

DSL-2730E

User Manual

FCC Statement

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

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

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and consider removing the no-collocation statement.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution!

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC - PART 68

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US:3P7DL01B2750EV1. If requested, this number must be provided to the telephone company.

This equipment uses the following USOC jacks: RJ-45&RJ-11

REN (RINGER EQUIVALENT NUMBERS) STATEMENT Notice: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

ATTACHMENT LIMITATIONS STATEMENT

Notice: This equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). This is confirmed by marking the equipment with the Industry Canada certification number. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together.

This precaution may be particularly important in rural areas. Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

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1 Introduction

The DSL-2730E supports multiple line modes. With four 10/100 base-T Ethernet interfaces at the user end, the device provides high-speed ADSL broadband connection to the Internet or Intranet for high-end users like net bars and office users. It provides high performance access to the Internet with a downstream rate of 24 Mbps and an upstream rate of 1 Mbps. It supports IPV6.

The device supports WLAN access, such as WLAN AP or WLAN device, to the Internet. It complies with specifications of IEEE 802.11, 802.11b/g/n, WEP, WPA, and WPA2 security. The WLAN of the device supports 1T1R.

1.1 Packing List

- 1 x DSL-2730E
- 1 x external splitter
- 1 x power adapter
- 1 x telephone cables (RJ-11)
- 1 x Ethernet cable (RJ-45)
- 1 x QIG

1.2 Safety Precautions

Take the following instructions to prevent the device from risks and damage caused by fire or electric power:

- Use the type of power marked in the volume label.
- Use the power adapter in the product package.
- Pay attention to the power load of the outlet or prolonged lines. An overburden power outlet or damaged lines or plugs may cause electric shock or fire accidents. Check the power cords regularly. If you find any damage, replace it at once.
- Proper space left for heat dissipation is necessary to avoid damage caused by overheating to the device. The long and thin holes on the device are designed for heat dissipation to ensure that the device works normally. Do not cover these heat dissipation holes.

- Do not put this device close to a heat source or under a high temperature occurs. Keep the device away from direct sunshine.
- Do not put this device close to an overdamp or watery place. Do not spill fluid on this device.
- Do not connect this device to a PC or electronic product unless instructed by our customer engineer or your broadband provider. Wrong connection may cause power or fire risk.
- Do not place this device on an unstable surface or support.

1.3 LEDs and Interfaces

Note:



The figures in this document are for reference only.





Front Panel



Figure 1 Front panel

The following table describes the LEDs of the device.

LED	Color	Status	Description
 Power	Green	Off	The power is off.
		On	The power is on and the initialization is normal.
	Red	On	The device is initiating.
		Blinks	The firmware is upgrading.
 LAN 1/2/3/4	Green	Off	No LAN link.
		Blinks	Data is being transmitted through the LAN interface.
		On	The connection of LAN interface is normal.

LED	Color	Status	Description
 WLAN	Green	Blinks	Data is transmitted through the WLAN interface.
		On	The connection of WLAN interface is normal.
		Off	The WLAN connection is not established.
 WPS	Blue	Blinks	WPS negotiation is enabled, waiting for the clients.
		Off	WPS negotiation is not enabled on the device.
 DSL	Green	Off	Initial self-test is failed.
		Blinks	The device is detecting itself.
		On	Initial self-test of the unit has passed and is ready.
 Internet	Green	Off	The device is under the Bridge mode, DSL connection is not present, or the power is off.
		Blinks	Internet data is being transmitted in the routing mode.
		On	IP is connected.
	Red	On	The device is attempted to become IP connected, but failed.

Rear Panel

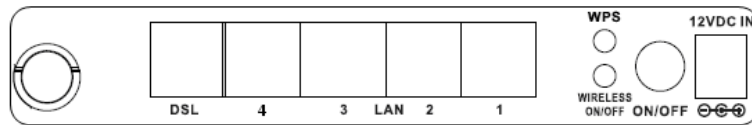



Figure 2 Rear panel

The following table describes the interface of the device.

Interface/Button	Description
	Antenna position
DSL	RJ-11 interface that connects to the telephone set through the telephone cable.
LAN4/3/2/1	Ethernet RJ-45 interfaces that connect to the Ethernet interfaces of computers or Ethernet devices.
WPS	Press the button for 1 second to enable WPS function.
WIRELESS ON/OFF	Press the button silently to enable WLAN function.
ON/OFF	Power on or off the device.
12V DCIN	Interface that connects to the power adapter. The power adapter output is: 12V DC, 500mA.
Reset (on the bottom case)	Reset to the factory defaults. To restore factory defaults, keep the device powered on and push a paper clip into the hole. Press down the button for 1 second and then release.

1.4 System Requirements

- A 10 baseT/100BaseT Ethernet card installed on your PC
- A hub or switch (attached to several PCs through one of Ethernet interfaces on the device)
- Operating system: Windows Vista, Windows 7, Windows 98SE, Windows 2000, Windows ME or Windows XP
- Internet Explorer V5.0 or higher, Netscape V4.0 or higher, or Firefox 1.5 or higher

1.5 Features

- Various line modes
- External PPPoE dial-up access
- Internal PPPoE and PPPoA dial-up access
- Leased line mode
- 1483B, 1483R, and MER access

- Multiple PVCs (eight at most) and these PVCs can be isolated from each other
- A single PVC with multiple sessions
- Multiple PVCs with multiple sessions
- Binding of ports with PVCs
- 802.1Q and 802.1P protocol
- DHCP server
- NAT and NAPT
- Static route
- Firmware upgrade: Web, TFTP, FTP
- Reset to the factory defaults
- DNS relay
- Virtual server
- DMZ
- Two-level passwords and user names
- Web user interface
- Telnet CLI
- System status display
- PPP session PAP and CHAP
- IP filter
- IP QoS
- Remote access control
- Line connection status test
- Remote management (telnet and HTTP)
- Backup and restoration of configuration file
- Ethernet interface supports crossover detection, auto-correction and polarity correction
- UPnP
- IPV6

2 Hardware Installation

Step 1 Connect the **DSL** port of the device and the **Modem** port of the splitter with a telephone cable. Connect the phone to the **Phone** port of the splitter through a telephone cable. Connect the incoming line to the **Line** port of the splitter.

The splitter has three ports:

- Line: Connect to a wall phone port (RJ-11 jack).
- Modem: Connect to the DSL port of the device.
- Phone: Connect to a telephone set.

Step 2 Connect a **LAN** port of the device to the network card of the PC through an Ethernet cable (MDI/MDIX).

Note:

Use twisted-pair cables to connect the device to a Hub or switch.

Step 3 Plug one end of the power adapter to the wall outlet and the other end to the **Power** port of the device.

Figure 3 displays the application diagram for the connection of the device, PC, splitter and telephone sets, when no telephone set is placed before the splitter.

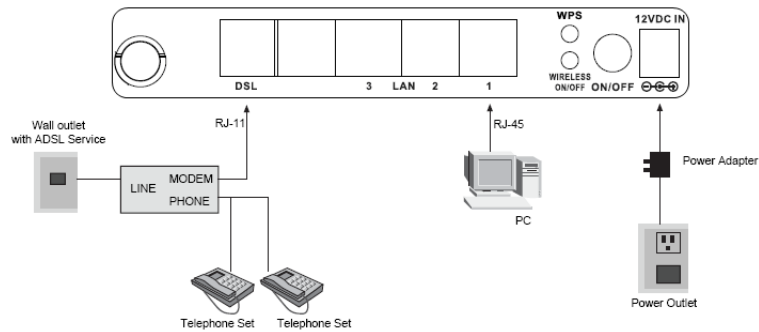


Figure 3 Connection diagram

3 Web Configuration

This chapter describes how to configure the device by using the Web-based configuration utility.

3.1 Accessing the Device

The following is the detailed description of accessing the device for the first time.

- Step 1** Open the Internet Explorer (IE) browser and enter <http://192.168.1.1>.
- Step 2** The **Login** page shown in the following figure appears. Enter the user name and password. The user name and password of the super user are **admin** and **admin**.



If you log in as the super user successfully, the page shown in the following figure appears. This page displays a summary overview of the router, including the system information, DSL information, LAN Configuration, DNS information and WAN Configuration.

Product Page: DSL-2730E Firmware Version: SEA_1.00

D-Link

DSL-2730E // SETUP ADVANCED MAINTENANCE STATUS HELP

ADSL ROUTER STATUS

This page shows the current status and some basic settings of the device.

SYSTEM

Alias Name	RTL867x ADSL Modem
Firmware Version	SEA_1.00
Uptime	0 1:32:58
Date/Time	Thu Jan 1 1:32:58 1970
Built Date	Jan 17 2013 15:11:22
Serial Number	001111111111

DSL

Operational Status	--
Upstream Speed	--
Downstream Speed	--

LAN CONFIGURATION

IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enable
MAC Address	00:11:11:11:11:11

WIRELESS INFO

Status:	Enabled
MAC Address:	00:05:1D:03:04:05
Network Name (SSID):	WLAN_0j0
Current Channel:	11
Encryption:	Disabled

DNS STATUS

DNS Mode	Auto
DNS Servers	
IPv6 DNS Mode	Auto
IPv6 DNS Servers	

WAN CONFIGURATION

Interface	VPI/VCI	Encap	Droute	Protoc ol	IP Address	Gateway	Status
pppoe1	0/100	LLC	On	PPPoE	0.0.0.0	0.0.0.0	down

WAN IPV6 CONFIGURATION

Interface	VPI/VCI	Encap	Protocol	IPv6 Address	Gateway	Droute	Status
pppoe1	0/100	LLC	PPPoE				down

Refresh

BROADBAND

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3.2 Setup

In the main interface, click **Setup** tab to enter the **Setup** menu as shown in the following figure. The submenus are **Wizard**, **Local Network**, **Internet Setup**, **Wireless Setup** and **Time and Date**.

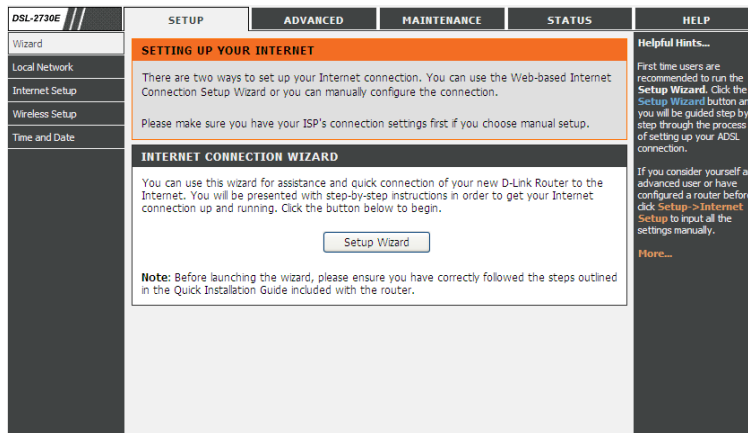
3.2.1 Wizard

Wizard enables fast and accurate configuration of Internet connection and other important parameters. The following sections describe configuration parameters.

When subscribing to a broadband service, you should be aware of the method, by which you are connected to the Internet. Your physical WAN device can be Ethernet, DSL, or both.

Technical information about the properties of your Internet connection is provided by your Internet service provider (ISP). For example, your ISP should inform you that you are connected to the Internet using a static or dynamic IP address, and the protocol you use to communicate over the Internet, i.g. PPPoA or PPPoE.

Choose **Setup > Wizard**. The page shown in the following figure appears.



Click **Setup Wizard**. The page shown in the following figure appears.

WELCOME TO D-LINK SETUP WIZARD

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

- **Step 1:** Change Device Login Password
- **Step 2:** Set Time and Date
- **Step 3:** Setup Internet Connection
- **Step 4:** Configure Wireless Network
- **Step 5:** Completed and Apply

There are 5 steps to configure the device. Click **Next** to continue.

Step 1 Change the device login password.

STEP 1: CHANGE DEVICE LOGIN PASSWORD → 2 → 3 → 4 → 5

To help secure your network, D-Link recommends that you should choose a new password. If you do not wish to choose a new password now, just click "Skip" to continue. Click "Next" to proceed to next step.

Current Password :

New Password :

Confirm Password :

Step 2 Set the time and date.

1 → STEP 2: SET TIME AND DATE → 3 → 4 → 5

The Time Configuration option allows you to configure, update, and maintain the correct time on the internal system clock. From this section you can set the time zone that you are in and set the NTP (Network Time Protocol) Server. Daylight Saving can also be configured to automatically adjust the time when needed.

SYSTEM TIME

System time: Thu Jan 1 1:49:55 1970

Time Zone: (GMT) Gambia, Liberia, Morocco, England

DayLight: LocalTIME

Mode: Copy Computer time

Step 3 Configure the Internet connection.

1 → 2 → **STEP 3: SETUP INTERNET CONNECTION** → 4 → 5

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Others".

Country :

Internet Service Provider :

Protocol :

Connection Type :

VPI : (0-255)

VCI : (32-65535)

If the internet service you subscribed is **PPPoE** or **PPPoA**, you can choose the **Protocol** to be **PPPoE** or **PPPoA**. Set the VPI and VCI. Enter the user name and password provided by your ISP.

1 → 2 → **STEP 3: SETUP INTERNET CONNECTION** → 4 → 5

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Others".

Country :

Internet Service Provider :

Protocol :

Connection Type :

VPI : (0-255)

VCI : (32-65535)

PPPoE

Please enter your Username and Password as provided by your ISP (Internet Service Provider). Please enter the information exactly as shown taking note of upper and lower cases. Click "Next" to continue.

Username :

Password :

Confirm Password :

If the internet service you subscribed is **Dynamic IP**, you can choose **Protocol** to be **Dynamic IP**. The page shown in the following figure appears.

1 → 2 → **STEP 3: SETUP INTERNET CONNECTION** → 4 → 5

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Others".

Country : Australia

Internet Service Provider : AAPT

Protocol : Dynamic IP

Connection Type : LLC

VPI : 8 (0-255)

VCI : 35 (32-65535)

Back Next Cancel

If the Protocol is **Static IP**, you can choose **Protocol** to be **Static IP**. The page shown in the following figure appears. Enter the **IP Address**, **Subnet Mask**, **Default Gateway** and **Primary DNS Server** provided by your ISP.

1 → 2 → **STEP 3: SETUP INTERNET CONNECTION** → 4 → 5

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Others".

Country :

Internet Service Provider :

Protocol :

Connection Type :

VPI : (0-255)

VCI : (32-65535)

STATIC IP

You have selected Static IP Internet connection. Please enter the appropriate information below as provided by your ISP.

The Auto PVC Scan feature will not work in all cases so please enter the VPI/VCI numbers if provided by the ISP.

Click Next to continue.

IP Address :

Subnet Mask :

Default Gateway :

Primary DNS Server :

If the Protocol is **Bridge**, the page shown in the following figure appears.

1 → 2 → **STEP 3: SETUP INTERNET CONNECTION** → 4 → 5

Please select your Country and ISP (Internet Service Provider) from the list below. If your Country or ISP is not in the list, please select "Others".

Country :

Internet Service Provider :

Protocol :

Connection Type :

VPI : (0-255)

VCI : (32-65535)

Step 4 Configure the wireless network.

1 → 2 → 3 → **STEP 4: CONFIGURE WIRELESS NETWORK** → 5

Your wireless network is enabled by default. You can simply uncheck it to disable it and click "Next" to skip configuration of wireless network.

Enable Your Wireless Network

Your wireless network needs a name so it can be easily recognized by wireless clients. For security purposes, it is highly recommended to change the pre-configured network name.

Wireless Network Name (SSID) : (1~32 characters)

Select "Visible" to publish your wireless network and SSID can be found by wireless clients, or select "Invisible" to hide your wireless network so that users need to manually enter SSID in order to connect to your wireless network.

Visibility Status : Visible Invisible

In order to protect your network from hackers and unauthorized users, it is highly recommended you choose one of the following wireless network security settings.

Security Level :

None WEP WPA-PSK WPA2-PSK

Security Mode: WPA-PSK
Select this option if your wireless adapters support WPA-PSK.

Now, please enter your wireless security key.

WPA2 Pre-Shared Key :
(8-63 characters, such as a~z, A~Z, or 0~9, i.e. '%Fortress123&')

Note: You will need to enter the same key here into your wireless clients in order to enable proper wireless connection.

Step 5 Complete and apply the settings. Click **Apply** to save the settings.

1 → 2 → 3 → 4 → STEP 5: COMPLETED AND APPLY

Setup complete. Click "Back" to review or modify settings. Click "Apply" to apply current settings.

If your Internet connection does not work after apply, you can try the Setup Wizard again with alternative settings or use Manual Setup instead if you have your Internet connection details as provided by your ISP.

SETUP SUMMARY

Below is a detailed summary of your settings. Please print this page out, or write the information on a piece of paper, so you can configure the correct settings on your wireless client adapters.

Time Settings :	Copy from Computer
VPI / VCI :	8/35
Protocol :	Bridge
Connection Type :	LLC
Wireless Network :	Enabled
Wireless Network Name (SSID) :	WLAN_0j0
Visibility Status :	Visible
Encryption :	WPA2-PSK/AES (also known as WPA2 Personal)
Pre-Shared Key :	%Fortress123

**Note:**

In each step of the Wizard page, you can click **Back** to review or modify the previous settings. Click **Cancel** to exit the wizard page.

3.2.2 Local Network

You can configure the LAN IP address according to the actual application. The preset IP address is 192.168.1.1. You can use the default settings and DHCP service to manage the IP settings for the private network. The IP address of the device is the base address used for DHCP. To use the device for DHCP on your LAN, the IP address pool used for DHCP must be compatible with the IP address of the device. The IP address available in the DHCP IP address pool changes automatically if you change the IP address of the device.

You can also enable the secondary LAN IP address. The two LAN IP addresses must be in different networks.

3.2.2.1 LAN Interface

Choose **Setup > Local Network > LAN Interface**. The **LAN Setting** page shown in the following figure appears. You may configure the LAN interface, for example, the IP address and subnet mask.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP														
Wizard	LAN SETTING				Helpful Hints... The IP address of your router is the same IP address you will use to access the web management interface of your router. More...														
Local Network	This page is used to configure the LAN interface of your ADSL Router. Here you may change the setting for IP address, subnet mask, etc..																		
Internet Setup	LAN INTERFACE SETTINGS																		
Wireless Setup	Interface Name: e1 IP Address: <input type="text" value="192.168.1.1"/> Subnet Mask: <input type="text" value="255.255.255.0"/> <input type="checkbox"/> Secondary IP IGMP Snooping: <input checked="" type="radio"/> Disable <input type="radio"/> Enable																		
Time and Date	<input type="button" value="Apply Changes"/>																		
	LAN LINK MODE SETTINGS																		
	LAN Port: <input type="text" value="1"/> Link Speed/Duplex Mode: <input type="text" value="100M Full Duplex"/> <input type="button" value="Modify"/>																		
	ETHERNET Status Table: <table border="1"> <thead> <tr> <th>Select</th> <th>Port</th> <th>Link Mode</th> </tr> </thead> <tbody> <tr> <td><input type="radio"/></td> <td>LAN1</td> <td>AUTO Negotiation</td> </tr> <tr> <td><input type="radio"/></td> <td>LAN2</td> <td>AUTO Negotiation</td> </tr> <tr> <td><input type="radio"/></td> <td>LAN3</td> <td>AUTO Negotiation</td> </tr> <tr> <td><input type="radio"/></td> <td>LAN4</td> <td>AUTO Negotiation</td> </tr> </tbody> </table>				Select	Port	Link Mode	<input type="radio"/>	LAN1	AUTO Negotiation	<input type="radio"/>	LAN2	AUTO Negotiation	<input type="radio"/>	LAN3	AUTO Negotiation	<input type="radio"/>	LAN4	AUTO Negotiation
Select	Port	Link Mode																	
<input type="radio"/>	LAN1	AUTO Negotiation																	
<input type="radio"/>	LAN2	AUTO Negotiation																	
<input type="radio"/>	LAN3	AUTO Negotiation																	
<input type="radio"/>	LAN4	AUTO Negotiation																	
	MAC ADDRESS CONTROL SETTINGS																		
	MAC Address Control: <input type="checkbox"/> LAN1 <input type="checkbox"/> LAN2 <input type="checkbox"/> LAN3 <input type="checkbox"/> LAN4 <input type="checkbox"/> WLAN <input type="button" value="Apply Changes"/>																		
	New MAC Address: <input type="text"/> <input type="button" value="Add"/>																		
	CURRENT ALLOWED MAC ADDRESS TABLE																		
	<table border="1"> <thead> <tr> <th>MAC Addr</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>				MAC Addr	Action													
MAC Addr	Action																		

The following table describes the parameters in this page.

Field	Description
IP Address	Enter the IP address of LAN interface. It is recommended to use an address from a block reserved for private use. This address block is 192.168.1.1- 192.168.1.254.
Subnet Mask	Enter the subnet mask of LAN interface. The range of subnet mask is from 255.255.0.0-255.255.255.254.
Secondary IP	Select it to enable the secondary LAN IP address. The two LAN IP addresses must be in different subnets.
LAN Port	You may choose the LAN interface you want to configure.
Link Speed/Duplex Mode	You may select one mode from the drop-downlist: 100Mbps/FullDuplex, 100Mbps/Half Duplex, 10Mbps/FullDuplex, 10Mbps/Half Duplex and Auto Negotiation.
MAC Address Control	It is the access control based on MAC address. Select it, and the host whose MAC address is listed in the Current Allowed MAC Address Table can access the modem.
Add	Enter MAC address, and then click this button to add a new MAC address.

3.2.2.2 LAN IPv6 Interface

Choose **Setup > Local Network > LAN IPv6 Interface**. The **LAN IPv6 Setting** page shown in the following figure appears. You may set LAN RA server work mode and LAN DHCPv6 server work mode.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wizard	LAN IPV6 SETTING				
Local Network	This page is used to configure ipv6 lan setting. User can set lan RA server work mode and lan DHCPv6 server work mode.				
Internet Setup	LAN GLOBAL ADDRESS SETTING				
Wireless Setup	Global Address: <input type="text"/> / <input type="text"/>				
Time and Date	<input type="button" value="Apply Changes"/>				
	RA SETTING				
	Enable: <input checked="" type="checkbox"/>				
	M Flag: <input type="checkbox"/>				
	O Flag: <input type="checkbox"/>				
	Max Interval: <input type="text" value="600"/> Secs				
	Min Interval: <input type="text" value="200"/> Secs				
	Prefix Mode: <input type="text" value="Auto"/>				
	<input type="button" value="Apply Changes"/>				
	DHCPV6 SETTING				
	DHCPv6 Mode: <input type="text" value="None"/>				
	<input type="button" value="Apply Changes"/>				

The following table describes the parameters of this page.

Field	Description
Global Address	Specify the LAN global ipv6 address. It can be assigned by ISP.
Enable	Enable or disable the Router Advertisement feature.
M Flag	Enable or disable the "Managed address configuration" flag in RA packet.
O Flag	Enable or disable the "Other configuration" flag in RA packet.
Prefix Mode	Specify the RA feature prefix mode: "Auto": the RA prefix will use WAN dhcp-pd prefix; "Manual": user will specify the prefix address, length, preferred time and valid time.
DHCPv6 Mode	Specify the dhcpv6 server mode: "None": close dhcpv6 server; "Manual": dhcpv6 server is opened and user

Field	Description
	<p>specifies the dhcpv6 server address pool and other parameters.</p> <p>“Auto”: dhcpv6 server is opened and it use WAN dhcp-pd prefix to generate address pool.</p>

3.2.2.3 DHCP Server

Choose **Setup > Local Network > DHCP Server**. The **DHCP Server Setting** page shown in the following figure appears. You may configure the DHCP mode.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wizard Local Network Internet Setup Wireless Setup Time and Date	<h4 style="background-color: #f4a460; padding: 2px;">DHCP SERVER SETTING</h4> <p>This page can be used to config the DHCP mode:None,DHCP Relay or DHCP Server. (1)Enable the DHCP Server if you are using this device as a DHCP server. This page lists the IP address pools available to hosts on your LAN. The device distributes numbers in the pool to hosts on your network as they request Internet access. (2)Enable the DHCP Relay if you are using the other DHCP server to assign IP address to your hosts on the LAN. You can set the DHCP server ip address. (3)If you choose "None", then the modem will do nothing when the hosts request a IP address.</p> <h4 style="background-color: #333; color: white; padding: 2px;">DHCP SERVER SETTINGS</h4> <p>LAN IP: 192.168.1.1/255.255.255.0</p> <p>DHCP Mode: DHCP Server</p> <p>Interface: <input checked="" type="checkbox"/> LAN1 <input checked="" type="checkbox"/> LAN2 <input checked="" type="checkbox"/> LAN3 <input checked="" type="checkbox"/> LAN4 <input checked="" type="checkbox"/> WLAN <input checked="" type="checkbox"/> VAP0 <input checked="" type="checkbox"/> VAP1 <input checked="" type="checkbox"/> VAP2 <input checked="" type="checkbox"/> VAP3</p> <p>IP Pool Range: 192.168.1.2 - 192.168.1.254 Show Client</p> <p>Max Lease Time: 1440 minutes</p> <p>Domain Name: domain.name</p> <p>DNS Servers: 192.168.1.1 </p> <p style="text-align: center;"> Apply Changes Undo </p> <p style="text-align: center;">Set VendorClass IP Range</p>				Helpful Hints... If you already have a DHCP server on your network or are using static IP addresses on all the devices on your network, select DHCP Mode:None to disable this feature. More...

The following table describes the parameters of this page.

Field	Description
DHCP Mode	If set to DHCP Server , the router can assign IP addresses, IP default gateway and DNS servers to the host in Windows95, Windows NT and other operation systems that support the DHCP client.
IP Pool Range	It specifies the first and last IP addresses in the IP address pool. The router assigns IP address in the IP pool range to the host.
Max Lease Time	The lease time determines the period that the host retains the assigned IP addresses before the IP addresses change.
Domain Name	Enter the domain name if you know. If you leave this blank, the domain name obtained by DHCP from the ISP is used. You must enter host name (system name) on each individual PC. The domain name can be assigned from the router through the DHCP server.
DNS Servers	You can configure the DNS server ip addresses for DNS Relay.

Click the button **Show Client** to display the page **Active DHCP Client Table** as shown below. It shows the IP addresses assigned to DHCP clients.

ACTIVE DHCP CLIENT TABLE				
This table shows the assigned IP address, MAC address and time expired for each DHCP leased client.				
ACTIVE DHCP CLIENT TABLE				
Name	IP Address	MAC Address	Expiry	Type
<input type="button" value="Refresh"/> <input type="button" value="Close"/>				

The following table describes the parameters and buttons in this page:

Field	Description
IP Address	It displays the IP address assigned to the DHCP client from the router.
MAC Address	It displays the MAC address of the DHCP client. Each Ethernet device has a unique MAC address. The MAC address is assigned at the factory and it consists of six pairs of hexadecimal character, for example, 00-A0-C5-00-02-12.
Expiry	It displays the lease time. The lease time determines the period that the host retains the assigned IP addresses before the IP addresses change.
Refresh	Click it to refresh this page.

Click the button **Set VendorClass IP Range** to display the page **Device IP Range Set**. In this page, you can configure the IP address range based on the device type.

DEVICE IP RANGE SET

This page is used to configure the IP address range based on device type.

DEVICE IP RANGE SETUP

device name:

start address:

end address:

option60:

IP RANGE TABLE:

Select	device name	start address	end address	default gateway	option60

In the **DHCP Mode** field, choose **None**. The page shown in the following figure appears.

The screenshot shows the 'DHCP SERVER SETTING' page. The 'DHCP Mode' dropdown menu is set to 'None'. The LAN IP is 192.168.1.1/255.255.255.0. There are 'Apply Changes' and 'Undo' buttons, and a 'Set VendorClass IP Range' link.

In the **DHCP Mode** field, choose **DHCP Relay**. The page shown in the following figure appears.

The screenshot shows the 'DHCP SERVER SETTING' page with 'DHCP Mode' set to 'DHCP Relay'. A 'Relay Server' field is now visible and contains the IP address 192.168.2.242. The other settings remain the same.

The following table describes the parameters and buttons of this page:

Field	Description
DHCP Mode	If set to DHCP Relay , the router acts a surrogate DHCP Server and relays the DHCP requests and responses between the remote server and the client.
Relay Server	Enter the DHCP server address provided by your ISP.
Apply Changes	Click it to save the settings of this page.

3.2.2.4 DHCP Reserved

Choose **Setup > Local Network > DHCP Reserved**. The **DHCP Static IP Configuration** page appears. This page lists the fixed IP/MAC address on your LAN. The device distributes the number configured to hosts on your network as they request Internet access.

The following table describes the parameters of this page.

Field	Description
IP Address	Enter the specified IP address in the IP pool range, which is assigned to the host.
Mac Address	Enter the MAC address of a host on the LAN.
Add	After entering the IP address and MAC address, click this button to add them to the DHCP Static IP Table.
Delete Selected	Select a row in the DHCP Static IP Table, then click it, this row is deleted.
Undo	Click it to refresh this page.
DHCP Static IP Table	It shows the assigned IP address based on the MAC address.

3.2.3 Internet Setup

3.2.3.1 Channel Config

Choose **Setup > Internet Setup > Channel Config**. The **Channel Configuration** page appears. You may configure the parameters for the channel operation modes of your ADSL Router.

DSL-2730E
SETUP ADVANCED MAINTENANCE STATUS HELP

Wizard

Local Network

Internet Setup

Wireless Setup

Time and Date

CHANNEL CONFIGURATION

This page is used to configure the parameters for the channel operation modes of your ADSL Modem/Router. Note : When connect type of PPPoE and PPPoA only is "Manual", the "Connect" and "Disconnect" button will be enable.

DEFAULT ROUTE SELECTION

Default Route Selection: Auto Specified

CHANNEL CONFIGURATION

VPI: VCI: Encapsulation: LLC VC-Mux

Channel Mode: Enable NAPT: Enable IGMP:

802.1q: Disable Enable VLAN ID(1-4095):

PPP Settings: User Name: Password:

 Type: Idle Time (min):

WAN IP Settings: Type: Fixed IP DHCP

 Local IP Address: Remote IP Address:

 Netmask:

Default Route: Disable Enable Auto

Unnumbered

Connect Disconnect Add Modify Delete Undo Refresh

CURRENT ATM VC TABLE:

Select	Inf	Mod e	VPI	VCI	Enca p	NAP T	IGM P	Dro ute	IP A ddr	Rem ote IP	Net Mas k	Use r Na me	Unn umber	Stat us	Edit
<input type="radio"/>	ppp	ppp	0	100	LLC	On	Off	On	0.0.0.0	0.0.0.0	255.255.255.255		---	down	

Helpful Hints...

When configuring the router to access the Internet, be sure to choose the correct **Channel Mode** from the list below.

Please take care when entering your **username** and **password** as these are case sensitive. The majority of connection issues are caused by incorrect **username** or **password** combinations.


Note: Be sure to restart the router for the new Internet Setting to take effect.

[More...](#)

The following table describes the parameters of this page.

Field	Description
Default Route Selection	You can select Auto or Specified .
VPI	The virtual path between two points in an ATM network, ranging from 0 to 255 .
VCI	The virtual channel between two points in an ATM network, ranging from 32 to 65535 (1 to 31 are reserved for known protocols)
Encapsulation	You can choose LLC and VC-Mux .
Channel Mode	You can choose 1483 Bridged , 1483 MER , PPPoE , PPPoA , 1483 Routed or IPoA .
Enable NAPT	Select it to enable Network Address Port Translation (NAPT) function. If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is enabled.
Enable IGMP	You can enable or disable Internet Group Management Protocol (IGMP) function.
802.1q	You can select Disable or Enable . If enabled, you need to enter the VLAN ID.
VLAN ID	The value ranges from 1 to 4095 .
IP Protocol	When any channel mode except 1483 Bridged is selected, select an IP protocol from IPv4/IPv6 , IPv4 and IPv6 .
PPP Settings	
User Name	Enter the correct user name for PPP dial-up, which is provided by your ISP.
Password	Enter the correct password for PPP dial-up, which is provided by your ISP.
Type	You can choose Continuous , Connect on Demand or Manual .
Idle Time (min)	If the type is set to Connect on Demand , you need to enter the idle timeout time. Within the preset minutes, if the router does not detect the flow of the

Field	Description
	user continuously, the router automatically disconnects the PPPoE connection.
WAN IP Settings	
Type	You can choose Fixed IP or DHCP . <ul style="list-style-type: none"> ● If select Fixed IP, you should enter the local IP address, remote IP address and subnet mask. ● If select DHCP, the router is a DHCP client, the WAN IP address is assigned by the remote DHCP server.
Local IP Address	Enter the IP address of WAN interface provided by your ISP.
Remote IP Address	Enter the IP address of gateway provided by your ISP.
Netmask	Enter the subnet mask of the local IP address.
Default Route	Routing table entry is not clearly specified in the routing, as to any network prefix forwarding address.
Unnumbered	Select this checkbox to enable IP unnumbered function.
IPv6 WAN Setting	
Address Mode	When the channel mode is not set to 1483 Bridged , configure this interface as supporting Slaac or Static to generate wan ipv6 addresses.
Enable DHCPv6 Client	You may enable or disable dhcpv6 client on this interface. After enabling it, user may specify the dhcpv6 client request an address or prefix.

After a PPPoE ATM VC is added to the table, click  in the **PPPoE** mode, the page shown in the following figure appears. In this page, you can configure parameters of this PPPoE PVC.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wizard	PPP INTERFACE - MODIFY				
Local Network	This page is used for advanced PPP interface configuration.				
Internet Setup	PPP INTERFACE				
Wireless Setup	Protocol: PPPoE ATM VCC: 0/100 Login Name: <input type="text"/> Password: <input type="password"/> Authentication Method: <input type="text" value="AUTO"/> Connection Type: <input type="text" value="Continuous"/> Idle Time (s): <input type="text" value="0"/> Bridge: <input type="radio"/> Bridged Ethernet (Transparent Bridging) <input type="radio"/> Bridged PPPoE (implies Bridged Ethernet) <input checked="" type="radio"/> Disable Bridge AC-Name: <input type="text"/> Service-Name: <input type="text"/> 802.1q: <input checked="" type="radio"/> Disable <input type="radio"/> Enable VLAN ID(1-4095): <input type="text" value="0"/> MTU (1-1500): <input type="text" value="1492"/> Static IP: <input type="text"/> Source Mac address: <input type="text" value="00:11:11:11:11:12"/> (ex:00:E0:86:71:05:02) <input type="button" value="MACCLONE"/>				
Time and Date	<input type="button" value="Apply Changes"/> <input type="button" value="Return"/> <input type="button" value="Undo"/>				

The following table describes the parameters and buttons of this page:

Field	Description
Protocol	It displays the protocol type used for this WAN connection.
ATM VCC	The ATM virtual circuit connection assigned for this PPP interface (VPI/VCI).
Login Name	The user name provided by your ISP.
Password	The password provided by your ISP.
Authentication Method	You can choose AUTO , CHAP , or PAP .
Connection Type	You can choose Continuous , Connect on Demand , or Manual .
Idle Time (s)	If choose Connect on Demand , you need to enter the idle timeout time. Within the preset minutes, if the router does not detect the flow of the user continuously, the router automatically disconnects the PPPoE connection.
Bridge	You can select Bridged Ethernet , Bridged

Field	Description
	PPPoE, or Disable Bridge.
AC-Name	The accessed equipment type.
Service-Name	The service name.
802.1q	You can select Disable or Enable . After enable it, you need to enter the VLAN ID. The value ranges from 1 to 4095.
Source Mac address	The MAC address you want to clone.
MAC Clone	Click it to enable the MAC Clone function with the MAC address that is configured.
Apply Changes	Click it to save the settings of this page temporarily.
Return	Click it to return to the Channel Configuration page.
Undo	Click it to refresh this page.

3.2.3.2 ATM Settings

Choose **Setup > Internet Setup > ATM Settings**. The **ATM Settings** page appears. You may configure the parameters for the ATM of your ADSL Router. Here you may change the setting for VPI, VCI and QoS, etc.

The screenshot shows the 'ATM SETTINGS' page in the DSL-2730E web interface. The page has a navigation menu on the left and a main content area. The main content area is titled 'ATM SETTINGS' and contains a text box explaining the page's purpose. Below this, there are input fields for VPI, QoS, and UBR, and a dropdown menu for UBR. There are also input fields for PCR and SCR. At the bottom, there are 'Apply Changes' and 'Undo' buttons, and a table with columns for Select, VPI, VCI, QoS, PCR, CDVT, SCR, and MBS.

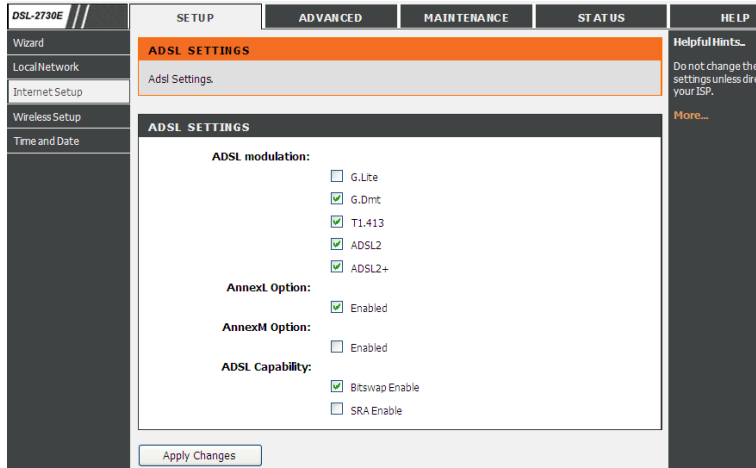
The following table describes the parameters of this page.

Field	Description
VPI	The virtual path identifier of the ATM PVC.

Field	Description
VCI	The virtual channel identifier of the ATM PVC.
QoS	The QoS category of the PVC. You can choose UBR, CBR, rt-VBR, or nrt-VBR.
PCR	Peak cell rate (PCR) is the maximum rate at which cells can be transmitted along a connection in the ATM network. Its value ranges from 1 to 65535.
CDVT	Cell delay variation tolerance (CDVT) is the amount of delay permitted between ATM cells (in microseconds). Its value ranges from 0 to 4294967295.
SCR	Sustained cell rate (SCR) is the maximum rate that traffic can pass over a PVC without the risk of cell loss. Its value ranges from 0 to 65535.
MBS	Maximum burst size (MBS) is the maximum number of cells that can be transmitted at the PCR. Its value ranges from 0 to 65535.

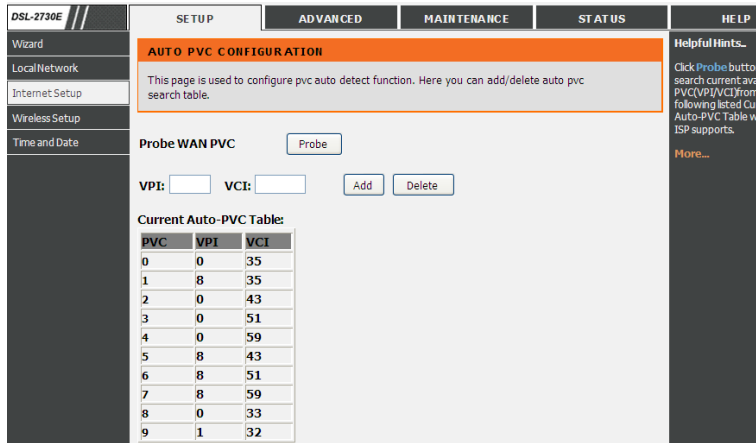
3.2.3.3 ADSL Settings

Choose **Setup > Internet Setup > ADSL Settings**. The **ADSL Settings** page appears. This page contains a modulation and capability section to be specified by your ISP. Consult with your ISP to select the correct settings for each. Click **Apply Changes** to finish.



3.2.3.4 PVC Auto Search

Choose **Setup > Internet Setup > PVC Auto Search**. The **Auto PVC Configuration** page appears. You may configure PVC auto detect function. Here you can add/delete auto PVC search table.



3.2.4 Wireless Setup

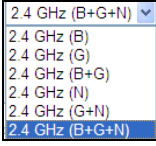
This section describes the wireless LAN and basic configuration. A wireless LAN can be as simple as two computers with wireless LAN cards communicating in a peer-to-peer network or as complex as a number of computers with wireless LAN cards communicating through access points which bridge network traffic to wired LAN.

3.2.4.1 Wireless Basics

Choose **Setup > Wireless Setup > Wireless Basics**. The **Wireless Basic Settings** page appears. You may configure the parameters for wireless LAN clients, which may connect to your access point. Here you may change wireless encryption settings as well as wireless network parameters.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wizard	WIRELESS BASIC SETTINGS				Helpful Hints...
Local Network	This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.				Changing your Wireless Network Name (SSID) is the first step in securing your wireless network. Change it to a familiar name that does not contain any personal information.
Internet Setup	WIRELESS NETWORK SETTINGS				For your wireless device to connect to your access point, you will need to manually enter the Wireless Network Name (SSID) on each device. Please take a note of your SSID and keep it handy.
Wireless Setup	<input type="checkbox"/> Disable Wireless LAN Interface Band: 2.4 GHz (B+G+H) <input type="button" value="v"/> Mode: AP <input type="button" value="v"/> SSID: WLAN_0j0 <input type="text"/> Channel Number: Auto <input type="button" value="v"/> Current Channel: 11 Radio Power (Percent): 100% <input type="button" value="v"/> Associated Clients: <input type="button" value="Show Active Clients"/>				More...
Time and Date	WIRELESS OPTIONS				
	Channel Width: 20MHZ <input type="button" value="v"/> Control Sideband: Upper <input type="button" value="v"/>				
	<input type="button" value="Apply Changes"/>				

The following table describes the parameters in this page.

Field	Description
Band	<p>Choose the working mode of the modem. You can choose from the drop-down list.</p> 
Mode	<p>Choose the network model of the modem, which is varied according to the software. By default, the network model of the modem is AP.</p>
SSID	<p>The service set identification (SSID) is a unique name to identify the modem in the wireless LAN. Wireless stations associating to the modem must have the same SSID. Enter a descriptive name that is used when the wireless client connecting to the modem.</p>
Channel Number	<p>Choose a channel from the drop-down list box. A channel is the radio frequency used by 802.11b/g wireless devices. There are 13 channels (from 1 to 13) available depending on the geographical area. You may have a choice of channels (for your region) and you should use a different channel from an adjacent AP to reduce the interference. Interference and degrading performance occurs when radio signal from different APs overlap.</p>
Radio Power (Percent)	<p>You can choose the transmission power of the radio signal. The default one is 100%. It is recommended to choose the default value 100%.</p>
Show Active Clients	<p>Click it to view the information of the wireless clients connected to the modem.</p>
Channel Width	<p>Select the appropriate band of 20MHZ or 40MHZ according to your subscribed broadband service.</p>
Control Sideband	<p>Choose the channel selection mode as Upper or Lower.</p>

Click the button **Show Active Clients** to view the MAC address, transmission, reception packet counters and encrypted status for each associated wireless client.

ACTIVE WIRELESS CLIENT TABLE					
This table shows the MAC address, transmission, reception packet counters and encrypted status for each associated wireless client					
ACTIVE WIRELESS CLIENT TABLE					
MAC Address	Tx Packet	Rx Packet	Tx Rate (Mbps)	Power Saving	Expired Time (s)
None	---	---	---	---	---

Click **Apply Changes** to save the settings.

3.2.4.2 Wireless Security

Choose **Setup > Wireless Setup > Wireless Security**. The **Wireless Security Settings** page appears. Turn on WEP or WPA using encryption keys could prevent any unauthorized access to your wireless network.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Wizard	WIRELESS SECURITY SETTINGS				Helpful Hints...
Local Network	This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.				If you enable Wireless Security, make sure write down the encryption key that have configured. You need to enter this information on any device that you connect your wireless network.
Internet Setup	WIRELESS SECURITY SETTINGS				More...
Wireless Setup	SSID TYPE: <input checked="" type="radio"/> Root <input type="radio"/> VAP0 <input type="radio"/> VAP1 <input type="radio"/> P2 <input type="radio"/> VAP3 <input type="radio"/>				
Time and Date	Encryption: <input type="text" value="None"/> <input type="button" value="Set WEP Key"/>				
	<input type="checkbox"/> Use 802.1x Authentication <input type="radio"/> WEP 64bits <input type="radio"/> WEP 128bits				
	WPA Authentication Mode: <input type="radio"/> Enterprise (RADIUS) <input type="radio"/> Personal (Pre-Shared Key)				
	Pre-Shared Key Format: <input type="text" value="Passphrase"/>				
	Pre-Shared Key: <input type="text" value="*****"/>				
	Authentication RADIUS Server: Port <input type="text" value="1812"/> less Password <input type="text" value="0.0.0.0"/>				
	<input type="button" value="Apply Changes"/>				
	Note: When encryption WEP is selected, you must set WEP key value.				

The following table describes the parameters of this page:

Field	Description
Encryption	<p>Configure the wireless encryption mode. You can choose None, WEP, WPA (TKIP), WPA (AES), WPA2 (AES), WPA2 (TKIP) or WPA2 Mixed.</p> <ul style="list-style-type: none"> ● Wired equivalent privacy (WEP) encrypts data frames before transmitting over the wireless network. ● Wi-Fi protected access (WPA) is a subset of the IEEE802.11i security specification draft. ● WPA2 Mixed is the collection of WPA and WPA2 encryption modes. The wireless client establishes the connection between the modem through WPA or WPA2. <p>Key differences between WPA and WEP are in user authentication and improved data encryption.</p>
Set WEP Key	<p>It is available when you set the encryption mode to WEP. Click it, the Wireless WEP Key Setup page appears.</p>
WPA Authentication Mode	<ul style="list-style-type: none"> ● Select Personal (Pre-Shared Key), enter the pre-shared key in the Pre-Shared Key field. ● Select Enterprise (RADIUS), enter the port, IP address, and password of the Radius server. <p>You need to enter the username and password provided by the Radius server when the wireless client connects the modem.</p> <p>If the encryption is set to WEP, the modem uses 802.1 X authentication, which is Radius authentication.</p>

Click **Set WEP Key**, and the page **Wireless WEP Key Setup** appears. You can choose a 64-bit or 128-bit encryption key, and select ASCII or Hex format for input values.

WIRELESS WEP KEY SETUP

This page allows you setup the WEP key value. You could choose use 64-bit or 128-bit as the encryption key, and select ASCII or Hex as the format of input value.

WIRELESS WEP KEY SETUP

SSID TYPE: Root VAP0 VAP1 VAP2 VAP3

Key Length: 64-bit

Key Format: ASCII (5 characters)

Default Tx Key: Key 1

Encryption Key 1: [*****]

Encryption Key 2: [*****]

Encryption Key 3: [*****]

Encryption Key 4: [*****]

Apply Changes Close Reset

The following describes the parameters of this page:

Field	Description
Key Length	Choose the WEP key length. You can Choose 64-bit or 128-bit .
Key Format	<ul style="list-style-type: none"> ● If you choose 64-bit, you can choose ASCII (5 characters) or Hex (10 characters). ● If you choose 128-bit, you can choose ASCII (13 characters) or Hex (26 characters).
Default Tx Key	Choose the index of WEP Key. You can choose Key 1 , Key 2 , Key 3 or Key 4 .
Encryption Key 1 to 4	<p>The Encryption keys are used to encrypt the data. Both the modem and wireless stations must use the same encryption key for data transmission.</p> <ul style="list-style-type: none"> ● If you choose 64-bit and ASCII (5 characters), enter any 5 ASCII characters. ● If you choose 64-bit and Hex (10 characters), enter any 10 hexadecimal characters. ● If you choose 128-bit and ASCII (13

Field	Description
	<p>characters), enter any 13 ASCII characters.</p> <ul style="list-style-type: none"> If you choose 128-bit and Hex (26 characters), enter any 26 hexadecimal characters.
Apply Changes	Click it to apply the settings temporarily. If you want to save the settings of this page permanently, click Save in the lower left corner.

Click **Apply Changes** to save the settings.

3.2.5 Time and Date

Choose **Setup > Time and Date**. The **System Time Configuration** page appears. In the page, you can configure, update and maintain the correct time on the internal system clock. You can set the time zone that you are in and the Network Time Protocol (NTP) server. You can also configure daylight saving to automatically adjust the time when needed.

The following table describes the parameters in this page.

Field	Description
System Time	Displays the time currently maintained by the router. If this is incorrect, use the following options to configure the time correctly.

Field	Description
Time Zone	Select your local time zone from the dropdown list.
Daylight	Adjust the clock for daylight savings time.
Mode	To synchronize the time automatically with the Internet or your own computer, you may select Set Time Manually , Copy Computer Time or Set NTP Server Manually .
Get GMT Time	Synchronize to Greenwich Mean Time.

When the mode is set to **Set NTP Server Manually**, the following page will appear.

The following table describes the parameters in this page.

Field	Description
State	Select Enable to synchronize the time automatically with Internet or your own computer.
Server	Select a Network Time Server for synchronization from the dropdown list. You may set two servers.
Interval	Specify the interval for synchronization with the time server.

3.3 Advanced

This section includes advanced features for network management, security and administrative tools to manage the device. You can view status and other information used to examine performance and for troubleshooting.

3.3.1 Advanced Wireless

This function is used to modify the standard 802.11g wireless radio settings. It is suggested not to change the defaults, as incorrect settings may reduce the performance of your wireless radio. The default settings provide the best wireless radio performance in most environments.

3.3.1.1 Advanced Settings

Choose **Advanced > Advanced Wireless > Wireless Advanced**. The page shown in the following figure appears. These settings are only for more technically advanced users who have sufficient knowledge about wireless LAN. Do not change these settings unless you know the effect of changes on the device.

The screenshot shows the 'WIRELESS ADVANCED SETTINGS' page in the DSL-2730E web interface. The page is divided into several sections:

- Navigation Menu (Left):** Includes links for Advanced Wireless, Access Control List, Port Triggering, Port Forwarding, DMZ, Parent Control, Filtering Options, DOS Settings, DNS, Dynamic DNS, Network Tools, Routing, and NAT.
- Page Header:** Shows 'DSL-2730E' and tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'.
- WIRELESS ADVANCED SETTINGS:**
 - Authentication Type:** Radio buttons for Open System, Shared Key, and Auto (selected).
 - Fragment Threshold:** Input field with value 2346 (range 256-2346).
 - RTS Threshold:** Input field with value 2347 (range 0-2347).
 - Beacon Interval:** Input field with value 100 (range 20-1024 ms).
 - DTIM Interval:** Input field with value 1 (range 1-255).
 - Data Rate:** Dropdown menu set to Auto.
 - Preamble Type:** Radio buttons for Long Preamble (selected) and Short Preamble.
 - Broadcast SSID:** Radio buttons for Enabled (selected) and Disabled.
 - Relay Blocking:** Radio buttons for Enabled and Disabled (selected).
 - Ethernet to Wireless Blocking:** Radio buttons for Enabled and Disabled (selected).
 - Wifi Multicast to Unicast:** Radio buttons for Enabled (selected) and Disabled.
 - Aggregation:** Radio buttons for Enabled (selected) and Disabled.
 - Short GI:** Radio buttons for Enabled (selected) and Disabled.
- Helpful Hints... (Right):** A note stating: "By default these options need not be changed for this router to operate with Wireless." Below it is a 'More...' link.
- Apply Changes:** A button at the bottom of the settings area.

The following table describes the parameters in this page.

Field	Description
Fragment Threshold	Used to fragment packets which help improve performance in the presence of radio frequency (RF) interference.
RTS Threshold (Request to	Determines the packet size of a transmission through the use of the router to help control traffic flow.

Field	Description
Send Threshold)	
Beacon Interval	A packet of information that is sent from a connected device to all other devices where it announces its availability and readiness. A beacon interval is a period of time (sent with the beacon) before sending the beacon again. The beacon interval may be adjusted in milliseconds (ms).
DTIM Interval	Sets the wake-up interval for clients in power-saving mode.
Preamble Type	This is the length of the CRC (Cyclic Redundancy Check) block for communication between the router and wireless clients. High network traffic areas should select Short preamble type.
Broadcast SSID	With Disabled selected, no wireless clients will be able to see your wireless network when they scan to see what's available.

Click **Apply Changes** to save the settings.

3.3.1.2 Access Control

Choose **Advanced > Advanced Wireless > Access Control**. The page shown in the following figure appears. Incoming connection can be filtered on your wireless router based on their MAC addresses.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP				
Advanced Wireless	WIRELESS ACCESS CONTROL If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.				Helpful Hints... Create a list of MAC addresses that you would either like to allow or deny users access to the wireless router.				
Access Control List	WIRELESS ACCESS CONTROL MODE Wireless Access Control Mode: <input type="text" value="Disable"/>				More...				
Port Triggering	<input type="button" value="Apply Changes"/>								
DMZ	WIRELESS ACCESS CONTROL SETTINGS MAC Address: <input type="text"/> (ex. 00E086710502)								
Parent Control	<input type="button" value="Add"/> <input type="button" value="Reset"/>								
Filtering Options	CURRENT ACCESS CONTROL LIST								
DOS Settings	<table border="1"> <thead> <tr> <th>MAC Address</th> <th>Select</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>				MAC Address	Select			
MAC Address	Select								
DNS	<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/>								
Dynamic DNS									
Network Tools									
Routing									
NAT									

Set the Wireless Access Control Mode to **Allow Listed** to enable white list function. Only the devices whose MAC addresses are listed in the **Current Access Control List** can access the modem.

Set the Wireless Access Control Mode to **Deny Listed** to enable black list function. The devices whose MAC addresses are listed in the **Current Access Control List** are denied to access the modem.

3.3.1.3 WPS

Choose **Advanced > Advanced Wireless > WPS**. The page shown in the following figure appears. With this feature, your wireless client automatically synchronize its setting and connect to the Access Point.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	WI-FI PROTECTED SETUP				
Access Control List	This page allows you to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client automatically synchronize its setting and connect to the Access Point in a minute without any hassle.				
Port Triggering	WIFI PROTECTED SETTINGS				
Port Forwarding	<input type="checkbox"/> Disable WPS WPS Status: <input checked="" type="radio"/> Configured <input type="radio"/> UnConfigured Self-PIN Number: <input type="text" value="82644277"/> <input type="button" value="Regenerate PIN"/> PIN Configuration: <input type="button" value="Start PIN"/> Push Button Configuration: <input type="button" value="Start PBC"/>				
DMZ	<input type="button" value="Apply Changes"/> <input type="button" value="Reset"/>				
Parent Control	CURRENT KEY INFO				
Filtering Options	Authentication		Encryption		Key
DOS Settings	Open		None		N/A
DNS	CLIENT PIN INFO				
Dynamic DNS	Client PIN Number: <input type="text"/>				
Network Tools	<input type="button" value="Start PIN"/>				
Routing					
NAT					

There are two methods for the wireless client to establish connection with the modem through WPS.

For one method, click **Regenerate PIN** to generate a new PIN, and then click **Start PBC**. In the wireless client tool, enter the PIN which is generated by the modem to start connection. The client will automatically establish the connection with the modem through the encryption mode, and you need not to enter the key.

For the other method, the wireless client generates PIN. In the above figure, enter PIN of the wireless client in the **Client PIN Number** field, then click **Start PIN** to establish the connection.



Note:

The wireless client establishes the connection with the modem through WPS negotiation. The wireless client must support WPS.

3.3.1.4 MBSSID

Choose **Advanced > Advanced Wireless > MBSSID**. The page shown in the following figure appears. In this page, you can set virtual access points (VAP), its SSID and authentication type.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	WIRELESS MULTIPLE BSSID SETUP				
Access Control List	This page allows you to set virtual access points(VAP). Here you can enable/disable virtual AP, and set its SSID and authentication type. click "Apply Changes" to take it effect.				
Port Triggering	WIRELES MULTIPLE BSSID SETTINGS- VAP0				
Port Forwarding	<input type="checkbox"/> Enable VAP0 SSID: <input type="text" value="CTC-0000"/> broadcast SSID: <input checked="" type="radio"/> Enable <input type="radio"/> Disable Relay Blocking: <input type="radio"/> Enable <input checked="" type="radio"/> Disable Authentication Type: <input type="radio"/> Open System <input type="radio"/> Shared Key <input checked="" type="radio"/> Auto				
DMZ	WIRELES MULTIPLE BSSID SETTINGS- VAP1				
Parent Control	<input type="checkbox"/> Enable VAP1 SSID: <input type="text" value="CTC-1111"/> broadcast SSID: <input checked="" type="radio"/> Enable <input type="radio"/> Disable Relay Blocking: <input type="radio"/> Enable <input checked="" type="radio"/> Disable Authentication Type: <input type="radio"/> Open System <input type="radio"/> Shared Key <input checked="" type="radio"/> Auto				
Filtering Options	WIRELES MULTIPLE BSSID SETTINGS- VAP2				
DOS Settings	<input type="checkbox"/> Enable VAP2 SSID: <input type="text" value="CTC-2222"/> broadcast SSID: <input checked="" type="radio"/> Enable <input type="radio"/> Disable Relay Blocking: <input type="radio"/> Enable <input checked="" type="radio"/> Disable Authentication Type: <input type="radio"/> Open System <input type="radio"/> Shared Key <input checked="" type="radio"/> Auto				
DNS	WIRELES MULTIPLE BSSID SETTINGS- VAP3				
Dynamic DNS	<input type="checkbox"/> Enable VAP3 SSID: <input type="text" value="CTC-3333"/> broadcast SSID: <input checked="" type="radio"/> Enable <input type="radio"/> Disable Relay Blocking: <input type="radio"/> Enable <input checked="" type="radio"/> Disable Authentication Type: <input type="radio"/> Open System <input type="radio"/> Shared Key <input checked="" type="radio"/> Auto				
Network Tools	<input type="button" value="Apply Changes"/>				
Routing					
NAT					

The device supports four virtual access points (VAPs). It is a unique name to identify the modem in the wireless LAN. Wireless stations associating to the modem must have the same name. Enter a descriptive name that is used when the wireless client is connecting to the modem.

3.3.2 Access Control List

Multiple connections are required by some applications, for example, internet games, video conferencing and Internet telephony. These applications have difficulties working through NAT (Network Address Translation). This section is used to open multiple ports or a range of ports in your router and redirect data through those ports to a single PC on your network.

3.3.2.1 Access Control List

Choose **Advanced > Access Control List > Access Control List**. The page shown in the following figure appears. In this page, you can permit the data packets from LAN or WAN to access the router. You can configure the IP address for Access Control List (ACL). If ACL is enabled, only the effective IP address in the ACL can access the router.



Note:

If you select **Enable** in ACL capability, ensure that your host IP address is in ACL list before it takes effect.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP																							
Advanced Wireless	ACL CONFIGURATION				Helpful Hints... You can enable/disable specified service from LAN or WAN. More...																							
Access Control List	You can specify what services are accessible from LAN or WAN parts. Entries in this ACL table are used to permit certain types of data packets from your local network or Internet network to the Gateway. Using of such access control can be helpful in securing or restricting the Gateway management.																											
Port Triggering	ACL CONFIGURATION -- DIRECTION																											
Port Forwarding	Direction Select: <input checked="" type="radio"/> LAN <input type="radio"/> WAN																											
DMZ	LAN ACL SWITCH CONFIGURATION																											
Parent Control	LAN ACL Switch: <input checked="" type="radio"/> Enable <input type="radio"/> Disable																											
Filtering Options	<input type="button" value="Apply"/>																											
DOS Settings	ACL SETTINGS																											
DNS	IP Address: <input type="text"/> - <input type="text"/> (The IP 0.0.0.0 represent any IP)																											
Dynamic DNS	Services Allowed: <input checked="" type="checkbox"/> Any																											
Network Tools	<input type="button" value="Add"/> <input type="button" value="Reset"/>																											
Routing	CURRENT ACL TABLE																											
NAT	<table border="1"> <thead> <tr> <th>Select</th> <th>Direction</th> <th>IP Address/Interface</th> <th>Service</th> <th>Port</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>LAN</td> <td>0.0.0.0</td> <td>ping</td> <td>--</td> <td><input type="button" value="Delete"/></td> </tr> <tr> <td>1</td> <td>LAN</td> <td>0.0.0.0</td> <td>web</td> <td>--</td> <td><input type="button" value="Delete"/></td> </tr> <tr> <td>2</td> <td>LAN</td> <td>0.0.0.0</td> <td>telnet</td> <td>--</td> <td><input type="button" value="Delete"/></td> </tr> </tbody> </table>				Select	Direction	IP Address/Interface	Service	Port	Action	0	LAN	0.0.0.0	ping	--	<input type="button" value="Delete"/>	1	LAN	0.0.0.0	web	--	<input type="button" value="Delete"/>	2	LAN	0.0.0.0	telnet	--	<input type="button" value="Delete"/>
Select	Direction	IP Address/Interface	Service	Port	Action																							
0	LAN	0.0.0.0	ping	--	<input type="button" value="Delete"/>																							
1	LAN	0.0.0.0	web	--	<input type="button" value="Delete"/>																							
2	LAN	0.0.0.0	telnet	--	<input type="button" value="Delete"/>																							

The following table describes the parameters and buttons of this page:

Field	Description
Direction Select	Select the router interface. You can select LAN or WAN . In this example, LAN is selected.
LAN ACL Switch	Select it to enable or disable ACL function.
IP Address	Enter the IP address of the specified interface. Only the IP address that is in the same network segment with the IP address of the specified interface can access the router.
Services Allowed	You can choose the following services from LAN: Web, Telnet, SSH, TFTP, SNMP and PING . You can also choose all the services.
Add	After setting the parameters, click it to add an entry

Field	Description
	to the Current ACL Table .
Reset	Click it to refresh this page.

When the direction of data packets is set to **WAN**, the page shown in the following figure appears.

The screenshot shows the 'ACL CONFIGURATION' page in the DSL-2730E web interface. The 'Direction Select' is set to WAN. The 'WAN Setting' is 'Interface' and the 'WAN Interface' is 'pppoe1'. The 'Services Allowed' section has checkboxes for web, telnet, ssh, tftp, snmp, and ping. Below this is the 'CURRENT ACL TABLE' with the following data:

Select	Direction	IP Address/Interface	Service	Port	Action
0	LAN	0.0.0.0	ping	--	Delete
1	LAN	0.0.0.0	web	--	Delete
2	LAN	0.0.0.0	telnet	--	Delete

The following table describes the parameters and buttons of this page:

Field	Description
Direction Select	Select the router interface. You can select LAN or WAN . In this example, WAN is selected.
WAN Setting	You can choose Interface or IP Address .
WAN Interface	Choose the interface that permits data packets from WAN to access the router.

Field	Description
Services Allowed	You can choose the following services from WAN: Web, Telnet, SSH, TFTP, SNMP and PING . You can also choose all the services.
Add	After setting the parameters, click it to add an entry to the Current ACL Table .
Reset	Click it to refresh this page.

3.3.2.2 Access Control List IPv6

Choose **Advanced > Access Control List > Access Control List IPv6**. The page shown in the following figure appears. For configuration method, refer to 3.3.2.1 *Access Control List*.

3.3.3 Port Triggering

Choose **Advanced > Port Triggering**. The page shown in the following figure appears. Port Triggering is a special form of Port Forwarding in which it requires an outgoing connection before allowing incoming connections on a single or multiple ports. Port Triggering is mostly used when your computer is behind a NAT router. It gives more flexibility than static port forwarding because you don't need to set it up for a specific computer.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP																																																																						
Advanced Wireless	NAT PORTTRIGGER				<p>Helpful Hints...</p> <p>Use this feature if you are trying to execute one of the listed network applications and it is not communicating as expected.</p> <p>Check the Application Name drop down menu for a list of predefined applications.</p> <p>More...</p>																																																																						
Access Control List	<p>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 "Relate Port" in the firewall when an application on the LAN initiates a TCP/UDP connection to a remote party using the "Match Port". The Router allows the remote party from the WAN side to establish new connections back to the application on the LAN side using the "Relate Port".</p>																																																																										
Port Triggering	<p>Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.</p>																																																																										
Port Forwarding	NAT PORT TRIGGER STATUS																																																																										
DMZ	<p>Nat Port Trigger: <input type="radio"/> Enable <input checked="" type="radio"/> Disable</p>																																																																										
Parent Control	<p><input type="button" value="Apply Changes"/></p>																																																																										
Filtering Options	APPLICATION TYPE																																																																										
DOS Settings	<p><input checked="" type="radio"/> Usual Application <input type="radio"/> User-defined Application Name:</p> <p>Select One</p>																																																																										
DNS	<table border="1"> <thead> <tr> <th>Start Match Port</th> <th>End Match Port</th> <th>Trigger Protocol</th> <th>Start Relate Port</th> <th>End Relate Port</th> <th>Open Protocol</th> <th>Nat Type</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> <tr> <td></td> <td></td> <td>UDP</td> <td></td> <td></td> <td>UDP</td> <td>outgoing</td> </tr> </tbody> </table>					Start Match Port	End Match Port	Trigger Protocol	Start Relate Port	End Relate Port	Open Protocol	Nat Type			UDP			UDP	outgoing			UDP			UDP	outgoing			UDP			UDP	outgoing			UDP			UDP	outgoing			UDP			UDP	outgoing			UDP			UDP	outgoing			UDP			UDP	outgoing			UDP			UDP	outgoing			UDP			UDP	outgoing
Start Match Port	End Match Port	Trigger Protocol	Start Relate Port	End Relate Port		Open Protocol	Nat Type																																																																				
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Dynamic DNS	<p><input type="button" value="Apply Changes"/></p>																																																																										
Network Tools	CURRENT PORTTRIGGER TABLE																																																																										
Routing	<table border="1"> <thead> <tr> <th>ServerName</th> <th>Trigger Protocol</th> <th>Direction</th> <th>Match Port</th> <th>Open Protocol</th> <th>Relate Port</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				ServerName	Trigger Protocol	Direction	Match Port	Open Protocol	Relate Port	Action																																																																
ServerName	Trigger Protocol	Direction	Match Port	Open Protocol	Relate Port	Action																																																																					
NAT																																																																											

Click the **Usual Application Name** drop-down menu to choose the application you want to set up for port triggering. When you have chosen an application the default Trigger settings will populate the table below.

If the application you want to set up isn't listed, click the **User-defined Application Name** radio button and type in a name for the trigger in the Custom application field. Configure the **Start Match Port**, **End Match Port**, **Trigger Protocol**, **Start Relate Port**, **End Relate Port**, **Open Protocol** and **Nat type**.

Click the **Apply changes** button to finish.

3.3.4 Port Forwarding

This function is used to open ports in your device and redirect data through those ports to a single PC on your network (WAN-to-LAN traffic). It allows remote users to access services on your LAN, such as FTP for file transfers or SMTP and POP3 for e-mail. The device accepts remote requests for these services at your global IP address. It uses the specified TCP or UDP protocol and port number, and redirects these requests to the server on your LAN with the LAN IP address you specify. Note that the specified private IP address must be within the available range of the subnet where the device is in.

Choose **Advanced > Port Forwarding**. The page shown in the following figure appears.

DSL-2730E // SETUP ADVANCED MAINTENANCE STATUS HELP

Advanced Wireless
Access Control List
Port Triggering
Port Forwarding
DMZ
Parent Control
Filtering Options
DOS Settings
DNS
Dynamic DNS
Network Tools
Routing
NAT

PORT FORWARDING

Port Forwarding allows you to direct incoming traffic from the WAN side (identified by Protocol and WAN port) to the internal server with a private IP address on the LAN side. Select Usual Service Name, and enter the LAN IP address and click "Apply Changes" to forward IP packets for this service to the specified server.

PORT FORWARDING SETUP

Usual Service Name AUTH
 User-defined Service Name

Protocol TCP
WAN Setting Interface
WAN Interface 0000e1
WAN Port 113 (ex. 5001:5010)
LAN Open Port 113
LAN IP Address

Apply Changes

CURRENT PORT FORWARDING TABLE

ServerName	Protocol	Local IP Address	Local Port	WAN IP Address	WAN Port	State	Action
------------	----------	------------------	------------	----------------	----------	-------	--------

Helpful Hints...
Check the Usual Service Name drop down menu for a list of predefined applications.
If you do not see your application listed you can still define a new service.
More...

Click the **Usual Service Name** drop-down menu to choose the service you want to set up for port forwarding. When you have chosen a service, the default settings will populate the table below.

If the service you want to set up isn't listed, select the **User-defined Service Name** radio button and type in a service name. Configure the **Protocol**, **WAN Setting**, **WAN Interface**, **WAN Port**, **LAN Open Port** and **LAN IP Address**.

Click the **Apply changes** button to finish.

3.3.5 DMZ

DMZ is the abbreviation of the Demilitarized Zone. Since some applications are not compatible with NAT, the device supports the use of a DMZ IP address for a single host on the LAN. This IP address is not protected by NAT and it is visible to agents on the Internet with the correct type of software. Note that any client PC in the DMZ is exposed to various types of security risks. If you use the DMZ, take measures (such as client-based virus protection) to protect the remaining client PCs on your LAN from possible contamination through DMZ.

Choose **Advanced > DMZ**. The page shown in the following figure appears.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	DMZ				Helpful Hints... Enable the DMZ option only as a last resort. If you are having trouble using an application from a computer behind the router, first try opening ports associated with the application in the Advanced -> Port Trigger section. More...
Access Control List	A Demilitarized Zone is used to provide Internet services without sacrificing unauthorized access to its local private network. Typically, the DMZ host contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.				
Port Triggering	DMZ CONFIGURATION				
Port Forwarding	<input type="checkbox"/> Enable DMZ DMZ Host IP Address: <input type="text"/>				
DMZ	<input type="button" value="Apply Changes"/> <input type="button" value="Reset"/>				
Parent Control					
Filtering Options					
DOS Settings					
DNS					
Dynamic DNS					
Network Tools					
Routing					
NAT					

In the DMZ Host IP Address, input the LAN IP address of the LAN computer that you want to have unrestricted Internet communication. If this computer obtains its address automatically using DHCP, then you may want to make a static reservation on the Setup-->Local Network-->DHCP Reserved page so that the IP address of the DMZ computer does not change.

Click **Apply** to save the settings.

3.3.6 Parental Control

You may create a list of websites that you would like the devices on your network to be denied access to. **URL Block** allows you to quickly create a list of all websites that you wish to stop users from accessing. **MAC Filter** allows you to control when clients or PCs connected to the device are allowed to access the Internet.

3.3.6.1 URL Block

Choose **Advanced > Parental Control > URL Block**. The **URL Block** page shown in the following figure appears. You may deny certain websites from being accessed during the "schedule" you specified. Here you can add/delete filtered URL.



Note:

To use this feature, the time of router must be correct. Please set in 3.2.5 Time and Date.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP										
Advanced Wireless	URL BLOCK				Helpful Hints...										
Access Control List	This page is used to configure the blocked URL in specified time. Here you can add/delete filtered URL. Firstly, you should enable URL Blocking Capability.				Create a list of websites that you would like the devices on your network to be denied access to										
Port Triggering	Note: To use this feature, the time of router must be correct. Please set in SETUP -- Time and Date.				Select a schedule for when the rule will be enabled. If you do not see the schedule you need in the list of schedules, go to Advanced -> Parental Control -> Schedules.										
Port Forwarding	URL BLOCKING CAPABILITY				More...										
DMZ	URL Blocking Capability: <input type="radio"/> Disable <input checked="" type="radio"/> Enable														
Parent Control	<input type="button" value="Apply Changes"/>														
Filtering Options	URL BLOCKING														
DOS Settings	<input type="checkbox"/> Block Any URL														
DNS	<input checked="" type="radio"/> URL: <input type="text" value="http://"/>														
Dynamic DNS	Schedule Mode: <input type="radio"/> Existing Schedule <input checked="" type="radio"/> Manual Schedule														
Network Tools	Schedule: <input type="button" value="View Available Schedules"/>														
Routing	Days: <input type="checkbox"/> EveryDay														
NAT	<input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed														
	<input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat														
	All day(24Hour): <input type="checkbox"/>														
	Time: From <input type="text"/> : <input type="text"/> : <input type="text"/> To <input type="text"/> : <input type="text"/> : <input type="text"/> (e.g. From 09:21 To 18:30)														
	<input type="button" value="Add Filter"/>														
	URL BLOCKING TABLE:														
	<table border="1"> <thead> <tr> <th>Select</th> <th>Filtered URL</th> <th>Days</th> <th>Time</th> <th>Rule Name</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				Select	Filtered URL	Days	Time	Rule Name	<input type="checkbox"/>					
Select	Filtered URL	Days	Time	Rule Name											
<input type="checkbox"/>															
	<input type="button" value="Delete Selected URL"/>														

In the field **Schedule Mode**, you may select an existing schedule schedule for when the rule will be enabled, or manually set a schedule. After setting, click **Add Filter** to add the URL into the **URL Blocking Table**. To add schedules, refer to 3.3.6.3 Schedules.

3.3.6.2 MAC Block

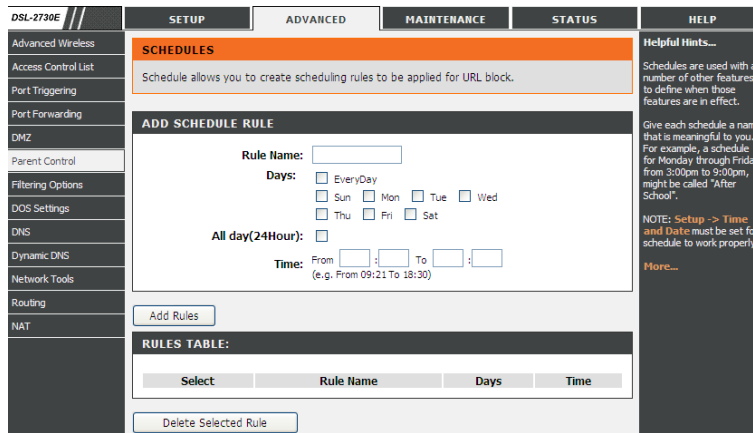
Choose **Advanced > Parental Control > MAC Block**. The **URL Block** page shown in the following figure appears. You may block a LAN device connected to the router in the specified time section.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP									
Advanced Wireless	MAC BLOCK				Helpful Hints... Give each rule a name that is meaningful to you. For example, a schedule for Monday through Friday from 8:00pm to 9:00pm, might be called "After School" and enter the MAC address that you want to deny access to the Internet. More...									
Access Control List	This page is used to block a LAN device connected to the router in the specified time section. To find out the MAC address of a Windows-based PC, open a command prompt window and type "ipconfig /all".													
Port Triggering	MAC BLOCKING													
Port Forwarding	Rule Name: <input type="text"/> MAC Address: <input type="text"/> (Ex. 00:E0:86:71:05:02) Days: <input type="checkbox"/> EveryDay <input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat All day(24Hour): <input type="checkbox"/> Time: From <input type="text"/> : <input type="text"/> : <input type="text"/> To <input type="text"/> : <input type="text"/> : <input type="text"/> (e.g. From 09:21 To 18:30)													
DMZ	<input type="button" value="Add Rule"/>													
Parent Control	MAC BLOCKING TABLE:													
Filtering Options	<table border="1"> <thead> <tr> <th>Select</th> <th>Rule name</th> <th>MAC</th> <th>Days</th> <th>Time</th> </tr> </thead> <tbody> <tr> <td colspan="5"> </td> </tr> </tbody> </table>				Select	Rule name	MAC	Days	Time					
Select	Rule name	MAC	Days	Time										
DOS Settings	<input type="button" value="Delete Selected"/>													
DNS														
Dynamic DNS														
Network Tools														
Routing														
NAT														

In the field **Rule Name**, input a name that is meaningful to you, then enter a MAC address that you want to deny access to the Internet, and set the days and hours, and click Add Rule to add the MAC into the **MAC Blocking Table**.

3.3.6.3 Schedules

Choose **Advanced > Parental Control > Schedules**. The **Schedules** page shown in the following figure appears. You may add or delete scheduling rules to be applied for URL block.



In the field **Rule Name**, give the schedule a name that is meaningful to you, such as "Weekday rule". Set the **Day(s)** and time field, and click **Add Rules** to save the new rule in the following Rules Table.

3.3.7 Filtering Options

Filters can be configured to manage your incoming and outgoing traffic.

3.3.7.1 IP/Port Filter

When you use the Port Triggering or Port Forwarding features to open specific ports to traffic from the Internet, you could be increasing the exposure of your LAN to cyberattacks from the Internet. In these cases, you can limit that exposure by specifying the IP addresses of Internet hosts that you trust to access your LAN through the ports that you have opened.

Choose **Advanced > Filtering Options > IP/Port Filter**. The **IP/Port Filtering** page shown in the following figure appears.

Direction **Upstream (Downstream)** means packets outgoing (incoming) from (to) router. The Source IP addresses are LAN-side (WAN-side) addresses and the Destination IP addresses are WAN-side (LAN-side) addresses. Select the rule action, specify at least one of the following criteria: protocol, source/destination IP address, subnet mask and source/destination port. Click the **Apply Changes** to save a finished rule in the Rules List. The **Current Filter Table** shows detailed information about each created IP filter.

 **Note:**

The settings only apply when the firewall is enabled.

3.3.7.2 IPv6/Port Filter

Choose **Advanced > Filtering Options > IPv6/Port Filter**. The **IP/Port Filtering** page shown in the following figure appears. You may restrict certain types of ipv6 data packets between LAN-side and WAN-side.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP																				
Advanced Wireless	IP / PORT FILTERING																								
Access Control List	Entries in this table are used to restrict certain types of ipv6 data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.																								
Port Triggering	DEFAULT ACTION STATUS																								
Port Forwarding	Outgoing Default Action: <input checked="" type="radio"/> Permit <input type="radio"/> Deny Incoming Default Action: <input type="radio"/> Permit <input checked="" type="radio"/> Deny																								
DMZ	RULE CONFIGURATION																								
Parent Control	Rule Action: <input checked="" type="radio"/> Permit <input type="radio"/> Deny Protocol: IPv6 Direction: Upstream Icmp6Type: PING6 Source IPv6 Address: <input type="text"/> Dest IPv6 Address: <input type="text"/> SPort: <input type="text"/> - <input type="text"/> DPort: <input type="text"/> - <input type="text"/> Enable: <input checked="" type="checkbox"/>																								
Filtering Options	<input type="button" value="Apply Changes"/> <input type="button" value="Reset"/> <input type="button" value="Help"/>																								
DOS Settings	CURRENT FILTER TABLE																								
DNS	<table border="1"> <thead> <tr> <th>Rule</th> <th>Protocol</th> <th>Source IPv6/Prefix</th> <th>SPort</th> <th>Dest IPv6/Prefix</th> <th>DPort</th> <th>ICMP6Type</th> <th>State</th> <th>Direction</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>					Rule	Protocol	Source IPv6/Prefix	SPort	Dest IPv6/Prefix	DPort	ICMP6Type	State	Direction	Action										
Rule	Protocol	Source IPv6/Prefix	SPort	Dest IPv6/Prefix	DPort	ICMP6Type	State	Direction	Action																
Dynamic DNS																									
Network Tools																									
Routing																									
NAT																									

For detailed configuration, you may refer to 3.3.7.1IP/Port Filter.

3.3.7.3 MAC Filter

Choose **Advanced > Filtering Options > MAC Filter**. The **MAC Filtering** page shown in the following figure appears. You may create a list of MAC addresses that you would either like to allow or deny access to your network.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP							
Advanced Wireless	MAC FILTERING				Helpful Hints... Create a list of MAC addresses that you would either like to allow or deny access to your network. More...							
Access Control List	Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.											
Port Triggering	DEFAULT POLICY											
Port Forwarding	Outgoing Default Policy: <input type="radio"/> Deny <input checked="" type="radio"/> Allow Incoming Default Policy: <input type="radio"/> Deny <input checked="" type="radio"/> Allow											
DMZ	<input type="button" value="Apply Changes"/>											
Parent Control	ADD FILTER											
Filtering Options	Direction: <input type="text" value="Outgoing"/> Action: <input checked="" type="radio"/> Deny <input type="radio"/> Allow Source MAC: <input type="text"/> (ex. 00E086710502) Destination MAC: <input type="text"/> (ex. 00E086710502)											
DOS Settings	<input type="button" value="Add"/>											
DNS	CURRENT MAC FILTER TABLE											
Dynamic DNS	<table border="1"> <thead> <tr> <th>Select</th> <th>Direction</th> <th>Source MAC</th> <th>Destination MAC</th> </tr> </thead> <tbody> <tr> <td><input type="button" value="Delete"/></td> <td colspan="3"><input type="button" value="Delete All"/></td> </tr> </tbody> </table>					Select	Direction	Source MAC	Destination MAC	<input type="button" value="Delete"/>	<input type="button" value="Delete All"/>	
Select	Direction	Source MAC	Destination MAC									
<input type="button" value="Delete"/>	<input type="button" value="Delete All"/>											
Network Tools												
Routing												
NAT												

3.3.8 DoS Settings

Denial-of-Service Attack (DoS attack) is a type of attack on a network that is designed to bring the network to its knees by flooding it with useless traffic.

Choose **Advanced > DoS Settings**. The **DOS Settings** page shown in the following figure appears. Select the **Enable DoS Prevention** checkbox, select the options below, and click **Apply Changes** to finish.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	DOS SETTINGS				Helpful Hints... If Enable DoS Prevention checkbox is selected, the router will detect some attacks. More...
Access Control List	A "denial-of-service" (DoS) attack is characterized by an explicit attempt by hackers to prevent legitimate users of a service from using that service.				
Port Triggering	DOS CONFIGURATION				
Port Forwarding	<input type="checkbox"/> Enable DoS Prevention				
DMZ	<input type="checkbox"/> Whole System Flood: SYN <input type="text" value="100"/> Packets/Second				
Parent Control	<input type="checkbox"/> Whole System Flood: FIN <input type="text" value="100"/> Packets/Second				
Filtering Options	<input type="checkbox"/> Whole System Flood: UDP <input type="text" value="100"/> Packets/Second				
DOS Settings	<input type="checkbox"/> Whole System Flood: ICMP <input type="text" value="100"/> Packets/Second				
DNS	<input type="checkbox"/> Per-Source IP Flood: SYN <input type="text" value="100"/> Packets/Second				
Dynamic DNS	<input type="checkbox"/> Per-Source IP Flood: FIN <input type="text" value="100"/> Packets/Second				
Network Tools	<input type="checkbox"/> Per-Source IP Flood: UDP <input type="text" value="100"/> Packets/Second				
Routing	<input type="checkbox"/> Per-Source IP Flood: ICMP <input type="text" value="100"/> Packets/Second				
NAT	<input type="checkbox"/> TCP/UDP PortScan <input type="text" value="Low"/> Sensitivity				
	<input type="checkbox"/> ICMP Smurf				
	<input type="checkbox"/> IP Land				
	<input type="checkbox"/> IP Spoof				
	<input type="checkbox"/> IP TearDrop				
	<input type="checkbox"/> PingOfDeath				
	<input type="checkbox"/> TCP Scan				
	<input type="checkbox"/> TCP SynWithData				
	<input type="checkbox"/> UDP Bomb				
	<input type="checkbox"/> UDP EchoChargen				
	<input type="button" value="Select ALL"/> <input type="button" value="Clear ALL"/>				
	<input type="checkbox"/> Enable Source IP Blocking <input type="text" value="300"/> Block time (sec)				
	<input type="button" value="Apply Changes"/>				

3.3.9 DNS

Domain Name System (DNS) is an Internet service that translates the URL/domain name into the corresponding IP address. Since URL/Domain Names are alphabetical, they are easier to remember. But the Internet is based on IP address. For example, the URL/Domain Name www.dlink.com is actually 192.168.0.123.

3.3.9.1 DNS

Choose **Advanced > DNS > DNS**. The **DNS Configuration** page shown in the following figure appears. You may configure the ip addresses of DNS servers for DNS Relay.

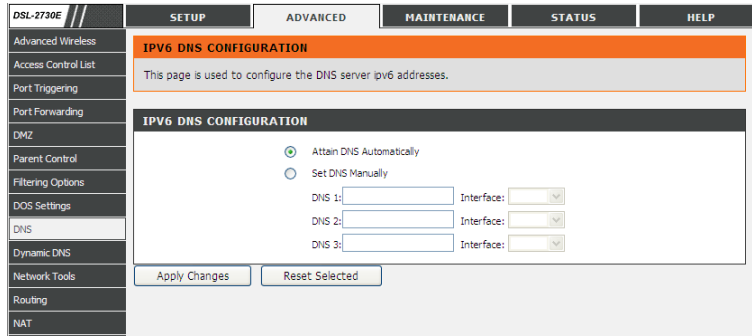
DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	DNS CONFIGURATION				Helpful Hints... If Attain DNS Automatically is selected, this router will accept the first received DNS assignment from one of the PPPoA, PPPoE or MER/DHCP enabled PVC(s) during the connection establishment. If Set DNS Manually is selected, enter the DNS server IP addresses. Only do so if you are having problems with your DNS servers. More...
Access Control List	This page is used to configure the DNS server ip addresses for DNS Relay.				
Port Triggering	DNS CONFIGURATION				
Port Forwarding	<input checked="" type="radio"/> Attain DNS Automatically <input type="radio"/> Set DNS Manually DNS 1: <input type="text" value="0.0.0.0"/> DNS 2: <input type="text"/> DNS 3: <input type="text"/>				
DMZ	<input type="button" value="Apply Changes"/> <input type="button" value="Reset Selected"/>				
Parent Control					
Filtering Options					
DOS Settings					
DNS					
Dynamic DNS					
Network Tools					
Routing					
NAT					

The following table describes the parameters and buttons of this page:

Field	Description
Attain DNS Automatically	Select it, the router accepts the first received DNS assignment from one of the PPPoA, PPPoE or MER enabled PVC(s) during the connection establishment.
Set DNS Manually	Select it, enter the IP addresses of the primary and secondary DNS server.
Apply Changes	Click it to save the settings of this page.
Reset Selected	Click it to start configuring the parameters in this page.

3.3.9.2 IPv6 DNS

Choose **Advanced > DNS > IPv6 DNS**. The **IPv6 DNS Configuration** page shown in the following figure appears. You may configure the ipv6 addresses of DNS servers.



The following table describes the parameters and buttons of this page.

Field	Description
Attain DNS Automatically	Select it, the router accepts the first received DNS assignment from one of the PPPoA, PPPoE or MER enabled PVC(s) during the connection establishment.
Set DNS Manually	Select it, enter the IP addresses and choose the WAN interface of the primary, the secondary and the tertiary DNS server.
Interface	The router accepts received packet assignment from one of the PPPoA, PPPoE or MER enabled PVC(s).
Apply Changes	Click it to save the settings of this page.
Reset Selected	Click it to start configuring the parameters in this page.

3.3.10 Dynamic DNS

The device supports dynamic domain name service (DDNS). The dynamic DNS service allows a dynamic public IP address to be associated with a static host name in any of the many domains, and allows access to a specified host from various locations on the Internet. Click a hyperlinked URL in the form of hostname.dyndns.org and allow remote access to a host. Many ISPs assign public IP addresses using DHCP, so locating a specific host on the LAN using the standard DNS is difficult. For example, if you are running a public web server or VPN server on your LAN, DDNS ensures that the host can be located from the Internet even if the public IP address changes. DDNS requires that an account be

set up with one of the supported DDNS service providers (DynDNS.org or dlinkddns.com).

Choose **Advanced > Dynamic DNS**. The **Dynamic DNS Configuration** page shown in the following page appears.

The following table describes the parameters and buttons of this page.

Field	Description
DDNS provider	Select a dynamic DNS service provider from the pull-down list.
Hostname	Enter the host name that you registered with your DDNS service provider.
Username	Enter the username provided by your service provider.
Password	Enter the password provided by your service provider.



Note:

In some cases DDNS service requires you to open the WAN http service. Refer to Access Control List-> Access Control List.

Click **Add** to save the settings to the **Dynamic DDNS Table**.

3.3.11 Network Tools

The router provides following tools: **Port Mapping**, **IGMP Proxy**, **IP QoS**, **UPnP**, **SNMP**, **TR-069**, **Software Forbidden**, **ARP Binding** and **Client Limit**.

3.3.11.1 Port Mapping

Port Mapping supports a single (LAN) port or multiple (LAN) ports to be formed as a group and mapped to a PVC (which is associated w/ a VLAN). As a result, each group of LAN ports will perform as an independent (logical) network (like a broadcast domain) among whom traffic broadcast would be prevented. This feature is useful while you would like to form multiple independent (logical) networks for multimedia applications at home. For instance, you can map PVC1 to port 1~3 to create a network (broadcast domain) for PCs for Internet, and map PVC2 to port 4 to create another network (broadcast domain) for IPTV service (devices). By using this feature (w/ multiple PVCs), data traffic and IPTV traffic would not affect each other.

Choose **Advanced > Network Tools > Port Mapping**. The **Port Mapping Configuration** page shown in the following figure appears.

PORT MAPPING CONFIGURATION

To manipulate a mapping group:
 1. Select a group from the table.
 2. Select interfaces from the available/grouped interface list and add it to the grouped/available interface list using the arrow buttons to manipulate the required mapping of the ports.
 3. Click "Apply Changes" button to save the changes.

Note that the selected interfaces will be removed from their existing groups and added to the new group.

PORT MAPPING CONFIGURATION

Port Mapping: Disable Enable

WAN **Interface group**

LAN

Add > < Del

Select	Interfaces	Status
Default	LAN1,LAN2,LAN3,LAN4,wlan,wlan-vap0,wlan-vap1,wlan-vap2,wlan-vap3,pppoe1	Enabled
Group1		--
Group2		--
Group3		--
Group4		--

Apply

Follow the steps to manipulate a mapping group.

- Step 1** Select a group from the table.
- Step 2** Select interfaces from the available WAN and LAN interface groups and add it to the interface group list using the arrow buttons to manipulate the required mapping of the ports.
- Step 3** Click **Apply** button to save the changes.

**Note:**

The selected interfaces will be removed from their existing groups and added to the new group.

3.3.11.2 IGMP Proxy

IGMP allows support for efficient multicasting -- transmission of identical content, such as multimedia, from a source to a number of recipients. IGMP proxy enables the system to issue IGMP host messages on behalf of hosts that the system discovered through standard IGMP interfaces. The system acts as a proxy for its hosts when you enable it.

Choose **Advanced > Network Tools > IGMP Proxy**. The **IGMP Proxy Configuration** page shown in the following figure appears.

The following table describes the parameters and buttons of this page.

Field	Description
Multicast allowed	Enable multicast proxy, only for route mode.
Robust Count	Allows tuning for the expected packet loss on a link. It determines how many times a startup query should be xmitted.
Last Member Query Count	This parameter specifies the times the device sends the query message.

Field	Description
Query Interval	The device sends query messages to check IGMP user periodically. The unit is second.
Query Response Interval	The device waits for the IGMP user's reply. The unit is 100 * millisecond.
Group Leave Delay	The duration for the modem to cease forwarding multicast packets after a corresponding IGMP "Leave Group" message has been successfully offered to the modem.

Click **Apply Changes** to save the settings.

3.3.11.3 IP QoS

Quality of Service is a feature that allows you to allocate or guarantee the throughput or speed of Internet for certain computers. This is a very useful feature for sensitive applications such as VoIP whereby it will assist in preventing dropped calls. Large amounts of non-critical data can be scaled so that they do not affect sensitive real-time applications such as VoIP or Streaming.

Choose **Advanced > Network Tools > IP QoS**. The **IP QoS** page shown in the following figure appears.

- Step 1** Enable IP QoS and click **Apply** to enable IP QoS function.
- Step 2** Click **add rule** to add a new IP QoS rule. The page shown in the following figure appears.

The screenshot displays the DSL-2730E web interface for IP QoS configuration. The interface includes a sidebar with navigation options like 'Advanced Wireless', 'Access Control List', and 'Routing'. The main content area is titled 'IP QoS' and contains the following sections:

- IP QoS Configuration:** Features radio buttons for 'disable' and 'enable' (selected), and an 'Apply' button. Below, 'QoS Policy' is set to 'stream based' and 'Schedule Mode' is set to 'strict prior'.
- QoS Rule List:** A table with columns for 'src IP', 'src Port', 'dest IP', 'dest Port', 'proto', 'phy port', 'prior', 'DSCP', '802.1p', and 'MAC Address'. Below the table are 'add rule', 'delete', and 'delete all' buttons.
- Add QoS Rule:** Contains input fields for 'Src IP', 'Src Mask', 'Dest IP', 'Dest Mask', 'Src Port', 'Dest Port', 'Protocol', and 'Phy Port'. It also includes a 'set priority' dropdown (set to 'p3(lowest)'), a checked checkbox for 'insert or modify QoS mark', and dropdowns for 'DSCP' and '802.1p'. An 'add rule' button is at the bottom.

The following table describes the parameters and buttons of this page.

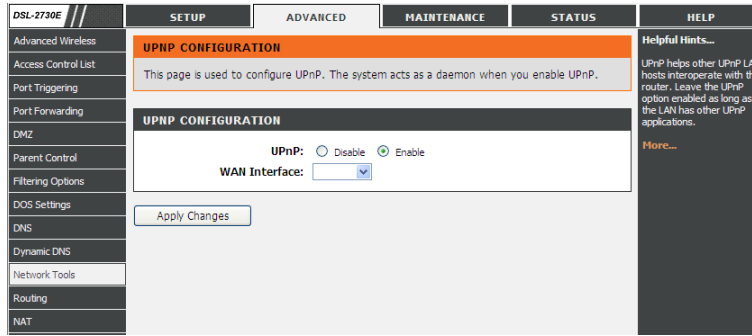
Field	Description
QoS Policy	You can choose stream based , 802.1p based , or DSCP based .
Schedule Mode	You can choose strict prior or WFQ (4:3:2:1) .
Source IP	The IP address of the source data packet.
Source Mask	The subnet mask of the source IP address.
Destination IP	The IP address of the destination data packet.
Destination Mask	The subnet mask of the destination IP address.
Source Port	The port of the source data packet.
Destination Port	The port of the destination data packet.
Protocol	The protocol responding to the IP QoS rules. You can choose TCP , UDP , or ICMP .
Phy Port	The LAN interface responding to the IP QoS rules.
Set priority	The priority of the IP QoS rules. P0 is the highest priority and P3 is the lowest.
802.1p	You can choose from 0 to 7 .
Delete	Select a row in the QoS rule list and click it to delete the row.
Delete all	Select all the rows in the QoS rule list and click it to delete the rows.

Click **add rule** to add it to the **QoS Rule List**.

3.3.11.4 UpnP

UPnP (Universal Plug and Play) is a networking architecture that provides compatibility among networking equipment, software, and peripherals. This router has optional UPnP capability, and can work with other UPnP devices and software. The system acts as a daemon when you enable UPnP. Leave the UPnP option enabled as long as the LAN has other UPnP applications.

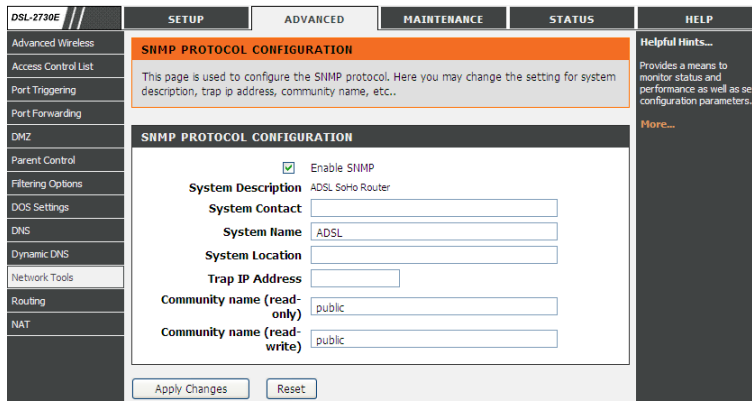
Choose **Advanced** > **Network Tools** > **UPnP**. The **UPnP Configuration** page shown in the following figure appears.



3.3.11.5 SNMP

SNMP (Simple Network Management Protocol) provides a means to monitor status and performance and set configuration parameters. It enables a management station to configure, monitor and receive trap messages from network devices.

Choose **Advanced > Network Tools > SNMP**. The **SNMP Protocol Configuration** page shown in the following figure appears. You may change the settings for system description, trap ip address and community name.



The following table describes the parameters of this page:

Field	Description
Enable SNMP	Select it to enable SNMP function. You need to enable SNMP, and then you can configure the parameters of this page.
Trap IP Address	Enter the trap IP address. The trap information is sent to the corresponding host.
Community Name (Read-only)	The network administrators must use this password to read the information of this router.
Community Name (Read-Write)	The network administrators must use this password to configure the information of the router.

3.3.11.6 TR-069

TR-069 is a WAN management protocol. It is a bidirectional SOAP/HTTP based protocol providing the communication between the ADSL router and an Auto Configuration Server (ACS) to monitor status and performance and to set configuration parameters from WAN side.

Choose **Advanced > Network Tools > TR-069**. The **TR-069 Configuration** page shown in the following figure appears. You may change the setting for the ACS's parameters.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Advanced Wireless	TR-069 CONFIGURATION				Helpful Hints... Provides a means to monitor status and performance as well as set configuration parameters from WAN side. More...
Access Control List	This page is used to configure the TR-069 CPE. Here you may change the setting for the ACS's parameters.				
Port Triggering					
Port Forwarding					
DMZ	ACS CONFIGURATION				
Parent Control	Enable: <input checked="" type="checkbox"/> URL: <input type="text" value="http://172.21.70.44/cpe/?pd12"/> User Name: <input type="text" value="rtk"/> Password: <input type="text" value="rtk"/> Periodic Inform Enable: <input type="radio"/> Disable <input checked="" type="radio"/> Enable				
Filtering Options	Periodic Inform Interval: <input type="text" value="300"/> seconds				
DOS Settings	CONNECTION REQUEST				
DNS	User Name: <input type="text" value="rtk"/> Password: <input type="text" value="rtk"/> Path: <input type="text" value="/tr069"/> Port: <input type="text" value="7547"/>				
Dynamic DNS	DEBUG				
Network Tools	ACS Certificates CPE: <input checked="" type="radio"/> No <input type="radio"/> Yes Show Message: <input checked="" type="radio"/> Disable <input type="radio"/> Enable CPE Sends GetRPC: <input checked="" type="radio"/> Disable <input type="radio"/> Enable Skip MReboot: <input checked="" type="radio"/> Disable <input type="radio"/> Enable Delay: <input type="radio"/> Disable <input checked="" type="radio"/> Enable Auto-Execution: <input type="radio"/> Disable <input checked="" type="radio"/> Enable CT Inform Extension: <input checked="" type="radio"/> Disable <input type="radio"/> Enable				
Routing	<input type="button" value="Apply Changes"/> <input type="button" value="Reset"/>				
NAT	CERTIFICATE MANAGEMENT				
	CPE Certificate Password: <input type="text" value="client"/> <input type="button" value="Apply"/> <input type="button" value="Undo"/> <input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Upload"/> CPE Certificate: <input type="button" value="Delete"/> <input type="text"/> <input type="button" value="Browse..."/> <input type="button" value="Upload"/> CA Certificate: <input type="button" value="Delete"/>				

The following table describes the parameters of this page:

Field	Description
ACS Configuration	
URL	The URL of the auto-configuration server to connect to.
User Name	The user name for logging in to the ACS.

Field	Description
Password	The password for logging in to the ACS.
Periodic Inform Enable	Select Enable to periodically connect to the ACS to check configuration updates.
Periodic Inform Interval	Specify the amount of time between connections to ACS.
Connection Request	
User Name	The connection username provided by TR-069 service.
Password	The connection password provided by TR-069 service.
Debug	
Show Message	Select Enable to display ACS SOAP messages on the serial console.
CPE sends GetRPC	Select Enable , the router contacts the ACS to obtain configuration updates.
Skip MReboot	Specify whether to send an MReboot event code in the inform message.
Delay	Specify whether to start the TR-069 program after a short delay.
Auto-Execution	Specify whether to automatically start the TR-069 after the router is powered on.
CT Inform Extension	Specify support China Telecom extension inform type or not.
Certificate Management	
CPE Certificate Password	The certificate password of the router.
CPE Certificate	Enter the CPE Certificate file. Click it to browse and upload the certificate for the router.
CA Certificate	Click it to browse and upload the CA certificate for the router.

3.3.11.7 Software Forbidden

Choose **Advanced > Network Tools > Software Forbidden**. The **Software Forbidden** page shown in the following figure appears. You may config some software to be forbidden to deny the ip packets of it.

To forbid one specified PC (or some PCs) from using an application, select the application you want to prohibit, and input a single IP address or IP addresses in range. When Single IP is selected, IP 0.0.0.0 represent for any IP. In this situation,all PCs connected to this router will deny the selected software.

The following table describes the parameters and buttons of this page:

Field	Description
Current Forbidden Software List	A list of currently forbidden applications for accessing the network.
Add Forbidden Software	Select an application to be forbidden from accessing the network.

3.3.11.8 ARP Binding

This function realizes the binding of IP addresses and MAC addresses to avoid ARP address cheats. Choose **Advanced > Network Tools > ARP Binding**. The **ARP Binding Configuration** page shown in the following figure appears.

The screenshot shows the DSL-2730E web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options: Advanced Wireless, Access Control List, Port Triggering, Port Forwarding, DMZ, Parent Control, Filtering Options, DOS Settings, DNS, Dynamic DNS, Network Tools, Routing, and NAT. The main content area is titled "ARP BINDING CONFIGURATION" and contains the following elements:

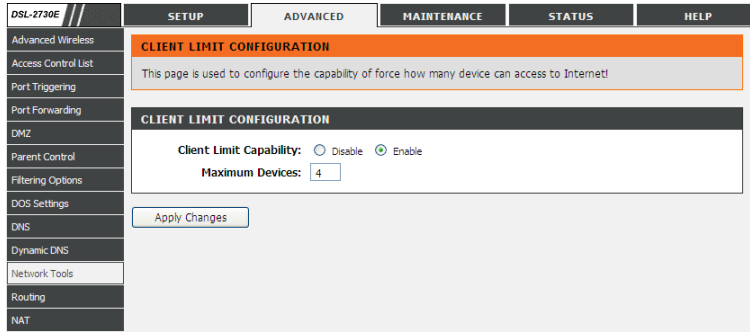
- A header bar with the title "ARP BINDING CONFIGURATION".
- A descriptive text box: "This page lists the permanent arp entry table. You can bind ip with corresponding mac to avoid arp spoof."
- Input fields for "IP Address" (with the value "0.0.0.0") and "Mac Address" (with the value "000000000000" and an example "(ex. 00E086710902)").
- Buttons for "Add", "Delete Selected", and "Undo".
- A table titled "ARP BINDING TABLE" with columns for "Select", "IP Address", and "MAC Address".

The following table describes the parameters and buttons of this page:

Field	Description
IP Address	An IP address to be bound.
Mac Address	An MAC address to be bound.
Add	Click this icon to add an ARP binding.
Delete Selected	Delete a selected setting from the list.
Undo	Reconfigure the above setting.
ARP Binding Table	A list of all the current ARP binding settings.

3.3.11.9 Client Limit

Choose **Advanced** > **Network Tools** > **Client Limit**. The **Client Limit Configuration** page shown in the following figure appears. You may configure the capability of forcing how many devices can access to the Internet.

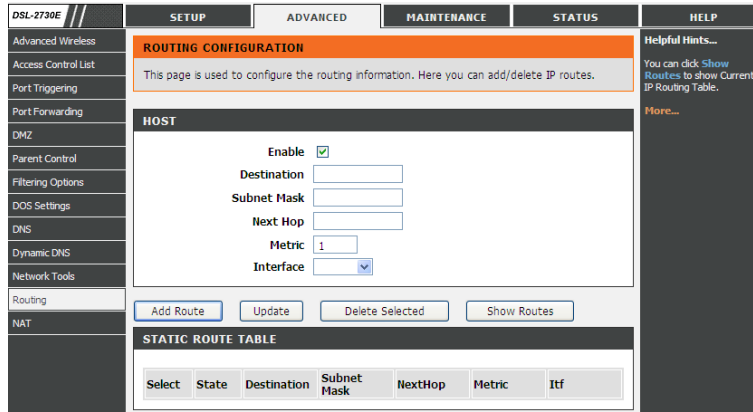


3.3.12 Routing

Under this menu, static route, default gateway and RIP type routing configurations can be performed.

3.3.12.1 Static Route

Choose **Advanced > Routing > Static Route**. The **Routing Configuration** page shown in the following figure appears. This page is used to configure the routing information. You may add or delete IP routes.



The following table describes the parameters and buttons of this page:

Field	Description
Enable	Select it to use static IP routes.
Destination	Enter the IP address of the destination device.
Subnet Mask	Enter the subnet mask of the destination device.
Next Hop	Enter the IP address of the next hop in the IP route to the destination device.
Metric	The metric cost for the destination.
Interface	The interface for the specified route.
Add Route	Click it to add the new static route to the Static Route Table .
Update	Select a row in the Static Route Table and modify the parameters. Then click it to save the settings temporarily.
Delete Selected	Select a row in the Static Route Table and click it to delete the row.
Show Routes	Click it, the IP Route Table appears. You can view a list of destination routes commonly accessed by your network.
Static Route Table	A list of the previously configured static IP routes.

Click **Show Routes**, the page shown in the following figure appears. The table shows a list of destination routes commonly accessed by your network.

IP ROUTE TABLE			
This table shows a list of destination routes commonly accessed by your network.			
CURRENT IP ROUTING TABLE			
Destination	Subnet Mask	NextHop	Interface
192.168.1.1	255.255.255.255	*	e1
Refresh		Close	

3.3.12.2 IPv6 Static Route

Choose **Advanced > Routing > IPv6 Static Route**. The **IPv6 Routing Configuration** page shown in the following figure appears. This page is used to configure the routing information. You can add or delete IP routes.

The screenshot shows the 'IPv6 ROUTING CONFIGURATION' page. On the left is a navigation menu with items like 'Advanced Wireless', 'Access Control List', 'Port Triggering', 'Port Forwarding', 'DMZ', 'Parent Control', 'Filtering Options', 'DOS Settings', 'DNS', 'Dynamic DNS', 'Network Tools', 'Routing', and 'NAT'. The main content area has tabs for 'SETUP', 'ADVANCED', 'MAINTENANCE', 'STATUS', and 'HELP'. The 'ADVANCED' tab is selected, showing the 'IPv6 ROUTING CONFIGURATION' page. A message states: 'This page is used to configure the ipv6 routing information. Here you can add/delete IPv6 routes.' Below this is a 'CONFIGURATION' section with four input fields: 'Destination', 'Prefix Length', 'Next Hop', and 'Interface'. There are two buttons: 'Add Route' and 'Delete Selected'. At the bottom is the 'IPv6 STATIC ROUTE TABLE' with columns: 'Select', 'Destination', 'NextHop', and 'Interface'.

The following table describes the parameters and buttons of this page.

Field	Description
Destination	Enter the IPv6 address of the destination device.
Prefix Length	Enter the prefix length of the IPv6 address.
Next Hop	Enter the IP address of the next hop in the IPv6 route to the destination address.
Interface	The interface for the specified route.
Add Route	Click it to add the new static route to the IPv6 Static Route Table .
Delete Selected	Select a row in the IPv6 Static Route Table and click it to delete the row.

3.3.12.3 RIP

Enable this function if you are using this device as a RIP-enabled router to communicate with others using Routing Information Protocol (RIP). This page is used to select the interfaces on your devices that use RIP, and the version of the protocol used.

Choose **Advanced > Routing > IPv6 Static Route**. The **IPv6 Routing Configuration** page shown in the following figure appears.

The screenshot shows the DSL-2730E web interface. The top navigation bar includes tabs for SETUP, ADVANCED, MAINTENANCE, STATUS, and HELP. The left sidebar lists various configuration options, with 'Routing' selected. The main content area is titled 'RIP CONFIGURATION' and contains the following elements:

- Enable RIP:** A radio button group with 'Off' selected and 'On' unselected, followed by an 'Apply' button.
- interface:** A dropdown menu currently set to 'br0'.
- Recv Version:** A dropdown menu currently set to 'RIP1'.
- Send Version:** A dropdown menu currently set to 'RIP1'.
- Buttons:** 'Add' and 'Delete' buttons are located below the configuration fields.
- RIP CONFIG LIST:** A table with columns for 'Select', 'interface', 'Recv Version', and 'Send Version'.

On the right side, there is a 'Helpful Hints...' section with text explaining that enabling RIP provides a protocol that determines the best path to a target by estimating the distance in number of hops or intermediate routers. A 'More...' link is also present.

The following table describes the parameters and buttons of this page:

Field	Description
RIP	Select Enable , the router communicates with other RIP-enabled devices.
Apply	Click it to save the settings of this page.
Interface	Choose the router interface that uses RIP.
Receive Version	Choose the interface version that receives RIP messages. You can choose RIP1 , RIP2 , or Both . <ul style="list-style-type: none"> Choose RIP1 indicates the router receives RIP v1 messages. Choose RIP2 indicates the router receives RIP v2 messages. Choose Both indicates the router receives RIP v1 and RIP v2 messages.
Send Version	The working mode for sending RIP messages. You can choose RIP1 or RIP2 . <ul style="list-style-type: none"> Choose RIP1 indicates the router broadcasts RIP1 messages only. Choose RIP2 indicates the router multicasts RIP2 messages only.

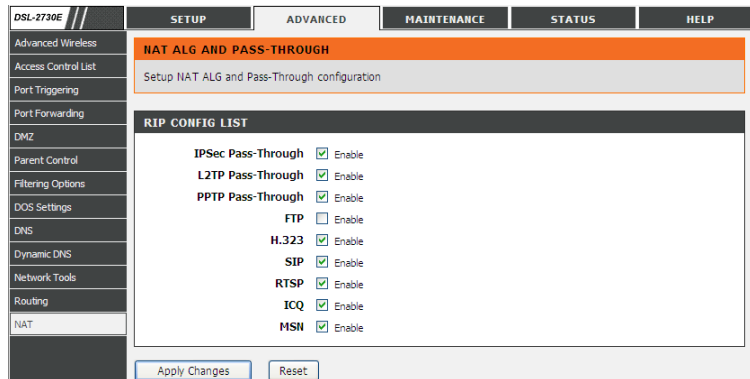
Field	Description
Add	Click it to add the RIP interface to the Rip Config List .
Delete	Select a row in the Rip Config List and click it to delete the row.

3.3.13 NAT

Under this menu, NAT ALG (Application Layer Gateway), NAT Exclude IP, NAT Forwarding, FTP ALG Config and NAT IP Mapping can be performed.

3.3.13.1 NAT ALG

Choose **Advanced > NAT > NAT ALG**. The **NAT ALG and Pass-Through** page shown in the following figure appears. Choose the NAT ALG and Pass-Through options, and then click **Apply Changes**.



3.3.13.2 NAT Exclude IP

Choose **Advanced > NAT > NAT Exclude IP**. The **NAT EXCLUDE IP** page shown in the following figure appears. In the page, you can configure some source IP addresses which use the purge route mode when accessing the Internet through the specified interface.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP								
Advanced Wireless	NAT EXCLUDE IP												
Access Control List	In the page ,you can config some source ip address which use the purge route mode when access internet through the specified interface.												
Port Triggering													
Port Forwarding													
DMZ	CONFIG												
Parent Control	interface <input type="text" value="pppoe1"/>												
Filtering Options	IP Range <input type="text"/> . <input type="text"/>												
DOS Settings	<input type="button" value="Apply Changes"/> <input type="button" value="Reset"/>												
DNS													
Dynamic DNS													
Network Tools	CURRENT NAT EXCLUDE IP TABLE												
Routing	<table border="1"> <thead> <tr> <th>WAN Interface</th> <th>Low IP</th> <th>High IP</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					WAN Interface	Low IP	High IP	Action				
WAN Interface	Low IP	High IP	Action										
NAT													

3.3.13.3 NAT Forwarding

Choose **Advanced > NAT > NAT Forwarding**. The **NAT Forwarding** page shown in the following figure appears.

Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.

Under 1483MER or 1483Routed mode, if NAPT (Network Address Port Translation) is enabled, the **Local IP Address** is configured as 192.168.1.3 and the **Remote IP Address** is configured as 202.32.0.2, the PC with the LAN IP 192.168.1.3 will use 202.32.0.2 when it is connected to the Internet via the router without NAPT control.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP								
Advanced Wireless	NAT FORWARDING												
Access Control List	Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.												
Port Triggering													
Port Forwarding													
DMZ													
Parent Control	SETTING												
Filtering Options	Local IP Address <input type="text"/>												
DOS Settings	Remote IP Address <input type="text"/>												
DNS	Enable <input checked="" type="checkbox"/>												
Dynamic DNS	Apply Changes <input type="button"/> Reset <input type="button"/>												
Network Tools													
Routing													
NAT	CURRENT NAT PORT FORWARDING TABLE												
	<table border="1"> <thead> <tr> <th>Local IP Address</th> <th>Remote IP Address</th> <th>State</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					Local IP Address	Remote IP Address	State	Action				
Local IP Address	Remote IP Address	State	Action										

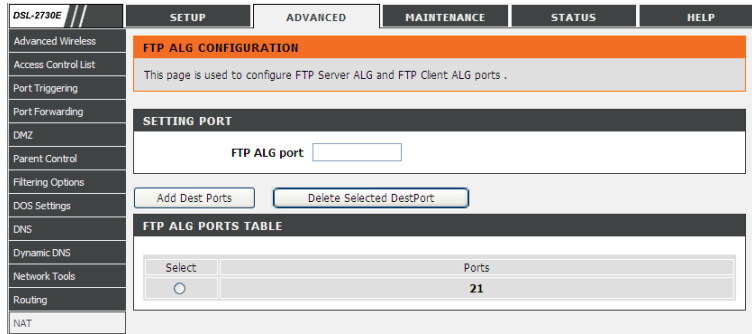
The following table describes the parameters and buttons of this page:

Field	Description
Local IP Address	Input a local IP address.
Remote IP Address	Input a remote IP address
Enable	Enable the current configured rule.
Apply Changes	Submit the configurations.
Reset	Cancel the modification and reconfigure the settings.
Current NAT Port Forwarding Table	Current configuration rule list.

3.3.13.4 FTP ALG Config

The common port for FTP connection is port 21, and a common ALG monitors the TCP port 21 to ensure NAT pass-through of FTP. By enabling this function, when the FTP server connection port is not a port 21, the FTP ALG module will be informed to monitor other TCP ports to ensure NAT pass-through of FTP.

Choose **Advanced > NAT > FTP ALG Config**. The **FTP ALG Configuration** page shown in the following figure appears.



The following table describes the parameters and buttons of this page:

Field	Description
FTP ALG port	Set an FTP ALG port.
Add Dest Ports	Add a port configuration.
Delete Selected DestPort	Delete a selected port configuration from the list.

3.3.13.5 NAT IP Mapping

Choose **Advanced > NAT > NAT IP Mapping**. The **NAT IP Mapping** page shown in the following figure appears.

Entries in the **Current NAT IP Mapping Table** allow you to configure one IP pool for a specified source IP address from LAN, so one packet whose source IP is in range of the specified address will select one IP address from the pool for NAT.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP										
Advanced Wireless	NAT IP MAPPING				Helpful Hints...										
Access Control List	Entries in this table allow you to config one IP pool for specified source ip address from lan,so one packet which's source ip is in range of the specified address will select one IP address from pool for NAT.				NAT IP Mapping are used for advanced network address translation. More...										
Port Triggering	SETTING														
Port Forwarding	Type: <input type="text" value="One-to-One"/>														
DMZ	Local Start IP: <input type="text"/>														
Parent Control	Local End IP: <input type="text"/>														
Filtering Options	Global Start IP: <input type="text"/>														
DOS Settings	Global End IP: <input type="text"/>														
DNS	<input type="button" value="Apply Changes"/> <input type="button" value="Reset"/>														
Dynamic DNS	CURRENT NAT IP MAPPING TABLE														
Network Tools	<table border="1"> <thead> <tr> <th>Local Start IP</th> <th>Local End IP</th> <th>Global Start IP</th> <th>Global End IP</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>				Local Start IP	Local End IP	Global Start IP	Global End IP	Action						
Local Start IP	Local End IP	Global Start IP	Global End IP	Action											
Routing	<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/>														
NAT															

3.4 Maintenance

3.4.1 System

Choose **Maintenance > System**. The page shown in the following figure appears. In this page you can reboot your router or save your router configuration to a file on your computer in case you have to reset your router to factory default settings. You can restore your router settings from a previously saved configuration file. You may also reset your router to factory default settings. Resetting your router to factory default settings will delete your current configuration.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
System	COMMIT/REBOOT Click the button below to reboot the router or reset it to factory default settings. <div style="text-align: center;"> <input type="button" value="Reset to default"/> <input type="button" value="Save and reboot"/> </div>				Helpful Hints... This page allows you to reboot your router or save your router configuration to a file on your computer as a precaution in case you have to reset your router to factory default settings. You will be able to restore your router settings from a previously saved configuration file. There is also a function to allow you to reset your router to factory default settings. Resetting your router to factory default settings will delete your current configuration. More...
Firmware Update	BACKUP SETTINGS Back up DSL Router configurations. You may save your router configurations to a file on your PC. <i>Note: Please always save configuration file first before viewing it.</i> <div style="text-align: center;"> <input type="button" value="Back Settings"/> </div>				
Password	UPDATE SETTINGS Update DSL Router settings. You may update your router settings using your saved files. Settings File Name : <input type="text"/> <input type="button" value="Browse..."/> <div style="text-align: center;"> <input type="button" value="Update Settings"/> </div>				
Diagnostics					
System Log					
Logout					

The following table describes the parameters and buttons of this page:

Field	Description
Reset to default	This option restores all configuration settings back to the settings that were in effect at the time the router was shipped from the factory. All settings will be lost. If you want to save your router configuration settings, use the Backup Settings option below.
Save and reboot	This will save all your settings and restart the router.
Back settings	Save your configurations in a file on your computer so that it may be accessed again later if your current settings are changed. Be sure to save the configuration before performing a firmware update.
Update settings	Click Browse to select the configuration file of device and click Update Settings to begin restoring the device configuration.



Note:

Do not turn off your device or press the **Reset** button while an operation in this page is in progress.

3.4.2 Firmware Update

Choose **Maintenance > Firmware Update**. The page shown in the following figure appears. This page displays your device firmware version and information that will be helpful for D-Link technicians should you require any technical support.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
System	UPGRADE FIRMWARE				Helpful Hints... Please Note: This page displays your device firmware version and information that will be helpful for D-Link technicians should you require any technical support. If your router is working without issue, there should be no need to update your firmware. This information is just for your reference as it is often necessary to upload new firmware to your router. More...
Firmware Update	<p>Step 1: Obtain an updated firmware image file from your ISP.</p> <p>Step 2: Enter the path to the image file location in the box below or click the "Browse" button to locate the image file.</p> <p>Step 3: Click the "Update Firmware" button once to upload the new image file.</p> <p>NOTE: The update process takes about 2 minutes to complete, and your DSL Router will reboot. Please DO NOT power off your router before the update is complete.</p>				
Password	SELECT FILE Current Firmware Version: SEA_1.00 Current Firmware Date: Jan 17 2013 15:11:22 Firmware File Name: <input type="text"/> <input type="button" value="Browse..."/>				
Diagnostics	<input type="button" value="Update Firmware"/> <input type="button" value="Reset"/>				
System Log					
Logout					

The procedure for updating the firmware is as follows.

- Step 1** Click **Browse...** to search the file.
- Step 2** Click **Update Firmware** to update the configuration file.
- Step 3** Wait for the router to reboot. This can take another minute or more.



Note:

Some firmware updates reset the configuration options to the factory defaults. Before performing an update, be sure to save the current configuration. Refer to 3.4.1 System.

3.4.3 Password

Choose **Maintenance > Password**. The page shown in the following figure appears. You may modify your router password needed to access this Web management interface. For security reasons, it is recommended that you change the default admin and user passwords of the router. The password you choose should be between 1 and 16 characters in length. 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.

The screenshot shows the 'USER ACCOUNT CONFIGURATION' page. The main configuration area contains the following fields:

- User Name:
- Old Password:
- New Password:
- Confirm Password:
- Idle logout time: (1-60min)

Below the fields are buttons for 'Add', 'Modify', 'Delete', and 'Reset'. At the bottom, there is a 'USER ACCOUNT TABLE' with the following data:

Select	User Name	Privilege	Idle Time
<input type="radio"/>	admin	root	5

The 'Helpful Hints...' sidebar on the right contains the following text:

This page allows you to modify your router password needed to access this Web management interface. For security reasons, it is recommended that you change your device's admin and user passwords from the factory default. The password you choose should be between 1 and 16 characters in length.

Please make sure to 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...](#)

The following table describes the parameters and buttons of this page:

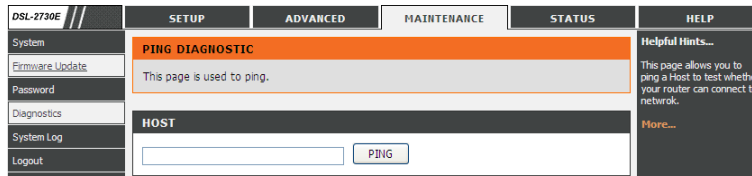
Field	Description
Root	The root account is fixed, having full access to the Web-based management interface.
User	The user account has the privilege to view configuration settings and statistics and update the router's firmware.

3.4.4 Diagnostics

Choose **Maintenance > Diagnostics**. The page shown in the following figure appears. Your router is capable of testing your DSL connection. If a test displays a fail status, click "Rerun Diagnostic Tests" at the bottom of this page to make sure the fail status is consistent.

3.4.4.1 Ping Diagnostic

Choose **Maintenance > Diagnostics > Ping**. The page shown in the following figure appears. This page allows you to ping a Host to test whether your router can be connected to the network.

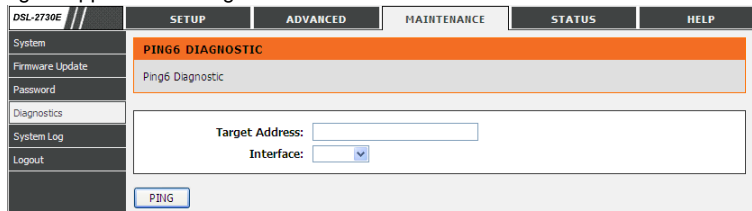


The following table describes the parameter and button of this page:

Field	Description
Host	Enter the valid IP address or domain name.
Ping	Click it to start to Ping.

3.4.4.2 Ping6

Choose **Maintenance > Diagnostics > Ping6**. The page shown in the following figure appears. The target Address can be a domain or IPv6 address.



The following table describes the parameter and button of this page:

Field	Description
Target Address	Enter an IP address for Ping6 diagnosis.
Interface name	Enter an interface through which the Ping6 diagnosis is performed.

3.4.4.3 Traceroute

Choose **Maintenance > Diagnostics > Traceroute**. The page shown in the following figure appears. You can track the route path through the information which is from your computer to the other side host on the Internet.

The screenshot shows the 'TRACEROUTE DIAGNOSTIC' page in the DSL-2730E web interface. The page has a sidebar on the left with navigation links: System, Firmware Update, Password, Diagnostics, System Log, and Logout. The main content area is titled 'TRACEROUTE DIAGNOSTIC' and contains a message: 'This page is used to traceroute diagnostic.' Below this is a form with the following fields and values:

- Host: [Text Input]
- NumberOfTries: 3
- Timeout: 5000 ms
- Datasize: 38 Bytes
- DSCP: 0
- MaxHopCount: 30
- Interface: any (dropdown menu)

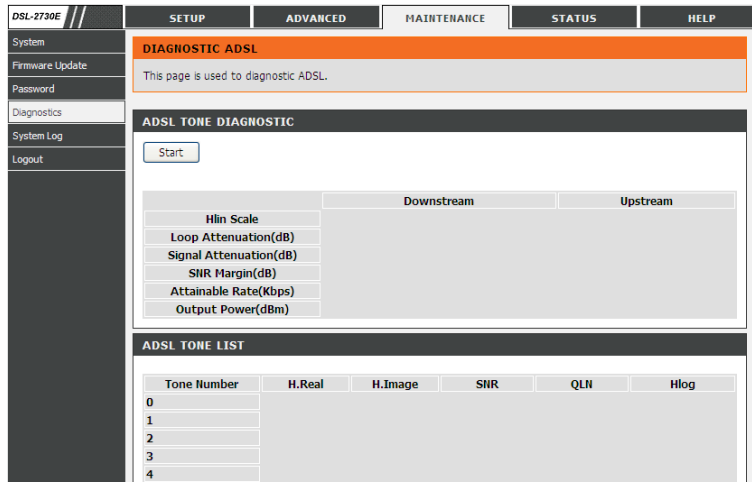
At the bottom of the form, there are two buttons: 'traceroute' and 'Show Result'.

The following table describes the parameters and buttons of this page.

Field	Description
Host	Enter the destination host address for diagnosis.
NumberOfTries	Number of repetitions.
Timeout	Put in the timeout value.
Datasize	Packet size.
DSCP	Differentiated Services Code Point, You should set a value between 0-63.
MaxHopCount	Maximum number of routes.
Interface	Select the interface.
Traceroute	Click start traceroute.

3.4.4.4 ADSL

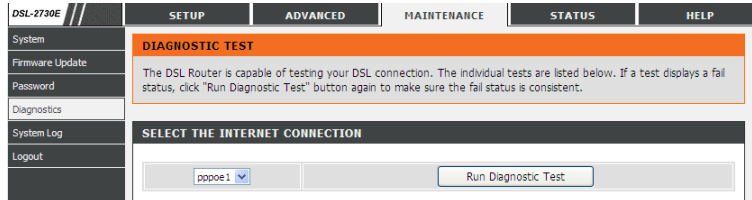
Choose **Maintenance > Diagnostics > ADSL**. The page shown in the following figure appears. It is used for ADSL tone diagnostics.



Click **Start** to start ADSL tone diagnostics.

3.4.4.5 Diag Test

Choose **Maintenance > Diagnostics > Diag Test**. The page shown in the following figure appears. In this page, you can test the DSL connection. You can also view the LAN status connection and ADSL connection.



3.4.5 System Log

Choose **Maintenance > System Log**. The page shown in the following figure appears. This section when enabled allows the system to begin logging events based on the selected log level.

The router can only keep a limited number of log entries due to router 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.

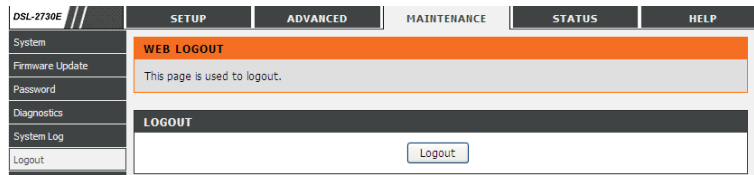
DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP							
System	LOG SETTING				Helpful Hints... This page allows you to enable, configure and view your router system log. The system log will keep a record of your router activity. Depending on the amount of detail you include in the log, your router can only keep a limited number of log entries due to router 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. More...							
Firmware Update	This page is used to display the system event log table. By checking Error or Notice (or both) will set the log flag. By clicking the ">>> ", it will display the newest log information below.											
Password	SETTING Error: <input type="checkbox"/> Notice: <input type="checkbox"/> <input type="button" value="Apply Changes"/> <input type="button" value="Reset"/>											
Diagnostics	REMOTE SETTING Remote Log Enable: <input checked="" type="checkbox"/> Remote Log Host: <input type="text"/> <input type="button" value="Apply Changes"/>											
System Log	EVENT LOG TABLE <input type="button" value="Save Log to File"/> <input type="button" value="Clean Log Table"/> Old <<< < > >>> New <table border="1"> <thead> <tr> <th>Time</th> <th>Index</th> <th>Type</th> <th>Log Information</th> </tr> </thead> <tbody> <tr> <td colspan="4">Page: 1/1</td> </tr> </tbody> </table>				Time	Index	Type	Log Information	Page: 1/1			
Time	Index	Type	Log Information									
Page: 1/1												
Logout												

The following table describes the parameters and buttons of this page.

Field	Description
Error	When the system is likely to result in a module abnormality, the system generates an Error log.
Notice	When the system is under attack or logged in, or port status changes, the system generates a Notice log.
Remote Log Host	Send system log to remote host, maybe a domain or an IP.
Save Log to File	You can save current log table to a file.

3.4.6 Logout

Choose **Maintenance** > **Logout**. The page shown in the following figure appears. In this page, you can log out of the configuration page.



3.5 Status

You can view the system information and monitor performance

3.5.1 Device Info

Choose **Status** > **Device Info**. The page shown in the following figure appears. This page displays a summary overview of your router, including system information, DSL information, LAN Configuration, DNS information, WAN Configuration and so on.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP			
Device Info	ADSL ROUTER STATUS				Helpful Hints... This page displays a summary overview of your router, including system information, DSL information, LAN Configuration, DNS information, WAN Configuration and so on More...			
Wireless Clients	This page shows the current status and some basic settings of the device.							
DHCP Clients	SYSTEM							
ADSL Driver	Alias Name		RTL867x ADSL Modem					
Statistics	Firmware Version		SEA_1.00					
Route Info	Uptime		0 0:0:14					
	Date/Time		Thu Jan 1 0:0:14 1970					
	Built Date		Jan 17 2013 15:11:22					
	Serial Number		001111111111					
	DSL							
	Operational Status		--					
	Upstream Speed		--					
	Downstream Speed		--					
	LAN CONFIGURATION							
	IP Address		192.168.1.1					
	Subnet Mask		255.255.255.0					
	DHCP Server		Enable					
	MAC Address		00:11:11:11:11:11					
	WIRELESS INFO							
	Status:		Enabled					
	MAC Address:		00:05:1D:03:04:05					
	Network Name (SSID):		WLAN_Ojjo					
	Current Channel:		1					
	Encryption:		Disabled					
	DNS STATUS							
	DNS Mode		Auto					
	DNS Servers							
	IPv6 DNS Mode		Auto					
	IPv6 DNS Servers							
	WAN CONFIGURATION							
	Interface	VPI/VC	Encap	Droute	Protoc ol	IP Address	Gateway	Status
	pppoe1	0/100	LLC	On	PPPoE	0.0.0.0	0.0.0.0	down
	WAN IPV6 CONFIGURATION							
	Interface	VPI/VCI	Encap	Protocol	IPv6 Address	Gateway	Droute	Status
	pppoe1	0/100	LLC	PPPoE				down
	Refresh							

3.5.2 Wireless Clients

Choose **Status > Wireless Clients**. The page shown in the following figure appears. This table shows the MAC address, transmission, reception packet counters and encrypted status for each associated wireless client.

DSL-2730E //	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP												
Device Info	ACTIVE WIRELESS CLIENT TABLE																
Wireless Clients	This table shows the MAC address, transmission, reception packet counters and encrypted status for each associated wireless client																
DHCP Clients	ACTIVE WIRELESS CLIENT TABLE																
ADSL Driver	<table border="1"> <thead> <tr> <th>MAC Address</th> <th>Tx Packet</th> <th>Rx Packet</th> <th>Tx Rate (Mbps)</th> <th>Power Saving</th> <th>Expired Time (s)</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> <td>---</td> </tr> </tbody> </table>					MAC Address	Tx Packet	Rx Packet	Tx Rate (Mbps)	Power Saving	Expired Time (s)	None	---	---	---	---	---
MAC Address	Tx Packet	Rx Packet	Tx Rate (Mbps)	Power Saving	Expired Time (s)												
None	---	---	---	---	---												
Statistics	Refresh																
Route Info																	

3.5.3 DHCP Clients

Choose **Status > DHCP Clients**. The page shown in the following page appears. This page displays all client devices that obtain IP addresses from the device. You can view the host name, IP address, MAC address and time expired(s).

DSL-2730E //	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP					
Device Info	ACTIVE DHCP CLIENT TABLE									
Wireless Clients	This table shows the assigned IP address, MAC address and time expired for each DHCP leased client.									
DHCP Clients	ACTIVE DHCP CLIENT TABLE									
ADSL Driver	<table border="1"> <thead> <tr> <th>Name</th> <th>IP Address</th> <th>MAC Address</th> <th>Expiry</th> <th>Type</th> </tr> </thead> <tbody> </tbody> </table>					Name	IP Address	MAC Address	Expiry	Type
Name	IP Address	MAC Address	Expiry	Type						
Statistics	Refresh									
Route Info										

3.5.4 ADSL Driver

Choose **Status > ADSL Driver**. The page shown in the following page appears. This page displays all ADSL statistics information, including link down or on, downstream and upstream, type, line coding and so on.

ADSL	
Adsl Line Status	ACTIVATING.
Adsl Mode	--
Up Stream	--
Down Stream	--
Attenuation Down Stream	--
Attenuation Up Stream	--
SNR Margin Down Stream	--
SNR Margin Up Stream	--
Vendor ID	RETK
Firmware Version	4923c106
CRC Errors	--
Up Stream BER	--
Down Stream BER	--
Up Output Power	--
Down Output Power	--
ES	--
SES	--
UAS	--

3.5.5 Statistics

Choose **Status > Statistics**. The page shown in the following page appears. This is a summary of the number of packets that have passed between the WAN and the LAN since the router was last initialized.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP																																																																																																									
Device Info	STATISTICS				Helpful Hints... This is a summary of the number of packets that have passed between the WAN and the LAN since the router was last initialized. More...																																																																																																									
Wireless Clients	This page shows the packet statistics for transmission and reception regarding to network interface.																																																																																																													
DHCP Clients	STATISTICS																																																																																																													
ADSL Driver	<table border="1"> <thead> <tr> <th>Interface</th> <th>Rx pkt</th> <th>Rx err</th> <th>Rx drop</th> <th>Tx pkt</th> <th>Tx err</th> <th>Tx drop</th> </tr> </thead> <tbody> <tr><td>e1</td><td>1176</td><td>0</td><td>0</td><td>1720</td><td>0</td><td>0</td></tr> <tr><td>a0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a1</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a3</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a4</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a5</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a6</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>a7</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w1</td><td>24283</td><td>0</td><td>0</td><td>3228</td><td>0</td><td>21</td></tr> <tr><td>w2</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w3</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w4</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> <tr><td>w5</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td><td>0</td></tr> </tbody> </table>					Interface	Rx pkt	Rx err	Rx drop	Tx pkt	Tx err	Tx drop	e1	1176	0	0	1720	0	0	a0	0	0	0	0	0	0	a1	0	0	0	0	0	0	a2	0	0	0	0	0	0	a3	0	0	0	0	0	0	a4	0	0	0	0	0	0	a5	0	0	0	0	0	0	a6	0	0	0	0	0	0	a7	0	0	0	0	0	0	w1	24283	0	0	3228	0	21	w2	0	0	0	0	0	0	w3	0	0	0	0	0	0	w4	0	0	0	0	0	0	w5	0	0	0	0	0	0
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Route Info																																																																																																														

3.5.6 Route Info

Choose **Status > Route Info**. The page shown in the following page appears. This table shows a list of destination routes commonly accessed by your network.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP								
Device Info	IP ROUTE TABLE				Helpful Hints... Displays the list of the ADSL router's routing table. More...								
Wireless Clients	This table shows a list of destination routes commonly accessed by your network.												
DHCP Clients	CURRENT IP ROUTING TABLE												
ADSL Driver	<table border="1"> <thead> <tr> <th>Destination</th> <th>Subnet Mask</th> <th>NextHop</th> <th>Interface</th> </tr> </thead> <tbody> <tr> <td>192.168.1.1</td> <td>255.255.255.255</td> <td>*</td> <td>e1</td> </tr> </tbody> </table>					Destination	Subnet Mask	NextHop	Interface	192.168.1.1	255.255.255.255	*	e1
Destination	Subnet Mask	NextHop	Interface										
192.168.1.1	255.255.255.255	*	e1										
Statistics	<input type="button" value="Refresh"/>												
Route Info													

3.6 Help

In the main interface, click **Help** tab to enter the **Help** menu as shown in the following figure. This section provides detailed configuration information for the device. Click a link to view corresponding information.

DSL-2730E	SETUP	ADVANCED	MAINTENANCE	STATUS	HELP
Menu	HELP MENU				
Setup	<ul style="list-style-type: none"> • Setup • Advanced • Maintenance • Status 				
Advanced	SETUP HELP				
Maintenance	<ul style="list-style-type: none"> • Local Network • Internet Setup • Wireless Setup • Time and Date 				
Status	ADVANCED HELP				
Support	<ul style="list-style-type: none"> • Advanced Wireless • Access Control List • Port Triggering • Port Forwarding • DMZ • Parental Control • Filtering Options • DGS settings • DNS • Dynamic DNS • Network Tools • Routing • NAT 				
	MAINTENANCE HELP				
	<ul style="list-style-type: none"> • System • Firmware Update • Password • Diagnostics • System Log • Logout 				
	STATUS HELP				
	<ul style="list-style-type: none"> • Device Info • Wireless Clients • DHCP Clients • ADSL Driver • Statistics • Route Info 				