DSL-2740E

User Manual v1.00

Federal Communication Commission Interference 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.

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 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.

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

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

Customer Information

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom is a label that contains, among other information, a product identifier in the format US: 3P7DL01BDSL-2740E. If requested, this number must be provided to the telephone company.

Applicable connector jack Universal Service Order Codes ("USOC") for the Equipment is RJ11C.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA.

A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US: 3P7DL01BDSL-2740E. The digits represented by 01B are the REN without a decimal point (e.g., 03 is a REN of 0.3).

If this Wireless N300 ADSL2+ Modem Router causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this Wireless N300 ADSL2+ Modem Router, for repair or warranty information, please contact :

Company name: D-Link USA Inc.
Company address: 17595 Mt. Herrmann St. Fountain Valley, CA92708, USA
The customer must obtain a Case ID Number from D-Link Technical Support at 1-877-453-5465, who will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form and entering the assigned Case ID Number at https://rma.dlink.com/.

If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

WHEN PROGRAMMING EMERGENCY NUMBERS AND(OR) MAKING TEST CALLS TO EMERGENCY NUMBERS:
1) Remain on the line and briefly explain to the dispatcher the reason for the call.
2) Perform such activities in the off-peak hours, such as early morning or late evenings.

Contents

Safety Precaution

Follow the following instructions to prevent the device from risks and damage

- Use the power adapter in the package.
- An overburden power outlet or damaged lines and plugs may cause electric shock or fire accident. Check the power cords regularly. If you find any damage, replace it at once.
- Proper space left for heat dissipation is necessary to avoid overheating. The holes on the device are designed for heat dissipation to ensure running normally. Do not cover these heat dissipation holes.
- Do not put this device close to a heat source or high temperature place. Avoid the device direct exposing sunshine.
- Do not put this device close to over damp place. Do not spill any fluid on this device.
- Do not connect this device to PC or electronic product, unless our customer engineer or your broadband provider instructs you to do this, because any wrong connection may cause power or fire risk.
- Do not place this device on an unstable surface or support.

Introduction

The DSL-2740E supports multiple line modes. With four 10/100 base-T Ethernet interfaces at the user end, the device provides high-speed ADSL broadband connection 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 complies with specifications of IEEE 802.11, 802.11b/g/n, WEP, WPA, and WPA2 security. The WLAN of the device supports 2T2R.

System Requirements

Network Requirement	Available DSL uplink access
Clients to be connected	Devices installed a wireless network adapter or 10 base T/100BaseT Ethernet adapter.
Web-based Configuration Utility Requirement	Computer with the following: Windows®, Macintosh, or Linux-based operating system An installed Ethernet adapter Browser Requirements: Microsoft Internet Explorer® v7, Mozilla® Firefox v9.0, Google® Chrome 16.0, or Safari® v4 or higher version. Windows® Users: Make sure you have the latest version of Java installed. Visit www.java.com to download the latest version.

Features

The device supports the following features:
- Various line modes
- External PPPoE dial-up access
- Internal PPPoE/PPPoA dial-up access
- 1483Bridged/1483Routed with dynamic IP or static IP
- Multiple PVCs (the number of PVCs support is eight)
- DHCP server/relay
- Static route
- Network Address Translation(NAT)
- DMZ
- Virtual Server
- Universal plug and play (UPnP)
- Dynamic Domain Name Server(DDNS)
- Network Time Protocol(NTP)
- Firmware upgrading through Web, TFTP
- Resetting to the factory defaults through Reset button or Web
- Diagnostic test
- Web interface
- Telnet CLI
- IP/MAC/URL Filter
- Application layer service
- QoS
- Port binding
- Wireless network

Installation

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

Before You Begin

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

Installation Notes

In order to establish a connection to the Internet it will be necessary to provide information to the Router that will be stored in its memory. For some users, only their account information (Username and Password) is required. For others, various parameters that control and define the Internet connection will be required. You can print out the two pages below and use the tables to list this information. This way you have a hard copy of all the information needed to setup the Router. If it is necessary to reconfigure the device, all the necessary information can be easily accessed. Be sure to keep this information safe and private.

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

Operating Systems
The DSL-2740E uses an HTML-based web interface for setup and management. The web configuration manager may be accessed using any operating system capable of running web browser software, including Windows 98 SE, Windows ME, Windows 2000, Windows XP, Windows Vista, Windows 7, and Windows 8.

Web Browser
Any common web browser can be used to configure the Router using the web configuration management software. The program is designed to work best with more recently released browsers such as Opera, Microsoft Internet Explorer® version 6.0, Netscape Navigator® version 6.2.3, or later versions. The web browser must have JavaScript enabled. JavaScript is enabled by default on many browsers. Make sure JavaScript has not been disabled by other software (such as virus protection or web user security packages) that may be running on your computer.

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

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

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

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

Information you will need from your ADSL service provider

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

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

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

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

Modulation Type
ADSL uses various standardized modulation techniques to transmit data over the allotted signal frequencies. Some users may need to change the type of modulation used for their service. The default DSL modulation (ADSL2+ Multi-Mode) used for the Router automatically detects all types of ADSL, ADSL2 and ADSL2+ modulation.

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

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

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

Information you will need about your
DSL-2740E Router

Username
This is the Username needed to access the Router's management interface. When you attempt to connect to the device through a web browser you will be prompted to enter this Username. The default Username for the Router is "admin."

Password
This is the Password you will be prompted to enter when you access the Router's management interface. The default Password is "admin." The user may change this.

LAN IP addresses for the DSL-2740E
This is the IP address you will enter into the Address field of your web browser to access the Router's configuration graphical user interface (GUI) using a web browser. The default IP address is **192.168.1.1**. This may be changed to suit any IP address scheme the user desires. This address will be the base IP address used for DHCP service on the LAN when DHCP is enabled.

LAN Subnet Mask for the DSL-2740E
This is the subnet mask used by the DSL-2740E and will be used throughout your LAN. The default subnet mask is **255.255.255.0**.

Information you will need about your LAN or computer

Ethernet NIC
If your computer has an Ethernet NIC, you can connect the DSL-2740E to the Ethernet port using an Ethernet cable.

DHCP Client status
Your DSL-2740E ADSL Router is configured, by default, to be a DHCP server. This means that it can assign an IP address, subnet mask and a default gateway address to computers on your LAN. The default range of IP addresses the DSL-2740E will assign are from 192.168.1.2 to 192.168.1.254. Your computer (or computers) needs to be configured to obtain an IP address automatically (that is, they need to be configured as DHCP clients.)

It is recommended that you backup or record this information here, or in some other secure place, in case you have to re-configure your ADSL connection in the future.

Once you have the above information, you are ready to setup and configure your DSL-2740E ADSL Router.

Hardware Description and Installation

LED Indicators

📖 **Note:**

The figures in this document are for reference only.

Figure 1 Front panel

The following table describes the LEDs of the device.

LED	Color	Status	Description
Power	Green	On	The initialization of the system is complete.
	Red	On	The device is powered on.
		Blinking	The firmware is upgrading.
LAN	Green	Off	The Ethernet interface is not properly connected.
		Blinking	The Ethernet interface is properly connected and data is being transmitted.
		On	The Ethernet interface is properly connected, but no data is being transmitted.
2.4GHz	Green	Blinking	The WLAN function is enabled and data is being transmitted on the WLAN.
		On	The WLAN function is enabled, but no data is being transmitted on the WLAN.
		Off	The WLAN function is disabled.
WPS	Green	Blinking	WPS is successfully triggered.
		Solid on for 5 seconds and then turns off	Connection is successfully established between the router and the client through WPS.
DSL	Green	Off	No signal is being detected.
		Blinking	The device is handshaking with the physical layer of the office end.
		On	A connection is set up with the physical layer of the office end.

LED	Color	Status	Description
⬤ Internet	Green	Off	The device is under the Bridge mode or powered off.
		On	A connection is set up and no traffic is detected.
		Blinking	Data is being transmitted over Internet.
	Red	On	The device is attempted to become IP connected, but failed.

Figure 2 Rear panel

The following table describes the interfaces of the device.

Interface/Button	Description
DSL	RJ-11 interface for connecting the host to the telephone jack on the wall or the **MODEM** interface of the splitter through a telephone line.
LAN4/3/2/1	For a PC or other Ethernet-abled device to join the LAN of 2750U by being connected to this interface with RJ-45 cable.
WPS	Press and hold the button for 5 seconds starts WPS negotiation.
WIRELESS ON/OFF	Press and hold the button for 5 seconds starts WLAN.
ON/OFF	Power switch, which is used to power on or power off the router.
12V DC IN (power)	Interface for connecting the power adapter.
Reset (On the bottom side)	Press and hold the button for 1 second to restore the factory defaults.

Best Location for Wireless Operation

Many environmental factors may affect the effective wireless function of the DSL Router. If this is the first time that you set up a wireless network device, read the following information:

The access point can be placed on a shelf or desktop, ideally you should be able to see the LED indicators in the front, as you may need to view them for troubleshooting.

Designed to go up to 100 meters indoors and up to 300 meters outdoors, wireless LAN lets you access your network from anywhere you want. However, the numbers of walls, ceilings, or other objects that the wireless signals must pass through limit signal range. Typical ranges vary depending on types of materials and background RF noise in your home or business.

Connecting the Router

The following figure displays the application diagram for the connection of the device, PC, splitter and telephone sets..
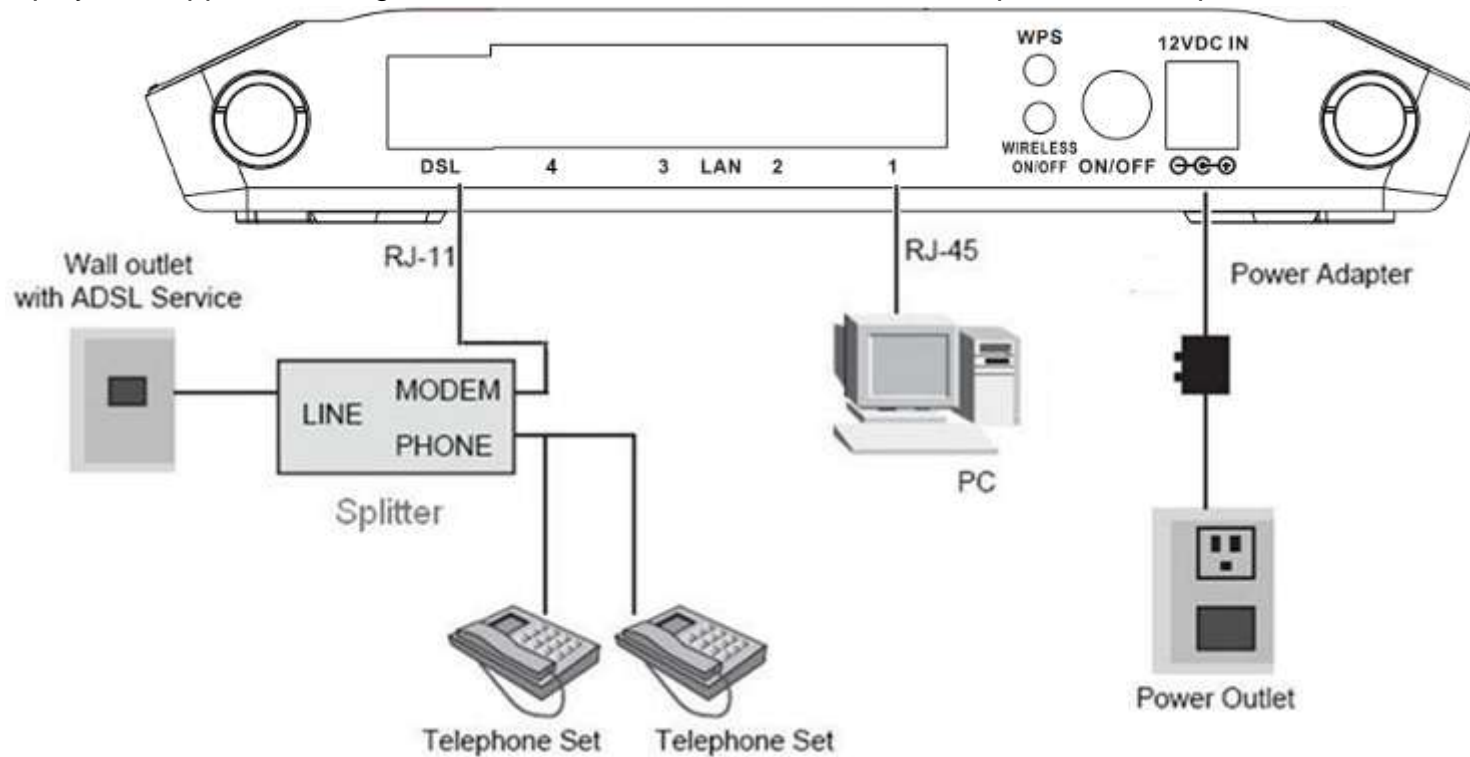
Figure 3 DSL uplink connection

Step 1   Connect the **DSL** port of the router and the Modem port of the splitter through a telephone cable; connect the phone to the phone port of the splitter through a telephone cable; and connect the Line port of the splitter to the uplink telephone jack on the wall.

The spliter has three ports:

- **LINE**: Connect to a wall phone jack (RJ-11 jack)
- **MODEM**: Connect to the Line interface of the router
- **PHONE**: Connect to a telephone set

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

Step 3   Plug the power adapter to the wall outlet and then connect the other end of it to the **Power** (12V DC IN) port of the route.

TCP/IP Configuration On A PC

Each network interface on the PC should either be configured with a statically defined IP address and DNS address, or be instructed to automatically obtain an IP address using the network DHCP server. DSL router provides a DHCP server on its LAN and it is recommended to configure your LAN to automatically obtain its IP address and DNS server IP address.

The configuration principle is identical but should be carried out differently on each operating system.

The right figure displays the **TCP/IP Properties** dialog box on Windows XP.

TCP/IP configuration steps for Windows XP are as follows:

Step 1 Choose **Start** > **Control Panel** > **Network Connections**.

Step 2 Right-click the Ethernet connection icon and choose **Properties**.

Step 3 On the General tab, select the Internet Protocol (TCP/IP) component and click Properties. The Internet Protocol (TCP/IP) Properties window appears.

Step 4 Select the **Obtain an IP address automatically** button.

Step 5 Select the **Obtain DNS server address automatically** button.

Click **OK** to save the settings.
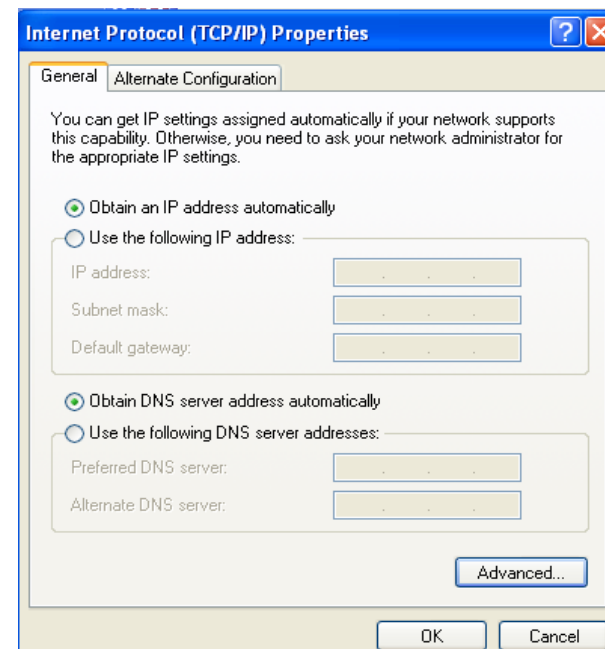
Web Configuration

This chapter describes how to use Web-based management of the DSL router, which allows you to configure and control all of DSL router features and system parameters in a user-friendly GUI.

Logging in and Wizard

The following description is a detail "How-To" user guide and is prepared for first time users.

Step 1   Open the Internet Explorer (IE) browser, and then go to **http://192.168.1.1**.

Step 2   The Login window will pop up. Enter the username and password. And then click **Login**.

●   The default username and password are both **admin**.

Select **Remember my login info. on this computer**, you only need to enter the password once for the first time logging.

Step 3   After logging in the web configuration page, click on the **Setup**. The **Wizard** page appears as shown on the right. The **Wizard** page will guide you to fast configure your router to connect the Internet. Click **Setup Wizard**.

Step 4   In the next page shown on the right, there are 5 steps to configure the device. Click **Next** to continue.

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

Next   Cancel

Step 5   Set a new login password. If you want to keep the previous password, click Skip to go to next page directly. After setting a new password, click **Next**.

Note:

The login password cannot contain a space.

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 :
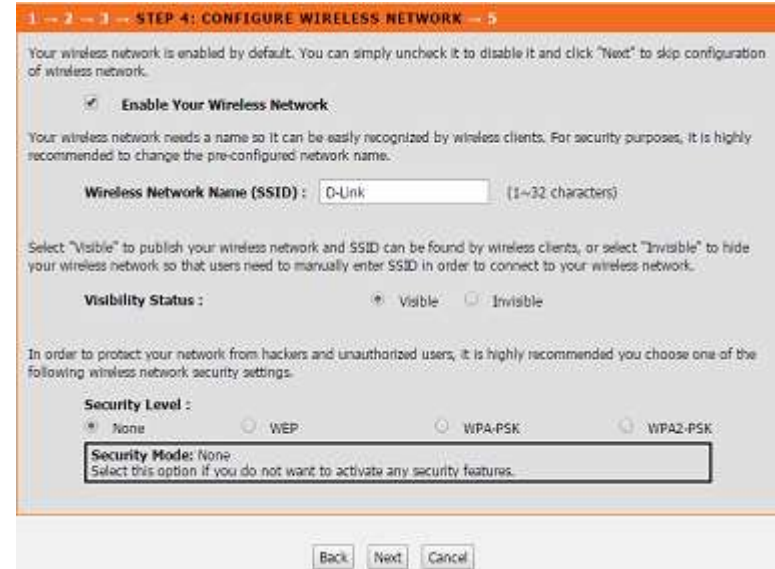
New Password :

Confirm Password :

Back   Next   Skip   Cancel

Step 6   Set the time and date manually or setup a correct NTP server, and then click **Next.**

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 0:18:11 1970

Time Zone: (GMT-12:00) International Date Line West

DayLight: LocalTIME

Mode: Copy Computer time

Step 7   Configure the Internet connection.

Please select correct country, ISP and service mode. If PPPoE is select, please enter the PPPoE sername and Password provided by your ISP.
Click **Next** to go to the next page.

📖 **Note:**

Different protocol requires entering different information. You can fill in the entries according to what your ISP provides you.

Step 8   Configure the wireless network in this page.
1)   Check **Enable Your Wireless Network**.
1)   Set the SSID for your wireless network, you can also keep it as default.
2)   Choose to display or hide your wireless network.
-    **Visible**: Your wireless network can be detected.
-    **Invisible**: You wireless network cannot be detected. Wireless clients needs to enter the SSID and password manually to join this wireless network.

3) Set the security level. The default security level of wireless network is **None**. Choose an encryption mode for the wireless network. It is recommended to choose **WPA2-PSK**.

4) Enter a new password in **WPA2 Pre-Shared Key**.

5) Click **Next** to go to the next page.

Step 9 View the setup summary.
Click **Apply** to take the setup into effect.
Click **Back** to modify the setup.
Click **Cancel** to cancel the whole setup.

Setup

LAN Interface Settings

Choose **SETUP** > **Local Network**. The **Local Network** page shown in the right figure appears.

To configure the local network of DSL-2740E, do as follow:

Step 1 In the **Router IP Address** textbox, enter the IP address of LAN interface. The default IP address is **192.168.1.1**. The Router IP address is the URL address for logging in the Web configuration page.

Step 2 Enter the subnet mask of LAN interface. If the Router IP address is **192.168.1.1**, the range of subnet mask is from **255.255.0.0** - **255.255.255.254**.

Step 3 Select **Secondary IP Address**. It enables the secondary LAN IP address for your router. It will be used when your primary router IP address is in the same network segment with other LANs. The Secondary router IP address must be in the different network segment from the primary one.

Step 4 Enter the secondary router IP address and subnet mask.

● Enabling LAN MAC Address Control

Step 1 The **MAC Address Control Setting** is block list. Only MAC address in Current Allowed MAC Address Table will be allowed. Enter the MAC address in the textbox for **New MAC Address** and then click **Add**

Step 2 Select the LAN port which would like to enable MAC address control. Then click **Apply Changes**.

DHCP server

The **DHCP Server** shown in the right figure appears. It used to assign an IP address to clients connect to LAN of this CPE.
It is suggest to keep it as default settings.

Step 1 Configure DHCP Server.

- **Enable DHCP Relay**: Enable the message to transmit between clients in different network segment.

- **Enable DHCP Server**: Enable the router to assign IP addresses, IP default gateway and DNS Servers to the host.

DHCP IP Address Range: It specifies the first IP address in the IP address pool. The router assigns IP address that base on the IP pool range to the host.

DHCP Lease Time: The lease time determines the period that the host retains the assigned IP addresses before the IP addresses change.

Step 2 Select the LAN or WAN ports which are going to adopt the setting.
Step 3 Click **Apply** to make the settings take effect.

DHCP reserved

The **DHCP Server** shown in the right figure appears. It used to assign an IP address to clients connect to LAN of this CPE.
It is suggest to keep it as default settings.

LAN IPv6 Interface

Choose **SETUP** > **LAN IPv6**. The page shown in the right figure appears. This page allows you to configure IPv6 LAN.

The following table describes the parameters of this page.

Field	Description
Global Address	The address through which PCs access the gateway.
RA settings	Choose to enable or disable RA (Router Advertisement and related parameters.
DHCPv6 Mode.	Configure DHCPv6 server as auto mode or manual mode. And configure the suffix pool for LAN side clients.

Internet Setup

Channel Configuration

Choose **SETUP** > **Internet Setup** > **Channel Config**. The page is shown as the figure appears on the right. In this page, you can add or configure WAN interface of your router.

Step 1 In the VPI and VCI textbox, enter the VPI and VCI value provided by your ISP.

📖 **Note:**

To access the internet, at least one PVC is required to add.

Step 2 In the protocol drop-down list, select the protocol according to the internet service you subscribed from your ISP. There are 5 types of protocols: **PPP over ATM (PPPoA)**, **PPP over Ethernet (PPPoE)**, **MAC Encapsulation Routing (1483 MER)**, **IP over ATM (IPoA)**, **Bridging, 1483 Bridge, 1483 Routed.**

● Adding a PVC in **PPPoE** or **PPPoA** mode

If the protocol is selected to **PPP over Ethernet (PPPoE)** or **PPP over ATM (PPPoA)**, the page shown as the right figure appears.

1) In **Protocol** drop-down list, select **PPPoE** (or **PPPoA**).
2) In **Encapsulation** Mode, select an option according to the information provided by your ISP.
3) Select IPv4 or IPv6 according to the information provided by ISP.
4) In the PPP Username and PPP Password textbox, input the Username and password of PPPoE account provided by your ISP.
5) In the **Dial-up Mode** drop-down list, select an option as you demand. There are 3 modes available: Continuous, Connect On Demand, Manual.
   - **Continuous**: The system automatically keeps dialing for WAN connection once the connection is off-line.
   - **Connect On Demand**: The system automatically dials for WAN connection once network access request is detected. If no request is sent from the LAN within the IdleTime, the system automatically disconnect from the internet. You can set the Idle Time as you need.
   - **Manual**: Manually dial to connect the WAN once powering on the Router.
6) For other entries which are not mentioned above, you can keep them as defaults.

1) Adding a PVC in MAC Encapsulation Routing (MER) or IP Over ATM (IPoA) mode

If the protocol is selected to **MAC Encapsulation Routing (MER)**, the page shown as the right figure appears.

2) In **Protocol** drop-down list, select **1483 MER**

3) In **Encapsulation Mode** drop-down list, select an option according to the information provided by your ISP.

4) Select IPv4 or IPv6 according to the information provided by ISP.

5) In WAN IP Setting section, choose an option according to the information provided by your ISP.

➢ **DHCP**: the dynamic WAN IP address will be assigned by your ISP.

➢ **Use the following address:** A static WAN IP address is provided to you by your ISP. Input the static WAN IP address and other information provided by your ISP.

6) For other entries which are not mentioned above, you can keep them as defaults.

● Adding a PVC in **Bridging** mode

1) In Protocol drop-down list, select 1483 Bridge

2) In Encapsulation Mode drop-down list, select an option according to the information provided by your ISP.

For PVC in Bridging mode, keep the settings as defaults.

📖 **Note:**

If the connection protocol is in Bridging mode, the connected PC must dial for WAN connection with installed dial-up software.

Step 3 After setting (take adding a PPPoE PVC as an example), click **Add** and the page skip to the page shown as the right figure appears. You can edit or delete the PVCs in the table.

ATM

Choose **SETUP** > **Internet Setup** > **ATM settings**. The page shown in the right figure appears.

In this page, it is recommended to keep it as defaults. The device negotiates the modulation mode with DSLAM.

Click **Apply** to save the settings.

ADSL

Choose **SETUP** > **Internet Setup** > **ADSL settings**. The page shown in the right figure appears.

This page is used to configure the parameters for the ATM of your ADSL Router. Here you may change the setting for VPI, VCI, QoS etc ...

Wireless

This section describes the configuration of 2.4G wireless network.
Choose **SETUP** > **Wireless**. The page shown in the right figure appears. This section contains **Wireless Basic** and **Wireless Security**.

Wireless Basic

Choose **SETUP** > **Wireless** > **Wireless Basic**. The page shown as the right figure appears. In this page, you can configure the parameters of wireless LAN clients that may connect to the device.
To configure this page, do as follow:

Step 1   Select **Enable Wireless**.

Step 2   In **Wireless Network Name** (SSID) textbox, enter a name for your wireless network. You can also keep it as defaults.

Step 3   Keep other entries as defaults.

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

Wireless Security

Choose **SETUP** > **Wireless** > **Wireless Security**. The page shown as the right figure appears. In this page, you can configure the parameters of wireless LAN clients that may connect to the device. Wireless security is vital to your network to protect the wireless communication among wireless stations, access points and wired network.
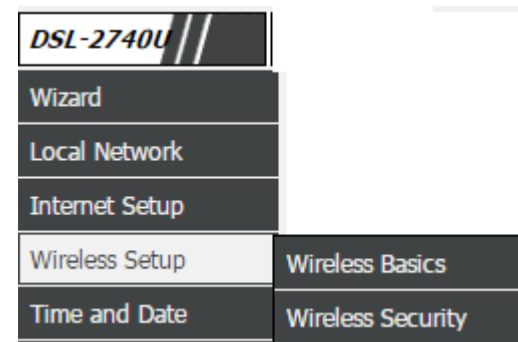
The default security mode is **None**. If the security mode is set to None, your wireless network can be connected by all wireless clients that can detect the SSID of this network.

If the Security Mode is set to **WPA(TKIP)**, **WPA(AES), WPA2(TKIP), WPA(AES)**, or **WPA2 Mixed**,, the page is shown as the right figure appears. Take **WPA2 Mixed** as an example.

Step 1   In **Security Mode** drop-down list, select **WPA2 Mixed**.

Step 2   In **WPA Authentication Mode**, select Personal (Pre-Share-Key)

Step 3   In **Pre-Shared Key Format** drop-down list, select **Passhrase**.

Step 4   Configure the **WPA Authentication Mode**.

- **Personal (Pre-Share-Key)**: WPA-PSK does not require an authentication server. You need to set a Pre-shared Key (wireless network password) for your wireless network.

- **Enterprise (RADIUS)**: When WPA enterprise is enabled, the router uses EAP (802.1x) to authenticate clients via a remote RADIUS server. Enter the port, IP address, and password of the Radius server. The wireless clients are required to enter the username and password provided by the Radius server.

Step 5   Enter the **Pre-Share Key**, at least for 8 charcacters..

Step 6   After setting, click **Apply Changes** to save the settings.

Time and Date

Choose **SETUP** > **Time and Date**. The page shown in the right figure appears. This page allows you to configure IPv6 LAN.

In the **Time and Date** 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.

Select **Set NTP Server Manually** and select the NTP server of D-Link. You can also specify the NTP server by selecting Other.

Select **Daylight** if necessary. Set the daylight as you want.

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

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 troubleshoot.

Advanced Wireless

Choose **ADVANCED** > **Advanced Wireless > Wireless Advanced**. The page shown in the right figure appears.
If you're not sure what you're configuring, please leave it as default.

Access Control

Choose **ADVANCED** > **Advanced Wireless > Access Control**. The page shown in the right figure appears.
1. Select **Wireless Access Control Mode** to **Allow Listed** or **Deny Listed**
2. Add MAC address to the list.
Only the MAC addresses in the listed will be allowed or denied according to what mode is selected.

WPS

There are 3 methods to realize wireless connection through WPS.

- PBC

Click the **Start PBC** button in this page. And then click WPS button on the client to be connected within 2 minutes. The connection will be established.

- Based on the PIN of wireless client to be connected.

In Input Client PIN textbox, input the PIN code of the wireless client to be connected. And then click on **Start PIN**

- Based on the PIN of DSL-2740E.

1) Select Enabled to enable WPS.
4) Input the **Self-PIN number** at wireless client to be connected.

Access Control List

You can specify what services are accessible form 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.

Select direction, LAN ACL Switch and click Apply to save the settings.
In ACL settings, please enter the IP address range and check which service to configure. Then click **Add** to create a new rule.

Access Control List IPv6

You can specify what services are accessible form 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.

Select direction, LAN ACL Switch and click Apply to save the settings.
In ACL settings, please enter the IP address range and check which service to configure. Then click **Add** to create a new rule.

Port Forwarding

Choose **ADVANCED** > **Port Forwarding**. The page shown in the right figure appears.
This function is used to open ports in your device and re-direct 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. 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 which within the available range of the subnet where the device is in.

Enter an IP address in the **WAN IP address** field when IP Address is selected in WAN settings or select the interface name
The Ports show the ports that you want to open on the device. The **TCP/UDP** means the protocol type of the opened ports.
Click **Add** to create a new rule.

Port Trigger

Choose **ADVANCED** > **Port Trigger** The page shown in the right figure appears. 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".

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.

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 right figure appears.
Input the host IP address. And Click **Apply Changes** to save the settings.

Parental Control

This page provides two useful tools for restricting the Internet access. **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.

Choose **ADVANCED** > **Parental Control > URL Block**. The **URL Block** page shown in the right figure appears.

Step 1   Enter the key word of website in the **Keyword** field.

Step 2   Select the corresponding time and days.

Step 3   Click **Add Filter.**

MAC Blocking

Choose **ADVANCED** > **Parental Control** > **MAC Blocking**. The page shown in the right figure appears.

Enter the **Rule Name**, **MAC address** to be blocked and configure the time/schedule accordingly.

Click **Add Rule** to add it in the MAC Blocking Table,

Schedule

Choose **ADVANCED** > **Parental Control** > **Schedule**. The page shown in the right figure appears.

The schedule created here could be used for the **URL blocking** or **MAC blocking.**

ADD SCHEDULE RULE

Rule Name:

Days: EveryDay
Sun Mon Tue Wed
Thu Fri Sat

All day(24Hour):

Time: From [ ] : [ ] To [ ] : [ ]
(e.g. From 09:21 To 18:30)

Add Rules

RULES TABLE:

Select	Rule Name	Days	Time

Delete Selected Rule

Filtering Options

IP/Port Filtering

Choose **ADVANCED** > **Filtering Options** > **IP/Port Filtering**. The page shown in the right figure appears. In this page, you may configure IP filtering function.

specify the criteria: Rule Action, Protocol, Direction, Source IP/Mask, Des IP/Mask,
Click **Apply Changes** to create a new rule.

DEFAULT ACTION STATUS

Outgoing Default Action: ● Permit ○ Deny
Incoming Default Action: ○ Permit ● Deny

RULE CONFIGURATION

Rule Action: ● Permit ○ Deny
Protocol: IP ▼
Direction: Upstream ▼
Source IP Address: [ ] Mask Address: 255.255.255.255
Dest IP Address: [ ] Mask Address: 255.255.255.255

SPort: [ ] - DPort: [ ] -

Enable: ✔

Apply Changes Reset Help

CURRENT FILTER TABLE

Rule	Protocol	Source IP/Mask	SPort	Dest IP/Mask	DPort	State	Direction	Action

IPv6/Port Filtering

Choose **ADVANCED** > **Filtering Options** > **IPv6/Port Filtering**. The page shown in the right figure appears. In this page, you may configure IPv6 filtering function.

specify the criteria: Rule Action, Protocol, Direction, Source IP/Mask, Des IP/Mask,
Click **Apply Changes** to create a new rule.

MAC Filtering

Choose **ADVANCED** > **Filtering Options > MAC Filtering**. The page shown in the right figure appears. In this page, you may configure MAC Filtering function.

specify the criteria: Action, Direction, Source MAC, Des MAC, and then
Click **Apply Changes** to create a new rule.

DOS settings

A denial-of-service (DoS) attack is characterized by an explicit attempt by attackers to prevent legitimate users of a service from using that service.
Port scan protection is designed to block attempts to discover vulnerable ports or services that might be exploited in an attack from the WAN.

Choose **ADVANCED** > **DOS settings**. The page shown in the right figure appears. In this page, you may configure IP firewall function.

Check the protections and click on **Apply Changes** to enable the protection. You might consult your ISP for which protection should be enabled.

DOS CONFIGURATION		
Enable DoS Prevention		
Whole System Flood: SYN	100	Packets/Second
Whole System Flood: FIN	100	Packets/Second
Whole System Flood: UDP	100	Packets/Second
Whole System Flood: ICMP	100	Packets/Second
Per-Source IP Flood: SYN	100	Packets/Second
Per-Source IP Flood: FIN	100	Packets/Second
Per-Source IP Flood: UDP	100	Packets/Second
Per-Source IP Flood: ICMP	100	Packets/Second
TCP/UDP PortScan	Low	Sensitivity
ICMP Smurf		
IP Land		
IP Spoof		
IP TearDrop		
PingOfDeath		
TCP Scan		
TCP SynWithData		
UDP Bomb		
UDP EchoChargen		
Select ALL Clear ALL		
Enable Source IP Blocking	300	Block time (sec)

Apply Changes

DNS

Domain name system (DNS) is an Internet service that translates domain names into IP addresses. Because domain names are alphabetic, they are easier to remember. The Internet, however, is actually based on IP addresses. Each time you use a domain name, a DNS service must translate the name into the corresponding IP address. For example, the domain name www.example.com might be translated to 198.105.232.4.

The DNS system is, in fact, its own network. If one DNS server does not know how to translate a particular domain name, it asks another one, and so on, until the correct IP address is returned.

Choose **ADVANCED** > **DNS**. The page shown in the right figure appears.

If you are using the device for DHCP service on the LAN or using DNS servers on the ISP network, select **Attain DNS Automatically**.

If you have DNS IP addresses provided by your ISP, enter these IP addresses in the available entry fields for the preferred DNS server and the alternate DNS server.

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

IPv6 DNS

Choose **ADVANCED** > **IPv6 DNS**. The page shown in the right figure appears.

If you are using the device for DHCP service on the LAN or using DNS servers on the ISP network, select **Attain DNS Automatically**.

If you have DNS IP addresses provided by your ISP, enter these IP addresses in the available entry fields for the preferred DNS server and the alternate IPv6 DNS server.

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

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 (DyndDNS.org or dlinkddns.com).

Choose **ADVANCED** > **Dynamic DNS**. The page shown in the right page appears.

Click **Add** to add dynamic DNS.

The following table describes the parameters of this page.

Field	Description
DDNS provider	Select one of the DDNS registration organizations from the down-list drop. Available servers include DynDns.org and dlinkddns.com.
Host Name	Enter the host name that you registered with your DDNS service provider.
Username	Enter the user name for your DDNS account.
Password	Enter the password for your DDNS account.

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

Network Tools

Port Mapping

Choose **ADVANCED** > **Network Tools** > **Port Mapping**. The page shown in the right figure appears. In this page, you can bind the WAN interface and the LAN interface to the same group.
Click **Add** to add port mapping.

The procedure for creating a mapping group is as follows:
Step 1 Select the group to be configured.
Step 2 Select interfaces from the Available Interface list and click the **Add >** button to add them to the grouped interface list, in order to create the required mapping of the ports. Or select the interface in Interface group and click **< Del** to remove it from current group.
Step 3 Click **Apply** to save the settings.

IGMP Proxy

Choose **ADVANCED** > **Network Tools** > **IGMP Proxy**. The page shown in the right figure appears.
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 after you enable it.

PORT MAPPING CONFIGURATION

Port Mapping: ○ Disable ◉ Enable

WAN		Interface group

Add >

LAN		< Del

Select	Interfaces	Status
Default	LAN2,LAN3,LAN4,wlan,pppoe1,a4,a5,a6,a7	Enabled
Group1○	LAN1,a0,a1	Enabled
Group2○		--
Group3○		--
Group4○		--

Apply

IGMP PROXY CONFIGURATION

IGMP Proxy:	○ Disable ◉ Enable
Multicast Allowed:	○ Disable ◉ Enable
Robust Count:	2
Last Member Query Count:	2
Query Interval:	60 (seconds)
Query Response Interval:	100 (*100ms)
Group Leave Delay:	2000 (ms)

Apply Changes   Undo

IP QoS Configuration

Choose **ADVANCED** > **Network Tool** >**QoS Configuration**. The page shown in the right figure appears. The QoS Configuration contains 3 parts: **IP QoS Configuration**, **QoS Rule list**.

IP QoS Configuration
Choose **ADVANCED** > **QoS Configuration** > **Configure QoS Global Options**. The page shown in the right figure appears. You can tick in the checkbox and then click **Submit** to enable queuing operation.

Click **Add Rule**.
The following table describes the parameters of this page.

Field	Description
MAC	Specify Source MAC and Destination MAC.
Ip/mask	Specify Source IP/Mask and Dest IP/Mask
Port	Specify TCP port.
Protocol Type	Choose a protocol type matching with the QoS rule.
Phy Port	Based on the Classify Type, choose a WAN/LAN interface.
IPP/DS field	Select TOS or DSCP QoS
Ranges	Select or enter corresponding QoS value ranges according to the IPP/DS field.

click **Apply Changes** to apply the settings.

UPNP

Choose **ADVANCED** > **Network Tools** > **UPnP**. The page shown in the right figure appears.

In this page, you can configure universal plug and play (UPnP). The system acts as a daemon after you enable UPnP.

UPnP is used for popular audio visual software. It allows automatic discovery of your device in the network. If you are concerned about UPnP security, you can disable it. Block ICMP ping should be enabled so that the device does not respond to malicious Internet requests.

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

SNMP

Choose **ADVANCED** > **Network Tools** > **SNMP**. The page shown in the right figure appears. In this page, you can set SNMP parameters.

TR-069

Choose **ADVANCED** > **Network Tools** > **TR-069**. The page shown in the right figure appears. In this page, In this page, you can configure the TR069 CPE.

ACS CONFIGURATION

Enable:	☑
URL:	http://rms.airtelbroadband.in:8103/AC:
User Name:	airtelacs
Password:	airtelacs
Periodic Inform Enable:	○ Disable ● Enable
Periodic Inform Interval:	86400 seconds

CONNECTION REQUEST

User Name:	admin
Password:	admin
Path:	/tr069
Port:	7547

DEBUG

ACS Certificates CPE:	● No ○ Yes
Show Message:	● Disable ○ Enable
CPE Sends GetRPC:	● Disable ○ Enable
Skip MReboot:	● Disable ○ Enable
Delay:	○ Disable ● Enable
Auto-Execution:	○ Disable ● Enable

Certificates

Here you can import the CA for TR-069.

CERTIFICATE MANAGEMENT

CPE Certificate Password:	client Apply Undo
CPE Certificate:	選擇檔案 未選擇任何檔案 Upload Delete
CA Certificate:	選擇檔案 未選擇任何檔案 Upload Delete

Software Forbidden

Choose **ADVANCED** > **Network Tools** > **Software Forbidden**. The page shown in the right figure appears. This page is used to configure some software to be forbidden. By it ,you can deny the IP packets from the specified software.

CURRENT FORBIDDEN SOFTWARE LIST

Software	Select

Delete   Delete All

ADD FORBIDDEN SOFTWARE

Add Forbidden Software: --

QQ&QQ Game
Yahoo Messenger
BT related software
Ourgame
GameABC
Chinagames
HF netgames
Mail Delievery
Receiving Mail

Add

ARP Binding

Choose **ADVANCED** > **Network Tools** > **ARP Binding**. The page shown in the right figure appears. This page lists the permanent arp entry table.You can bind ip with corresponding mac to avoid arp spoof.

ARP BINDING CONFIGURATION

IP Address: 0.0.0.0
Mac Address: 000000000000   (ex. 00E086710502)

Add   Delete Selected   Undo

ARP BINDING TABLE

Select	IP Address	MAC Address

Client Limit

Choose **ADVANCED** > **Network Tools** > **Client Limit**. The page shown in the right figure appears. This page is used to configure the capability of force how many device can access to Internet.

CLIENT LIMIT CONFIGURATION

Client Limit Capability: ○ Disable ● Enable
Maximum Devices: 4

Apply Changes

Telnet

Choose **ADVANCED** > **Network Tools** > **Telnet**. The page shown in the right figure appears**. This page is used to configure telnet function**

TELNET CONFIGURATION

Telnet: ○ Disable ● Enable

Apply Changes

Routing

Static Routing

Choose **ADVANCED** > **Routing** > **Static Route**. The page shown in the right figure appears. This page is used to configure the routing information. In this page, you can add or delete IP routes.

The following table describes the parameters of this page.

Field	Description
Destination	The destination IP address of the router.
Subnet Mask	The subnet mask of the destination IP address.
Next hop	The gateway IP address of the router.
Metric	The cost of this route.
Interface	The interface name of the router output port.

Click **Add Route** to add a static route.

IPv6 Static Routing

Choose **ADVANCED** > **Routing** > **IPv6 Static Route**. The page shown in the right figure appears. This page is used to configure the routing information. In this page, you can add or delete IP routes.
Click **Add** to add a static route.

The following table describes the parameters of this page.

Field	Description
Destination	The destination IP address of the static route.
Prefix length	The length of prefix for this route.
Next Hop	The gateway IP address of the static route.
Interface	The interface name of the static route.

Click **Add Route** to save the settings.

RIP

Choose **ADVANCED** > **Routing** > **RIP**. The page shown in the right figure appears. This page is used to select the interfaces on your device that use RIP and the version of the protocol used.

NAT

Traditional NAT would allow hosts within a private network to transparently access hosts in the external network, in most cases. In a traditional NAT, sessions are uni-directional, outbound from the private network. Sessions in the opposite direction may be allowed on an exceptional basis using static address maps for pre-selected hosts.

Choose **ADVANCED** > **NAT > NAT ALG**. The page shown in the right figure appears.

Setup NAT ALG and Pass-Through configuration
After setting, click **Apply Changes** to make the settings take effect.

NAT EXCLUDE IP
Choose **ADVANCED** > **NAT > NAT Exclude IP**. The page shown in the right figure appears.
In the page ,you can config some source ip address which use the purge route mode when access internet through the specified interface.

NAT Forwarding
Choose **ADVANCED** > **NAT > NAT Forwarding**. The page shown in the right 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.

NAT Forwarding

Choose **ADVANCED** > **NAT > FTP ALG config**. The page shown in the right figure appears.

This page is used to configure FTP Server ALG and FTP Client ALG ports .

NAT IP Mapping

Choose **ADVANCED** > **NAT > NAT IP Mapping**. The page shown in the right figure appears.

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.

Logout

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

MAINTAINANCE

In the main interface, click **MAINTAINANCE** tab to enter the maintenance menu. The submenu of the Management contains **System, Firmware Upgrade, Password , Diagnosis, system Log Configuration and Logout.**

System

Choose **MAINTAINANCE** > **System**. The page shown in the right figure appears.

In this page, you can reboot device, back up the current settings to a file, update settings from the file saved previously and restore the factory defaults.

The buttons in this page are described as follows:

Field	Description
Restore to Default Setting	Click this button to reset the device to default settings.
Save and Reboot	Click this button to reboot the device.
Backup Setting	Click this button to save the settings to the local hard drive. Select a location on your computer to back up the file. You can name the configuration file.
Update settings	Click **Browse** to select the configuration file of device and then click **Update Settings** to begin updating the device configuration.

COMMIT/REBOOT

Click the button below to reboot the router or reset it to factory default settings.

Reset to default   Save and reboot

BACKUP SETTINGS

Back up DSL Router configurations. You may save your router configurations to a file on your PC.
Note: Please always save configuration file first before viewing it.

Backup Settings

UPDATE SETTINGS

Update DSL Router settings. You may update your router settings using your saved files.

Settings File Name :   Browsing
Update Settings

📖 **Note:**

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

Firmware Upgrade

Choose **MAINTAINANCE** > **Firmware Update**. The page shown in the right figure appears. In this page, you can upgrade the firmware of the device.

To update the firmware, take the following steps.

Step 1   Click **Browse…**to find the file.

Step 2   Click **Update Firmware** to copy the file.

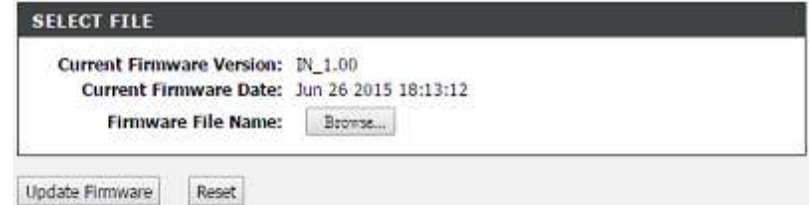The device loads the file and reboots automatically.

📖 **Note:**

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

Password

Choose **MAINTAINANCE** > **Password**. The page shown in the right figure appears. In this page, you can change the password of the user and set time for automatic logout.
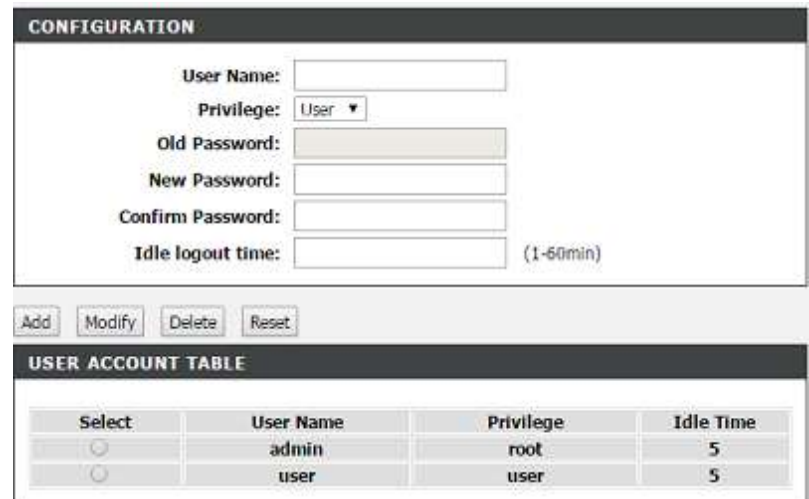
You should change the default password to secure your network. Ensure that you remember the new password or write it down and keep it in a safe and separate location for future reference. If you forget the password, you need to reset the device to the factory default settings and all configuration settings of the device are lost.

Enter the current and new passwords and confirm the new password to change the password. Click **Add or Modify** to apply the settings.
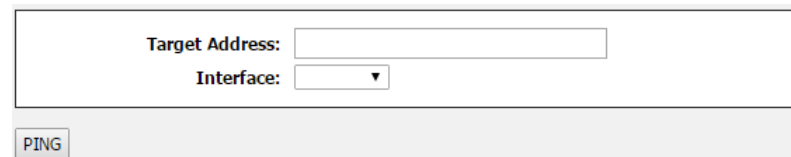
Diagnosis

Ping

Choose **MAINTAINANCE** > **Diagnosis** > **Ping**. The page shown in the right figure appears. In this page, you can determine the routers on the Internet by sending packets.

Ping

Choose **MAINTAINANCE** > **Diagnosis** > **Ping**. The page shown in the right figure appears. In this page, you can determine the routers on the Internet by sending packets.
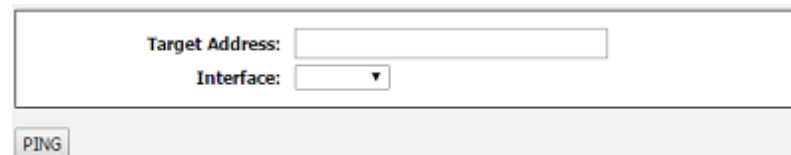
Traceroute

Choose **MAINTAINANCE** > **Diagnosis** > **Traceroute**. The page shown in the right figure appears. In this page, you can determine the routers on the Internet by sending packets.

ADSL Test

Choose **MAINTAINANCE** > **Diagnosis** > A**DSL Test**. The page shown in the right figure appears. In this page, you can test your DSL connection by clicking **Start**.

.

DIAGNOSTIC Test

Choose **MAINTAINANCE** > **Diagnosis** > **Diag Test**. The page shown in the right figure appears. In this page, you can test the bit error rate.

The DSL Router is capable of testing your DSL connection. The individual tests are listed below. If a test displays a fail status, click "Run Diagnostic Test" button again to make sure the fail status is consistent.

System Log

Choose **MAINTAINANCE** > **System Log**. The **System Log** page shown in the right figure appears.

This page displays event log data in the chronological manner. You can read the event log from the local host or send it to a system log server. Available event severity levels are as follows: Emergency, Alert, Critical, Error, Warning, Notice, Informational and Debugging. In this page, you can enable or disable the system log function.

To log the events, take the following steps.

Step 1   Select **Settings** check box to configure log level.

Step 2   Click **Apply Changes** to apply the settings.

Step 3   Check **Remote Log Enable** and configure remote systlog server IP address to enable remote log.

Step 4   Click **Apply Changes** to apply the settings.

Logout

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

Status

In the main interface, click **Status** tab to enter the **Status** menu. The submenus are **Device Info**, **Wireless Clients**, **DHCP clients**, **ADSL Driver**, **Statistics**, **Route Info** . You can view the system information and monitor performance.

Help

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

Troubleshooting

This chapter provides solutions to problems that might occur during the installation and operation of the DSL-2740E. Read the following descriptions if you are having problems. (The examples below are illustrated in Windows® XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.)

1. How do I configure my DSL-2740E Router without the CD-ROM?

Step 1   Connect your PC to the Router using an Ethernet cable.
Step 2   Open a web browser and enter the address http://192.168.1.1
Step 3   The default username is 'admin' and the default password is 'admin'.
Step 4   If you have changed the password and cannot remember it, you will need to reset the Router to the factory default setting (see question 2), which will set the password back to 'admin'.

2. How do I reset my Router to the factory default settings?

Step 1   Ensure the Router is powered on.
Step 2   Press and hold the reset button on the back of the device for approximately 1 second.
Step 3   This process should take around 1 to 2 minutes.

📖 **Note:**

Resetting the Router to the factory default settings will erase the current configuration settings.

3. What can I do if my Router is not working correctly?

There are a few quick steps you can take to try and resolve any issues:
Step 1   Follow the directions in Question 2 to reset the Router.
Step 2   Check that all the cables are firmly connected at both ends.
Step 3   Check the LEDs on the front of the Router. The Power indicator should be on, the Status indicator should flash, and the DSL and LAN

indicators should be on as well.

Step 4   Please ensure that the settings in the Web-based configuration manager, e.g. ISP username and password, are the same as the settings that have been provided by your ISP.

4. Why can't I get an Internet connection?

For ADSL ISP users, please contact your ISP to make sure the service has been enabled/connected by your ISP and that your ISP username and password are correct.

5. What can I do if my Router can't be detected by running the installation CD?

Step 1   Ensure the Router is powered on.

Step 2   Check that all the cables are firmly connected at both ends and all LEDs are working correctly.

Step 3   Ensure only one network interface card on your PC is activated.

Step 4   Click on **Start** > **Control Panel** > **Security Center** to disable the firewall.

 Note:

There is a potential security issue if the firewall is disabled on your PC. Please remember to turn it back on once you have finished the whole installation procedure. This will enable you to surf the Internet without any problems.

Networking Basics

Check Your IP Address

After you install your new D-Link adapter, by default, the TCP/IP settings should be set to obtain an IP address from a DHCP server (i.e. wireless router) automatically. To verify your IP address, please follow the steps below.

Click on **Start** > **Run**. In the run box type **cmd** and click on the **OK** button.

At the prompt, type **ipconfig** and press **Enter**.

This will display the IP address, subnet mask and the default gateway of your adapter.

If the address is 0.0.0.0, check your adapter installation, security settings and the settings on your router. Some firewall software programs may block a DHCP request on newly installed adapters.

If you are connecting to a wireless network at a hotspot (e.g. hotel, coffee shop, airport), please contact an employee or administrator to verify their wireless network settings.
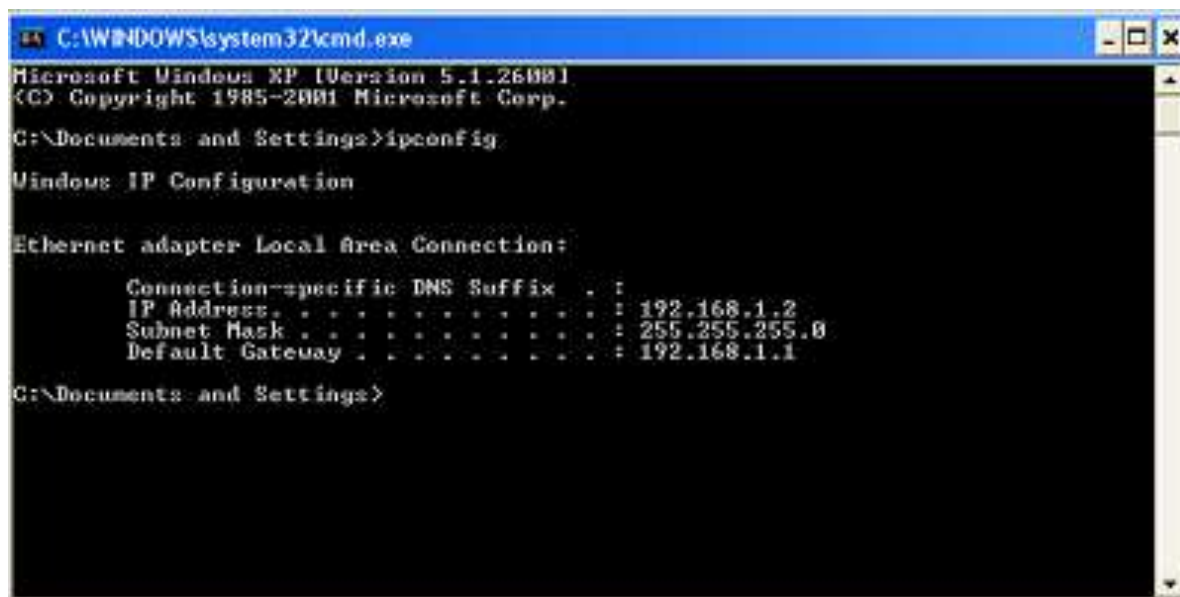
Statically Assigning an IP Address

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

Step 1
Windows® XP - Click on **Start** > **Control Panel** > **Network Connections**.
Windows® 2000 - From the desktop, right-click on the **My Network Places** > **Properties**.

Step 2
Right-click on the **Local Area Connection** which represents your network adapter and select the **Properties** button.

Step 3
Highlight **Internet Protocol (TCP/IP)** and click on the **Properties** button.

Step 4
Click on the **Use the following IP address** and enter an IP address that is on the same subnet as your network or the LAN IP address on your router.
Example: If the router's LAN IP address is 192.168.1.1, make your IP address 192.168.1.X where X is a number between 2 and 254. Make sure that the number you choose is not in use on the network. Set the Default Gateway to be the same as the LAN IP address of your router (192.168.1.1).

Set the Primary DNS to be the same as the LAN IP address of your router (192.168.1.1). The Secondary DNS is not needed or you may enter a DNS server from your ISP.

Step 5
Click on the **OK** button twice to save your settings.
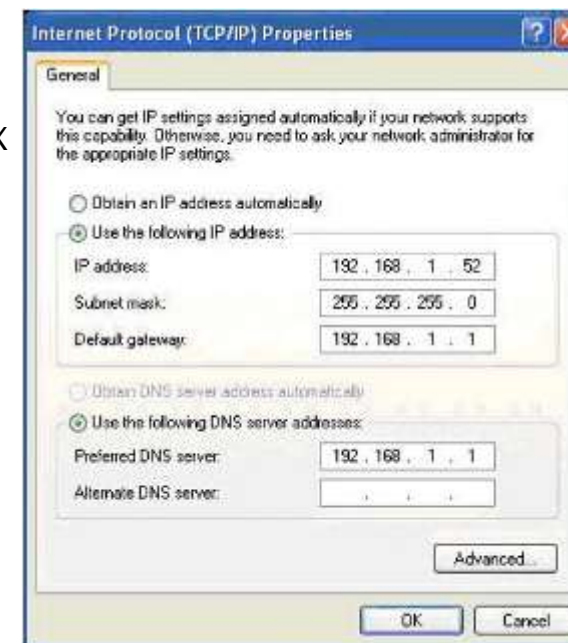
Technical Specifications

ADSL Standards

> ANSI T1.413 Issue 2
> ITU G.992.1 (G.dmt) AnnexA
> ITU G.992.2 (G.lite) Annex A
> ITU G.994.1 (G.hs)
> ITU G.992.5 Annex A

ADSL2 Standards

> ITU G.992.3 (G.dmt.bis) Annex A, L, M
> ☐ ITU G.992.4 (G.lite.bis) Annex A, L, M

ADSL2+ Standards

> ☐ ITU G.992.5 (ADSL2+) Annex A, L, M

Protocols

TCP/UDP	RFC1483/2684 Multiprotocol Encapsulation over ATM Adaptation Layer 5 (AAL5)
ARP	
RARP	
ICMP	
RFC1058 RIP v1	RFC1661 Point to Point Protocol
RFC1213 SNMP v1 & v2c	
RFC1334 PAP	RFC1994 CHAP
RFC1389 RIP v2	RFC2131 DHCP Client / DHCP Server
RFC1577 Classical IP over ATM	
	RFC2364 PPP over ATM
	RFC2516 PPP over Ethernet

Data Transfer Rate

> G.dmt full rate downstream: up to 8 Mbps / upstream: up to 1 Mbps
> G.lite: ADSL downstream up to 1.5 Mbps / upstream up to 512 Kbps
> G.dmt.bis full rate downstream: up to 12 Mbps / upstream: up to 12 Mbps
> ADSL full rate downstream: up to 24 Mbps / upstream: up to 1 Mbps

Media Interface

> ☐ ADSL interface: RJ-11 connector for connection to 24/26 AWG twisted pair telephone line
> ☐ LAN interface: RJ-45 port for 10/100BASE-T Ethernet connection