	102	103	104	105	106	107	108	109	110	111	
V	V	7	V	V	V	V	V		V	V		V		V	V	
112				116	117	118	119	120	121	122	123	124	125	126	127	
7				V	V	V	V	7	7	7	V	7	V	V	V	
128				132	133	134		136	137	138	139	140	141	142		
V	7	7	V	V	V	V	V	V	7	7	V	V	V	V	V	
144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	
160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	
V	V	V	V	V	V	V	V	V	V	✓	V	V	V	V	V	
176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	
V	V	1	V	V	V	V	V	V	V	V	V	V	V	V	V	
192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	
V	V	V	V	V	V	V	V	✓	✓	✓	V	V	V	V	✓	
208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	
V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	

ADSL Tone Settings

<u>IGMP</u>

Click the **IGMP** button to access the **IGMP** configuration page.

NETWORK TOOLS IGMP		
	IGMP	

After clicking the **IGMP** button the following page is available.

-Lini	1,-2				
					-
	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
l Wireless 2.4G	IGMP				
arding	IGMP				
ring					
	IGMP CONFIGURA	TION			
ontrol	Enter IGMP protocol o	onfiguration fields if you	want modify default val	ues shown below.	
ptions		Multicast Precedence :	Disable 🔻 lower value, hi	gher priority	
NS		Default Version :	3		
ools]	Query Interval :	125		
	Qu	ery Response Interval :	10		
	Last M	ember Query Interval :	10		
rvice	Ī	Robustness Value :	2		
		num Multicast Groups :	25		
er	Maximum Mult	icast Data Sources (for IGMPv3 : (1 - 24) :	10		
	Maximum Mul	ticast Group Members :	25		
		Fast Leave Enable :			
	LAN to LAN (Intra	LAN) Multicast Enable :			
	Mebership 3	oin Immediate (IPTV) :			
	MLD CONFIGURAT	ION			
	MLD Configuration				
		Default Version :	2		
		Query Interval :	125		
	Qu	ery Response Interval :	10		
	Last M	ember Query Interval :	10		
		Robustness Value :	2		
	Maxi	num Multicast Groups :	10		

In this section we can modify the IGMP Configuration.

Multicast Precedence: Select to enable or disable the multicast precedence feature here. Selecting a lower value assigns a higher priority.

Default Version: Enter the default IGMP version number here.

- Query Interval: Enter the query interval value here.
- **Query Response Interval:** Enter the query response interval value here.

Last Member Query Interval: Enter the last member query interval value here.

- **Robustness Value:** Enter the robustness value here.
- Maximum Multicast Groups: Enter the maximum multicast group value here.
- Maximum Multicast Data Sources: Enter the maximum multicast data sources value here.
- Maximum Multicast Group Members: Enter the maximum multicast group member value here.
- Fast Leave Enable: Tick this option to enable the fast leave feature.
- LAN to LAN (Intra LAN) Multicast Enable: Select this option to enable LAN to LAN (Intra LAN) multicasting.

Membership Join Immediate (IPTV): Tick this option to enable the membership join immediate (IPTV) feature.

IGMP CONFIGURATION

Enter IGMP protocol configuration fields if you want modify default values shown below.

Multicast Precedence:	Disable 🔻 lower value,	higher priority	
Default Version	3		
Query Interval	125		
Query Response Interval	10		
Last Member Query Interval	10		
Robustness Value	2		
Maximum Multicast Groups	25		
Maximum Multicast Data Sources (for IGMPv3 : (1 - 24)	10		
Maximum Multicast Group Members	25		
Fast Leave Enable	\checkmark		
LAN to LAN (Intra LAN) Multicast Enable			
Mebership Join Immediate (IPTV)			

In this section we can modify the MLD Configuration.

Default Version: Enter the default MLD version number here.

Query Interval: Enter the query interval value here.

Query Response Interval: Enter the query response interval value here.

Last Member Query Interval: Enter the last member query interval value here. Robustness Value: Enter the robustness value here.

Maximum Multicast Groups: Enter the maximum multicast group value here.

- Maximum Multicast Data Sources: Enter the maximum multicast data source value here.
- Maximum Multicast Group Members: Enter the maximum multicast group member value here.
- Fast Leave Enable: Tick this option to enable the fast leave feature.
- LAN to LAN (Intra LAN) Multicast Enable: Select this option to enable LAN to LAN (Intra LAN) multicasting.

Click the **Apply/Save** button to accept the changes made.

MLD CONFIGURATION

LD Configuration		
Default Version	2	
Query Interval	125	
Query Response Interval	10	
Last Member Query Interval	10	
Robustness Value	2	
Maximum Multicast Groups	10	
Maximum Multicast Data Sources (for mldv3)	10	
Maximum Multicast Group Members	10	
Fast Leave Enable		
LAN to LAN (Intra LAN) Multicast Enable		

Apply/Save

Routing

To access the **Routing** page, click on the **Advanced** menu link, at the top, and then click on the **Routing** menu link, on the left.

On this page the user can configure services related to the Routing feature of this product.

D-Linl	K				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	ROUTING STATI	C ROUTE			
Port Forwarding	Allows you to manually cor	nfigure special routes that yo	ur network might need.		
Port Triggering			-		
DMZ			Static Route		
Parental Control					
Filtering Options	ROUTING DEFAU				_
DNS	Allows you to configure De	efault Gateway used by WAN	Interface.		
Dynamic DNS		[Default Gateway		
Network Tools					
Routing	ROUTING RIP				
DLNA	Allows you to configure RI	IP (Routing Information Proto	col).		
Storage Service					
IP Tunnel			RIP		
Print Server					
Samba					
Logout					

Static Route

Click the Static Route button to access the Static Routing configuration page.

ROUTING -- STATIC ROUTE

Allows you to manually configure special routes that your network might need.

Static Route

After clicking the **Static Route** button the following page is available.

D-Lin	¢				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	ROUTING STATE	C ROUTE			
Port Forwarding	A maximum 32 entries can	be configured			
Port Triggering					
DMZ	STATIC ROUTE				
Parental Control	IP Version	DstIP/ PrefixLength	Gateway	Interface metri	c Remove
Filtering Options	IP VERSION	DSUP/ PrelixLeligui	Galeway	Intenace metri	c kelliove
DNS			Add Remove		
Dynamic DNS			Add Remove		
Network Tools					
Routing					
DLNA					
Storage Service					
IP Tunnel					
Print Server					
Samba					
Logout					

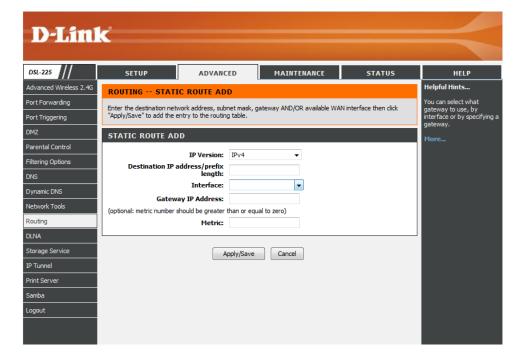
In this section a list of static route entries will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

STATIC ROUTE					
IP Version	DstIP/ PrefixLength	Gateway	Interface	metric	Remove
	Add	Remove			

After clicking the **Add** button, the following page is available.



In this section we can create a **Static Route** entry.

IP Version: Select the IP version used here. Options to choose from are IPv4 and IPv6.

Destination IP address: Enter the destination IP address for this route entry here.

Interface: Select the interface this will be associated with this rule here.

Gateway IP Address: Enter the gateway IP address for this route entry here.

Metric: Enter the metric value, used by this route entry, here.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

STATIC ROUTE ADD	
IP Version: Destination IP address/prefix length: Interface:	IPv4 •
Gateway IP Address:	
(optional: metric number should be greater	than or equal to zero)
Metric:	
A	pply/Save Cancel

In this section a list of static route entries will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry.

IP Version	DstIP/ PrefixLength	Gateway	Interface	metric	Remove
4	147.235.245.64/28		atm1	0	
4	147.235.245.64/28		ptm0.2	0	
4	147.235.245.112/28		atm1	0	
4	147.235.245.112/28		ptm0.2	0	

Default Gateway

Click the **Default Gateway** button to access the **Default Gateway** configuration page.

OUTING	DEFAULT	GATEWAY

Allows you to configure Default Gateway used by WAN Interface.

Default Gateway

After clicking the **Default Gateway** button the following page is available.

DIS					
D-Lin	<u>(</u>				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	ROUTING DEFAU	LT GATEWAY			Helpful Hints
Port Forwarding			nterfaces served as system de		You can select a preferred WAN Interface as the
Port Triggering	one will be used according the WAN interface is conne	system default gateway.			
DMZ	ROUTING DEFAU	LT CATEWAY			More
Parental Control					
Filtering Options	Selected Default Gate	vay Interfaces	Available Routed WAN Ir	iterfaces	
DNS	ppp0.2				
Dynamic DNS		->			
Network Tools					
Routing					
Storage Service					
IP Tunnel	Select a preferred wan inte	erface as the system default	IPv6 gateway.		
Print Server	Selected WAN Int	erface: pppoe_0_1_1/p	pp0.2 🔻		
Samba					
Logout		Apply/Save	Cancel		
		Apply/Save	Cancer		
	ROUTING DEFAU				
	Gateway A	ddress: 0.0.0.0			
	Alternative G	ateway			
	A Periodic Tim	uress :			
		/-			
		Ping	Stop		

In this section we can select the default gateway interface for this router.

Selected WAN Interface: Select the IPv4 WAN interface that will be used here.

Selected Default Gateway Interfaces: Select the IPv6 WAN interface that will be used here.

Available Routed WAN Interfaces: Select a Routed WAN interface.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

ROUTING -- DEFAULT GATEWAY

Selected Default Gateway Inter	faces Available Routed WAN Interfaces
ppp0.2	
	->
	<-
Select a preferred wan interface as th	ne system default IPv6 gateway.
Selected WAN Interface :	pppoe_0_1_1/ppp0.2 -

In this section we can configure the default gateway parameters for this router. **Gateway Address:** Enter the primary gateway IP address used here. **Alternative Gateway:** Enter the secondary gateway IP address used here. **Periodic Time:** Enter the periodic time value here.

Click the **Ping** button to initiate the gateway IP check. Click the **Stop** button to terminate the gateway IP check.

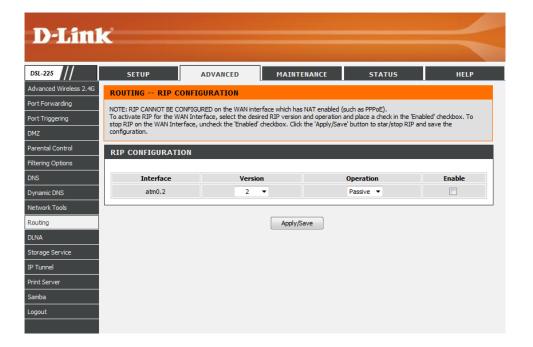
<u>RIP</u>

Click the **RIP** button to access the **RIP** configuration page.

ROUTING DEFAULT GATEWAY					
Gateway Address :	0.0.0.0				
Alternative Gateway Address :	0.0.0.0				
Periodic Time(sec) :	1				
	Ping Stop				



After clicking the **RIP** button the following page is available.



In this section we can configure the default gateway parameters for this router.

Version: Select the RIP version number here. Options to choose from are 1, 2, and Both.

Operation: Select the operation mode here. Options to choose from are **Active** and **Passive**.

Enable: Tick this option to enable the RIP configuration on the specified interface.

Click the **Apply/Save** button to accept the changes made.

Version	Operation	Enable
2 💌	Passive 🔻	
	· · · · · · · · · · · · · · · · · · ·	
Apply/Sa	ve	
	2 •	

DLNA

To access the DLNA page, click on the Advanced menu link, at the top, and then click on the DLNA menu link, on the left.

On this page the user can configure services related to the Digital Living Network Alliance (DLNA) feature of this product.

D-Lini					
	~				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	DLNA				
Port Forwarding	his page allows you to en	able / disable digital media se	erver support.		
Port Triggering					
DMZ	DIGITAL MEDIA S	ERVER SETTINGS			
Parental Control			Enable on-board digital m	edia server	
Filtering Options					
DNS			Apply/Save		
Dynamic DNS					
Network Tools					
Routing					
DLNA					
Storage Service					
IP Tunnel					
Print Server					
Samba					
Logout					

In this section we can configure the print server parameters for this router.

Enable on-board digital media server: Tick this option to enable the onboard digital media server.

Click the **Apply/Save** button to accept the changes made.

DIGITAL MEDIA SERVER SETTINGS	
V	Enable on-board digital media server
	Apply/Save

Storage Service

To access the **Storage** page, click on the **Advanced** menu link, at the top, and then click on the **Storage Service** menu link, on the left.

On this page the user can view information related to the **Storage Service** feature of this product.

D-Link						
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP	
Advanced Wireless 2.4G	STORAGE SERVICE					
Port Forwarding	The Storage service allows	you to use Storage devices	with modem to be more easily	accessed.		
Port Triggering						
DMZ	STORAGE SERVICE					
Parental Control	Volumename	e FileSy	-t T-t-	al Space	Used Space	
Filtering Options	volumename	riiesy	stem lota	ii Space	Used Space	
DNS						
Dynamic DNS						
Network Tools						
Routing						
DLNA						
Storage Service						
IP Tunnel						
Print Server						
Samba						
Logout						

IP Tunnel

To access the **IP Tunnel** page, click on the **Advanced** menu link, at the top, and then click on the **IP Tunnel** menu link, on the left.

On this page the user can configure services related to IP Tunneling used on this product.

D -Lini	<i>L</i> 2				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	IP TUNNEL IPV6	INIPV4			
Port Forwarding	IPv6inIPv4 Tunnel Configu	ration			
Port Triggering					
DMZ			IPv6inIPv4		
Parental Control					
Filtering Options	IP TUNNEL IPV4	INIPV6			
DNS	IPv4inIPv6 Tunnel Configu	ration			
Dynamic DNS			IPv4inIPv6		
Network Tools					
Routing					
DLNA					
Storage Service					
IP Tunnel	IPv6inIPv4				
Print Server	IPv4inIPv6				
Samba					
Logout					

<u>IPv6-in-IPv4</u>

Click the **IPv6inIPv4** button to access the **IPv6-in-IPv4** configuration page.

IP TUNNEL IPV6INIPV4	
IPv6inIPv4 Tunnel Configuration	
	IPv6inIPv4

After clicking the **IPv6inIPv4** button, the following page will be available.

D-Lini	2						
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP		
Advanced Wireless 2.4G	IP TUNNELING I	PV6INIPV4 TUNNEL	CONFIGURATION				
Port Forwarding	Currently, only 6rd config	Currently, only 6rd configuration is supported.					
Port Triggering							
DMZ	IPV6INIPV4 TUNN	EL ADD					
Parental Control		Tunnel Name:					
Filtering Options		Mechanism:	6RD 👻				
DNS	Ass	ociated WAN Interface:					
Dynamic DNS	As	sociated LAN Interface:	LAN/br0 👻				
Network Tools		۲	Manual				
Routing		0	Automatic				
DLNA		IPv4 Mask Length:					
Storage Service	6rd Pr	efix with Prefix Length:					
IP Tunnel		er Relay IPv4 Address:					
Print Server							
Samba			Apply/Save				
Logout			-pps/save				

In this section a list of entries will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry

IPV6INIPV4 TUNNEL CONFIGURATION							
Name	WAN	LAN	Dynamic	IPv4 Mask Length	6rd Prefix	Border Relay Address	Remove
Add Remove							

After clicking the **Add** button, the following page will be available.

D-Lini	ĸ				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	IP TUNNELING IF	V4INIPV6 TUNNEL	CONFIGURATION		
Port Forwarding	Currently, only DS-Lite con	figuration is supported.			
Port Triggering	IPV4INIPV6 TUNNE				
DMZ					
Parental Control		Tunnel Name:			
Filtering Options		Mechanism:	DS-Lite 🔻		
DNS		ciated WAN Interface:			
Dynamic DNS	Ass	ociated LAN Interface:	LAN/br0 🔻		
Network Tools		۲	Manual		
Routing		0	Automatic		
DLNA		Remote IPv6 Address:			
Storage Service					
IP Tunnel			Analy Cause		
Print Server			Apply/Save		
Samba					
Logout					

In this section, the following parameters can be configured:

Tunnel Name: Enter the tunnel name here.

- **Mechanism:** Select the tunnel mechanism option here. **6RD** is the only option available.
- Associated WAN Interface: Select the WAN interface that will be associated with this entry here.
- Associated LAN Interface: Select the LAN interface that will be associated with this entry here. Also select whether this interface will obtain the IPv4 mask length, 6rd prefix, and border relay IPv4 address information manually, by selecting **Manual**, or automatically, by selecting **Automatic**.
- **Remote IPv6 Address:** After selecting **Manual**, enter the remote IPv6 address here.

Click the **Apply/Save** button to accept the changes made.

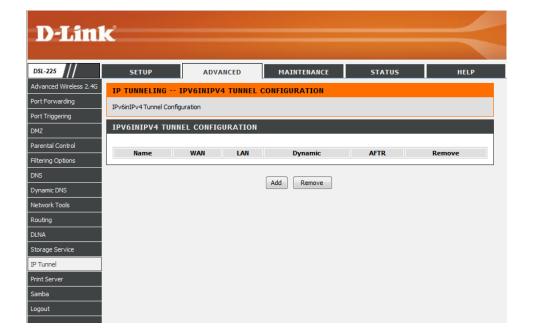
IPv4-in-IPv6

Click the IPv4inIPv6 button to access the IPv4-in-IPv6 configuration page.

IPV4INIPV6 TUNNEL ADD	
Tunnel Name:	
Mechanism:	
Associated WAN Interface:	▼
Associated LAN Interface:	LAN/br0 🗸
۲	Manual
0	Automatic
Remote IPv6 Address:	
	Apply/Save

IP TUNNEL IPV4INIPV6	
IPv4inIPv6 Tunnel Configuration	
	IPv4inIPv6

After click the IPv4inIPv6 button, the following page will be available.



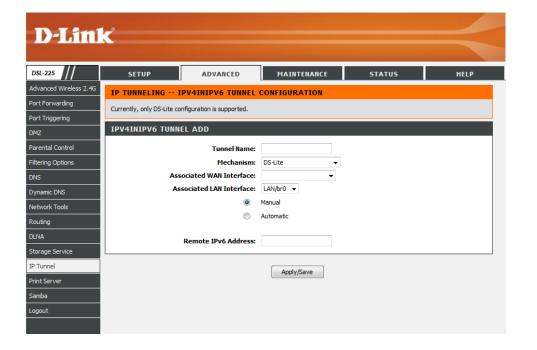
In this section a list of entries will be displayed.

Click the **Add** button to add a new entry.

Select the **Remove** option and click the **Remove** button to remove the specific entry

IPV4INIPV	5 TUNNEL	CONFIG	URATION		
Name	WAN	LAN	Dynamic	Remote IPv6 Address	Remove
			Add	Remove	

After click the Add button, the following page will be available.



In this section, the following parameters can be configured:

Tunnel Name: Enter the tunnel name here.

Mechanism: Select the mechanism option here. **DS-Lite** is the only option available.

Associated WAN Interface: Select the WAN interface will be associated with this entry here. Also select whether this interface will obtain the remote IPv6 address manually, by selecting Manual, or automatically, by selecting Automatic.

Associated LAN Interface: Select the LAN interface associated with this entry from the drop-down menu.

Remote IPv6 Address: After selecting Manual, enter the remote IPv6 address here.

Click the Apply/Save button to accept the changes made.

IPV4INIPV6 TUNNEL ADD	
Tunnel Name: Mechanism:	DS-Lite
Associated WAN Interface: Associated LAN Interface:	▼ LAN/br0 ▼
	Manual
0	Automatic
Remote IPv6 Address:	
	Apply/Save

Print Server

To access the **Print Server** page, click on the **Advanced** menu link, at the top, and then click on the **Print Server** menu link, on the left.

On this page the user can configure services related to the print server on this product.

D-Lini	ĸ				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	PRINT SERVER SE	TTINGS			
Port Forwarding	This page allows you to en	nable / disable printer suppo	rt.		
Port Triggering					
DMZ	PRINT SERVER CO	NFIGURATION			
Parental Control		\checkmark	Enable on-board print ser	ver	
Filtering Options		Printer name:			
DNS		Make and model:			
Dynamic DNS					
Network Tools			Apply/Save		
Routing					
DLNA					
Storage Service					
IP Tunnel					
Print Server					
Samba					
Logout					

In this section, the following parameters can be configured:

Enable on-board print server: Tick this option to enable the onboard print server feature.

Printer name: Enter the printer name here.

Make and model: Enter the printer's make and model description here.

Click the **Apply/Save** button to accept the changes made.

PRINT SERVER CONFIGURATION	
	Enable on-board print server
Printer name:	bezeq
Make and model:	bezeq
	Apply/Save

Samba

To access the Samba page, click on the Advanced menu link, at the top, and then click on the Samba menu link, on the left.

On this page the user can configure services related to the Samba connectivity of this product.

D-Lini	-				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless 2.4G	USB STORAGE				
Port Forwarding	USB Storage				
Port Triggering					
DMZ	USB STORAGE				
Parental Control		USB Storage:	Up		
Filtering Options		\checkmark	Enable Samba		
DNS		NetBios Name:	bezeq		
Dynamic DNS		Directory Name:	bezeq		
Network Tools		Charset:	UTF8 👻		
Routing					
DLNA					
Storage Service		A	oply/Save Unplug USB		
IP Tunnel					
Print Server					
Samba					
Logout					

In this section, the following parameters can be configured:

USB Storage: This parameter will display the USB storage device's status.

Enable Samba: Tick this option to enable the Samba feature.

NetBios Name: Enter the NetBIOS name here.

Directory Name: Enter the directory name here.

Charset: Select the character set option here. The only option available for selection is **UTF8**.

Click the **Apply/Save** button to accept the changes made.

USB STORAGE	
USB Storage:	Up Enable Samba
NetBios Name: Directory Name: Charset:	bezeq
A	pply/Save Unplug USB

Maintenance Category

The **Maintenance** category is designed to assist the user with maintenance configurations for this product.

The following pages can be found in the **Maintenance** category:

- System On this page the user can perform maintenance concerning the System. Services available for configuration are Backup and Restore Settings, Restore to Factory Default Settings, and a System Reboot.
- **Firmware Update** On this page the user can update the running firmware for this product.
- Access Control On this page the user can configure the login username and password for the web user interface of this product.
- **Diagnostics** On this page the user can run a diagnostics test that includes testing the **Ethernet**, **USB**, **Wireless**, and **DSL Connection** of this product.
- System Log On this page the user can View and Configure the System Log used by this product.

D -Linl	<i>.</i>				
	~				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
System	SETTINGS BACK	UP			
irmware Update	Back up DSL Router config	gurations. You may save your	router configurations to a file	on your PC.	
Access Control			Backup Settings		
Diagnostics			buckup occurigo		
System Log	SETTINGS UPDA	TE SETTINGS			
ogout	Update DSL Router settin	gs. You may update your rou	ter settings using your saved	files.	
	Settings Fil	e Name :		Browse	
			Update Settings		
	SETTINGS REST	ORE DEFAULT SETTI	NGS		
	Restore DSL Router settin	igs to the factory defaults.			
			Restore Default Settings		
	SETTINGS REBO	от			
	Click the button below to				
			Reboot		

System

To access the **System** page, click on the **Maintenance** menu link, at the top, and then click on the **System** menu link, on the left.

On this page the user can perform maintenance concerning the System. Services available for configuration are **Backup and Restore Settings**, **Restore to Factory Default Settings**, and a **System Reboot**.

SETTINGS BACKUP Back up DSL Router configurations. You may save your router configurations to a file on your PC. Backup Settings SETTINGS UPDATE SETTINGS Update DSL Router settings. You may update your router settings using your saved files. Settings File Name : Update Settings SetTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. Restore DFAULT SETTINGS SETTINGS REBOOT Click the button below to reboot the router.	/	SETUP	ADVANCED	MAINTENANCE	STATUS	HE
Back up DSL Router configurations. You may save your router configurations to a file on your PC. Backup Settings SETTINGS UPDATE SETTINGS Update DSL Router settings. You may update your router settings using your saved files. Settings File Name : Update Settings SetTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. SETTINGS REBOOT		SETTINGS BACKUP)			
SETTINGS UPDATE SETTINGS Update DSL Router settings. You may update your router settings using your saved files. Settings File Name : Update Settings SETTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT		Back up DSL Router configura	tions. You may save you	ur router configurations to a file	on your PC.	
SETTINGS UPDATE SETTINGS Update DSL Router settings. You may update your router settings using your saved files. Settings File Name : Update Settings SETTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT				Backup Settings		
Update DSL Router settings. You may update your router settings using your saved files. Settings File Name : Update Settings SETTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT						
Settings File Name : Browse Update Settings SETTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT		SETTINGS UPDATE	SETTINGS			
Update Settings SETTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT		Update DSL Router settings.	You may update your ro	uter settings using your saved f	files.	
Update Settings SETTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT						
SETTINGS RESTORE DEFAULT SETTINGS Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT		Settings File N	ame :		Browse	
Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT				Update Settings		
Restore DSL Router settings to the factory defaults. Restore Default Settings SETTINGS REBOOT						
Restore Default Settings SETTINGS REBOOT		SETTINGS RESTOR	E DEFAULT SETT	INGS		
SETTINGS REBOOT		Restore DSL Router settings	to the factory defaults.			
SETTINGS REBOOT				Rostero Dofault Sottions		
				Restore Default Seturigs		
Click the button below to reboot the router.		SETTINGS REBOOT				
		Click the button below to reb	oot the router.			

In this section we can initiate the configuration backup feature. Once you have configured the router to your satisfaction, it is a good idea to back up the configuration file to your computer. To save the current configuration settings to your computer, click the **Backup Settings** button. You will be prompted to select a location on your computer to put the file. The file type is *bin* and may be named anything you wish.

SETTINGS -- BACKUP Back up DSL Router configurations. You may save your router configurations to a file on your PC. Backup Settings

In this section we can restore the configuration backup from a saved file. To load a previously saved configuration file, click the **Browse** button and locate the file on your computer. Click the **Update Settings** button to load the settings from your local hard drive. Confirm that you want to load the file when prompted. The router will reboot and begin operating with the configuration settings that have just been loaded.

In this section we can perform a factory reset on this router. To reset the router to its factory default settings, click the **Restore Default Settings** button. You will be prompted to confirm your decision to reset the router. The router will reboot with the factory default settings.

In this section we can reboot the router. Click the **Reboot** button to initiate the reboot procedure.

SETTINGS UPDATE SETTI	IGS
Update DSL Router settings. You may u	pdate your router settings using your saved files.
Settings File Name :	Browse
	Update Settings

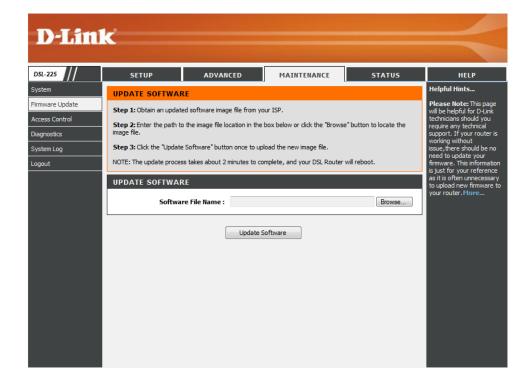
SETTINGS RESTORE DEFAULT SETTINGS
Restore DSL Router settings to the factory defaults.
Restore Default Settings

SETTINGS REBOOT	
Click the button below to reboot the router.	
	Reboot

Firmware Update

To access the Firmware Update page, click on the Maintenance menu link, at the top, and then click on the Firmware Update menu link, on the left.

On this page the user can update the running firmware for this product. From time to time a software update will be available for this product. Keep an eye on the D-Link website for possible software updates that might be available in the future.



In this section we can load the latest firmware for the device. Note that the device configuration settings may return to the factory default settings.

To upgrade the firmware, type in the name and path of the file in the **Software File Name** field or click on the **Browse** button to search for the file. Click the **Update Software** button to begin copying the file. The file will load and restart the router automatically.

UPDATE SOFTWARE	
Software File Name :	Browse
	Update Software

Access Control

To access the Access Control page, click on the Maintenance menu link, at the top, and then click on the Access Control menu link, on the left.

On this page the user can configure the login username and password for the web user interface of this product.

D-Lini	2				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
System	ACCESS CONTROL	S PASSWORD			
Firmware Update	Manage DSL Router user a	accounts.			
Access Control					
Diagnostics			Password		
System Log					
Logout	ACCESS CONTROL	REMOTE MANAGE	MENT		
	Allows you to configure Re	mote management.			
			Remote management		

Passwords

Click the **Password** button to access the **Password** configuration page.

ACCESS CONTROLS -- PASSWORD Manage DSL Router user accounts. Password

After clicking the **Password** button the following page is available.

D-Lini	¢				
DSL-225					
	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
System	ACCESS CONTROL	PASSWORDS			Helpful Hints
Firmware Update	Use the fields below to en	er up to 16 characters and d	ick "Apply/Save" to change or	create passwords. Note:	This page allows you to modify your router
Access Control	Password cannot contain a	space.			password needed to access this Web
Diagnostics	PASSWORDS SETT	ING			management interface. For security reasons, it is
System Log					recommended that you change your device's admin
Logout		rname :			and user passwords from
		ssword :			the factory default. The password you choose
		ssword :			should be between 1 and 16 characters in length.
	Confirm Pa	ssword :			Please make sure to choose a password you
		Apply/Save	Cancel		choose a password you can remember or write it down and keep in a safe and separate location for future reference. If you forget your device password, the only solution is to reset your router to factory default settings and you will lose all your device configuration settings. More

In this section we can configure the access control account information.

- **Username:** Enter the new login username for this router here. The default username is **Admin**.
- **Old Password:** Enter the old login password for this router here. The default password is **Admin**.
- New Password: Enter the new login password for this router here.
- **Confirm Password:** Enter the new login password for this router here again.

Click the **Apply/Save** button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

Username :	
Old Password :	
New Password :	
Confirm Password :	

Remote Management

Click the **Remote management** button to access the **Remote Management** configuration page.

ACCESS CONTROL REMOTE MANAGEME	OL REMOTE MANAGEM	REMOTE MAN	ROL	CONTE	ACCESS
--------------------------------	-------------------	------------	-----	-------	--------

Allows you to configure Remote management.

Remote management

D-Link

DSL-225	SETUP	ADVANCED	MAINTE	NANCE	STATUS	HELP		
System	ACCESS CONTROL	Helpful Hints						
Firmware Update	A Service Control List ("SCL	A Service Control List ("SCL") enables or disables services from being used.						
Diagnostics	REMOTE MANAGEM	REMOTE MANAGEMENT FEATURE						
System Log	Services		LAN	١	WAN	security reasons, it is recommended that you change your device's admin		
Logout	FTP		Enable		Enable	and user passwords from the factory default. The		
	нттр		Enable		Enable	password you choose should be between 1 and		
	ICMP		Enable		Enable	16 characters in length. Please make sure to		
	SNMP	V	Enable		Enable	choose a password you can remember or write it		
	SSH		Enable		Enable	down and keep in a safe and separate location for		
	TELNET	V	Enable		Enable	future reference. If you forget your device		
	TFTP	V	Enable		Enable	password, the only solution is to reset your router to factory default settings		
			Save/Apply			and you will lose all your device configuration settings.		
						More		

After clicking the **Remote management** button the following page is available.

In this section we can configure the following information:

Service: In this column a list of service is be displayed that can be enabled or remote access.

LAN: Tick the **Enable** option to enable the related service on the LAN interface. WAN: Tick the **Enable** option to enable the related service on the WAN interface.

Click the **Save/Apply** button to accept the changes made.

REMOTE MANAGEMENT FEATURE

Services	LAN	WAN
FTP	Enable	🔽 Enable
HTTP	✓ Enable	Enable
ICMP	Enable	Enable
SNMP	Enable	Enable
SSH	Enable	Enable
TELNET	Enable	Enable
TFTP	C Enable	Enable

Save/Apply

Diagnostics

To access the **Diagnostics** page, click on the **Maintenance** menu link, at the top, and then click on the **Diagnostics** menu link, on the left.

On this page the user can run a diagnostics test that includes testing the Ethernet, USB, Wireless, and DSL Connection of this product.

In this section diagnostic tests are performed to test the connection to the **Local Network** interface. This test will include testing the **Ethernet**, **USB**, and **Wireless** connections of this router.

If a connection does not pass the test, a **Help** link is available for a more detailed description about the connection test and the possible solutions that can be performed to solve the problem.

	SETUP	ADVANCED	MAINTENANCE	ST	ATUS	HELP
	DIAGNOSTICS					Helpful Hints
date	Your modem is capable.	of testing your DSL connection.	The individual tests are listed l	halow. Tfate	vet dicelave	This page shows the
rol	a fail status, click "Rerur	Diagnostic Tests" at the bottor	n of this page to make sure th	ie fail status i		of your router's self diagnostic and conne
	consistent. If the test of	ontinues to fail, click "Help" and	follow the troubleshooting pro	cedures.		test results. The Inte connectivity status w
	TEST THE CONNE	CTION TO YOUR LOCAL				show PASS if you hav correctly configured
g						Internet connection a
	Test your eth0 Connec	tion:		PASS	Help	your router is current online.
	Test your eth1 Connec	tion:		FAIL	Help	More
	Test your eth2 Connec	tion:		FAIL	Help	More
	Test your eth3 Connec	tion:		FAIL	Help	
	Test your eth4 Connec			PASS	<u>Help</u>	
	Test your USB Conn				Help	
	Test your Wireless	2.4G Connection:		PASS	Help	

TEST THE CONNECTION TO YOUR LOCAL NETWORK

Test your eth0 Connection:	PASS	Help
Test your eth1 Connection:	FAIL	Help
Test your eth2 Connection:	FAIL	Help
Test your eth3 Connection:	FAIL	Help
Test your USB Connection:	PASS	Help
Test your Wireless 2.4G Connection:	PASS	Help
Test your Wireless 5G Connection:	PASS	Help

In this section diagnostic tests are performed to test the connection to the **DSL Service Provider**. This test will include testing the **xDSL Synchronization**.

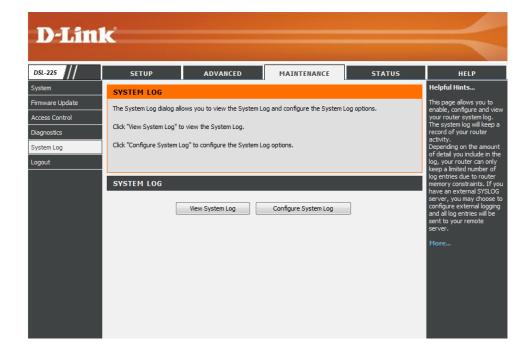
If a connection does not pass the test, a **Help** link is available for a more detailed description about the connection test and the possible solutions that can be performed to solve the problem.

TEST THE CONNECTION TO	O YOUR DSL SERVICE PROVIDER		
Test xDSL Synchronization		FAIL	Help
Test XDSE Synchronization		TAL	ncip
	Rerun Diagnostic Tests		

System Log

To access the **System Log** page, click on the **Maintenance** menu link, at the top, and then click on the **System Log** menu link, on the left.

On this page the user can view and configure the System Log used by this product.



Click the **View System Log** button to access the **System Log Display** page. Click the **Configure System Log** button to access the **System Log Configuration** page.

SYSTEM LOG			
	View System Log	Configure System Log]

After clicking the **View System Log** button, the following page is available.

D-Lini	2							
SL-225	SETU	JP		ADVANCED	STATUS	HELP		
stem	SYSTEM	Helpful Hints						
mware Update	System Log						This page allows you to enable, configure and view	
cess Control							your router system log. The system log will keep a	
agnostics	SYSTEM	LOG					record of your router activity.	
ystem Log		ate/Tim	•	Facility	Severity	Message	Depending on the amount of detail you include in the	
ogout	Jan 1		-			Thessage	log, your router can only keep a limited number of	
	01:20:36	daemon	warn	kernel: Broadcom Ingres	s QoS ver 0.1 initialized		log entries due to router	
	Jan 1 01:20:36	daemon	warn	kernel: BPM: tot_mem_s (19MB), num of buffers=	memory constraints. If you have an external SYSLOG server, you may choose to configure external logging and all log entries will be sent to your remote server.			
	Jan 1 01:20:36	daemon	warn	kernel: Broadcom BPM M Registered<244>^[[0m				
	Jan 1 01:20:36	daemon	warn	kernel: ^[[0;34m[NTC b				
	Jan 1 01:20:36	daemon	warn	kernel: ^[[Om			More	
	Jan 1 01:20:36	daemon	warn	kernel: NBUFF v1.0 Initia	alized			
	Jan 1 01:20:36	daemon	warn	kernel: ^[[0;36;44mIniti	alized fcache state^[[0m			
	Jan 1 01:20:36	daemon	warn	kernel: ^[[0;36;44mBroa 2013 20:54:05 Registere	adcom Packet Flow Cache Ch ed<242>^[[0m	nar Driver v2.2 Aug 26		
	Jan 1 01:20:36	daemon	warn	kernel: Created Proc FS	/procfs/fcache			
	Jan 1 01:20:36	daemon	warn	kernel: ^[[0;36;44mBroa chain^[[0m	adcom Packet Flow Cache re	gistered with netdev		
	Jan 1 01:20:36	daemon	warn	kernel: ^[[0;36;44mBroa [[0m	adcom Packet Flow Cache lea	arning via BLOG enabled. ^		
	Jan 1 01:20:36	daemon	warn	kernel: ^[[0;36;44mCon 2013 20:54:05^[[0m	structed Broadcom Packet F	low Cache v2.2 Aug 26		
	Jan 1 01:20:36	daemon	warn	kernel: chipId 0x631680	D0			

In this section a list of system log entries will be displayed.

Click the **Refresh** button to refresh the information in this table. Click the **Back** button to return to the previous page.

SYSTEM	LOG		
Jan 1			
01:20:36	daemon	warn	kernel: Broadcom Ingress QoS ver 0.1 initialized
Jan 1 01:20:36	daemon	warn	kernel: BPM: tot_mem_size=134217728B (128MB), buf_mem_size=20132655B (19MB), num of buffers=9460, buf size=2128
Jan 1 01:20:36	daemon	warn	kernel: Broadcom BPM Module Char Driver v0.1 Aug 26 2013 20:53:49 Registered<244>^[[0m
Jan 1 01:20:36	daemon	warn	kernel: ^[[0;34m[NTC bpm] bpm_set_status: BPM status : enabled
Jan 1 01:20:36	daemon	warn	kernel: ^[[Om
Jan 1 01:20:36	daemon	warn	kernel: NBUFF v1.0 Initialized
Jan 1 01:20:36	daemon	warn	kernel: ^[[0;36;44mInitialized fcache state^[[0m
Jan 1 01:20:36	daemon	warn	kernel: ^[[0;36;44mBroadcom Packet Flow Cache Char Driver v2.2 Aug 26 2013 20:54:05 Registered<242>^[[0m
Jan 1 01:20:36	daemon	notice	kernel: sd 0:0:0:0: [sda] Attached SCSI removable disk

Refresh Back

After clicking the **Configure System Log** button, the following page is available.

D-Lini	< Contraction of the second se				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
System	SYSTEM LOG C	ONFIGURATION			Helpful Hints
Firmware Update		d, the system will begin to log			This page allows you to enable, configure and view
Access Control	the selected level will be	ected level will be logged. For displayed. If the selected mod	e is 'Remote' or 'Both,' events	will be sent to the	your router system log. The system log will keep a
Diagnostics	specified IP address and will be recorded in the loc	UDP port of the remote syslog al memory.	server. If the selected mode	is 'Local' or 'Both,' events	record of your router activity.
System Log					Depending on the amount of detail you include in the
Logout	Select the desired values	and click 'Apply/Save' to confi	gure the system log options.		log, your router can only keep a limited number of
	CONFIGURATION				log entries due to router memory constraints. If you
		Log: 🖲 Disab	le 🔘 Enable		have an external SYSLOG server, you may choose to configure external logging
		Log Level: Debugging	g -		and all log entries will be sent to your remote
		Display Level: Error	_		server.
		Mode: Local	•		More
		Apply/Save	Cancel		

In this section we can configure the System Log parameters for this router.

Log: Select the log state here. Options to choose from are **Disable** and **Enable**.

- Log Level: Select the log level option here. Options to choose from are Emergency, Alert, Critical, Error, Warning, Notice, Information, and Debugging.
- Display Level: Select the display level option here. Options to choose from are Emergency, Alert, Critical, Error, Warning, Notice, Information, and Debugging.
- Mode: Select the mode option here. Options to choose from are Local, Remote, and Both.

Click the Apply/Save button to accept the changes made.

Click the **Cancel** button to discard the changes made and return to the main page.

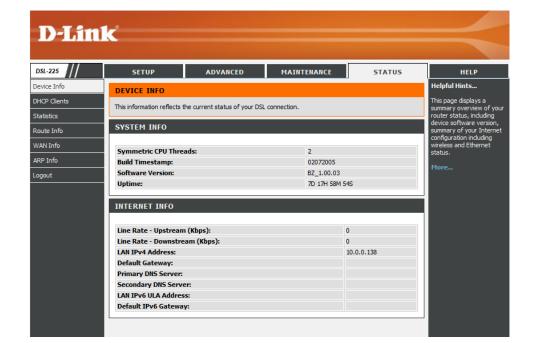
CONFIGURATION	
Log:	Oisable Enable
Log Level:	Debugging 🔻
Display Level:	Error 🔻
Mode:	Local 👻
A	pply/Save Cancel

Status Category

The Status category is designed to assist the user with information display pages, concerning the configuration and behavior of this product.

The following pages can be found in the Status category:

- **Device Info** On this page the user can view information regarding the System and Internet Connectivity.
- **DHCP Clients** On this page the user can view a list of **DHCP clients** that are currently connected to this product.
- **Statistics** On this page the user can view statistical information about the LAN, WAN, xTM, and xDSL interfaces.
- **Route Info** On this page the user can view information about routes used by this product.
- **WAN Info** On this page the user can view information about WAN interfaces used by this product.
- **ARP Info** On this page the user can view information about ARP interfaces used by this product.



Device Info

To access the **Device Info** page, click on the **Status** menu link, at the top, and then click on the **Device Info** menu link, on the left.

On this page the user can view System and Internet information.

D -Lin	1-2				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Device Info	DEVICE INFO				Helpful Hints
DHCP Clients		he current status of your DSL	connection		This page displays a summary overview of your
Statistics		ne carrent status or your bac	connection.		router status, including
Route Info	SYSTEM INFO				device software version, summary of your Internet
WAN Info		_			configuration including wireless and Ethernet
ARP Info	Symmetric CPU Three	ads:	2 02072005		status.
	Build Timestamp: Software Version:				More
Logout	Uptime:		BZ_1.00.03 ZD 17H 58M 5	40	
	optime.		70 171 301 3	13	
	INTERNET INFO				
		~~ ·		_	
	Line Rate - Upstream			0	
	Line Rate - Downstre	am (KDps):		0	
	Default Gateway:			10.0.0.136	
	Primary DNS Server:				
	Secondary DNS Serve	•r:			
	LAN IPv6 ULA Addres				
	Default IPv6 Gatewa	/:			

In this section we can view **System Information**.

SYSTEM INFO

Symmetric CPU Threads:	2
Build Timestamp:	02072005
Software Version:	BZ_1.00.03
Uptime:	7D 17H 58M 54S

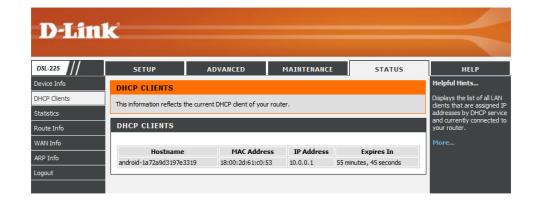
In this section we can view Internet Information.

INTERNET INFO	
Line Rate - Upstream (Kbps):	0
Line Rate - Downstream (Kbps):	0
LAN IPv4 Address:	10.0.0.138
Default Gateway:	
Primary DNS Server:	
Secondary DNS Server:	
LAN IPv6 ULA Address:	
Default IPv6 Gateway:	

DHCP Clients

To access the DHCP Clients page, click on the Status menu link, at the top, and then click on the DHCP Clients menu link, on the left.

On the page the user can view a list of DHCP clients that are currently connected to this product.



In this section we can view a list of **DHCP Clients**.

DHCP CLIENTS			
Hostname	MAC Address	IP Address	Expires In
android-1a72a9d3197e3319	18:00:2d:61:c0:53	10.0.0.1	55 minutes, 45 seconds

Statistics

To access the Statistics page, click on the Status menu link, at the top, and then click on the Statistics menu link, on the left.

On this page the user can view statistical information about various interfaces used by this product.

D-Lin1	e***				
DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Device Info	STATISTICS LA	N			
DHCP Clients Statistics			LAN		
Route Info	STATISTICS WA				
WAN Info	STATISTICS WA	AN SERVICE			
ARP Info			Wan Service		
Logout					
	STATISTICS XT	М			
			xTM		
	STATISTICS XD	SI			
	STATISTICS AD	36			
			xDSL		

D.Tink

LAN

Click the LAN button to access the Local Network and Wireless Statistics page.

STATISTICS LAN		
	LAN	

After clicking the **LAN** button, the following page is available.

DSL-225	SETU	ADVANCED						MAINTE	NANCE	51	ATUS	l	HELP
Device Info	STATIST	ICS											Helpful Hints
HCP Clients	This information reflects the current statistics of your LAN Interface.										This is a summary of the number of packets that		
tatistics											have passed between th		
oute Info	LOCAL N	ETWOR	(& WI	REL	ESS								WAN and the LAN since router was last initialized
VAN Info													More
												•	
RP Info	Interface	Received Total Multicast Unicast Broadcast				Total							
ogout	Interiace	Bytes	Pkts	Fres	Drops				Drops	Bytes	Pkts		
	eth0	15005814			0	0		125446	3990	148657506			
	eth1	0	0	0	0	0	0	0	0	0	0	Ξ	
	eth2	0	0	0	0	0	0	0	0	0	0		
	eth3	0	0	0	0	0	0	0	0	0	0		
	eth4	0	0	0	0	0	0	0	0	6148323	25431		
	wl0	870	11	0	6	0	2	8	1	6186708	25348	-	
	•			III	J						Þ		

In this section we can view Local Network and Wireless Statistics.

Click the **Reset Statistics** button to reset the information in this section.

LOCAL NETWORK & WIRELESS

				Re	ceived					
Interface	Total				Multic	ast	Unicast	Broadcast	Total	
	Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops	Bytes	Pkts
eth0	15005814	139884	0	0	0	10448	125446	3990	148657506	193450
eth1	0	0	0	0	0	0	0	0	0	0
eth2	0	0	0	0	0	0	0	0	0	0
eth3	0	0	0	0	0	0	0	0	0	0
eth4	0	0	0	0	0	0	0	0	6148323	25431
wl0	870	11	0	6	0	2	8	1	6186708	25348

WAN Service

Click the **WAN Service** button to access the **WAN Statistics** page.

STATISTICS -- WAN SERVICE

Wan Service

After clicking the **WAN Service** button, the following page is available.

Statistics Statistics statistics WAN SERVICE nfo Image: Market and the second se	25	SETUP	ADVANCED	MAIN	TENAN	CE	9	TATUS			HELP
Info WAN SERVICE Info Interface Description Received Transmitted atm1 ipoe_8_88_1 0<	Info	STATISTICS									
S WAN SERVICE fo Interface Description Received Transmitted atm1 ipoe_8_88_1 0	lients	Statistics WAN									
Interface Description Received Transmitted Bytes Pkts Errs Drops Bytes Pkts Errs Drops atm1 ipoe_8_88_11 0	s	Statistics WAIN									
Interface Description Received Transmitted Bytes Pkts Errs Drops Bytes Pkts Errs Drops atm1 ipoe_8_88_11 0	nfo	WAN SERVIC	E								
Bytes Pkts Errs Drops Bytes Pkts Errs Drops atm1 ipoe_8_88_1 0	nfo										
Bytes Pkts Errs Drops Bytes Pkts Errs Drops atm1 ipoe_8_98_1 0		Interface	Description		Rec	eived			Trans	mitted	
ppp0.1 pppoe_8_48_1:pppoe_1_48 0				Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops
ptm0.2 ipoe_8_88_3100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		atm1	ipoe_8_88_1	0	0	0	0	0	0	0	0
ppp1.1 pppoe_8_48_1:pppoe_1_48 0 0 0 0 0 0 0 0		ppp0.1	pppoe_8_48_1:pppoe_1_48	0	0	0	0	0	0	0	0
		ptm0.2	ipoe_8_88_3100	0	0	0	0	0	0	0	0
Reset Statistics		ppp1.1	pppoe_8_48_1:pppoe_1_48	0	0	0	0	0	0	0	0
				Reset S	statistics						

In this section we can view WAN Statistics.

хТМ

Click the Reset Statistics button to reset the information in this section.

Interface	Description		Received				Transmitted			
		Bytes	Pkts	Errs	Drops	Bytes	Pkts	Errs	Drops	
atm1	ipoe_8_88_1	0	0	0	0	0	0	0	0	
ppp0.1	pppoe_8_48_1:pppoe_1_48	0	0	0	0	0	0	0	0	
ptm0.2	ipoe_8_88_3100	0	0	0	0	0	0	0	0	
ppp1.1	pppoe_8_48_1:pppoe_1_48	0	0	0	0	0	0	0	0	

Reset Statistics

STATISTICS XTM		
	xTM	

After clicking the **xTM** button, the following page is available.

Click the **xTM** button to access the **xTM Statistics** page.

D-Lin	1¢	
DSL-225	SETUP ADVANCED MAINTENANCE STATUS	HELP
Device Info	STATISTICS	Helpful Hints
DHCP Clients Statistics	Statistics xTM	More
Route Info	INTERFACE STATISTICS	
WAN Info ARP Info Logout	Port In Out In Out In Out In Out In Number In Octess Octess Packets Packets Cells Cells	
	Reset	

D-Link

In this section we can view **xTM Inteface Statistics**.

Click the **Reset** button to reset the information in this section.



<u>xDSL</u>

Click the **xDSL** button to access the **xDSL Statistics** page.

STATISTICS -- XDSL

After clicking the **xDSL** button, the following page is available.

DSL-225	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Device Info	XDSL				Helpful Hints
HCP Clients	This information reflects th	ne current statistics of your x	DSL connection.		
Statistics					More
Route Info	XDSL				
WAN Info					
ARP Info	Mode:				
ogout	Traffic Type:				
-	Status:			Disabled	
	Link Power State:			<l3></l3>	
			Downstream	Upstream	
	Line Coding(Trellis):				
	SNR Margin (0.1 dB):				
	Attenuation (0.1 dB):				
	Output Power (0.1 dBm):				
	Attainable Rate (Kbps):				
	Rate (Kbps):				

In this section we can view **xDSL Statistics**.

Click the **xDSL BER Test** button to initiate the ADSL BER Test. Click the **Reset Statistics** button to reset the information in this section.

Mode:		
Traffic Type:		
Status:		Disabled
Link Power State:		<l3></l3>
	Downstream	Upstream
Line Coding(Trellis):		
SNR Margin (0.1 dB):		
Attenuation (0.1 dB):		
Output Power (0.1 dBm):		
Attainable Rate (Kbps):		
Rate (Kbps):		
Super Frames:		
Super Frame Errors:		
RS Words:		
RS Correctable Errors:		
RS Uncorrectable Errors:		
HEC Errors:		
OCD Errors:		
LCD Errors:		
Total Cells:		
Data Cells:		
Bit Errors:		
Total ES:		
Total SES:		
Total UAS:		

xDSL BER Test

Reset Statistics

After clicking the **xDSL BER Test** button, the following page is available.

In this section we can initiate the ADSL BER Test.

Tested Time: Select the testing time value here. Options to choose from are 1, 5, 10, 20, 60, 120, 180, 240, 300, and 360 seconds. By default this value is 20 seconds.

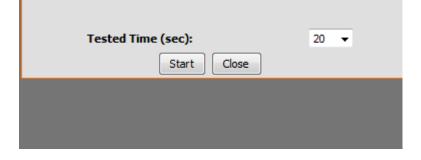
Click the **Start** button to start the ADSL BER Test. Click the **Close** button to close the window.

After clicking the **Start** button to the ADSL BER Test will run the test.

Click the **Stop** button to the stop the test. Click the **Close** button to close the window.

ADSL BER TEST - START

The ADSL Bit Error Rate (BER) test determines the quality of the ADSL connection. The test is done by transferring idle cells containing a known pattern and comparing the received data with this known pattern to check for any errors.



ADSL BER TEST - RUNNING
The ADSL BER test is in progress. The connection speed is 0 Kbps. The test will un for seconds.
Click "Stop" to terminate the test.
Stop Close

After the completion of the test, the **ADSL BER Test Result** will be displayed.

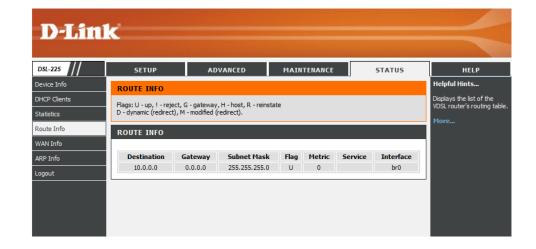
Click the **Close** button to close the window.

ADSL BER TEST - RESULT The ADSL BER test completed successfully. Test Time (sec): Total Transferred Bits: Total Error Bits: Error Ratio: Close

Route Info

To access the **Route Info** page, click on the **Status** menu link, at the top, and then click on the **Route Info** menu link, on the left.

On this page the user can view information about routes used by this product.



In this section we can view Route Information.

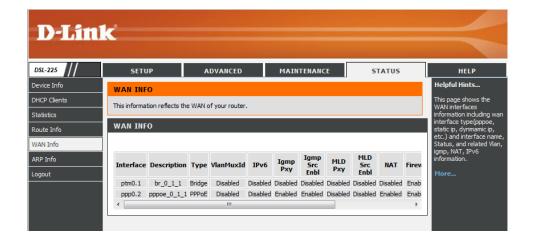
The information available in the Flag field can be translated to the following:U means Up. ! means Reject. G means Gateway. H means Host. R means Reinstate.D means Dynamic or Redirect. M means Modified or also Redirect.

ROUTE INFO						
Destination	Gateway	Subnet Mask	Flag	Metric	Service	Interface
10.0.0.0	0.0.0	255.255.255.0	U	0		br0
192.168.168.0	0.0.0	255.255.255.0	U	0		br 1

WAN Info

To access the WAN Info page, click on the Status menu link, at the top, and then click on the WAN Info menu link, on the left.

On this page the user can view information about WAN interfaces used by this product.



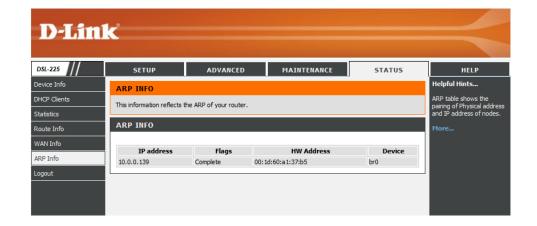
In this section we can view WAN Information.

WAN INF	0									
Interface	Description	Туре	VlanMuxId	IPv6	Igmp Pxy	Igmp Src Enbl	MLD Pxy	MLD Src Enbl	NAT	Firew
ptm0.1	br_0_1_1	Bridge	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Enab
ppp0.2	pppoe_0_1_1	PPPoE	Disabled	Disabled	Enabled	Enabled	Disabled	Disabled	Enabled	Enab
•										•

ARP Info

To access the **ARP Info** page, click on the **Status** menu link, at the top, and then click on the **ARP Info** menu link, on the left.

On this page the user can view information about ARP interfaces used by this product.



In this section we can view **ARP Information**.

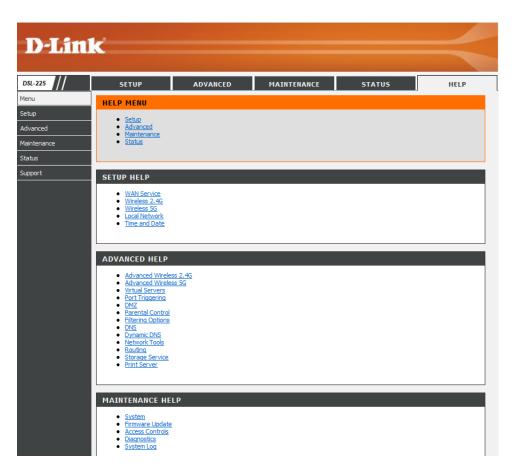
ARP INFO			
IP address	Flags	HW Address	Device
10.0.0.139	Complete	00:1d:60:a1:37:b5	br0

Help Category

The Help category is designed to assist the user with helpful information about every topic found on the web user interface of this product.

The following pages can be found in the **Help** category:

- **Menu** On this page the user can navigate easily to any page throughout the menu structure to access help information.
- **Setup** On this page the user can read more about topics discussed in the Setup category.
- Advanced On this page the user can read more about topics discussed in the Advanced category.
- **Maintenance** On this page the user can read more about topics discussed in the Maintenance category.
- **Status** On this page the user can read more about topics discussed in the Status category.



Knowledge Base

Networking Basics

Check your IP address

After you installed your new network or wireless adapter, by default, the TCP/IP settings should be set to obtain an IP address automatically from a DHCP server. By default the DHCP server option on your router is enabled.

To verify your IP address, please follow the steps below:

- Click on the Windows **Start** button and open the **Run** application.
- In the **Open** box type *cmd* and click **OK**.
- At the command prompt, type in the command *ipconfig* and press Enter. This will display the **IP address**, **Subnet Mask**, and the **Default Gateway** of your adapter. If the address is 0.0.0.0, it means that your network adapter did not receive an IP address from the DHCP server. Check your adapter installation, security settings, and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.

Administrator: C:\Windows\system32\cmd.exe	
Copyright (c) 2009 Microsoft Corporation. All rights reserved.	A
C:\Users\lost & found>ipconfig	
Windows IP Configuration	
Ethernet adapter Local Area Connection:	
Connection-specific DNS Suffix . : IPv4 Address : 10.0.0.139 Subnet Mask : 255.255.255.0 Default Gateway : 10.0.0.138	
Tunnel adapter isatap.{5964CF7F-0A43-47BD-A2C7-A1312215435E}:	
Media State : Media disconnected Connection-specific DNS Suffix . :	
Tunnel adapter Teredo Tunneling Pseudo-Interface:	
Media State Media disconnected Connection-specific DNS Suffix . :	
C:\Users\lost & found>_	-

Statically Assign an IP address

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

- Click on the Windows Start button and navigate to the Control Panel > Network and Sharing Center and click on the Change Adapter Settings option on the left panel.
- Right-click on the Local Area Connection, which represents your network adapter, and select Properties.
- Select the Internet Protocol Version 4 (TCP/IPv4) option and click on the Properties button.
- Select Use the following IP address and enter an IP address that is on the same subnet as your router. For example: If your router is running on the IP address of 10.0.0.138, use any IP address from 10.0.0.1 to 10.0.0.254, except 10.0.0.138. Use the Subnet Mask of 255.255.255.0. Set Default Gateway the same as the LAN IP address of your router. Set Preferred DNS server IP address the same as the LAN IP address of your router. The Secondary DNS is not needed at this stage.
- Click the **OK** button twice to return to the **Network Connections** window.

ternet Protocol Version 4 (TCP/IPv4)	Properties 💦 💦 🗾
General	
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.	
Obtain an IP address automatically	
Ouse the following IP address:	
IP address:	10 . 0 . 0 . 139
Subnet mask:	255.255.255.0
Default gateway:	10 . 0 . 0 .138
Obtain DNS server address automatically	
O Use the following DNS server addresses:	
Preferred DNS server:	
Alternate DNS server:	· · ·
Validate settings upon exit	
	OK Cancel

Wireless Basics

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 wireless family of products will allow you to securely access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

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

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

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

What is Wireless?

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

How does Wireless work?

Wireless works similar to how cordless phone work, through radio signals to transmit data from one point A to point B. But wireless technology has restrictions as to how you can access the network. You must be within the wireless network range area to be able to connect your computer. There are two different types of wireless networks Wireless Local Area Network (WLAN), and Wireless Personal Area Network (WPAN).

Wireless Local Area Network (WLAN)

In a wireless local area network, a device called an Access Point (AP) connects computers to the network. The access point has a small antenna attached to it, which allows it to transmit data back and forth over radio signals. With an indoor access point as seen in the picture, the signal can travel up to 300 feet. With an outdoor access point the signal can reach out up to 30 miles to serve places like manufacturing plants, industrial locations, college and high school campuses, airports, golf courses, and many other outdoor venues.

Wireless Personal Area Network (WPAN)

Bluetooth is the industry standard wireless technology used for WPAN. Bluetooth devices in WPAN operate in a range up to 30 feet away. Compared to WLAN the speed and wireless operation range are both less than WLAN, but in return it doesn't use nearly as much power which makes it ideal for personal devices, such as mobile phones, PDAs, headphones, laptops, speakers, and other devices that operate on batteries.

Who uses wireless?

Wireless technology has become so popular in recent years that almost everyone is using it, whether it's for home, office, business, we have a wireless solution for it.

Home

- Gives everyone at home broadband access.
- Surf the web, check email, instant message, etc...
- Gets rid of the cables around the house.
- Simple and easy to use.

Small Office and Home Office

- Stay on top of everything at home as you would at office.
- Remotely access your office network from home.
- Share Internet connection and printer with multiple computers.
- No need to dedicate office space.

Where is wireless used?

Wireless technology is expanding everywhere not just at home or office. People like the freedom of mobility and it's becoming so popular that more and more public facilities now provide wireless access to attract people. The wireless connection in public places is usually called "hotspots".

Using a Wireless Cardbus Adapter with your laptop, you can access the hotspot to connect to Internet from remote locations like: Airports, Hotels, Coffee Shops, Libraries, Restaurants, and Convention Centers.

Wireless network is easy to setup, but if you're installing it for the first time it could be quite a task not knowing where to start. That's why we've put together a few setup steps and tips to help you through the process of setting up a wireless network.

<u>Tips</u>

Here are a few things to keep in mind, when you install a wireless network.

Centralize your router or Access Point

Make sure you place the router/access point in a centralized location within your network for the best performance. Try to place the router/access point as high as possible in the room, so the signal gets dispersed throughout your home. If you have a two-story home, you may need a repeater to boost the signal to extend the range.

Eliminate Interference

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the router/access point. This would significantly reduce any interference that the appliances might cause since they operate on same frequency.

Security

Don't let your next-door neighbors or intruders connect to your wireless network. Secure your wireless network by turning on the WPA or WEP security feature on the router. Refer to product manual for detail information on how to set it up.

Wireless Modes

There are basically two modes of networking:

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

An Infrastructure network contains an Access Point or wireless router. All the wireless devices, or clients, will connect to the wireless router or access point. An Ad-Hoc network contains only clients, such as laptops with wireless Cardbus adapters. All the adapters must be in Ad-Hoc mode to communicate.

Wireless Security

This section will show you the different levels of security you can use to protect your data from intruders. The router offers wireless security options like WPA/WPA2 PSK/EAP.

What is WPA?

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

The 2 major improvements over WEP:

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

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

WPA/WPA2 incorporates user authentication through the Extensible Authentication Protocol (EAP). EAP is built on a more secure public key encryption system to ensure that only authorized network users can access the network.

Frequently Asked Questions

What can I do if my Router is not working correctly?

There are a few quick steps you can take to try and resolve any issues:

- Check that all the cables are firmly connected at both ends.
- Check that all the corresponding LED indicators are on, especially the Power, DSL, and LAN LED indicators.
- Ensure that the settings on the WAN Service page in the Web User Interface are the same as the settings that have been provided to you by your ISP.

Why can't I get an Internet connection?

For VDSL ISP users, please contact your ISP to make sure the service has been enabled/connected by your ISP and that your ISP username and password are correct.

What can I do if I forgot my web UI login password?

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

To reset the router, locate the reset button (hole) on the rear panel of the unit. With the router powered on, use a paperclip to hold the button down for 10-15 seconds. Release the button and the router will go through its reboot process. Wait about 30 seconds to access the router. The default IP address is **10.0.0.138**. When logging in, the username is '**Admin**' and the password is '**Admin**'.

Technical Specifications

Hardware Specifications

- LAN Interface: Four 10/100Mbps LAN ports
- DSL Interface: One RJ11 Internet port
- Wireless Interface (2.4Ghz): IEEE 802.11b/g/n
- USB Interface: Complaint USB 2.0

Operating Voltage

- Input: 100~240V (±10%), 50~60Hz
- Output: 12VDC, 1A EU

Temperature

- Operating: 32°F~104°F (0°C~40°C)
- Non-Operating: $-4^{\circ}F \sim 149^{\circ}F$ ($-20^{\circ}C \sim 65^{\circ}C$)

Humidity

- Operating: 10%~90% non-condensing
- Non-Operating: 5%~95% non-condensing

ADSL2 Standards

• ITU-T G.992.3 (G.dmt.bis) Annex A/J/K/L/M)

VDSL2 Standards

- ITU G.992.3 (G.dmt.bis) Annex A/J/K/L/M
- Annex A, B over POTS
- G.998.4 (G.INP)
- G.993.5 (G.Vector)
- ITU-T G.992.5 Annex A/L/M

Wireless Security

• 64/128bit WEP, WPA/WPA2-Personal, WPA/WPA2-Mixed Mode, WPS (PIN & PBC)

VDSL2+ Standards

• ITU G.992.5 Annex A/L/M

VDSL Data Transfer Rate

• VDSL2 up to 100M/50M

Wireless Frequency Range

- IEEE 802.11b: 2400 MHz~2497 MHz
- IEEE 802.11g: 2400 MHz~2497 MHz
- IEEE 802.11n: 2400 MHz~2497 MHz

Wireless Bandwidth Rate

- IEEE 802.11b: 11, 5.5, 2, and 1 Mbps
- IEEE 802.11g: 54, 48, 36, 24, 18, 12, 9, and 6 Mbps
- IEEE 802.11n: 6.5 to 300 Mbps

Wireless Channel Numbers

- IEEE 802.11b: Channels 1~11 (USA), 1~13 (Europe), 1~14 (Japan)
- IEEE 802.11g: Channels 1~11 (USA), 1~13 (Europe), 1~14 (Japan)
- IEEE 802.11n: Channels 1~11 (USA), 1~13 (Europe), 1~14 (Japan)

Antenna Type

• 2X2 PCB Antenna

Certifications

• CE

Dimensions & Weight

- 195 x 123 x 34 mm (7.68 x 4.84 x 1.34 in) (Length x Width x Height)
- 314.97 grams (0.694 lbs)