



# TP-LINK®

## User Guide

**TD-8810**

**External ADSL2+ Router**



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<http://www.tp-link.com>

## FCC STATEMENT



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

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

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.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

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

## CE Mark Warning



This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

## EC DECLARATION OF CONFORMITY (EUROPE)

In compliance with the EMC Directive 89/336/EEC, Low Voltage Directive 73/23/EEC, this product meets the requirements of the following standards:

- EN55022
- EN55024
- EN60950

## SAFETY NOTICES

### Caution:

Do not use this product near water, for example, in a wet basement or near a swimming pool.

## Package Contents

The following items should be found in your package:

- One TD-8810 External ADSL2+ Router
- One AC power Adapter for TD-8810 External ADSL2+ Router
- One Resource CD for TD-8810 External ADSL2+ Router, including:
  - This Guide
  - Quick installation Guide Program
  - Other Helpful Information
- Quick installation Guide
- One RJ45 cable
- Two RJ11 cable
- One ADSL splitter



### **Note:**

Make sure that the box contains the above items. If any of the listed items are damaged or missing, please contact with your distributor.

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# Chapter 1. Introduction

Thank you for choosing the TD-8810 External ADSL2+ Router.

## 1.1 Product Overview

With the excellent circuit design and high quality production, we guarantee the ADSL Router's high performance, great stability and easy to use.

The TD-8810 uses integrated ADSL transceiver. The AFE supports full-rate ADSL connectivity conforming to the ITU and ANSI specifications.

In addition to the basic DMT physical layer functions, the ADSL PHY supports dual latency ADSL framing (fast and interleaved) and the I.432 ATM Physical Layer.

The TD-8810 is a complete plug-and-play solution. With standard Ethernet interface, it can be directly connected to any 10M/100M Ethernet devices, support Auto-MDIX.

The TD-8810 not only uses html (web mode through Ethernet port) to configure the Router but also uses external utility software. You can download it from our website (<http://www.tp-link.com>).

## 1.2 Main Features

- High speed and asymmetry data transmit mode, provides safe and exclusive bandwidth
- Support All ADSL industrial standards
- Compatible with all mainstream DSLAM (CO)
- Firmware upgradeable
- Provide integrated access of internet and route function which face to SOHO user
- Advanced DMT modulation and demodulation
- Real-time Configuration and device monitoring
- Quick response semi-conductive surge protect circuit, provides reliable ESD and surge-protect function

## 1.3 Supporting protocol

- G.992.1 (G.dmt) - Annex A/B/C
- G.992.2 (G.lite) - Annex A/B/C
- ANSI T1.413
- G.992.3 (ADSL2) - Annex A/B/C/M and Annex L (RE-DSL) compliant
- G.992.5 (ADSL) Annex A/B/C and Annex L (RE-DSL) compliant
- ADSL dual latency (fast path and interleaved path)

- I.432 ATM physical layer compliant
- Supports RFC2364 (PPPoA)
- Supports RFC2516 (PPPoE)
- Supports RFC1483 (EoA) (Bridged \*and Router)
- Supports RFC1577 (IPoA)

 **Note:**

“\*” needs the third-party software.

## 1.4 Transmit data-rate

- Max download data-rate: 24Mbps
- Max upload data-rate: 3.5Mbps
- Max line length: 6Km

## 1.5 ATM property

- AAL0, AAL5, OAM, RM, and raw cell types supported
- Direct hardware support for 4 Receive VCs, with additional RX VCs and TX VCs supported in software
- Full 24-bit Virtual Path Identifier (VPI) and Virtual Circuit Identifier (VCI)

## 1.6 System support

- Support PVC
- Support NAT、DHCP and so on
- Support IEEE 802.3、IEEE 802.3u
- Support 10Base-T/100BASE-TX full-duplex or half duplex Ethernet
- Support Auto-MDIX

## 1.7 Working environment

- Operating temperature: 0 °C~40 °C
- Storage temperature: -40 °C~70 °C
- Humidity: 10%~90% (non-condensing)

## 1.8 Conventions

The Router or TD-8810, or device mentioned in this User guide stands for TD-8810 External

ADSL2+ Router without any explanations.

Parameters provided in the pictures are just references for setting up the product, which may differ from the actual situation.

You can set the parameters according to your demand.

## Chapter 2. Hardware Installation

The TD-8810 maintains three separate interfaces, one Ethernet, one ADSL and one power adapter interface.

The Router should not be located where it will be exposed to moisture or excessive heat.

Place the Router in a location where it can be safely connected to the various devices as well as to a power source.

### 2.1 System requirement

Confirm your computer has been installed with networking interface card (NIC) before connecting ADSL Router to your computer, with operating system supporting the TCP/IP protocol.

#### 2.1.1 LED explanation

The front panel of ADSL Router includes one power indicator (RED) and seven function indicators (GREEN), as explained in chart below:

Name	Status	Indication
PWR	On	Power OK
	Off	Power fail
ADSL	Quick flash	The LINE port is connecting to the ISP's network
	On	The LINE port has connected to ISP's network
	Off	The LINE port has no connection
ALARM	On	There is mistake when ADSL transmitting or receiving data
	Off	ADSL normal
ACT	On	There is data transmitting or receiving on LINE port
	Off	No data transmitting or receiving on LINE port
LAN	On	LAN port normal
	Off	Connection on LAN port abnormal
	Flash	Data transmitting or receiving on LAN port

### 2.2 Rear-panel

- **ON/OFF:** Turn on/off the ADSL Router's power.
- **Power (9V~0.8A input):** Please use the provided power adaptor, otherwise may cause damage to the ADSL Router.
- **RESET (reset default):** First press the reset button of Router, then turn on the Router's power for at least three seconds. It will resume the default manufacturer's setup.

- **LAN:** Connect with your computer's NIC.
- **LINE (WAN):** Connect to the MODEM Port of Splitter or Connect with the telephone line.

## 2.3 Hardware installation procedures

The procedure to install the Router can be described in general terms in the following steps:

**Step 1:** Connecting the MODEM port of Splitter with the TD-8810 ADSL Router LINE port by telephone line. While you need to use a telephone, please attach telephone line into the phone of Splitter.

**Step 2:** Connect category 5 cable with RJ45 jacks to the ADSL Router's LAN port and your computer's NIC.

**Step 3:** Plug one end of the AC Power Adapter into the Power jack on the Ethernet ADSL2+ Router and the other end to a standard electrical outlet.

**Step 4:** Check the line connection to see if everything is ready. Power up finally.

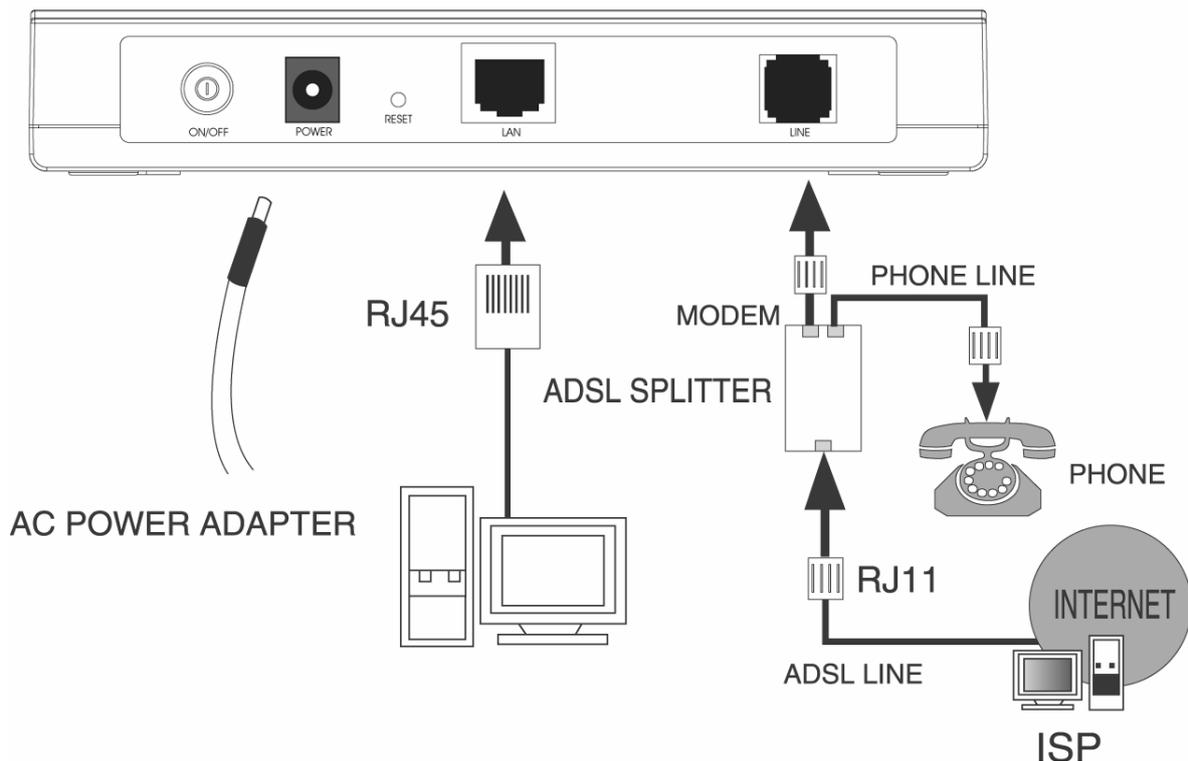


Figure 2-1

## Chapter 3. System Configuration

### 3.1 Computer Configuration

1. Connect the cable according to Chapter 2, turn on the power.
2. Change the IP address of your PC (Figure 3-1) : Open TCP/IP Properties of the LAN card in your PC, enter the IP address as 192.168.1.\*.

**Note:**

(\* is any value between 2 to 254, Net mask is 255.255.255.0, Gateway is 192.168.1.1, DNS address is the value provided by ISP).

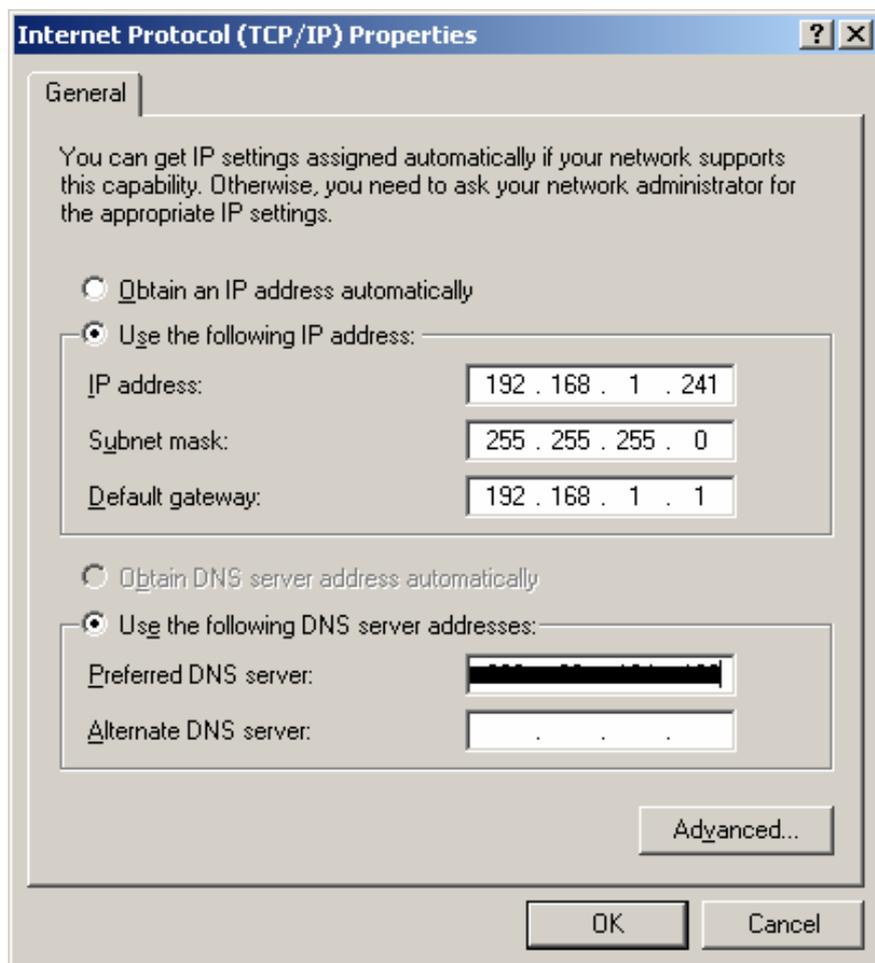


Figure 3-1

**Note:**

Users of Windows 98 can open **TCP/IP Properties** according to the following: Right-click (Mouse) **Network Neighbor** -> Choose **Properties** -> Double-click **TCP/IP**.

Users of Windows 2000/NT/XP can do the following: Right-click **Network Neighbor** -> Choose **Properties** -> Right-click **Local Connection** -> Choose **Properties** -> Double-click **Internet Protocol (TCP/IP)**.

**Note:**

The words in fact may be different with this guide.

**Remarks:** you can check whether your configuration is successful through **PING** command. Enter **Ping 192.168.1.1**

If the screen looks like the following, you have been successful.

```
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Figure 3-2

If the screen looks like the following, the connection has failed. Please try again.

```
Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Figure 3-3

## 3.2 Login

Startup Internet Explorer, and enter 192.168.1.1; then enter default user name(admin) 、 password(admin), When ADSL connection is OK, you will see the Figure 3-2.



Figure 3-4

### 3.3 Quick Setup

- 1) Figure 4 is the main page of the Router.

Device Info	
Board ID:	96338L-2M-8M
Firmware Version:	3.06L.03-T1.0a-080130.A2pB023k.d17m
Bootloader (CFE) Version:	1.0.37-6.5

This information reflects the current status of your DSL connection.

Line Rate - Upstream (Kbps):	
Line Rate - Downstream (Kbps):	
LAN IP Address:	192.168.1.1
Default Gateway:	
Primary DNS Server:	192.168.1.1
Secondary DNS Server:	192.168.1.1

Figure 3-5

- 2) Please select **Quick Setup**. Enter the **VPI** and **VCI** values provided by your Internet Service Provider and click **Next**.

**TD-8810**

**Quick Setup**

This Quick Setup will guide you through the steps necessary to configure your DSL Router.

**ATM PVC Configuration**  
The Virtual Path Identifier (VPI) and Virtual Channel Identifier (VCI) are needed for setting up the ATM PVC. Do not change VPI and VCI numbers unless your ISP instructs you otherwise.

VPI: [0-255]

VCI: [32-65535]

**Enable Quality Of Service**

Enabling QoS for a PVC improves performance for selected classes of applications. However, since QoS also consumes system resources, the number of PVCs will be reduced consequently. Use **Advanced Setup/Quality of Service** to assign priorities for the applications.

Enable Quality Of Service

[Next](#)

Figure 3-6

- 3) Select the relevant Connection Type and Encapsulation mode as the settings provided by your Internet Service Provider and click **Next**.

### 3.3.1 PPPoA

- a) Select PPP over ATM (PPPoA) Connection Type, and click **Next**.

**TD-8810**

**Connection Type**

Select the type of network protocol for IP over Ethernet as WAN interface

PPP over ATM (PPPoA)

PPP over Ethernet (PPPoE)

MAC Encapsulation Routing (MER)

IP over ATM (IPoA)

Bridging

**Encapsulation Mode**

LLC/SNAP-BRIDGING

[Back](#) [Next](#)

Figure 3-7

- b) Enter the Username and Password provided by your Internet Service Provider and click **Next**.

**PPP Username and Password**

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

PPP Username:

PPP Password:

Authentication Method: **AUTO**

MTU [512-1500] :

Dial on demand (with idle timeout timer)

Inactivity Timeout (minutes) [1-4320]:

PPP IP extension

Use Static IP Address

Enable PPP Debug Mode

Figure 3-8

- c) Turn on the selected functions according to your demands. Clicking the **next** button to enter the next step.

**Enable IGMP Multicast, and WAN Service**

Enable IGMP Multicast

Enable WAN Service

Service Name

Figure 3-9

- d) Click **Save/Reboot**.

**WAN Setup - Summary**

Make sure that the settings below match the settings provided by your ISP.

<b>VPI / VCI:</b>	0 / 33
<b>Connection Type:</b>	PPPoA
<b>Service Name:</b>	br_0_33
<b>Service Category:</b>	UBR
<b>IP Address:</b>	Automatically Assigned
<b>Service State:</b>	Enabled
<b>NAT:</b>	Enabled
<b>Firewall:</b>	Enabled
<b>IGMP Multicast:</b>	Enabled
<b>Quality Of Service:</b>	Disabled

Click "Save" to save these settings. Click "Back" to make any modifications.  
NOTE: You need to reboot to activate this WAN interface and further configure services over this interface.

Figure 3-10

### 3.3.2 PPPoE

- a) Select PPP over Ethernet (PPPoE) Connection Type, and click **Next**.

**TD-8810**

**Device Info**

**Quick Setup**

**Advanced Setup**

**Diagnostics**

**Management**

**Connection Type**

Select the type of network protocol for IP over Ethernet as WAN interface

PPP over ATM (PPPoA)  
 PPP over Ethernet (PPPoE)  
 MAC Encapsulation Routing (MER)  
 IP over ATM (IPoA)  
 Bridging

**Encapsulation Mode**

LLC/SNAP-BRIDGING

Figure 3-11

- b) Enter the Username and Password provided by your Internet Service Provider and click **Next**.

**PPP Username and Password**

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

PPP Username:

PPP Password:

PPPoE Service Name:

Authentication Method:

MTU [512-1500] :

Dial on demand (with idle timeout timer)

Inactivity Timeout (minutes) [1-4320]:

PPP IP extension

Use Static IP Address

Enable PPP Debug Mode

Figure 3-12

c) Click **Save/Reboot**.

**WAN Setup - Summary**

Make sure that the settings below match the settings provided by your ISP.

<b>VPI / VCI:</b>	0 / 35
<b>Connection Type:</b>	PPPoE
<b>Service Name:</b>	pppoe_0_35_2
<b>Service Category:</b>	UBR
<b>IP Address:</b>	Automatically Assigned
<b>Service State:</b>	Enabled
<b>NAT:</b>	Enabled
<b>Firewall:</b>	Enabled
<b>IGMP Multicast:</b>	Enabled
<b>Quality Of Service:</b>	Disabled

Click "Save/Reboot" to save these settings and reboot router. Click "Back" to make any modifications.  
NOTE: The configuration process takes about 1 minute to complete and your DSL Router will reboot.

Figure 3-13

**⚠ Note:**

The Router will restart when you complete the configuration, so you have to wait for a while until it restarts successfully.

**3.3.3 MER**

- a) Select MAC Encapsulation Routing (MER) Connection Type, and click **Next**.

The screenshot shows the configuration interface for the TD-8810 router. On the left is a navigation menu with the following items: Device Info, Quick Setup, Advanced Setup, Diagnostics, and Management. The main content area is titled "Connection Type" and contains the instruction: "Select the type of network protocol for IP over Ethernet as WAN interface". There are five radio button options: PPP over ATM (PPPoA), PPP over Ethernet (PPPoE), MAC Encapsulation Routing (MER) (which is selected), IP over ATM (IPoA), and Bridging. Below these options is the "Encapsulation Mode" section, which has a dropdown menu currently set to "LLC/SNAP-BRIDGING". At the bottom right of the configuration area are two buttons: "Back" and "Next".

- b) Enter the parameter and the way which is provided by your ISP, then click **Next**.

**WAN IP Settings**

Enter information provided to you by your ISP to configure the WAN IP settings.  
 Notice: DHCP can be enabled for PVC in MER mode or IP over Ethernet as WAN interface if "Obtain an IP address automatically" is chosen. Changing the default gateway or the DNS effects the whole system. Configuring them with static values will disable the automatic assignment from DHCP or other WAN connection.  
 If you configure static default gateway over this PVC in MER mode, you must enter the IP address of the remote gateway in the "Use IP address". The "Use WAN interface" is optional.

Obtain an IP address automatically  
 Use the following IP address:  
 WAN IP Address:   
 WAN Subnet Mask:

Obtain default gateway automatically  
 Use the following default gateway:  
 Use IP Address:   
 Use WAN Interface:

Obtain DNS server addresses automatically  
 Use the following DNS server addresses:  
 Primary DNS server:   
 Secondary DNS server:

Figure 3-14

c) Turn on the selected functions according to your needs. Click **Next**.

**Network Address Translation Settings**

Network Address Translation (NAT) allows you to share one Wide Area Network (WAN) IP address for multiple computers on your Local Area Network (LAN).

Enable NAT   
 Enable Firewall

**Enable IGMP Multicast, and WAN Service**

Enable IGMP Multicast   
 Enable WAN Service   
 Service Name:

Figure 3-15

d) Click **Save/Reboot**.

**WAN Setup - Summary**

Make sure that the settings below match the settings provided by your ISP.

VPI / VCI:	0 / 33
Connection Type:	MER
Service Name:	br_0_33
Service Category:	UBR
IP Address:	Automatically Assigned
Service State:	Enabled
NAT:	Enabled
Firewall:	Enabled
IGMP Multicast:	Enabled
Quality Of Service:	Disabled

Click "Save" to save these settings. Click "Back" to make any modifications.  
 NOTE: You need to reboot to activate this WAN interface and further configure services over this interface.

Figure 3-16

### 3.3.4 IPoA

- a) Select IP over ATM (IPoA) Connection Type, and click **Next**.

**TD-8810**

- Device Info
- Quick Setup
- Advanced Setup
- Diagnostics
- Management

**Connection Type**

Select the type of network protocol for IP over Ethernet as WAN interface

- PPP over ATM (PPPoA)
- PPP over Ethernet (PPPoE)
- MAC Encapsulation Routing (MER)
- IP over ATM (IPoA)
- Bridging

**Encapsulation Mode**

LLC/SNAP-BRIDGING

Figure 3-17

- b) Enter the parameter and the way which is provided by your ISP, then click **Next**.

**TD-8810**

**WAN IP Settings**

Enter information provided to you by your ISP to configure the WAN IP settings.

Notice: DHCP is not supported in IPoA mode. Changing the default gateway or the DNS effects the whole system. Configuring them with static values will disable the automatic assignment from other WAN connection.

WAN IP Address:

WAN Subnet Mask:

Use the following default gateway:

Use IP Address:

Use WAN Interface:

Use the following DNS server addresses:

Primary DNS server:

Secondary DNS server:

Figure 3-18

- c) Turn on the selected functions according to your needs. Click **Next**

**Network Address Translation Settings**

Network Address Translation (NAT) allows you to share one Wide Area Network (WAN) IP address for multiple computers on your Local Area Network (LAN).

Enable NAT

Enable Firewall

**Enable IGMP Multicast, and WAN Service**

Enable IGMP Multicast

Enable WAN Service

Service Name:

Figure 3-19

- d) Click **Save/Reboot**.

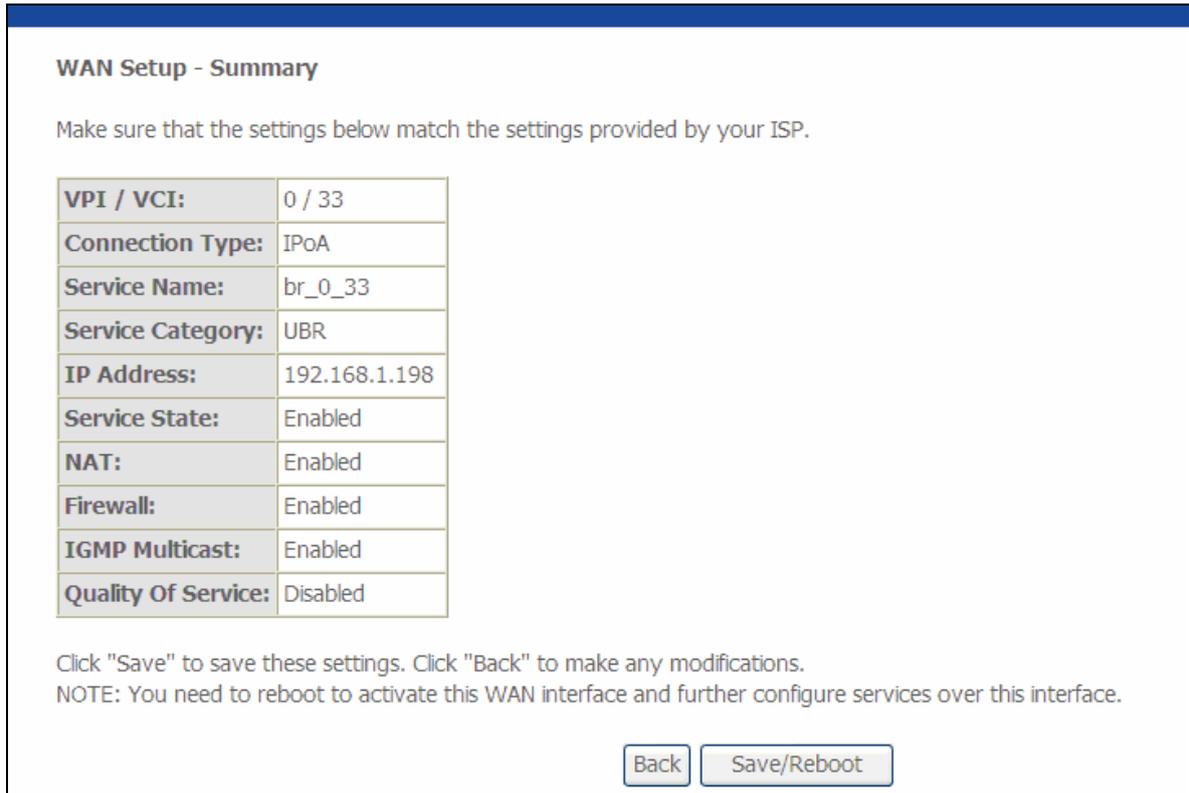


Figure 3-20

### 3.3.5 Bridging

- a) Select **Bridging** Connection Type, and click **Next**.

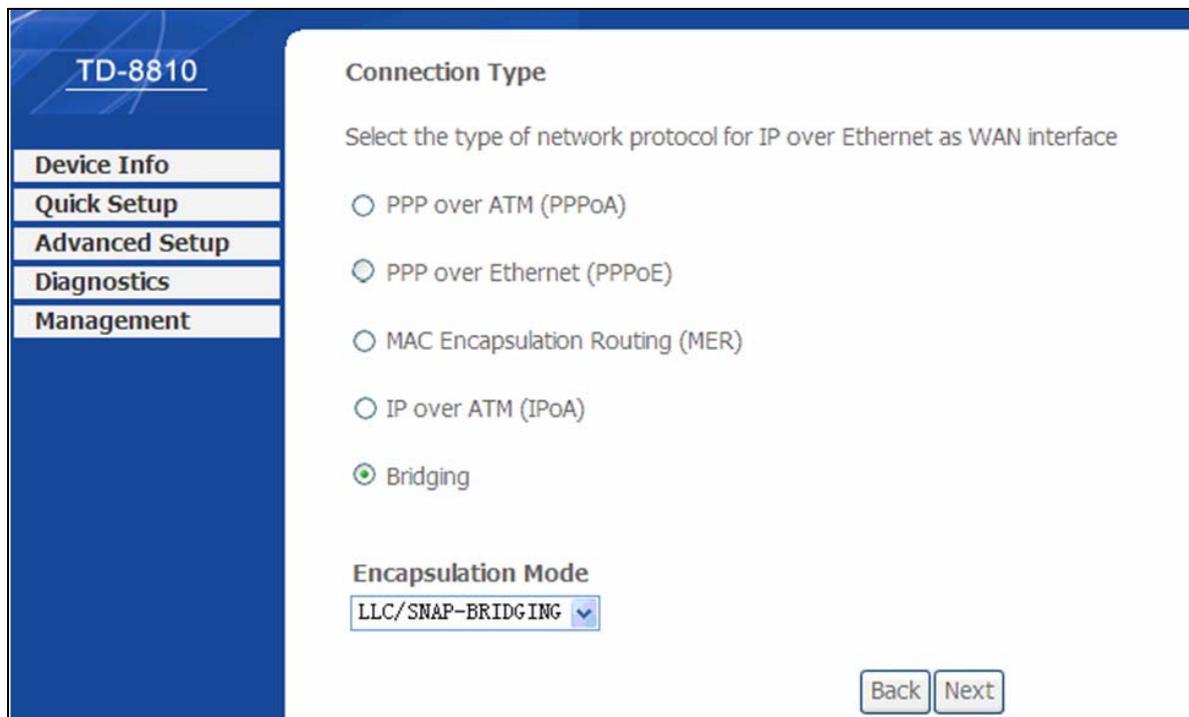


Figure 3-21

- b) Click **Save/Reboot**.

**WAN Setup - Summary**

Make sure that the settings below match the settings provided by your ISP.

<b>VPI / VCI:</b>	0 / 33
<b>Connection Type:</b>	Bridge
<b>Service Name:</b>	br_0_33
<b>Service Category:</b>	UBR
<b>IP Address:</b>	Not Applicable
<b>Service State:</b>	Enabled
<b>NAT:</b>	Enabled
<b>Firewall:</b>	Enabled
<b>IGMP Multicast:</b>	Not Applicable
<b>Quality Of Service:</b>	Disabled

Click "Save" to save these settings. Click "Back" to make any modifications.  
NOTE: You need to reboot to activate this WAN interface and further configure services over this interface.

Figure 3-22

**Note:**

After you complete any setup, the new setup must be saved and the Router must be restarted for the configuration to go into effect. Please click the **Save/Reboot** button to restart.

### 3.4 Change Password

You will then see the Figure 3-23, which displays some information such as link rate and so on

**TD-8810**

**Device Info**

<b>Board ID:</b>	96338L-2M-8M
<b>Firmware Version:</b>	3.06L.03-T1.0a-080130.A2pB023k.d17m
<b>Bootloader (CFE) Version:</b>	1.0.37-6.5

This information reflects the current status of your DSL connection.

<b>Line Rate - Upstream (Kbps):</b>	
<b>Line Rate - Downstream (Kbps):</b>	
<b>LAN IP Address:</b>	192.168.1.1
<b>Default Gateway:</b>	
<b>Primary DNS Server:</b>	192.168.1.1
<b>Secondary DNS Server:</b>	192.168.1.1

Figure 3-23

Default value of user name and password is "admin"; if you want to change them, please go to "Management" → "Access control" → "Passwords" changing them. (Figure 3-24)

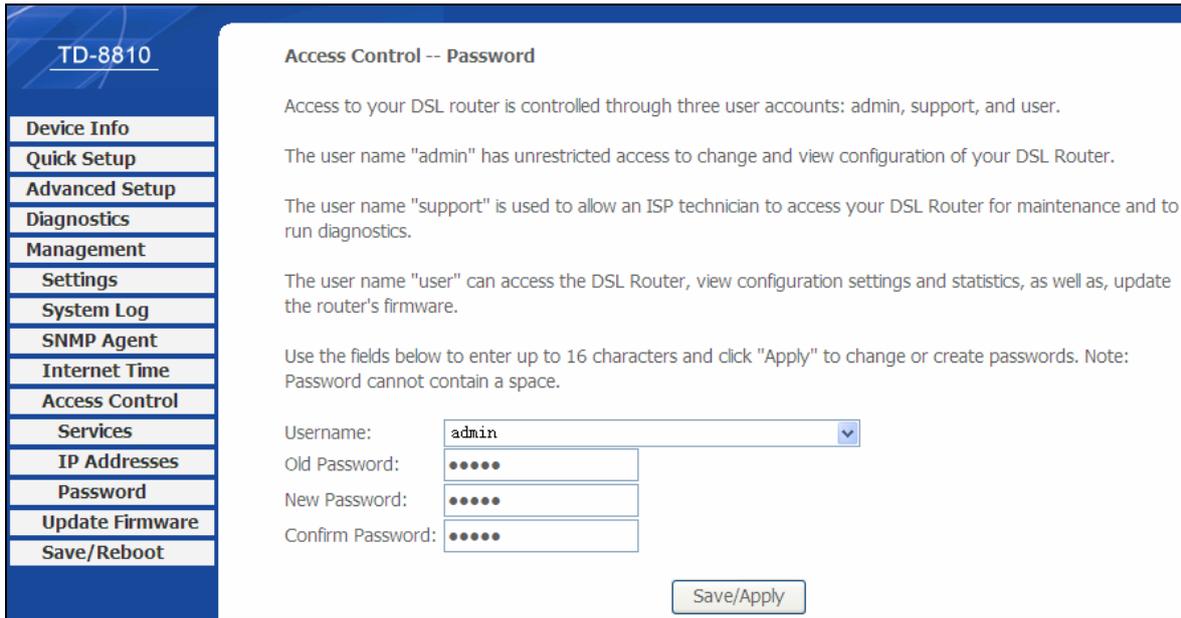


Figure 3-24

### 3.5 Web Setup

Choose “**Advanced Setup**”→”**WAN**”, you will enter the page of Wide Area Network (WAN) Setup, you will see the Figure 3-25.

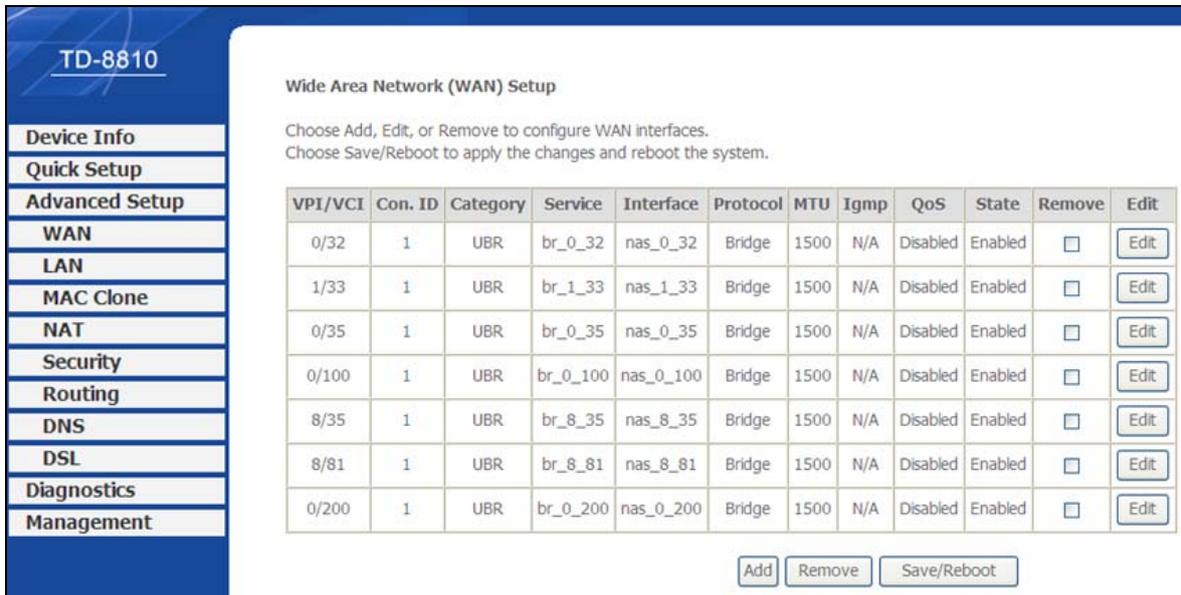


Figure 3-25

There are 7 PVC links in the **WAN** setup page, choose the appropriate PVC according to your need, and then click the **edit** button, you will enter the page of ATM PVC Configuration (See Figure 3-26)

The screenshot shows the 'ATM PVC Configuration' page in the TD-8810 router's web interface. On the left is a navigation menu with options: Device Info, Quick Setup, Advanced Setup, WAN, LAN, MAC Clone, NAT, Security, Routing, DNS, DSL, Diagnostics, and Management. The main content area is titled 'ATM PVC Configuration' and includes a descriptive paragraph: 'This screen allows you to configure an ATM PVC identifier (VPI and VCI) and select a service category. Otherwise choose an existing interface by selecting the checkbox to enable it.' Below this are input fields for 'VPI: [0-255]' with the value '0' and 'VCI: [32-65535]' with the value '33'. A 'Service Category' dropdown menu is set to 'UBR Without PCR'. A section titled 'Enable Quality Of Service' contains a paragraph explaining that enabling packet level QoS improves performance but reduces the number of PVCs, and a checkbox labeled 'Enable Quality Of Service' which is currently unchecked. At the bottom right are 'Back' and 'Next' buttons.

Figure 3-26

Enter **VPI/VCI** value and service category which is provided by your ISP, click **next** to enter the next step. You will see the Figure 3-27.

 **Note:**

The type of network protocol selected may be different in different areas, there are five types (Figure 3-27) , So you should ask your ISP to acquire the local type of network protocol and Encapsulation mode.

The screenshot shows the 'Connection Type' page in the TD-8810 router's web interface. The navigation menu on the left is identical to Figure 3-26. The main content area is titled 'Connection Type' and includes the instruction: 'Select the type of network protocol for IP over Ethernet as WAN interface'. There are five radio button options: 'PPP over ATM (PPPoA)', 'PPP over Ethernet (PPPoE)', 'MAC Encapsulation Routing (MER)', 'IP over ATM (IPoA)', and 'Bridging', with 'Bridging' selected. Below this is an 'Encapsulation Mode' dropdown menu set to 'LLC/SNAP-BRIDGING'. At the bottom right are 'Back' and 'Next' buttons.

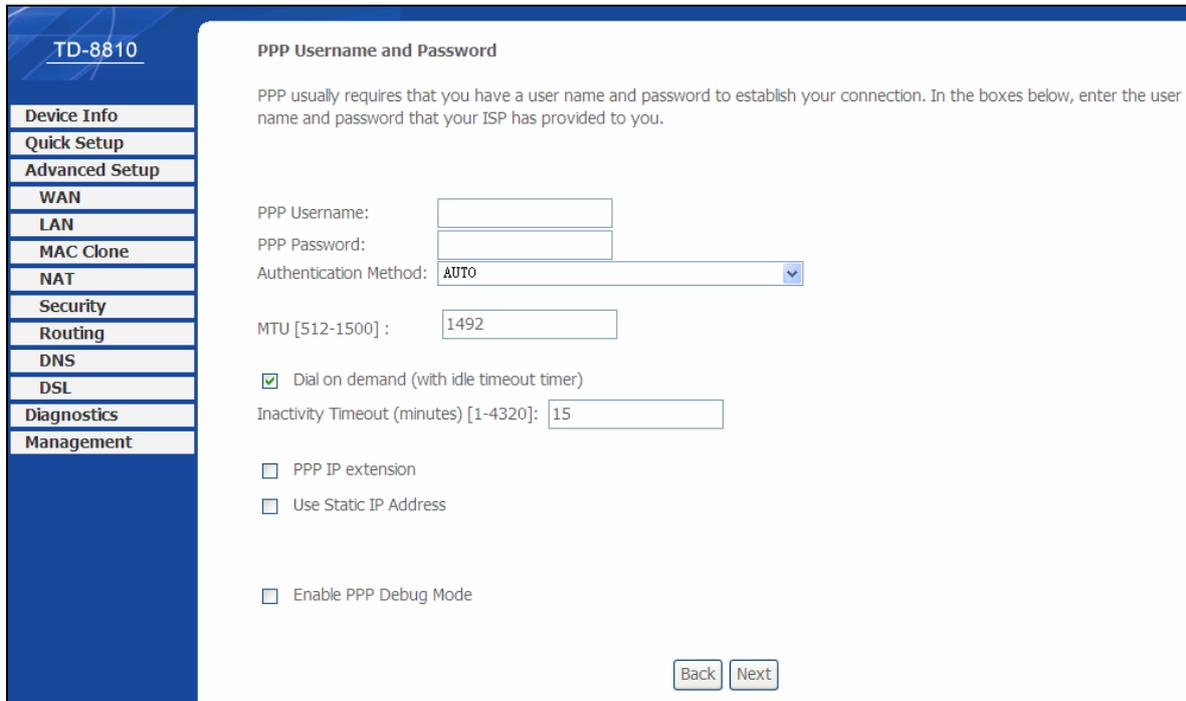
Figure 3-27

After choosing the proper protocol, enter the correct parameters supported by your ISP. Enable

the configurations, and then you will go to Internet.

### ➤ PPP over ATM (PPPoA)

If you select the protocol of PPP over ATM (PPPoA), you will see the Figure 3-28, in which please enter the value of user name and password which is provided by your ISP. After selecting the other function (it's recommended to keep the default setup), click **Next** to continue.



The screenshot shows the configuration page for PPP Username and Password. The page has a blue header with 'TD-8810' and a left sidebar with navigation options: Device Info, Quick Setup, Advanced Setup, WAN, LAN, MAC Clone, NAT, Security, Routing, DNS, DSL, Diagnostics, and Management. The main content area is titled 'PPP Username and Password' and contains the following fields and options:

- PPP Username: [Text input field]
- PPP Password: [Text input field]
- Authentication Method: [Dropdown menu showing 'AUTO']
- MTU [512-1500]: [Text input field showing '1492']
- Dial on demand (with idle timeout timer)
- Inactivity Timeout (minutes) [1-4320]: [Text input field showing '15']
- PPP IP extension
- Use Static IP Address
- Enable PPP Debug Mode

At the bottom right, there are two buttons: 'Back' and 'Next'.

Figure 3-28

You will see the Figure 3-29, and then turn on the selected functions according to your demands. Clicking the **next** button to enter the next step, you will see the Figure 3-30, finally click **save** to complete the configuration.

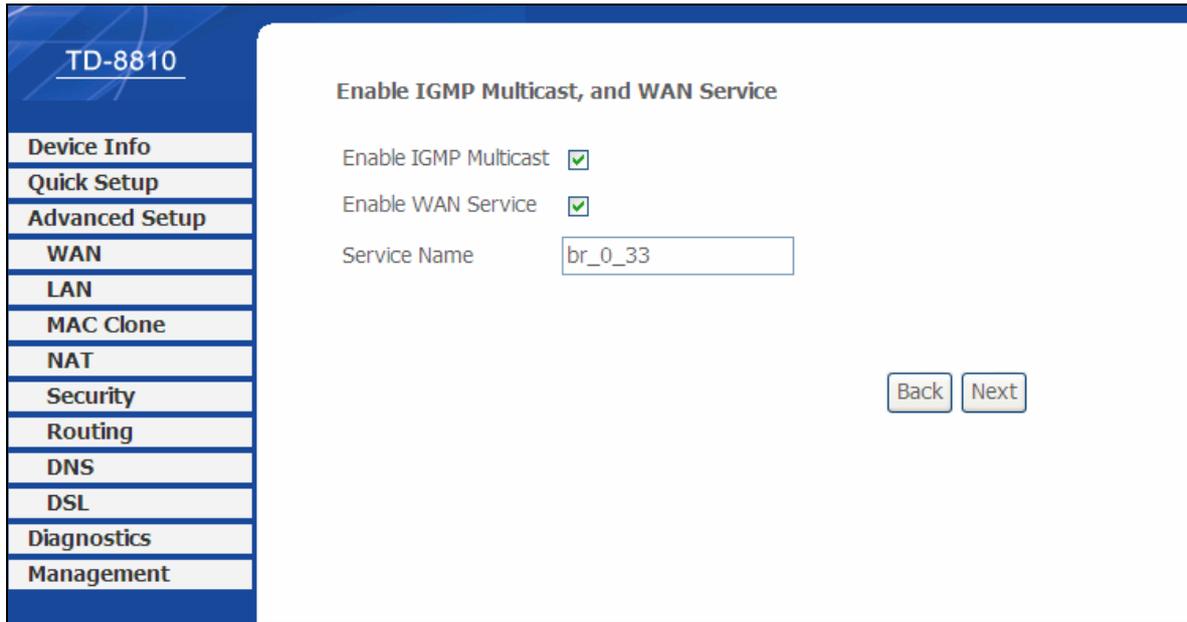


Figure 3-29

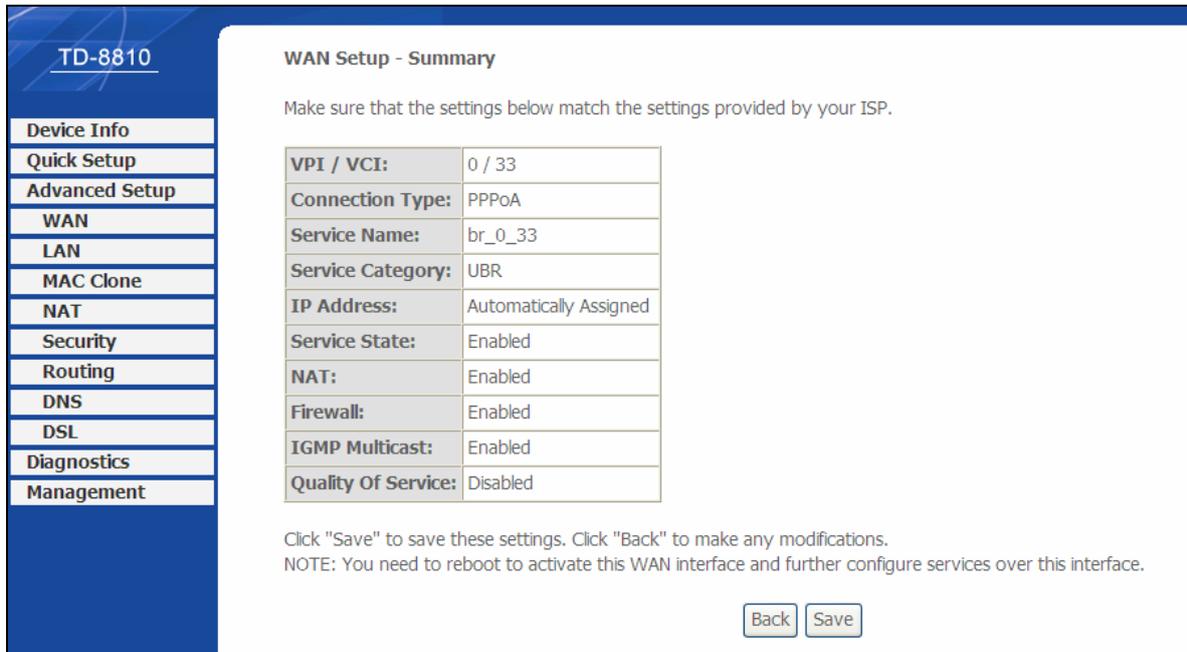


Figure 3-30

➤ **PPP over Ethernet (PPPoE)**

If you select the protocol of PPP over Ethernet (PPPoE), you will see the Figure 3-31, in which please enter the value of user name and password which is provided by your ISP. After selecting the other function (it's recommended to keep the default setup), click the **next** button.

**TD-8810**

**Device Info**  
**Quick Setup**  
**Advanced Setup**  
**WAN**  
**LAN**  
**MAC Clone**  
**NAT**  
**Security**  
**Routing**  
**DNS**  
**DSL**  
**Diagnostics**  
**Management**

**PPP Username and Password**

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

PPP Username:

PPP Password:

PPPoE Service Name:

Authentication Method: **AUTO**

MTU [512-1500] :

Dial on demand (with idle timeout timer)

Inactivity Timeout (minutes) [1-4320]:

PPP IP extension

Use Static IP Address

Enable PPP Debug Mode

Figure 3-31

You will see the Figure 3-32, and then turn on the selected functions according to your needs. Clicking the **next** button to enter the next step, you will see the Figure 3-33, finally click **save** to complete the configuration.

**TD-8810**

**Device Info**  
**Quick Setup**  
**Advanced Setup**  
**WAN**  
**LAN**  
**MAC Clone**  
**NAT**  
**Security**  
**Routing**  
**DNS**  
**DSL**  
**Diagnostics**  
**Management**

**Enable IGMP Multicast, and WAN Service**

Enable IGMP Multicast

Enable WAN Service

Service Name

Figure 3-32

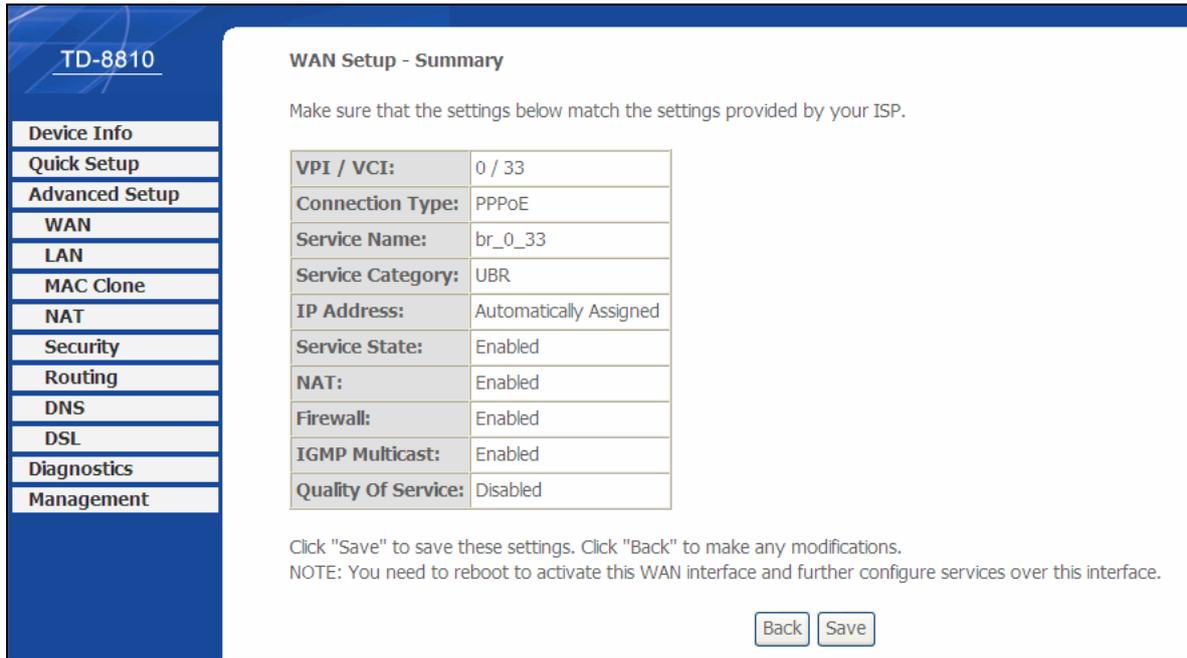


Figure 3-33

➤ **MAC Encapsulation Routing (MER)**

If you select the protocol of MAC Encapsulation Routing (MER), you will see the page (Figure 3-34), Enter the parameter and the way which is provided by your ISP, then click the **next** button.

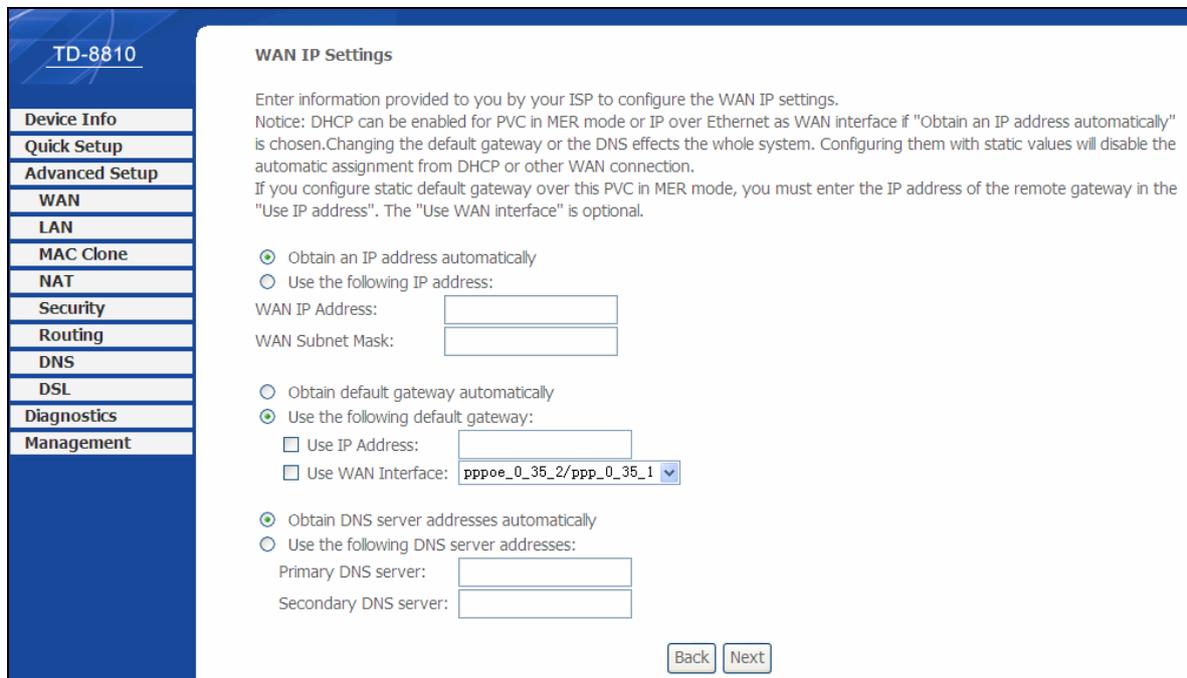


Figure 3-34

You will see the Figure 3-35, and then turn on the selected functions according to your needs. Clicking the **next** button to enter the next step, you will see the Figure 3-36, finally click **save** to complete the configuration.

**TD-8810**

**Network Address Translation Settings**

Network Address Translation (NAT) allows you to share one Wide Area Network (WAN) IP address for multiple computers on your Local Area Network (LAN).

Enable NAT

Enable Firewall

**Enable IGMP Multicast, and WAN Service**

Enable IGMP Multicast

Enable WAN Service

Service Name:

Figure 3-35

**TD-8810**

**WAN Setup - Summary**

Make sure that the settings below match the settings provided by your ISP.

VPI / VCI:	0 / 33
Connection Type:	MER
Service Name:	br_0_33
Service Category:	UBR
IP Address:	Automatically Assigned
Service State:	Enabled
NAT:	Enabled
Firewall:	Enabled
IGMP Multicast:	Enabled
Quality Of Service:	Disabled

Click "Save" to save these settings. Click "Back" to make any modifications.  
NOTE: You need to reboot to activate this WAN interface and further configure services over this interface.

Figure 3-36

### ➤ IP over ATM (IPoA)

If you select the protocol of IP over ATM (IPoA), you will see the Figure 3-37, enter the parameter and the way which is provided by your ISP, then click the **next** button.

The screenshot shows the 'WAN IP Settings' page in the router's web interface. On the left is a navigation menu with 'WAN' selected. The main content area has a title 'WAN IP Settings' and a sub-header 'Enter information provided to you by your ISP to configure the WAN IP settings.' Below this is a notice: 'Notice: DHCP is not supported in IPoA mode. Changing the default gateway or the DNS effects the whole system. Configuring them with static values will disable the automatic assignment from other WAN connection.' The form contains two input fields: 'WAN IP Address' with the value '192.168.1.198' and 'WAN Subnet Mask' with the value '255.255.255.0'. There are three main sections, each with a checkbox: 1) 'Use the following default gateway:' with sub-options 'Use IP Address:' (empty field) and 'Use WAN Interface:' (dropdown menu showing 'pppoe\_0\_35\_2/ppp\_0\_35\_1'). 2) 'Use the following DNS server addresses:' with sub-options 'Primary DNS server:' (empty field) and 'Secondary DNS server:' (empty field). At the bottom right are 'Back' and 'Next' buttons.

Figure 3-37

You will see the page (Figure 3-38), then turn on the selected functions according to your needs. Clicking the **next** button to enter the next step, you will see the Figure 3-39, finally click **save** to complete the configuration.

The screenshot shows the 'Network Address Translation Settings' page in the router's web interface. On the left is a navigation menu with 'WAN' selected. The main content area has a title 'Network Address Translation Settings' and a sub-header 'Network Address Translation (NAT) allows you to share one Wide Area Network (WAN) IP address for multiple computers on your Local Area Network (LAN).' The form contains several checkboxes: 'Enable NAT' (checked), 'Enable Firewall' (checked), 'Enable IGMP Multicast, and WAN Service' (sub-section), 'Enable IGMP Multicast' (checked), and 'Enable WAN Service' (checked). There is one input field: 'Service Name' with the value 'br\_0\_33'. At the bottom right are 'Back' and 'Next' buttons.

Figure 3-38

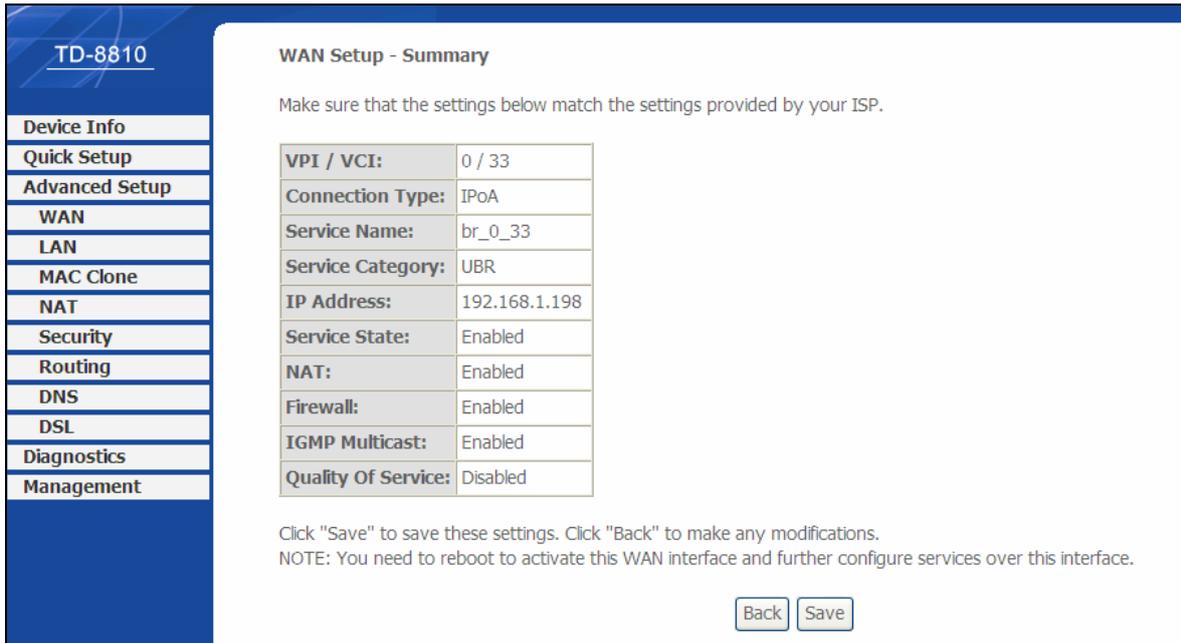


Figure 3-39

➤ **Bridging**

If you select the Bridging protocol, you just open the bridge service function options, you will see the Figure 3-40, then click the **next** button, you will see the Figure 3-41, finally click **save** to complete the configuration.

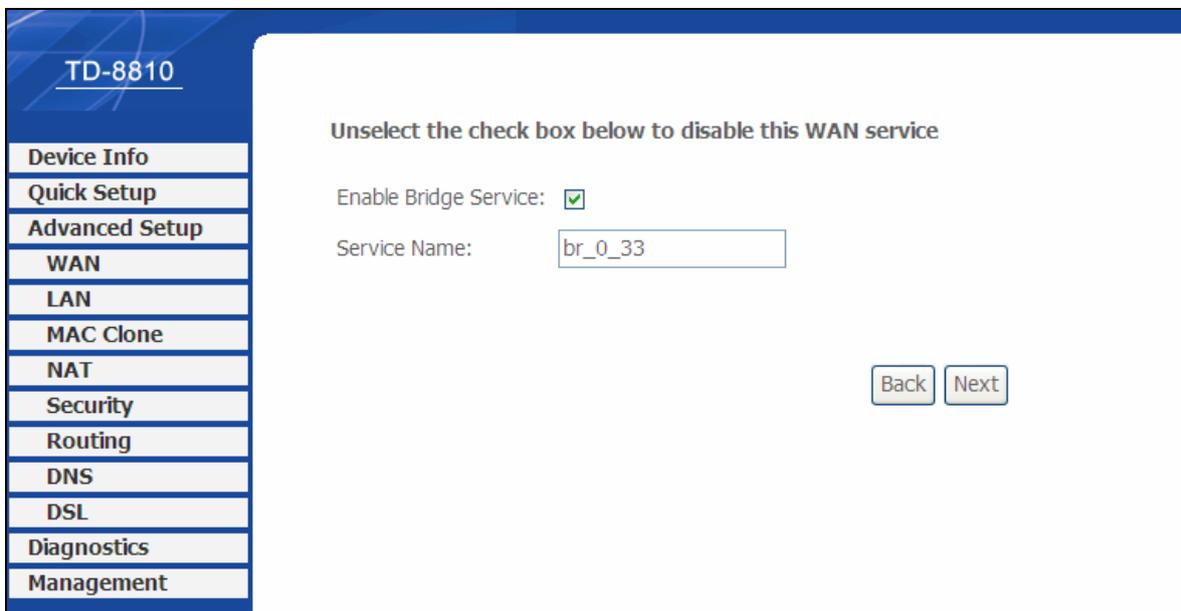


Figure 3-40

**TD-8810**

**WAN Setup - Summary**

Make sure that the settings below match the settings provided by your ISP.

VPI / VCI:	0 / 33
Connection Type:	Bridge
Service Name:	br_0_33
Service Category:	UBR
IP Address:	Not Applicable
Service State:	Enabled
NAT:	Enabled
Firewall:	Enabled
IGMP Multicast:	Not Applicable
Quality Of Service:	Disabled

Click "Save" to save these settings. Click "Back" to make any modifications.  
NOTE: You need to reboot to activate this WAN interface and further configure services over this interface.

[Back](#) [Save](#)

Figure 3-41

**Note:**

After you complete any setup, the new setup must be saved and the Router must be restarted for the configuration to go into effect. Please click the **Save/Reboot** button to restart, referring to the Figure 3-42.

**TD-8810**

**Wide Area Network (WAN) Setup**

Choose Add, Edit, or Remove to configure WAN interfaces.  
Choose Save/Reboot to apply the changes and reboot the system.

VPI/VCI	Con. ID	Category	Service	Interface	Protocol	MTU	Igmp	QoS	State	Remove	Edit
0/32	1	UBR	br_0_32	nas_0_32	Bridge	1500	N/A	Disabled	Enabled	<input type="checkbox"/>	<a href="#">Edit</a>
1/33	1	UBR	br_1_33	nas_1_33	Bridge	1500	N/A	Disabled	Enabled	<input type="checkbox"/>	<a href="#">Edit</a>
0/35	1	UBR	br_0_35	nas_0_35	Bridge	1500	N/A	Disabled	Enabled	<input type="checkbox"/>	<a href="#">Edit</a>
0/100	1	UBR	br_0_100	nas_0_100	Bridge	1500	N/A	Disabled	Enabled	<input type="checkbox"/>	<a href="#">Edit</a>
8/35	1	UBR	br_8_35	nas_8_35	Bridge	1500	N/A	Disabled	Enabled	<input type="checkbox"/>	<a href="#">Edit</a>
8/81	1	UBR	br_8_81	nas_8_81	Bridge	1500	N/A	Disabled	Enabled	<input type="checkbox"/>	<a href="#">Edit</a>
0/200	1	UBR	br_0_200	nas_0_200	Bridge	1500	N/A	Disabled	Enabled	<input type="checkbox"/>	<a href="#">Edit</a>

[Add](#) [Remove](#) [Save/Reboot](#)

Figure 3-42

**Note:**

All of the above setup is under windows XP OS.

### 3.5.1 DHCP IP Reservation

When you specify a reserved IP address for a PC on the LAN, that PC will always receive the same IP address each time when it accesses the DHCP server. Reserved IP addresses should be assigned to servers that require permanent IP settings.

To setup an Address Reservation entry:

 **Note:**

1. DHCP IP Reservation are not available for the connection type of Bridge here, they won't display on the screen below since only Bridge is selected.
2. DHCP IP Reservation are not available for the connection type of PPPoE with PPP IP Extension function selected, and they won't display on the screen below since PPP IP Extension is selected.

Choose "**Advanced Setup**"→"**LAN**", and you will see the LAN screen, the section allows you to configure the Router's LAN ports settings, and you can configure the DHCP IP Reservation function in this screen.

### Local Area Network (LAN) Setup

Configure the DSL Router IP Address and Subnet Mask for LAN interface. Save button only saves the LAN configuration data. Save/Reboot button saves the LAN configuration data and reboots the router to make the new configuration effective.

IP Address:

Subnet Mask:

Enable UPnP

Enable IGMP Snooping

Standard Mode

Blocking Mode

Disable DHCP Server

Enable DHCP Server

Start IP Address:

End IP Address:

Leased Time (hour):

Configure the second IP Address and Subnet Mask for LAN interface

Figure 3-25

1. Click the **Set Address Reservation** button, and the **Address Reservation** screen pop up, as it showed below;

**Address Reservation**

Notice:  
Your configuration won't take effect unless the ADSL router is rebooted.

ID	MAC Address	IP Address	State	Remove
----	-------------	------------	-------	--------

New Entry    Enable All    Disable All    Remove All

Save/Reboot    Back

Figure 3-26

- Click **New Entry** button to add new entries, and the screen showed below pop up, you can modify an address reservation entry in this screen;

**Address Reservation Configure**

Add or Modify a Address Reservation Entry

MAC Address:   
(xx:xx:xx:xx:xx:xx)

Reserved IP Address:

States:

Save    Back

Figure 3-27

- Type the MAC Address (00:13:8F:A9:E6: CA for instance) of the computer which you want to reserve an IP (192.168.1.100 for instance) for in the **MAC Address** text box;
- Type the IP Address (192.168.1.100 for instance) you have reserved in the **Reserved IP Address** text box;
- Click **save** button to save the settings you have set;

 **Note:**

The MAC Address and IP Address added in the text box used for illustrating. That may be different to your circs.

- When you have saved the settings, the new entry will added to the **Address Reservation** screen showed below.

**Address Reservation**

Notice:  
Your configuration won't take effect unless the ADSL router is rebooted.

ID	MAC Address	IP Address	State	Remove
0	00:13:8f:a9:e6:ca	192.168.1.100	<input checked="" type="checkbox"/> Enable	Remove

Figure 3-28

7. Click **Save/Reboot** button to save the settings and reboot the router.

 **Note:**

The function won't take effect until the router reboots.

### 3.5.2 DNS

When you select the connection type **PPPoE**, **PPPoA**, **MER** or **IPoA** for WAN configuration, you will see the **DNS** menu in the Web-based Utility (shown in Figure 3-29). It includes **DNS Server** and **Dynamic DNS** submenus.

TD-8810

**DNS Server Configuration**

If 'Enable Automatic Assigned DNS' checkbox is selected, this router will accept the first received DNS assignment from one of the PPPoA, PPPoE or MER/DHCP enabled PVC(s) during the connection establishment. If the checkbox is not selected, enter the primary and optional secondary DNS server IP addresses. Click 'Save' button to save the new configuration. You must reboot the router to make the new configuration effective.

Enable Automatic Assigned DNS

[Device Info](#)  
[Quick Setup](#)  
[Advanced Setup](#)  
[WAN](#)  
[LAN](#)  
[MAC Clone](#)  
[NAT](#)  
[Security](#)  
[Routing](#)  
**[DNS](#)**  
[DNS Server](#)  
[Dynamic DNS](#)  
[DSL](#)  
[Diagnostics](#)  
[Management](#)

Figure 3-29

#### 3.5.2.1. DNS Server

Choose **“Advanced Setup”**→**“DNS”**→**“DNS Server”**. You can see the **DNS Server** screen, this screen allows you to configure the DNS Server Addresses (shown in Figure 3-30).

### DNS Server Configuration

If 'Enable Automatic Assigned DNS' checkbox is selected, this router will accept the first received DNS assignment from one of the PPPoA, PPPoE or MER/DHCP enabled PVC(s) during the connection establishment. If the checkbox is not selected, enter the primary and optional secondary DNS server IP addresses. Click 'Save' button to save the new configuration. You must reboot the router to make the new configuration effective.

Enable Automatic Assigned DNS

Primary DNS server:

Secondary DNS server:

Figure 3-30

If you select **Enable Automatic Assigned DNS**, this Router will accept automatically the first received DNS assignment from one of **PPPoA**, **PPPoE** or **MER/DHCP** enabled PVC(s) during the connection established process. If the checkbox is not selected, please enter the primary and/or optional secondary DNS server IP addresses provided by your ISP. Then click the **Save** button to save the new configuration.

 **Note:**

You have to reboot the Router to make the new configuration take effect.

### 3.5.2.2. Dynamic DNS

Choose “**Advanced Setup**”→“**DNS**”→“**Dynamic DNS**”, you can see the **Dynamic DNS** screen, this screen allows you to configure the Dynamic DNS (shown in Figure 3-31).

The Router offers a Dynamic Domain Name System (**DDNS**) feature. DDNS lets you assign a fixed host and domain name to a dynamic Internet IP Address. The Dynamic DNS service allows you to alias a dynamic IP address to a static hostname in any of the many domains, allowing your Router more easily accessed from various locations on the Internet.

Dynamic DNS

The Dynamic DNS service allows you to alias a dynamic IP address to a static hostname in any of the many domains, allowing your DSL router to be more easily accessed from various locations on the Internet.

Choose Add or Remove to configure Dynamic DNS.

Hostname	Username	Service	Interface	Remove
Alsblog.homeunix.net	nacy	dyndns	ppp_8_35_1	<input type="checkbox"/>

Figure 3-31

**To setup DDNS, follow these instructions:**

1. Click the **Add** button (pop-up Figure 3-31), then you will set the DDNS in the next screen (shown in Figure 3-32).

Add dynamic DNS

This page allows you to add a Dynamic DNS address from DynDNS.org, TZO or No-IP.

D-DNS provider 

- DynDNS.org
- TZO
- No-IP

Hostname

Interface

**DynDNS Settings**

Username

Password

Figure 3-32

**Note:**

This page allows you to add a Dynamic DNS address from DynDNS.org, TZO or No-IP.

2. Select **D-DNS provider** (DynDNS.org, TZO or No-IP) in the drop-down list.

3. Enter the Hostname of the DNS Server, and select the corresponding Interface for the DDNS, you can leave it default.
4. Type the **User Name** and **Password** for your DDNS account.
5. Click the **Save/Apply** button to save the entry.

### 3.6 Software Dial

If TD-8810 CPE work in bridged (RFC 1483 Bridged) mode when it connecting Internet. You must install dial software on your PC. There are some software working on WINDOWS in market, example for EnterNet3000、RASPPPoE、WinPeET.

#### How do I set up the connection in the windows XP?

- The users of Windows XP can click the “**start->All Programs->Accessories->Communications->New connection wizard**”, then click **Next** to enter the configuration page.
- Please you select the “**connect to the internet**”, and then click the **Next** button to enter the next page and select the “**set up my connection manually**”, click **Next** to enter the next page.
- Please select the “**connect using a broadband connection that requires user name and password**”, click **Next** to type the name of your ISP in the current page, and then click **Next**.
- Enter an **ISP account name** and **password**, if you have forgotten an existing account name or password, please connect with your ISP, and click **Next**.
- To create the connection and close this wizard, click **finish** to add a shortcut to this connection to your desktop.
- When you assess the internet by ADSL, double-click this shortcut of dial connection in your desktop, enter the account name and password, then click **connect** to connect the internet.

## Chapter 4. Advantage management setup

In order to satisfy our customer's needs we offer an excellent Web management interface. Feel free to utilize the Advantage application and online software upgrades. The functions of the Web management interface are as follows:

- Upgrade software
- Modify the default IP address of the port of LAN(192.168.1.1)
- Modify the login password
- Configure DHCP
- Check the information of IP and the operation status
- Configure the NAT function
- Configure the DNS parameters
- Configure Security rule
- Configure DSL parameter

## Appendix A: FAQ

### 1. What related parameters are required to acquire ISP when you want to access the internet by ADSL Router?

- 1) Dial user: Connection protocol, User name, Password, Value of VPI/VCI, Encapsulation mode of AAL5 and so on.
- 2) Static IP user: Connection protocol, WAN IP Address, Subnet Mask, Gateway, Value of VPI/VCI, Encapsulation mode of AAL5 and so on.

### 2. About Connection protocol, VCI/VPI, Encapsulation mode of AAL5

- 1) This product supports the PPP protocol over ATM (PPPoA)、PPP over Ethernet (PPPoE)、MAC Encapsulation Routing (MER)、IP over ATM (IPoA) and Bridging. You may be used with any one of the five protocols above. Because the ISP in different areas supports different protocol, you must choose the protocol which is supported by your ISP.
- 2) The VPI is the English abbreviation of the Virtual Path Identifier, the VCI is the English abbreviation of the Virtual Channel Identifier, the value of VCI/VPI must be compatible with the value that provided by ISP.
- 3) Encapsulation mode of AAL5 include: LLC/SNAP and VC\_MAX(often using LLC/SNAP).

### 3. Why the LAN's and the NIC's LED both bright, but the configuration interface is inaccessible?

- 1) Use the order of **ping 192.168.1.1** to check the Accuracy of connection.
- 2) Check the Accuracy of working NIC.
- 3) Whatever the setup of the IP address on your computer (if you close the DHCP function, you can't obtain the IP address automatically, must specify the IP address of your computer manually).
- 4) Run the winipcfg order in the windows 95/98(run the ipconfig order in the windows 2000) to check whether setup the IP address, subnet mask, default gateway by DHCP.
- 5) Resume the ADSL Modem default configuration if necessary.

### 4. Have complete all configurations, but can't dial through computer

- 1) Check the indicator of ADSL, it should be working in normally.
- 2) Check the accuracy of parameter of value of VPI/VCI, Encapsulation mode of AAL5 and so on, whether you need to install the dial software, such as Winpoet, Enternet.

- 3) This product has the PPP dial procedure inside, so you will not need to use the dial software if your protocol is PPPoA or PPPoE, ADSL Modem will connect automatically.
- 4) You can check whether your ADSL Modem succeeds in connection with **PING** command.

## Appendix B: Default Config

<b>User name</b>	admin
<b>Password</b>	admin
<b>IP Address</b>	192.168.1.1