



User Manual

Broadband ADSL 2/2+ Router

KM-410P

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1. Introduction

The KM-410P supports multiple line modes. It provides four 10/100Base-T Ethernet interface at the user end. Utilizing the high-speed ADSL connection, the device provide users with broadband connectivity to the Internet or the Intranet for high-end users as net bars, office users, etc. can provide a downlink speed up to 24 Mbit/s and uplink speed up to 1 Mbit/s.

1.1 Package List

- One ADSL device(ADSL four port router)
- One external splitter
- One power adapter
- Two pieces of telephone lines(RJ-11,more than 1.8m)
- One piece of Ethernet cable(RJ-45, more than 1.8m)
- One copy of User's Manual
- A quality guarantee card
- A certificate of quality
- One copy of driver and utility software CD(optional)

1.2 Safety Cautions

Follow these announcements below to protect the device from risks and damage caused by fire or electric power.

- ▶ Use volume labels to mark the type of power.
- ▶ Use the power adapter packed within the device package.
- ▶ Pay attention to the power load of the outlet or prolonged lines. 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 radiation is necessary to avoid any damage caused by overheating to the device. The long and thin holes on the Access Point are designed for heat radiation to make sure the device works normally. Don't cover these heat radiant holes.
- ▶ Do not put this device close to a place where a heat source exists or high temperature occurs. Avoid the device from direct sunshine.
- ▶ Do not put this device close to a place where is over damp or watery. Do not spill any fluid on this device.
- ▶ Do not connect this device to any PC or electronic product, unless our customer engineer or your broadband provider instructs you to do this, because any wrong connection may cause any power or fire risk.
- ▶ Do not place this device on an unstable surface or support.

1.3 Descriptions of LEDs and Interfaces

Front panel

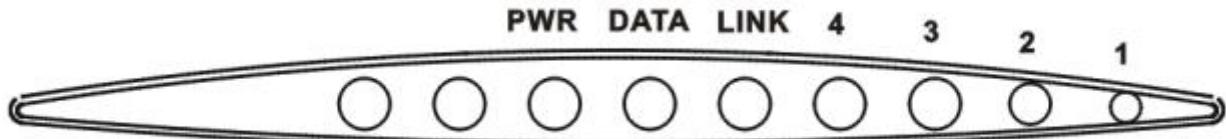


Fig 1.3-1 Front panel

LED	Color	Status	Descriptions
PWR	Green/Red	OFF	No power
		GREEN	Device init OK
		RED	Device init
		RED BLINK	Fireware upgrade
DATA	Green	OFF	No WAN link
		BLINK	WAN data transiting
		ON	WAN link established and active
LINK	Green	OFF	Initial self-test failed
		BLINK	Device is detecting itself
		ON	Initial self-test of the unit is OK and ready
4/3/2/1	Green	OFF	No LAN link
		BLINK	LAN data transiting
		ON	LAN link established and active

Rear panel

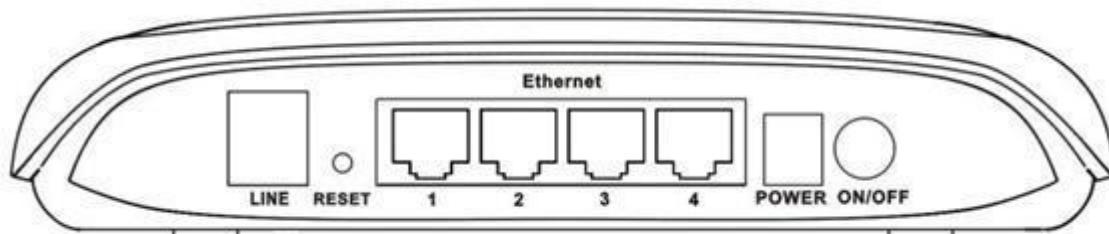


Fig 1.3-2 Rear panel

Items	Usage
Line	Line RJ-11 port
Reset	Resets to factory defaults. To restore factory defaults, keep the device powered on and push a paper clip in to the hole. Press down the button over 5 seconds and then release.

Items	Usage
Ethernet	Ethernet RJ-45 port
	Power On/Off.
Power	Power connector. DC 12 Voltage/1000mA,female pole is positive.

1.4 System Requirements

Make sure first that you have prepared these following items to guarantee the ROUTER can work normally.

- ▶ Services subscriptions
- ▶ An 10BaseT/100BaseT Ethernet card installed on your PC
- ▶ HUB or Switch. (Attached to several PCs through one of Ethernet interfaces on the device)
- ▶ Operation system: Windows 98SE, Windows 2000, Windows ME, or Windows XP
- ▶ Internet Explorer V5.0 or higher, or Netscape V4.0 or higher, or firefox 1.5 or higher.

1.5 Feature

- ▶ Supports various line modes
- ▶ Supports external PPPoE dial-up access
- ▶ Supports internal PPPoE/PPPoA dial-up access
- ▶ Supports leased line mode
- ▶ Supports ZIPB (Zero Installation PPP Bridge Mode)
- ▶ Supports 1483B/1483R/MER access
- ▶ Supports multiple PVCs(eight at most) and these PVCs can be isolated from each other
- ▶ Support a single PVC with multiple sessions
- ▶ Support multiple PVCs with multiple sessions
- ▶ Supports the binding of the ports and the PVCs
- ▶ Supports the 802.1Q and 802.1P protocol
- ▶ Supports DHCP server
- ▶ Supports NAT/NAPT
- ▶ Supports static route
- ▶ Supports firmware upgrade: WEB/tftp/ftp
- ▶ Supports reset to factory default:reset, WEB
- ▶ Supports DNS relay
- ▶ Supports Virtual server
- ▶ Supports DMZ functions
- ▶ Supports two-level passwords and usernames
- ▶ Supports WEB interface
- ▶ Supports telnet CLI
- ▶ Supports System status display
- ▶ Supports PPP session PAP/CHAP
- ▶ Supports IP filter function

-
- ▶ Supports IP QoS function
 - ▶ Supports remote access control
 - ▶ Supports line connection status test
 - ▶ Supports remote management (Telnet; HTTP)
 - ▶ Supports configuration file backup and restoration function
 - ▶ Ethernet supported such as Crossover Detection & Auto-Correction and polarity correction
 - ▶ Supports UPnP

2. Hardware Installation

1、Refer to the figure below: Connect the DSL port of the device and the ROUTER port of the splitter with a telephone cable; connect the phone to the Phone port of the splitter through a cable; connect the incoming line to the Line port of the splitter.

The splitter has three ports:

LINE: Connects to a wall phone jack (RJ-11 jack)

ROUTER: Connects to the DSL jack of the device

PHONE: Connects to a telephone set

2、Connect the LAN port of the device to the network card of the PC via an Ethernet line (MDI/MDIX).

Note: Use twisted-pair cables to connect with the HUB/Switch.

3、Plug the power adapter to the wall outlet and then connect the other end of it to the PWR port of the device.

Connection 1: Fig. 2-1 displays the application diagram for the connection of the Router, PC, splitter and telephone set.

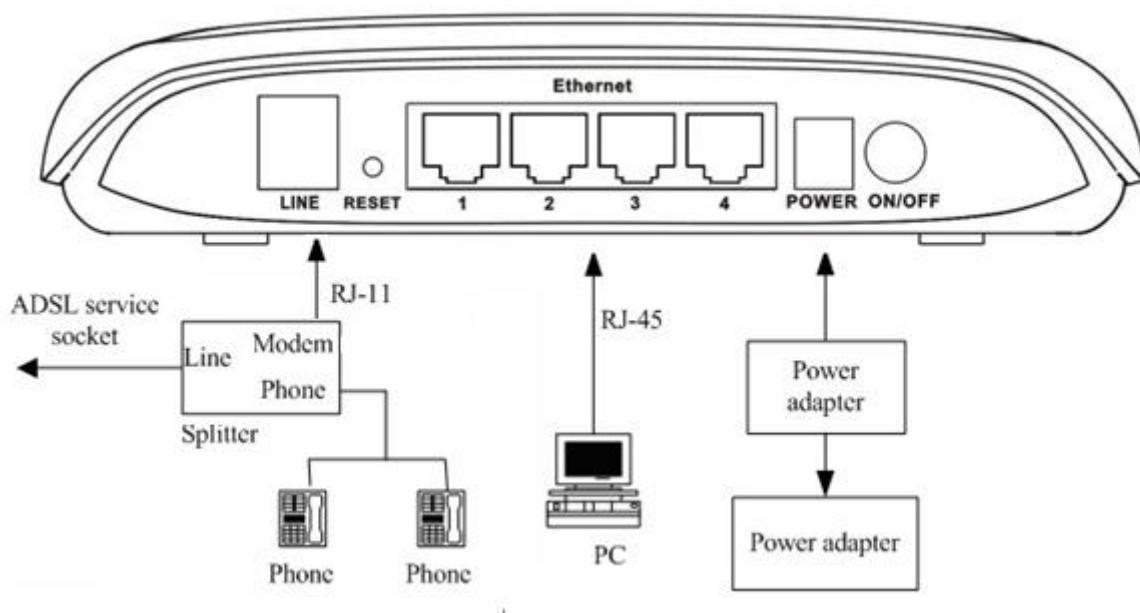


Fig 2-1 Connection Diagram (Without connecting telephone sets before the splitter)

Connection 2: As illustrated in the following figure, the splitter is installed close to the device.

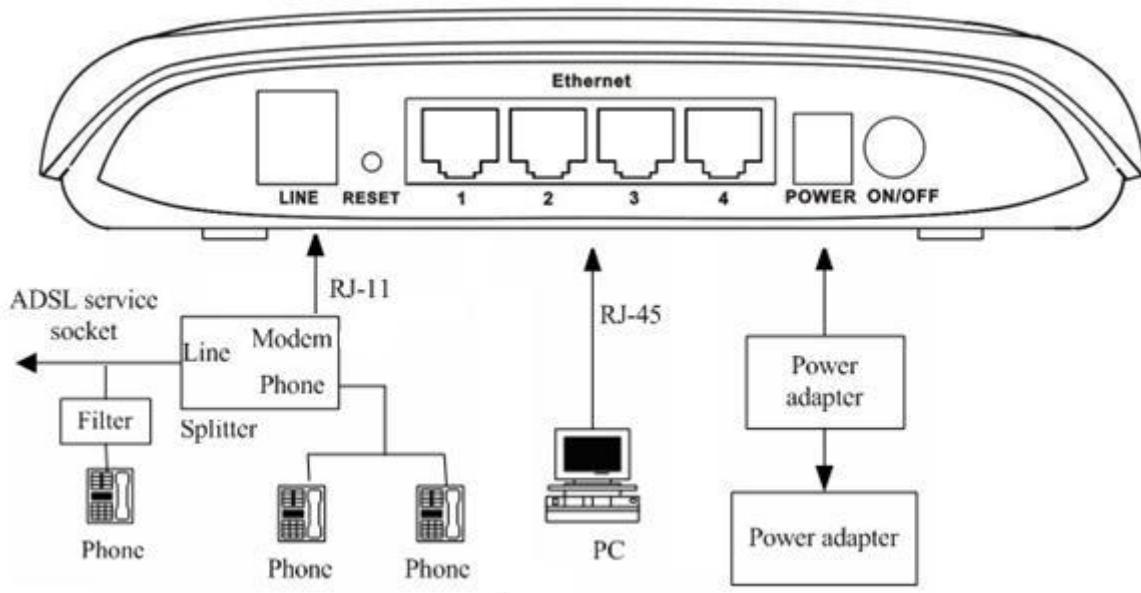


Fig 2-2 Connection Diagram (Connecting a telephone set before the splitter)

- It is **recommended** to follow the Connection 1 in an actual connection!
- **Note:** When Connection 2 is used, the filter must be installed close to the telephone lines. (See Fig. 2-2. Do not use the splitter instead of the filter).

Installing a telephone directly before the splitter may lead to a failure of connection between the device and the device of LAN side, or cannot access into the Internet, or slow the connection speed if you really need to add a telephone set before the splitter, you have to add a MicroFilter before connecting to a telephone set. Do not connect several telephones before the splitter. Moreover, do not connect several telephones with MicroFilters.

3. Introducing the Web Configurator

3.1 How to access ROUTER

The following introductions are prepared for the first time users, it is a detail “How-To” user guide.

- 1、Open IE browser, then enter <http://192.168.1.1> in address bar.
- 2、You are required to enter user name and password. See the Fig 3.1-1.
 - The super user name and password is admin/admin
 - The common user name and password is user/user

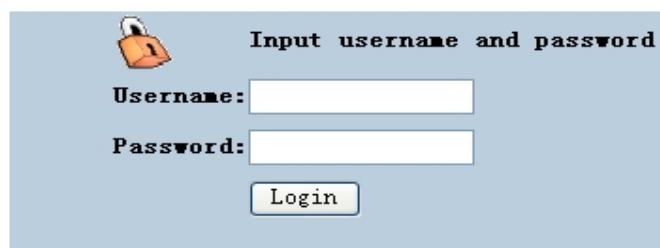


Fig 3.1-1

- 3、If you enter as super user, the below screen will be displayed when you enter successfully.

A screenshot of the router's web interface under the 'Status' tab. The top navigation bar includes 'Status', 'Wizard', 'LAN', 'WAN', 'Advance', 'Admin', and 'Diagnostic'. Below the navigation is a sub-menu with links: System | LAN | WAN | Port Mapping | Statistic | ARP Table. The main content area is titled 'System Status' and contains the following text: 'This page shows the current status and some basic settings of the device.' To the right is a table with system information:

System	
Alias Name	ADSL Modem/Router
Software Version	1.3.9
DSP Version	2.8.1.3
DSL	
DSL mode	T1.413 G.Dmt ADSL2 ADSL2+
DSL Status	ACTIVATING.
Upstream Speed	0 kbps ()
Downstream Speed	0 kbps ()
Upstream SNR	0.0dB
Downstream SNR	0.0dB
reconnection Counts	0
Uptime	3 min
Showtime	

Fig 3.1-2

After you enter router as super user, you can check, config and modify all the options. You can use the system diagnostic function also.

If you enter as common user, you can check the status of ROUTER, but can't change the most of options.

3.2 Status

Click **Status** in the menu to open the sub-menu which contains 6 items: **System, LAN, WAN, Port Mapping, Statistic and ARP Table.**

3.2.1 System

Click **System** in the sub-menu to open the screen of Fig 3.2.1. In this page, you can view the current status and some basic settings of this router, for example, Software Version, DSL mode, Upstream Speed, Downstream Speed, Uptime and so on.

The screenshot shows a web-based interface for a router's system status. The top navigation bar includes tabs for Status, Wizard, LAN, WAN, Advance, Admin, and Diagnostic. Below the tabs is a breadcrumb menu with links to System, LAN, WAN, Port Mapping, Statistic, and ARP Table. The main content area is titled "System Status" and contains a sub-section titled "System". This section displays various configuration parameters in a table format:

System	
Alias Name	ADSL Modem/Router
Software Version	1.3.9
DSP Version	2.8.1.3
DSL	
DSL mode	T1.413 G.Dmt ADSL2 ADSL2+
DSL Status	ACTIVATING.
Upstream Speed	0 kbps ()
Downstream Speed	0 kbps ()
Upstream SNR	0.0dB
Downstream SNR	0.0dB
reconnection Counts	0
Uptime	3 min
Showtime	

Fig 3.2.1

3.2.2 LAN

Click **LAN** in the sub-menu to open the screen of Fig 3.2.2. In this page, you can view the LAN IP, DHCP Server status, MAC Address and DHCP Client Table. If you want to config the LAN network, refer to chapter 3.4.1 “LAN Settings”.

The screenshot shows the LAN Status page with the following details:

- LAN Configuration:**

IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enabled
MAC Address	00-e0-4c-86-70-01
- DHCP Client Table:**

IP Address	MAC Address	Time Expired(s)
None	-----	-----

Fig 3.2.2

3.2.3 WAN

Click **WAN** in the sub-menu to open the screen of Fig 3.2.3. In this page, you can view basic status of WAN, Default Gateway, DNS Server, ect. If you want to config the WAN network, refer to chapter 3.5.1 “WAN Interface”.

The screenshot shows the WAN Status page with the following details:

- Interface Status:**

Interface	VPI/VCI	Encap	Protocol	IP Address	Gateway	Status
Internet_R_8_35	8/35	LLC	PPPoE			down 0sec / 0sec
- Default Gateway:** (Empty table row)
- DNS Servers:** (Empty table row)

Fig 3.2.3

3.2.4 Port Mapping

Click **Port Mapping** in the sub-menu to open the screen of Fig 3.2.4. In this page, you can view the mapping relation and the status of port mapping.

The screenshot shows a network management interface. The top navigation bar includes tabs for Status, Wizard, LAN, WAN, Advance, Admin, and Diagnostic, with Status being the active tab. Below the navigation bar is a sub-menu with links to System, LAN, WAN, Port Mapping, Statistic, and ARP Table. The main content area is titled "Port Mapping" and contains the following text: "This page shows the mapping relation and the status of port mapping." A status message "Status: Disabled" is displayed in red. Below this is a section titled "Mapping Relation" containing a table:

Select	Interface	Priority
Default	LAN4, LAN3, LAN2, LAN1, Internet_R_8_35	low
Group1		low
Group2		low
Group3		low
Group4		low

Fig 3.2.4

3.2.5 Statistic

Click **Statistic** in the sub-menu to open the menu in the left bar, which contains two items: **Traffic Statistic** and **DSL Statistic**.

3.2.5.1 Traffic Statistic

Click **Traffic Statistic** in the left bar to open the screen of Fig 3.2.5.1. In this page, you can view the statistics of each network port.

The screenshot shows a traffic statistic interface. The top navigation bar and sub-menu are identical to Fig 3.2.4. The main content area is titled "Statistics -- Port" and contains the following text: "This page shows the statistics of each network port." Below this is a table:

Interface	Rx pkt	Rx err	Rx drop	Tx pkt	Tx err	Tx drop
eth0	585	0	0	623	0	0
Internet_R_8_35	0	0	0	0	0	0

A "Refresh" button is located at the bottom of the table.

Fig 3.2.5.1

3.2.5.2 DSL Statistic

Click **DSL Statistic** in the left bar to open the screen of Fig 3.2.5.2. In this page, you can view the ADSL line statistics, downstream rate, upstream rate, etc.

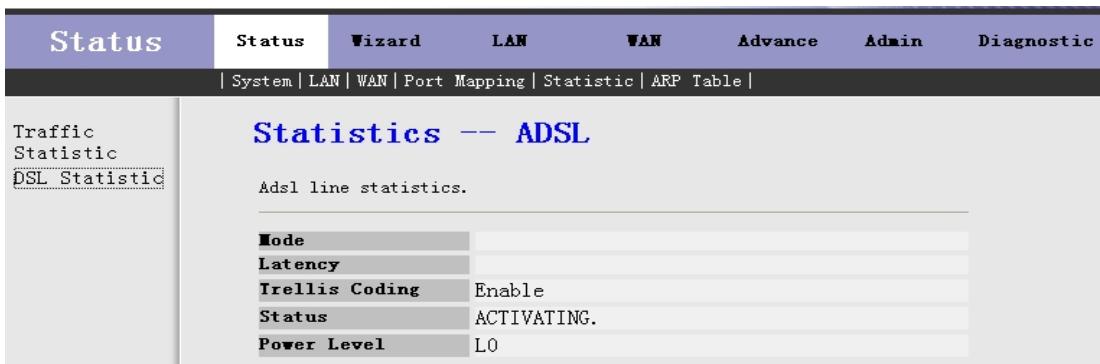


Fig 3.2.5.2

3.2.6 ARP Table

Click **ARP Table** in the sub-menu to open the screen of Fig 3.2.6. In this page, you can view the talbe which shows a list of learned MAC addresses.

Status	Status	Wizard	LAN	WAN	Advance	Admin	Diagnostic
System LAN WAN Port Mapping Statistic ARP Table							
ARP Table	ARP Table						
This table shows a list of learned MAC addresses.							
	IP Address	MAC Address					
	192.168.1.22	00-16-76-E1-67-74					
	<input type="button" value="Refresh"/>						

Fig 3.2.6

3.3 Wizard

Click **Wizard** in the menu to open the sub-menu which contains one item: **Wizard**.

3.3.1 Wizard

Wizard enables speedy and accurate configuration of your Internet connection and other important parameters. The following sections describe these various configuration parameters. Whether you configure these parameters or use the default ones, click 'Next' to enable your Internet connection.

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 either Ethernet, DSL, or both. Technical information regarding the properties of your Internet connection should be provided by your Internet Service Provider (ISP). For example, your ISP should inform you whether you are connected to the Internet using a static or dynamic IP

address, or what protocols, such as PPPOA or PPPoE, you will be using to communicate over the Internet.

Click **Wizard** in the sub-menu to open the screen of Fig 3.3.1-1. In this page, you can config the VPI/VCI number.

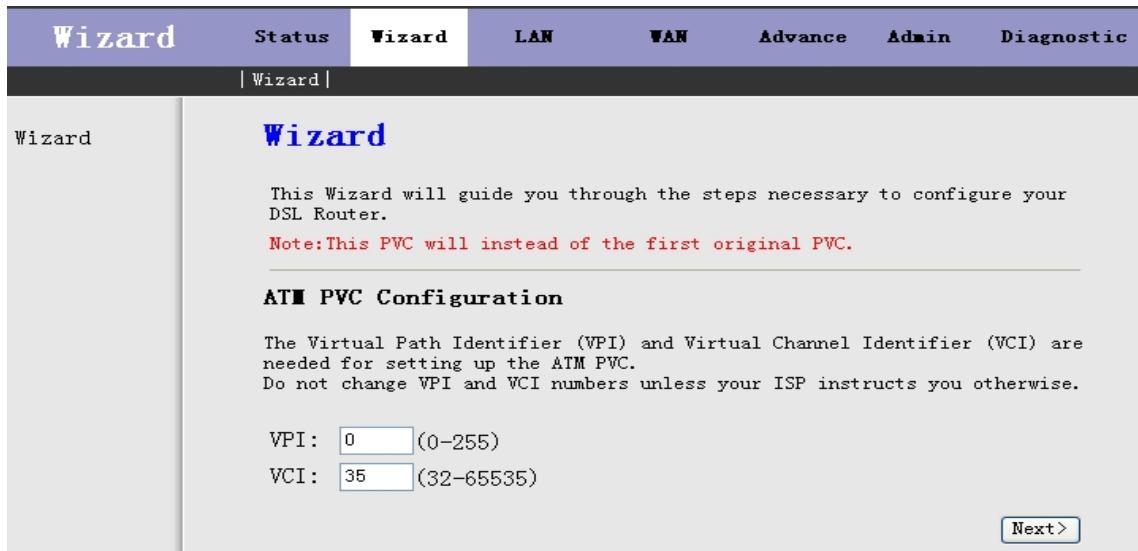


Fig 3.3.1-1

Be sure to use the correct Virtual Path Identifier(VPI) and Virtual Channel Identifier(VCI) numbers assigned to you. The valid range for VPI is 0 to 255 and for VCI is 32 to 65535(0 to 31 is reserved for local management of ATM traffic).

Then press **Next**, the Fig 3.3.1-2 screen will appear. In this page, you can select the WAN Connect Type and the encapsulation method.

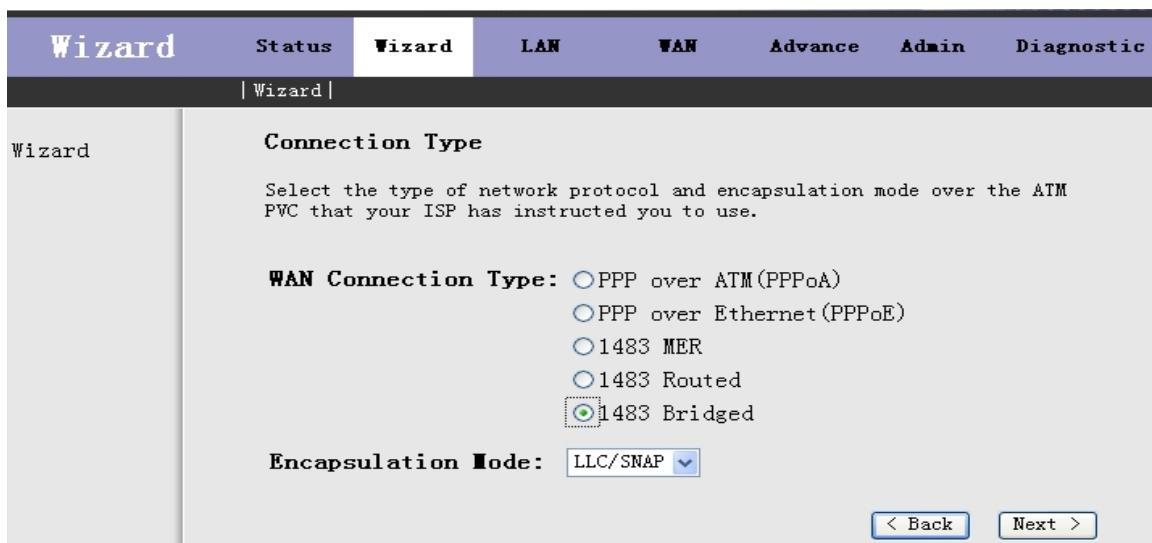


Fig 3.3.1-2

The following table describes the fields in this screen.

Label	Description
WAN Connection Type	Select the WAN Connection Type here, you can select PPPoA , PPPoE , 1483 MER , 1483 Routed or 1483 Bridged .
Encapsulation Mode	Select the method of encapsulation used by your ISP from the drop-down list box. Choices are LLC/SNAP or VC-Mux .
< Back	Click < Back to return to the previous screen
Next >	Click Next > to go to the next screen

If you select PPPoA or PPPoE in WAN Connection Type, click **Next**, the screen of Fig 3.3.1-3 appears as shown next.



Fig 3.3.1-3

The following table describes the fields of this screen.

Label	Description
Obtain an IP address automatically	The dynamic IP is not fixed; your ISP assigns you a different one each time.
Use the following IP address	A static IP is a fixed IP that your ISP gives you.
WAN IP Address	Input the IP address of the WAN interface provided by your ISP
Enable NAT	Select it to enable the NAT functions of the MODEM. If you are not to enable NAT and intend the user of the MODEM to access the Internet normally, you must add a route on the uplink equipment; otherwise the access to the Internet will fail. Normally, it is required to enable NAT.
< Back	Click < Back to return to the previous screen
Next >	Click Next > to go to the next screen

Then click **Next**, the screen of Fig3.3.1-4 appears as shown next.

The screenshot shows a software interface titled "Wizard" at the top. The "Wizard" tab is selected, and the sub-page title is "PPP Username and Password". A descriptive text block explains that PPP requires a user name and password. Below this, there are two text input fields for "PPP Username" and "PPP Password". Under "PPP Connection Type:", there are three radio button options: "Continuous" (selected), "Connect on Demand", and "Manual". For "Connect on Demand", there is an "Idle Time" field containing the value "20". At the bottom right are "Back" and "Next" buttons.

Fig 3.3.1-4

The following table describes the fields of this screen.

Label	Description
PPP Username	The username and password apply to PPPoE and PPPoA encapsulation only. Make sure that you have entered the correct username and password.
PPP Password	
PPP Connection Type	Choices are Continuous , Connect on Demand and Manual .
< Back	Click < Back to return to the previous screen
Next >	Click Next > to go to the next screen

Then click Next, the screen of Fig3.3.1-5 appears as shown next.

LAN Interface Setup

This page is used to configure the LAN interface of your ADSL Router.

LAN IP:	192.168.1.1
LAN Netmask:	255.255.255.0

Enable Secondary IP

Secondary LAN IP:	192.168.100.1
Secondary LAN Netmask:	255.255.255.0

DHCP Server

Set and configure the Dynamic Host Protocol mode for your device.

Enable DHCP Server

Start IP:	192.168.1.2
End IP:	192.168.1.254
Max Lease Time:	1 Day 0 Hour 0 Min (If all is -1, Max Lease Time is not limited)

< Back **Next >**

Fig 3.3.1-5

The following table describes the fields of this screen.

Label	Description
LAN IP	Enter the IP address of your ROUTER in dotted decimal notation, for example, 192.168.1.1(factory default)
LAN Netmask	Type the subnet mask of LAN IP.
Enable Secondary IP	Select this check box to enable the secondary LAN IP
Secondary LAN IP	Enter the secondary IP address of your ROUTER in dotted decimal notation, for example, 192.168.100.1(factory default)
Secondary LAN Netmask	Type the subnet mask of the secondary LAN IP
Enable DHCP Server	Select this check box to enable the DHCP Server
Start IP	This field specifies the first of the contiguous addresses in the IP address pool.
End IP	This field specifies the last of the contiguous addresses in the IP address pool.
< Back	Click < Back to return to the previous screen
Next >	Click Next > to go to the next screen

If you finish the settings of this page, click **Next**, the screen appears as shown next.

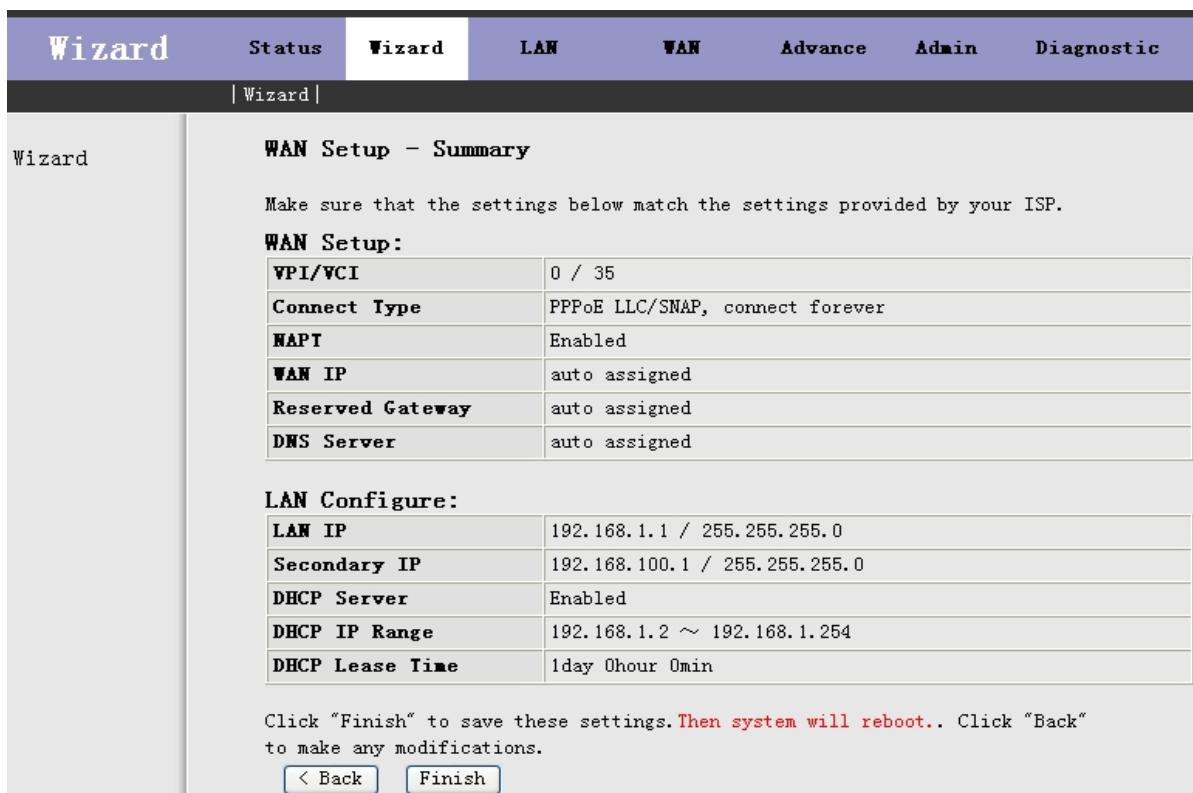


Fig 3.3.1-7

If you select 1483 MER in Fig 3.3.1-2, the screen appears as shown next.

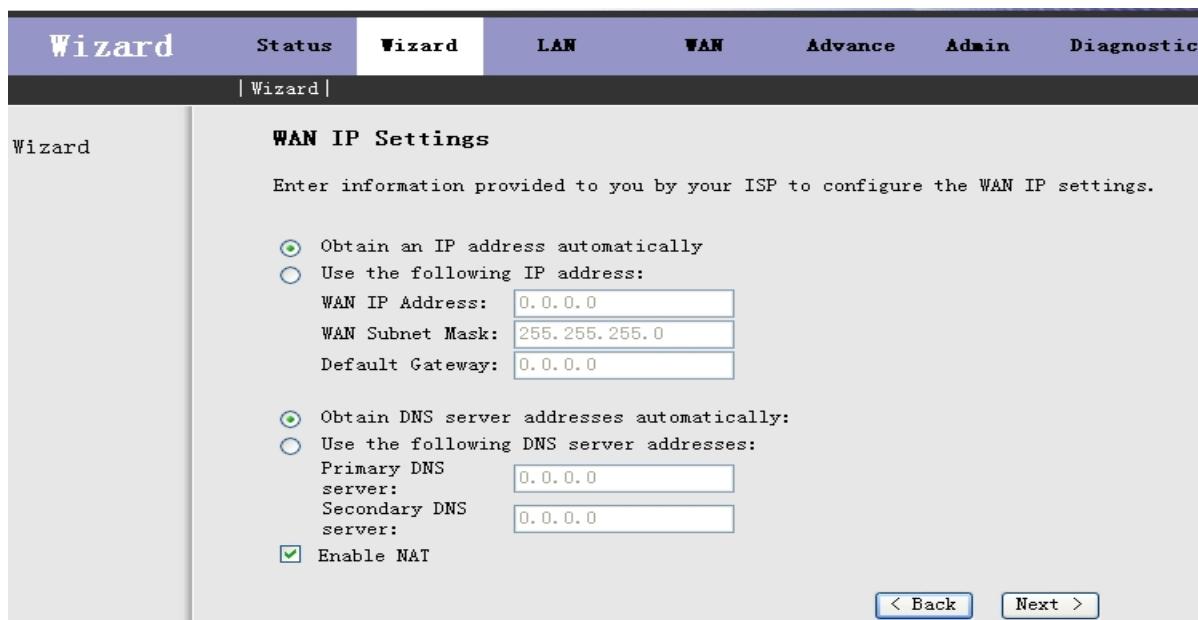


Fig 3.3.1-8

The following table describes the fields of this screen.

Label	Description
Obtain an IP address automatically	The MODEM will obtain a (WAN) IP address automatically and at this time it will enable DHCP Client functions. The WAN IP address is obtained from the uplink equipment like BAS and the uplink equipment is required to enable the DHCP Server functions.
Use the following IP address	If you want to input the WAN ip address by yourself. Check this entry and then input related data in the field.
WAN IP Address	Input the IP address of the WAN interface provided by your ISP
WAN Subnet Mask	Input the subnet mask concerned to the IP address of the WAN interface provided by your ISP.
Default Gateway	You can input the IP address of the default gateway by yourself, click this entry and then input related data in the fields.
Obtain DNS server addresses automatically	To obtain the IP address of the DNS server assigned by the uplink equipment such as BAS.
Use the following DNS server addresses	If you want to input the IP address of the DNS server by yourself, click this entry and then input related data in the fields.
Primary DNS server	Input the IP address of the primary DNS server here.
Secondary DNS server	Input the IP address of the secondary DNS server provided by your ISP here.
Enable NAT	Select it to enable the NAT functions of the MODEM. If you are not to enable NAT and intend the user of the MODEM to access the Internet normally, you must add a route on the uplink equipment; otherwise the access to the Internet will fail. Normally, it is required to enable NAT.
< Back	Click < Back to return to the previous screen
Next >	Click Next > to go to the next screen

If you finish the settings of this page, click Next, the screen of Fig 3.3.1-6 appears. The settings of this screen, see above paragraphs.

If you select 1483 Routed in Fig 3.3.1-2, the screen of Fig 3.3.1-9 appears as shown next.

Fig 3.3.1-9

The following table describes the fields of this screen.

Label	Description
None	
Obtain an IP address automatically	The dynamic IP is not fixed; your ISP assigns you the different one each time.
Use the following IP address	A static IP is a fixed IP that your ISP gives you.
WAN IP Address	Input the IP address of the WAN interface provided by your ISP
WAN Subnet Mask	Input the subnet mask concerned to the IP address of the WAN interface provided by your ISP.
Obtain DNS server addresses automatically	To obtain the IP address of the DNS server assigned by the uplink equipment such as BAS.
Use the following DNS server addresses	If you want to input the IP address of the DNS server by yourself, click this entry and then input related data in the fields.
Primary DNS server	Input the IP address of the primary DNS server here.
Secondary DNS server	Input the IP address of the secondary DNS server provided by your ISP here.
Enable NAT	Select it to enable the NAT functions of the MODEM. If you are not to enable NAT and intend the user of the MODEM to access the Internet normally, you must add a route on the uplink equipment; otherwise the access to the Internet will fail. Normally, it is required to enable NAT.
< Back	Click < Back to return to the previous screen
Next >	Click Next > to go to the next screen

3.4 LAN

Click **LAN** in the menu to open the sub-menu which contains 2 items: **LAN Settings** and **DHCP Settings**. You can use the LAN configuration to define an IP address for the DSL Router and configure the DHCP server.

3.4.1 LAN Settings

On this screen you can change the device's IP address. The preset IP address is 192.168.1.1. This is the Private IP address of the DSL Router. This is the address under which the device can be reached in the local network. It can be freely assigned from the block of available addresses.

Click **LAN Settings** in the sub-menu to open the screen of Fig 3.4.1. In this page you can config the LAN network.

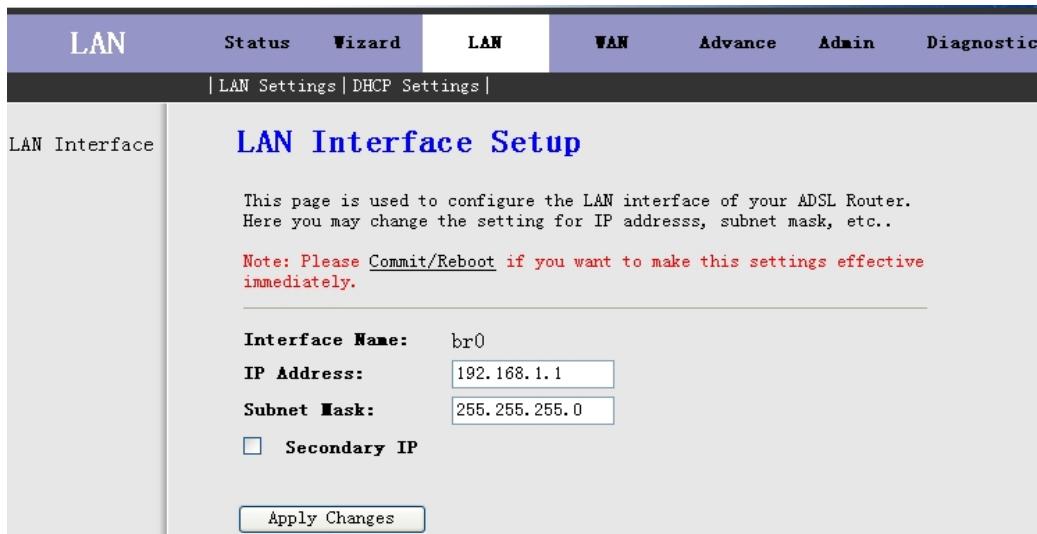


Fig 3.4.1

The following table describes the fields of this screen.

Label	Description
IP Address	Input the IP of Local area network interface here.
Subnet Mask	We recommend that you use an address from a block that is reserved for private use. This address block is 192.168.1.1- 192.168.255.254
Secondary IP	Select this checkbox to enable the secondary LAN IP. The two LAN IP must be in the different network.
Apply Changes	Click this button to save the settings of this page.

3.4.2 DHCP Settings

DHCP(Dynamic Host Configuration Protocol) allows the individual client(computers) to obtain the TCP/IP configuration at start-up from the centralized DHCP server. You can configure this router as a DHCP server or disable it. DHCP server can assign IP address, an IP default gateway and DNS server to DHCP clients. This router can also act as a surrogate DHCP server(DHCP Proxy) where it relays IP address assignment from a real DHCP server to clients.

If the DHCP was disabled, the screen of Fig 3.4.2-1 appears. You can enable/disable DHCP Server or DHCP Proxy.

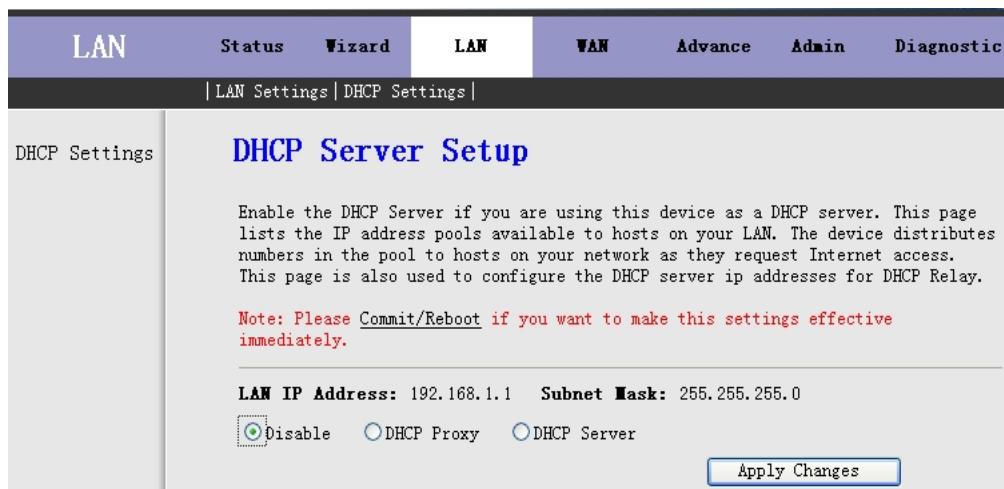


Fig 3.4.2-1

If you set to DHCP Proxy, the screen of Fig 3.4.2-2 appears.

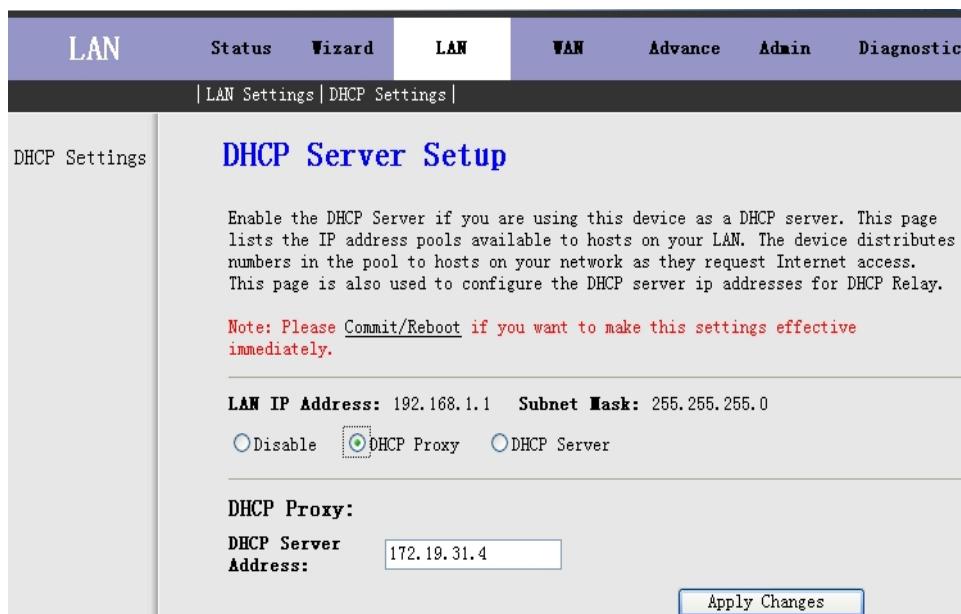


Fig 3.4.2-2

The following table describes the fields of this screen.

Label	Description
DHCP Proxy	If set to DHCP Proxy, your ROUTER acts a surrogate DHCP Server and relays the DHCP requests and responses between the remote server and the client.
DHCP Server Address	Enter the IP address of the actual, remote DHCP server in this field.
Apply Changes	Click this button to save the changes of this page.

If you set to DHCP Server, the screen of Fig3.4.2-3 appears as shown next.

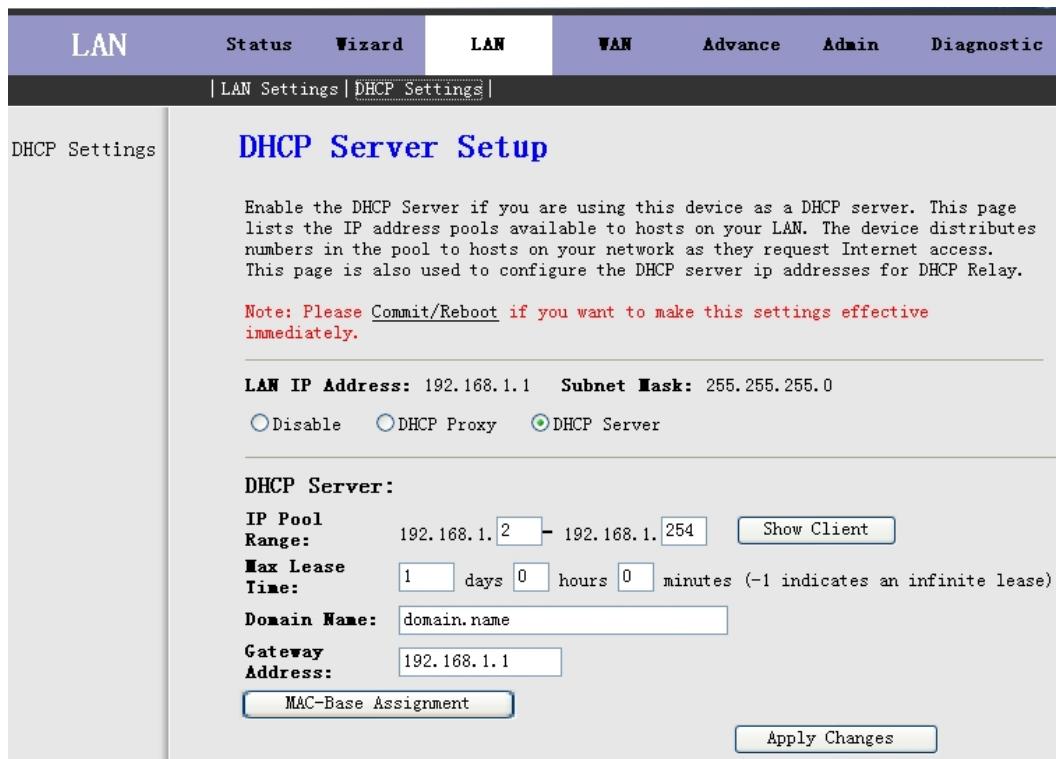


Fig 3.4.2-3

The following table describes the fields in this screen.

Label	Description
DHCP Server	If set to DHCP Server, your ROUTER can assign IP addresses, an IP default gateway and DNS Servers to Windows95, Windows NT and other systems that support the DHCP client.
IP Pool Range	This field specifies the first and the last of contiguous IP address of the IP address pool.
Show Client	Click this button, the screen of Fig 3.5.2-4 appears, which shows the assigned IP address of the clients.
Max Lease Time	The Lease time determines the period for which the PCs retain the IP addresses assigned to them without changing them.
Domain Name	Input the domain name here if you know. If you leave this blank, the domain name obtained by DHCP from the ISP is used. While you must enter host name(System Name) on each individual computer, the domain name can be assigned from this router via DHCP server.
Gateway Address	Enter the IP default gateway of the IP address pool.
MAC-Base Assignment	Click this button, the screen of Fig3.5.2-5 appears. This function allows you assign IP addresses on the LAN to specific individual computers based on their MAC address.
Apply Changes	Click this button to save the changes of this page.

Click **Show Client**, the following window appears. In this window, you can view the IP address assigned to each DHCP client.



Fig 3.4.2-4

The following table describes the fields in this screen.

Label	Description
IP Address	This field displays the IP address relative to the MAC address.
MAC Address	This field displays the MAC(Media Access Control) address of the computer. Every Ethernet device has a unique MAC address. The MAC address is assigned at the factory and consists of six pairs of hexadecimal character, for example, 00-A0-C5-00-02-12.
Time Expired(s)	Here shows the lease time. The Lease time determines the period for which the PCs retain the IP addresses assigned to them without changing them.
Refresh	Click this button to refresh the Active DHCP Client Table.
Close	Click this button to close this window.

Click **MAC-Base Assignment** button, the below window appears. In this page, you can assign IP addresses on the LAN to specific individual computers based on their MAC address.

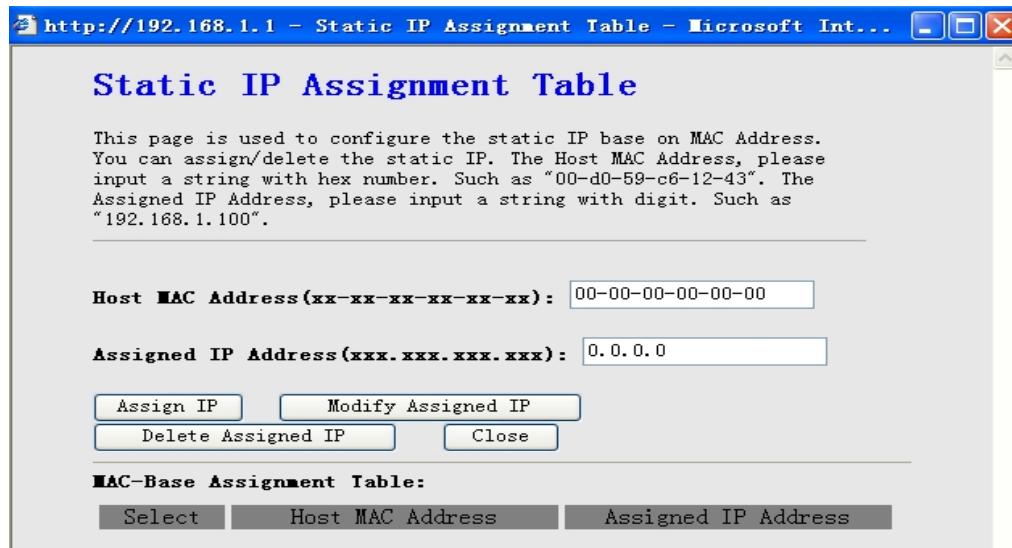


Fig 3.4.2-5

The following table describes the fields of this screen.

Label	Description
Host MAC Address	Type the MAC address of a computer on your LAN
Assigned IP Address	This field specifies the IP of the IP address pool.
Assign IP	Click this button after entered Host MAC Address and Assigned IP Address , a row will be added in MAC-Base Assignment Table .
Modify Assigned IP	Select a row in MAC-Base Assignment Table , the MAC address and IP address will appear Host MAC Address and Assigned IP Address . After modified the MAC Address and IP Address, click this button to save the changes.
Delete Assigned IP	Select a row in MAC-Base Assignment Table , then click this button, this row will be deleted.
Close	Click this button to close this window.
MAC-Base Assignment Table	This table shows the assigned IP address based on the MAC address.

3.5 WAN

Click **WAN Interface** in the menu to open the sub-menu which contains 2 items: **WAN Interface** and **ADSL Settings**.

3.5.1 WAN Interface

Click **WAN Interface** in the sub-menu to open the screen of Fig 3.5.1-1. In this page, you can configure WAN Interface of your router.

The screenshot shows the 'Channel Configuration' page under the 'WAN Interface' sub-menu. The top navigation bar includes tabs for WAN, Status, Wizard, LAN, WAN, Advance, Admin, and Diagnostic. A sub-menu bar below the main tabs shows 'WAN Interface | ADSL Settings'. The left sidebar has a 'WAN Interface' section. The main content area is titled 'Channel Configuration' and contains the following sections:

- Current ATM VC Table:** A table showing one entry for 'Internet_R_8_81' with columns: Select, Inf, Mode, VPI, VCI, Encap, NAPT, IP Addr, Remote IP, User Name, Droute, Status, Actions. The 'Actions' column shows an edit icon.
- Configuration Options:**
 - VPI: 0, VCI: [input field], Encapsulation: LLC (radio button selected), VC-Mux (radio button)
 - Channel Mode: 1483 Bridged (dropdown), Application Mode: Internet (dropdown)
 - Admin Status: Enable (radio button selected), Disable (radio button)
 - Enable NAPT: [checkbox]
- PPP Settings:** Login Name: [input field], Password: [input field], Connection Type: Continuous (dropdown), Idle Time(min): [input field]
- WAN IP Settings:** Type: Fixed IP (radio button selected), Use DHCP: [checkbox], Local IP Address: [input field], Remote IP Address: [input field], Subnet Mask: [input field], Unnumbered: [checkbox], Default Route: Disable (radio button), Enable (radio button selected).

At the bottom are buttons for Add, Modify, Delete, Undo, and ATM Setting.

Fig 3.5.1-1

Label	Description
Current ATM VC Table	This table shows the PVCs already existed. It shows the Interface name, Channel Mode, VPI/VCI, Encapsulation mode, local IP Address, Remote IP address, etc. The maximum item of this table is eight.
VPI	(Virtual Path Identifier) The virtual path between two points in an ATM network, and its valid value is 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	Choices are LLC and VC-Mux.
Channel Mode	There are five choices: 1483 Bridged, 1483 MER, PPPoE, PPPoA and 1483 Routed.
Admin Status	If select Disable, this PVC will be unusable.
Enable NAPT	Select it to enable the NAPT functions of the MODEM. If you are not to enable NAPT and intend the user of the MODEM to access the Internet normally, you must add a route on the uplink equipment; otherwise the access to the Internet will fail. Normally, it is required to enable NAPT.
PPP Settings	
Login Name	The correct user name that your ISP has provided to you.
Password	The correct password that your ISP has provided to you
Connection Type	The choices are Continuous , Connect on Demand and Manual .
Idle Time(min)	If select Connect on Demand , you need to input the idle timeout time. Within the preset minutes, if the MODEM doesn't detect the flow of the user continuously, the MODEM will automatically disconnect the PPPOE connection.
WAN IP Settings	
Type	The choices are Fixed IP and Use DHCP . If set Fixed IP , you should enter the Local IP Address , Remote IP Address and Subnet Mask . If set Use DHCP , your MODEM will be a DHCP client, the WAN IP will be assigned by the remote DHCP server.
Local IP Address	This is the IP of WAN interface which is provided by your ISP.
Remote IP Address	This is the gateway IP which is provided by your ISP.
Subnet Mask	This is the Subnet Mask of the Local IP Address .
Unnumbered	Select this checkbox to enable IP Unnumbered function.
Default Route	
Add	After configuring the parameters of this page, click this button then a new PVC will be added into Current ATM VC Table .
Modify	Select a PVC in the Current ATM VC Table , then modify the parameters of this PVC. When you finish, click this button to apply the change of this PVC.
Delete	Select a PVC in the Current ATM VC Table , then click this button to delete this PVC.
Undo	Click this button to begin configuring this screen afresh.
ATM Setting	Click this button, the Fig 3.5.1-3 will appear. In this page, you can configure ATM PVCs'QoS mode. The details, please see the following pages.
	Click this button, the following screens will appear. In these pages, you can modify the PVCs' parameters.

If the PVC uses PPPoE mode, click , the Fig 3.5.1-2 will appear. In this page, you can configure this PPPoE PVC's parameters.

WAN Status Wizard LAN WAN Advance Admin Diagnostic

| WAN Interface | ADSL Settings |

PPP Interface - Modify

PPP Interface: ppp0
Protocol: PPPoE
ATM VCC: 8/81
Status: Disable Enable
Login Name: pvc1
Password: *****
Authentication Method: Auto
Connection Type: Continuous
Idle Time(min): 0
Default Route: Disable Enable
MTU: 1400
IP Address: Dynamic IP Static IP 0.0.0.0
Bridge:
 Bridged Ethernet (Transparent Bridging)
 Bridged PPPoE (implies Bridged Ethernet)
 Disable Bridge
AC-Name:

Apply Changes Return Undo

Fig 3.5.1-2

ATM Setting : Click **ATM Setting** button in Fig3.5.1-1, the screen of Fig 3.5.1-3 will appear. In this page, you can configure the parameters of the ATM for your ADSL router, include QoS type, PCR, CDVT, SCR and MBS.

http://192.168.1.1 - ATM Settings - Microsoft Internet Explorer

ATM Setting

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

Current ATM VC Table:

索引	VPI	VCI	QoS	PCR	CDVT	SCR	MBS
0	8	81	UBR	6000	0	---	---

VPI: VCI: QoS:

PCR: CDVT: SCR: MBS:

Apply Changes Undo Close

Fig 3.5.1-3

3.5.2 ADSL Settings

Click **ADSL Interface** in the sub-menu to open the screen of Fig 3.5.2. In this page, you can select the DSL modulation. Mostly, the user just need to remain this factory default setting. Our modem support these modulations: G.Dmt, G.lite, T1.413, ADSL2, ADSL2+, AnnexL and AnnexM. The router will negotiate the modulation mode with the DSLAM.

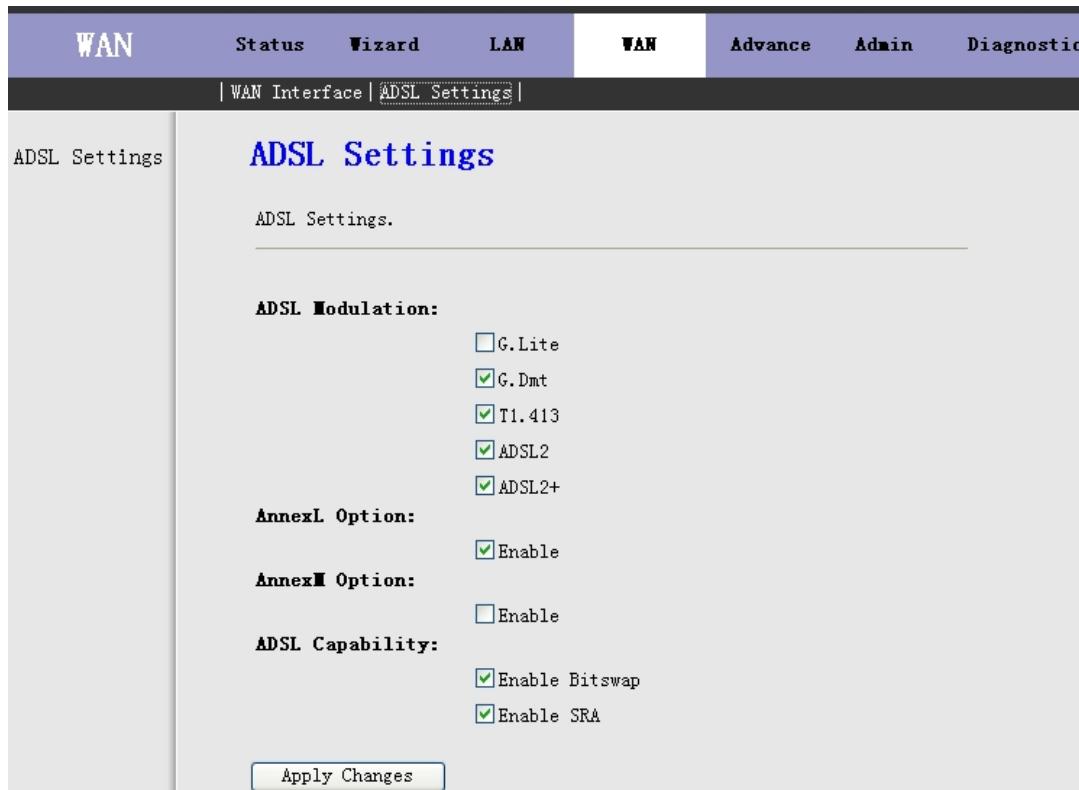


Fig 3.5.2

3.6 Advance

Click **Advance** in the menu to open the sub-menu which contains 8 items: **DNS, Firewall, Virtual Server, Routing, IP QOS, Anti-dos, Port Mapping** and **Others**.

3.6.1 DNS

Short for Domain Name System (or Service or Server), an Internet service that translates domain names into IP addresses. Because domain names are alphabetic, they're easier to remember. The Internet however, is really based on IP addresses. Every time you use a domain name, therefore, a DNS service must translate the name into the corresponding IP address. For example, the domain name www.example.com might translate to 198.105.232.4.

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

Click **DNS** in the sub-menu to open the screen of Fig 3.6.1.

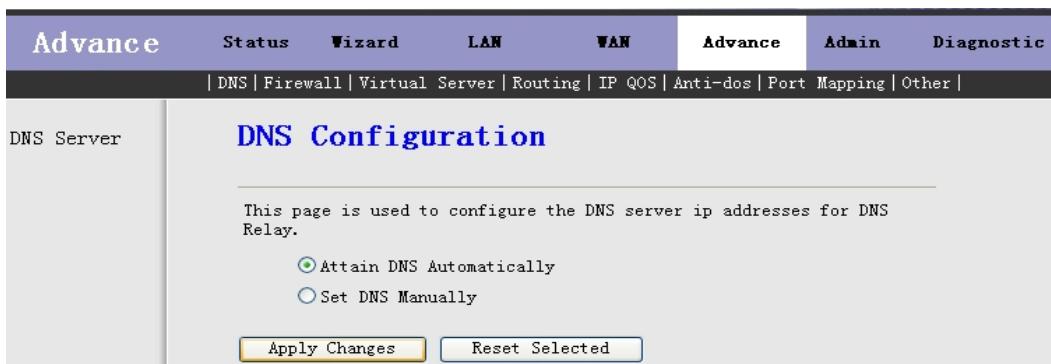


Fig 3.6.1

Label	Description
Attain DNS Automatically	When this checkbox is selected, this router will accept the first received DNS assignment from one of the PPPoA, PPPoE or MER enabled PVC(s) during the connection establishment.
Set DNS Manually	When this checkbox is selected, please enter the primary and optional secondary DNS server IP addresses.
Apply Changes	Click this button to save the settings of this page.
Reset Selected	Click this button to begin configuring this screen afresh.

3.6.2 Firewall

Click **Firewall** in the sub-menu to open the menu in the left bar, which contains three items:**IP\Port Filterer**, **MAC Filter** and **URL Blocking**.

3.6.2.1 IP\Port Filterer

Click **IP\Port Filterer** in the left bar to open the screen of Fig 3.6.2.1. Entries in this table are used to restrict certain types of data packets through the Gateway. Use of such filters can be helpful in securing or restricting your local network.

Click the button **Apply Changes** to save the settings of this page.

Click the button **Add Rule** to add a new rule of the IP\Port Filter.

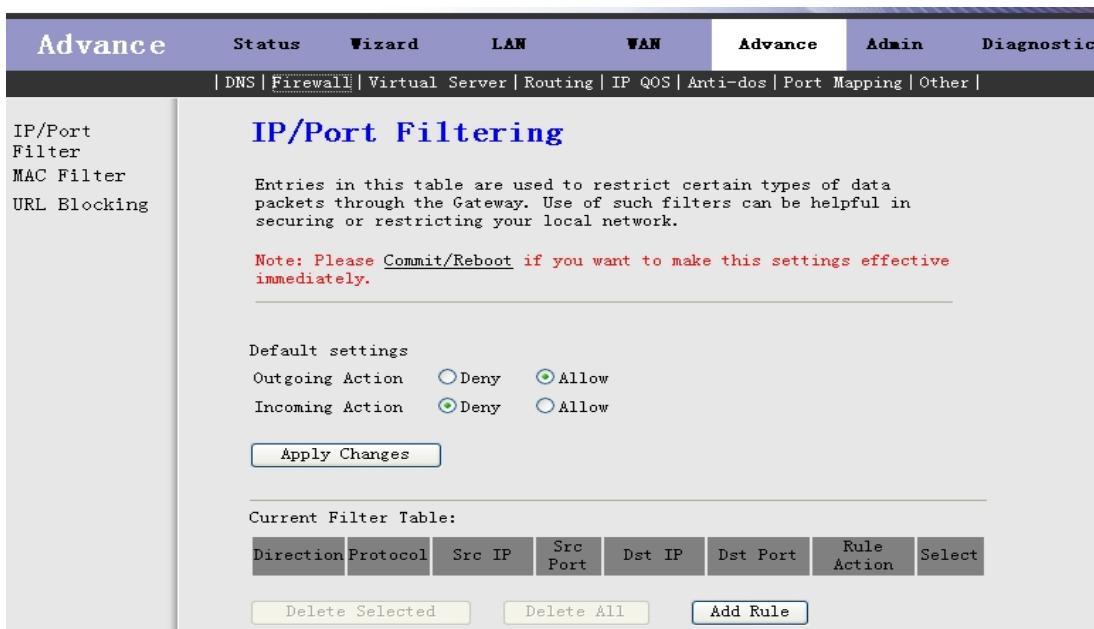


Fig 3.6.2.1

3.6.2.2 MAC Filter

Click **MAC Filter** in the left bar to open the screen of Fig 3.6.2.2. 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.

Click the button **Apply Changes** to save the settings of this page.

Click the button **Add Rule** to add a new rule of the MAC Filter.

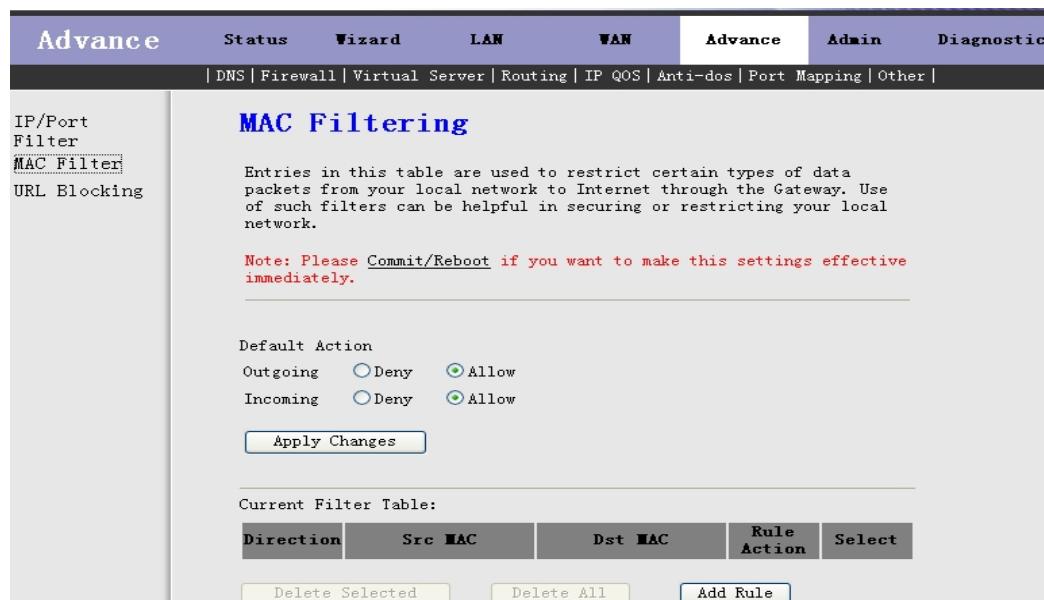


Fig 3.6.2.2

3.6.2.3 URL Blocking

Click **URL Blocking** in the left bar to open the screen of Fig 3.6.2.3. This page is used to configure the Blocked FQDN(Such as tw.yahoo.com) and filtered keyword. Here you can add/delete FQDN and filtered keyword.

The screenshot shows the 'URL Blocking Configuration' page. At the top, there's a navigation bar with tabs: Status, Wizard, LAN, WAN, Advance (which is selected), Admin, and Diagnostic. Below the navigation bar is a menu bar with links: DNS, Firewall, Virtual Server, Routing, IP QoS, Anti-dos, Port Mapping, and Other. On the left side, there's a sidebar with links: IP/Port Filter, MAC Filter, and URL Blocking (which is selected). The main content area has a heading 'URL Blocking Configuration'. It contains a note: 'This page is used to configure the Blocked FQDN(Such as tw.yahoo.com) and filtered keyword. Here you can add/delete FQDN and filtered keyword.' Below this, there's a note: 'Note: Please Commit/Reboot if you want to make this settings effective immediately.' There are two radio buttons for 'URL Blocking': 'Disabled' (selected) and 'Enabled'. A 'Apply Changes' button is located below the radio buttons. Below this section is a 'FQDN' input field containing 'www.xxx.xxx' with 'Add FQDN' and 'Delete FQDN' buttons. Underneath is a 'URL Blocking Table' with 'Select' and 'FQDN' buttons. Another 'FQDN' input field with 'Add FQDN' and 'Delete FQDN' buttons follows. Below that is a 'Keyword' input field containing 'xxx' with 'Add Keyword' and 'Delete Keyword' buttons. Underneath is a 'Keyword Filtering Table' with 'Select' and 'Keyword' buttons. The entire interface has a light gray background with blue and black text.

Fig 3.6.2.3

3.6.3 Virtual Server

Click **Virtual Server** in the sub-menu to open the menu in the left bar, which contains two items:**Services** and **DMZ Settings**.

3.6.3.1 Services

Click **Services** in the left bar to open the screen of Fig 3.6.3.1. This page is used to enable the servers in the local network.

Click the button **Add** to add a virtual server.

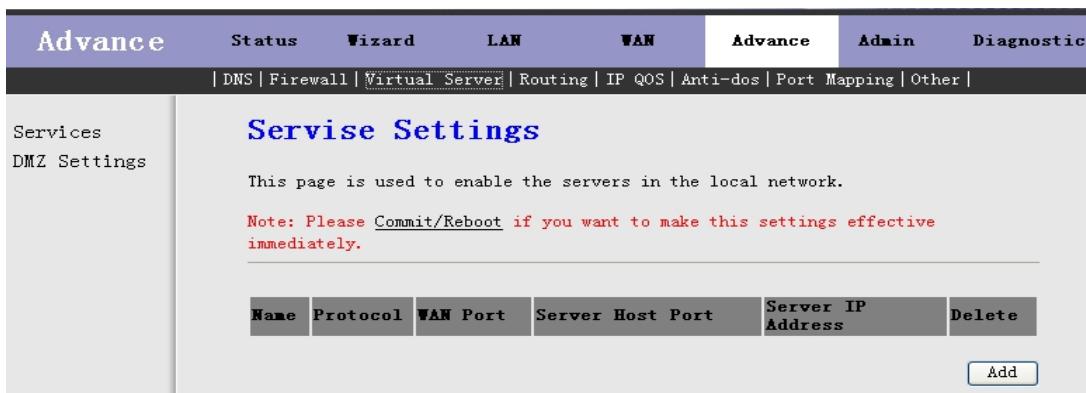


Fig 3.6.3.1

3.6.3.2 DMZ Settings

Click **DMZ Settings** in the left bar to open the screen of Fig 3.6.3.2. 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.

Select the checkbox **Enable DMZ** to enable this function. Then input a IP Address of the DMZ host.

Click the button **Apply Changes** to save the settings of this page.

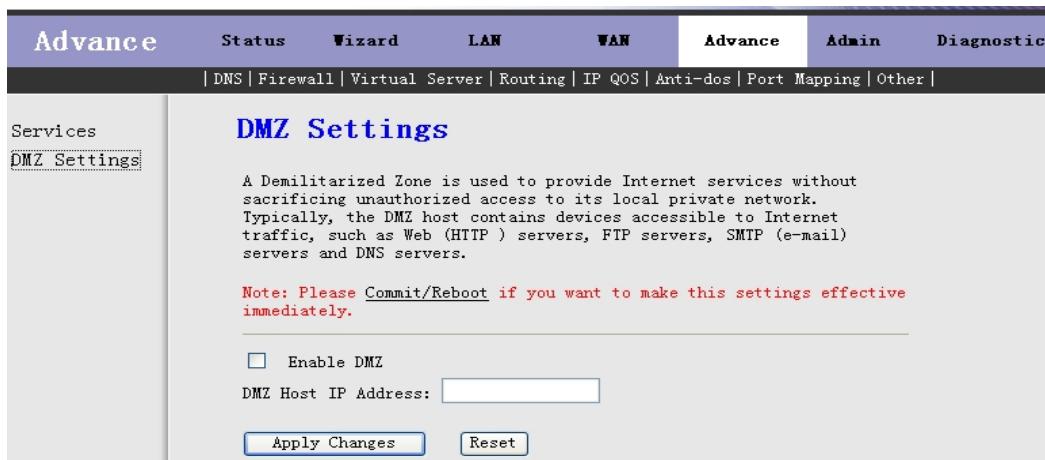


Fig 3.6.3.2

3.6.4 Routing

Click **Routing** in the sub-menu to open the menu in the left bar, which contains two items:**RIP** and **Static Route**.

3.6.4.1 RIP

Click **RIP** in the left bar to open the screen of Fig 3.6.4.1. Enable the RIP if you are using this device as a RIP-enabled router to communicate with others using the Routing Information Protocol. This page is used to select the interfaces on your deviceis that use RIP, and the version of the protocol used.

The screenshot shows the 'RIP Configuration' page. On the left sidebar, 'RIP' is selected under 'Static Route'. The main area has a heading 'RIP Configuration' with a sub-instruction: 'Enable the RIP if you are using this device as a RIP-enabled router to communicate with others using the Routing Information Protocol. This page is used to select the interfaces on your deviceis that use RIP, and the version of the protocol used.' Below this, there is a 'RIP:' section with 'Disable' (selected) and 'Enable' radio buttons, and an 'Apply Changes' button. Under 'Interface:', 'br0' is selected. Under 'Receive Mode:', 'None' is selected. Under 'Send Mode:', 'None' is selected. There are 'Add' and 'Delete Selected Entry' buttons. At the bottom, there is a 'RIP Config Table' with tabs for 'Select', 'Interface', 'Receive Mode', and 'Send Mode'.

Fig 3.6.4.1

3.6.4.2 Static Route

Click **Static Route** in the left bar to open the screen of Fig 3.6.4.2-1. This page is used to configure the routing information. Here you can add/delete IP routes.

The screenshot shows the 'Routing Configuration' page. On the left sidebar, 'Static Route' is selected under 'RIP'. The main area has a heading 'Routing Configuration' with a sub-instruction: 'This page is used to configure the routing information. Here you can add/delete IP routes.' Below this, there is an 'Enable:' checkbox (checked), a 'Destination:' input field, a 'Subnet Mask:' input field, a 'Next Hop:' input field, a 'Metric:' input field, and an 'Interface:' dropdown menu set to 'any'. There are 'Add Route', 'Update', 'Delete Selected', and 'Show Routes' buttons. At the bottom, there is a 'Static Route Table' with tabs for 'Select', 'State', 'Destination', 'Subnet Mask', 'Next Hop', 'Metric', and 'Interface'.

Fig 3.6.4.2-1

Click the button Show Routes, the below window will appear. 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.

Destination	Subnet Mask	Next Hop	Metric	Interface
192.168.1.0	255.255.255.0	*	0	br0
127.0.0.0	255.255.255.0	*	0	lo

Refresh **Close**

Fig 3.6.4.2-2

3.6.5 IP QoS

Click **Anti-dos** in the sub-menu to open the screen of Fig 3.6.5. Entries in this table are used to assign the precedence for each incoming packet based on physical LAN port, TCP/UDP port number, and source/destination IP address/subnet masks.

Advance Status Wizard LAN WAN Advance Admin Diagnostic

| DNS | Firewall | Virtual Server | Routing | IP QoS | Anti-dos | Port Mapping | Other |

IP QoS

Entries in this table are used to assign the precedence for each incoming packet based on physical LAN port, TCP/UDP port number, and source/destination IP address/subnet masks.

Note: Please Commit/Reboot if you want to make this settings effective immediately.

IP QoS: Disabled Enabled **Apply Changes**

Fig 3.6.5

3.6.6 Anti-dos

Click **Anti-dos** in the sub-menu to open the screen of Fig 3.6.6. "denial-of-service attack"(DoS Attack) a type of attack on a network that is designed to bring the network to its knees by flooding it with useless traffic. In this page, you can configure to prevent DOS attacks.

Click the button **Apply Changes** to save the settings of this page.

Fig 3.6.6

3.6.7 Port Mapping

Click **Anti-dos** in the sub-menu to open the screen of Fig 3.6.7. In this page, you can bind the WAN interface and the LAN interface to the same group.

To manipulate a mapping group:

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

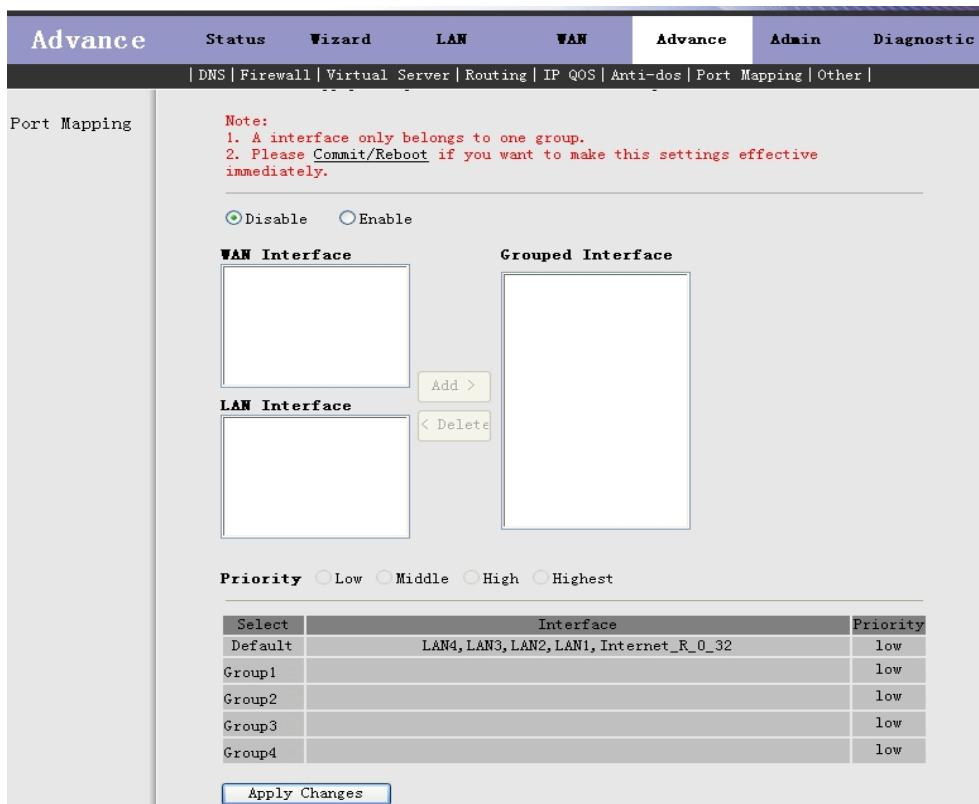


Fig 3.6.7

3.6.8 Other

Click **Others** in the sub-menu to open the menu in the left bar, which contains four items: **IGMP Proxy**, **UPNP**, **Bridge** and **IP PassThrough**.

3.6.8.1 IGMP Proxy

Click **IGMP Proxy** in the left bar to open the screen of Fig 3.6.8.1. 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.

Click **Apply Changes** to save the settings of this page.

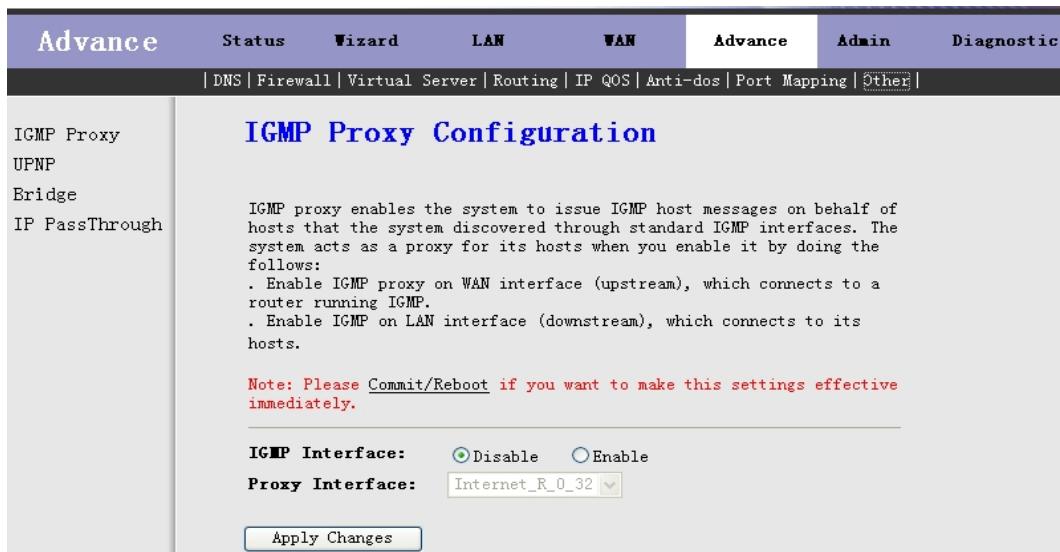


Fig 3.6.8.1

3.6.8.2 UPNP

Click **UPNP** in the left bar to open the screen of Fig 3.6.8.2. This page is used to configure UPnP. The system acts as a daemon after you enable it.

Click **Apply Changes** to save the settings of this page.

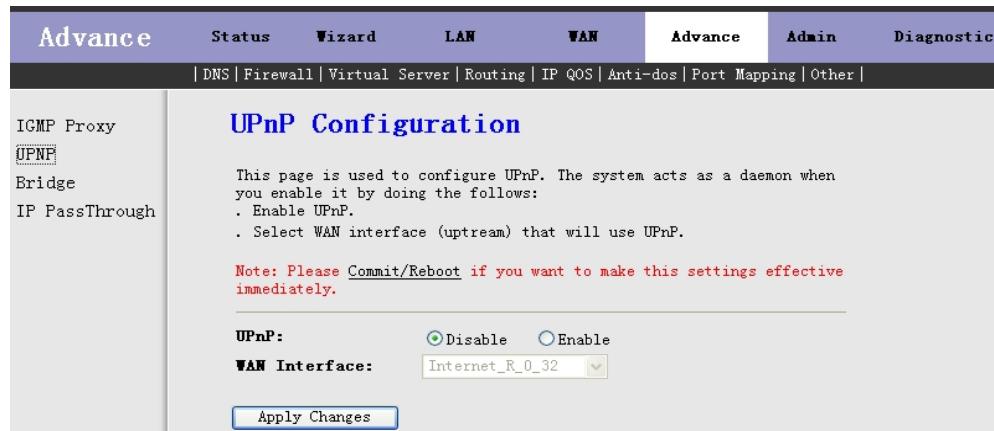


Fig 3.6.8.2

3.6.8.3 Bridge

Click **Bridge** in the left bar to open the screen of Fig 3.6.8.3-1. This page is used to configure the bridge parameters. Here you can change the settings or view some information on the bridge and its attached ports.



Fig 3.6.8.3-1

Click **Show MACs** button in Fig 3.6.8.3-1, the below window will appear. This table shows a list of learned MAC addresses for this bridge.

Bridge Forwarding Database Table			
This table shows a list of learned MAC addresses for this bridge.			
Port No.	MAC Address	Is Local?	Aging Time
2	00-e0-4c-86-70-01	yes	---
1	00-e0-4c-86-70-01	yes	---
1	00-16-76-e1-67-74	no	0.01

Fig 3.6.8.3-2

3.6.8.4 IP PassThrough

Click **IP PassThrough** in the left bar to open the screen of Fig 3.6.8.4. The IP PassThrough has the other name ZIPB or IP Extension. In this page, you can enable and configure IP PassThrough function.

Fig 3.6.8.4

3.7 Admin

Click **Admin** in the menu to open the sub-menu which contains 11 items: **Remote Access, Commit/Reboot, Password, Backup/Restore, Upgrade Fireware, Time Zone, System Log, SNMP, TR069, ACL and Logout.**

3.7.1 Remote Access

Click **Remote Access** in the sub-menu to open the screen of Fig 3.7.1. In this page, you can enable or disable the services which will be used by remote host. For example, if TELNET service is enabled and port is 23, the remote host can access this router by telnet through port 23.

The screenshot shows the 'Remote Access' configuration page. The top navigation bar includes tabs for Admin, Status, Wizard, LAN, WAN, Advance, Admin, and Diagnostic. Below the tabs is a breadcrumb trail: Remote Access | Commit/Reboot | Login Password | PWC Password | Backup/Restore | Upgrade Firmware | Time Zone | System Log | SNMP | ACL. The left sidebar has a 'Remote Access' link. The main content area is titled 'Remote Access' and contains a note: 'This page is used to enable/disable management services for the WAN.' A dropdown menu labeled 'Interface' is set to 'Internet_R_8_81'. Below it is a table showing service names, open ports, and checkboxes for enabling or disabling them:

Service Name	Open Port
TELNET	<input type="checkbox"/> 23
FTP	<input type="checkbox"/> 21
TFTP	<input type="checkbox"/>
HTTP	<input type="checkbox"/> 80
SNMP	<input checked="" type="checkbox"/>
ICMP	<input type="checkbox"/>

A 'Apply Changes' button is at the bottom of the table.

Fig 3.7.1

3.7.2 Commit/Reboot

Click **Commit/Reboot** in the sub-menu to open the screen of Fig 3.7.2. In this page, you can set the router reboot to default settings or set the router save the current settings then reboot.

The screenshot shows the 'Commit/Reboot' configuration page. The top navigation bar includes tabs for Admin, Status, Wizard, LAN, WAN, Advance, Admin, and Diagnostic. Below the tabs is a breadcrumb trail: Remote Access | Commit/Reboot | Login Password | PWC Password | Backup/Restore | Upgrade Firmware | Time Zone | System Log | SNMP | ACL. The left sidebar has a 'Commit/Reboot' link. The main content area is titled 'Commit/Reboot' and contains a note: 'Please press "Reboot" to reboot your system.' It also includes instructions for resetting to factory default or committing current settings:

If you want reset the current settings to factory default, please choose "reset to default settings", then press "Reboot" to reboot system.

If you want commit current settings, please choose "commit current settings", then press "Reboot" to reboot system.

Checkboxes below the instructions:

- reset to default settings
- commit current settings

A 'Reboot' button is at the bottom.

Fig 3.7.2

Label	Description
Reset to default settings	Select this checkbox to reset router to default settings.
Commit current settings	Select this checkbox to save the current settings and reboot router.
Reboot	Click this button to reboot the router according to the above option.

3.7.3 Password

Click **Login Password** in the sub-menu to open the screen of Fig 3.7.3. In this page, you can change the password of the user, include admin and user. The super user name and password are admin/admin as default, and the common user name and password are user/user.

The screenshot shows the 'User/Password Management' page. At the top, there is a navigation bar with tabs: Admin, Status, Wizard, LAN, WAN, Advance, Admin, and Diagnostic. Below the navigation bar, there is a horizontal menu with links: Remote Access, Commit/Reboot, Login Password, PVC Password, Backup/Restore, Upgrade Firmware, Time Zone, System Log, SNMP, and ACL. The main content area has a heading 'User/Password Management'. It contains a note: 'This page is used to set the account to access the web server of ADSL Router. The new password will be availability after system reboot.' Below the note, there are four input fields: 'User Name:' with a dropdown menu showing 'admin' selected, 'Old Password' (empty input field), 'New Password' (empty input field), and 'Confirmed Password' (empty input field). At the bottom of the form are two buttons: 'Apply Changes' and 'Reset'.

Fig 3.7.3

Label	Description
User Name	Select the user name in the drop-down list box. The choices are admin and user .
Old Password	After selected the user name, input the old password of the user here.
New Password	Input the new password what you want to set of the user.
Confirmed Password	Input the new password again.
Apply Changes	Click this button to save the settings of this page.
Reset	Click this button to begin configuring the password afresh.

3.7.4 Backup/Restore

Click **Backup/Restore** in the sub-menu to open the screen of Fig 3.7.4. In this page, you can backup the current settings to a file and restore the settings from the file which was saved previously.

IMPORTANT! Do not turn off your router or press the Reset button while these procedures are in progress.

This page allows you to backup current settings to a file or restore the settings from the file which was saved previously.

Save Settings to File:

Load Settings from File:

Fig 3.7.4

Label	Description
Save Settings to File	Click the Save button, then select the path and save the configuration file of your router.
Load Settings from File	Click the Browse button to select the configuration file.
Upload	Selected the configuration file of router, click Upload button to begin restore the router configuration.

3.7.5 Upgrade Fireware

Click **Upgrade Fireware** in the sub-menu to open the screen of Fig 3.7.5. In this page, you can upgrade the fireware of this router.

IMPORTANT! Do not turn off your router or press the Reset button while this procedure is in progress.

Step 1: Get system upgrade file.
 Step 2: Press "Browse" to specify system upgrade file.
 Step 3: press "Upload" to upgrade the ADSL Router firmware to new version.

Note: Upload needs about two minutes, do not power off the device during the upload because it may crash the system. The system will reboot after upload. This page allows you to upgrade the ADSL Router firmware to new version.

current software version:1.3.9

Select File:

Fig 3.7.5

Label	Description
Select File	Click the Browse button to select the Fireware file.
Upload	Selected the Fireware file, click Upload button to begin upgrading the Fireware.
Reset	Click this button to begin selecting the Fireware file afresh.

3.7.6 Time Zone

Click **Time Zone** in the sub-menu to open the screen of Fig 3.7.6. In this page, you can set the system time manually or get the system time from the time server.

The screenshot shows the 'System Time Zone Modification' page. At the top, there's a navigation bar with tabs: Admin, Status, Wizard, LAN, WAN, Advance, Admin, and Diagnostic. Below the navigation bar, a sub-navigation bar lists: Remote Access | Commit/Reboot | Login Password | PWC Password | Backup/Restore | Upgrade Firmware | Time Zone | System Log | SNMP | ACL. The main content area is titled 'System Time Zone Modification' and contains the following information:

- Synchronized:** 2008-1-16 14:36:03
- Instant Time:** 2008-1-16 14:36:03
- System Time:** 1970-1-1 4:31:3
- Refresh** button
- Time Mode:** Time Server Manual
- Enable SNTP Client Update
- SNTP Server:** 203.117.180.36 - Asia (manual setting)
- Time Zone:** (GMT+08:00) Beijing, Chongqing, Hong Kong, Urumqi
- Apply changes** button

Fig 3.7.6

Label	Description
Refresh	Click this button to refresh the system shown in the page.
Time Mode	If select Time Server, the router will get the system time from the time server. If select Manual, you should configure the system time manually.
Enable SNTP Client Update	If select this checkbox, you can choose the correct SNTP Server which you want.
SNTP Server	Choose the SNTP Server here.
Time Zone	Select the Time Zone of in which area you are.
Apply Changes	Click this button to save the settings of this page.

3.7.7 System Log

Click **System Log** in the sub-menu to open the screen of Fig 3.7.7. In this page, you can enable or disabled the System log function, view the system log.

Fig 3.7.7

Label	Description
System Log	You can enable or disable the System Log function.
Apply Changes	Click this button to save the settings of this page.
Refresh	Click this button to refresh the system log shown in the textfield.

3.7.8 SNMP

Click **SNMP** in the sub-menu to open the screen of Fig 3.7.8. In this page, you can set the SNMP parameters.

Fig 3.7.8

Label	Description
Trap IP Address	Input the Trap Host's IP here. The trap information will be sent to this host.
Community name(read-only)	The network administrators must use this password to read the

	information of this router.
Community name(write-only)	The network administrators must use this password to configure the information of this router.
Apply Changes	Click this button to save the settings of this page.
Reset	Click this button to begin configuring this screen afresh.

3.7.9 TR069

Click **ACL** in the sub-menu to open the screen of Fig 3.7.9. In this page, you can configure the TR-069 CPE.

The screenshot shows the 'TR-069 Configuration' page. The top navigation bar includes Admin, Status, Wizard, LAN, WAN, Advance, Admin (selected), and Diagnostic. Below the navigation is a toolbar with links: Remote Access, Commit/Reboot, Password, Backup/Restore, Upgrade Firmware, Time Zone, System Log, SNMP, TR069, ACL, and Logout. The main content area is titled 'TR-069 Configuration'. It contains three sections: 'ACS', 'Connection Request', and 'Debug'. The 'ACS' section has fields for URL (http://), User Name (username), Password (password), Periodic Inform Enable (radio buttons for Disabled and Enabled, with Enabled selected), and Periodic Inform Interval(s) (300). The 'Connection Request' section has fields for User Name and Password. The 'Debug' section has several pairs of radio buttons for Show Message, CPE Sends GetRPC, Skip Reboot, Delay, Auto-Execution, and CT Inform Extension, all set to Enabled. At the bottom are 'Apply Changes' and 'Undo' buttons.

Fig 3.7.9

3.7.10 ACL

Click **ACL** in the sub-menu to open the screen of Fig 3.7.10. In this page, you can configure the IP Address for Access Control List. If ACL enabled, only the effective IP in ACL can access ADSL Router.

- Step 1: If you want to enable ACL, please choose "Enable" then press "Apply Changes";
- Step 2: Config Access Control List;
- Step 3: Press "take effect" to effect the configuration.

Note: If you check "Enable" in ACL Capability, please make sure that your host IP is in ACL List before it takes effect

ACL Configuration

Access Control List Configuration.
If enable ACL, then only the effective IP in ACL can access ADSL Modem.
Step 1: If you want to enable ACL, please choose "Enable" then press "Apply Changes";
Step 2: Config Access Control List;
Step 3: Press "take effect" enable the configuration.

Note: If you choose "Enable" in ACL Capability, please make sure that your host IP is in ACL before it takes effect.

ACL Capability: Disable Enable

Enable:
Interface: LAN
IP Address: 192.168.1.22

ACL List:

Select	state	Interface	IP Address
--------	-------	-----------	------------

Fig 3.7.10

3.7.11 Logout

Click **Logout** in the sub-menu to open the screen of Fig 3.7.11. If you want to logout the Web configurator, click the Logout button.

Logout

This page is used to logout from adsl gateway.

Fig 3.7.11

3.8 Diagnostic

Click **Diagnostic** in the menu to open the sub-menu which contains 4 items: **Ping**, **ATM Loopback**, **ADSL** and **Diagnostic**.

3.8.1 Ping

Click **Ping** in the sub-menu to open the screen of Fig 3.8.1.

Fig 3.8.1

Label	Description
Host Address	Enter the IP Address here.
Go!	Click this button to begin to Ping the Host Address .

3.8.2 ATM Loopback

Click **ATM Loopback** in the sub-menu to open the screen of Fig 3.8.2. In this page, you can use VCC loopback function to check the connectivity of the VCC.

Fig 3.8.2

Go!: Click this button to begin testing.

3.8.3 ADSL

Click **ADSL** in the sub-menu to open the screen of Fig 3.8.3. This page is used for ADSL Tone Diagnostics.

Diagnostic		Status	Wizard	LAN	WAN	Advance	Admin	Diagnostic																				
ADSL	Ping ATM Loopback ADSL Diagnostic																											
	Diagnostics -- ADSL																											
Adsl Tone Diagnostics.																												
Go!																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Downstream</th> <th style="text-align: center;">Upstream</th> </tr> </thead> <tbody> <tr> <td>Hlin Scale</td> <td style="text-align: center;">65384</td> <td style="text-align: center;">144</td> </tr> <tr> <td>Loop Attenuation(dB)</td> <td style="text-align: center;">-2.2</td> <td style="text-align: center;">-24.9</td> </tr> <tr> <td>Signal Attenuation(dB)</td> <td style="text-align: center;">18.3</td> <td style="text-align: center;">23.0</td> </tr> <tr> <td>SNR Margin(dB)</td> <td style="text-align: center;">-25.1</td> <td style="text-align: center;">-9.9</td> </tr> <tr> <td>Attainable Rate(Kbps)</td> <td style="text-align: center;">194</td> <td style="text-align: center;">-77</td> </tr> <tr> <td>Output Power(dBm)</td> <td style="text-align: center;">-4.3</td> <td style="text-align: center;">21.2</td> </tr> </tbody> </table>									Downstream	Upstream	Hlin Scale	65384	144	Loop Attenuation(dB)	-2.2	-24.9	Signal Attenuation(dB)	18.3	23.0	SNR Margin(dB)	-25.1	-9.9	Attainable Rate(Kbps)	194	-77	Output Power(dBm)	-4.3	21.2
	Downstream	Upstream																										
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Attainable Rate(Kbps)	194	-77																										
Output Power(dBm)	-4.3	21.2																										

Fig 3.8.3

Go!: Click this button to begin ADSL Tone Diagnostics.

3.8.4 Diagnostic

Click **Diagnostic** in the sub-menu to open the screen of Fig 3.8.4. This page is used for testing your DSL connection.

Diagnostic		Status	Wizard	LAN	WAN	Advance	Admin	Diagnostic								
Diagnostic	Ping ATM Loopback ADSL Diagnostic															
	Diagnostic Test															
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.																
Select the Internet Connection: <input style="border: 1px solid black; padding: 2px; width: 150px; height: 20px;" type="button" value="Internet_R_8_81"/> Run Diagnostic Test																

Fig 3.8.4

Run Diagnostic Test: Click this button to begin testing.