1 Overview

The router is a highly ADSL2/2+ Integrated Access Device and can support ADSL link with downstream up to 24 Mbps and upstream up to 1 Mbps. It is designed to provide a simple and cost-effective ADSL Internet connection for a private Ethernet. The Router combines high-speed ADSL Internet connection, Ethernet uplink and IP routing for the LAN in one package. It is usually preferred to provide high access performance applications for individual users, SOHOs and small enterprises.

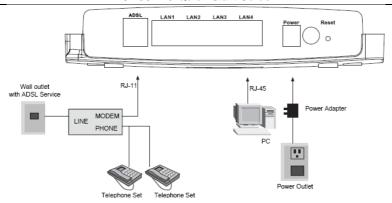
2 Hardware Installation

Step 1 Connect the ADSL port of the router to the Modem port of the splitter using a telephone cable. Connect the phone to the phone port of the splitter using a telephone cable. Connect the incoming line to the Line port of the splitter.

The spliiter has three ports:

- LINE: Connect to a wall phone jack (RJ-11 jack)
- Modem: Connect to the ADSL interface of the router
- PHONE: Connect to a telephone set
- Step 2 Connect the LAN port of the router to the network card of the PC through an Ethernet cable.
- Step 3 Plug one end of the power adapter into the wall outlet and the other end to the **Power** port of the router.

The following figure shows the connection of the DSL router, PC and telephones.



The following table describes the interface or button of the Router.

Interface/Button	Description		
ADSL	RJ-11 port: Connect the router to a DSL connector or splitter through a telephone cable.		
LAN 1~4	RJ-45 port, for connecting the router to a PC or another network device.		
Power	Power interface, for connecting the power adapter.		
\circ	Power switch.		
Reset	Press the button and hold for at least 1 second before releasing it. System restores the factory default settings.		

3 Web Configuration

Configure TCP/IP properties of your network card to **obtain an IP address automatically from modem**, or set the IP address of the computer with the same network mask of the modem.

For example, if the IP address of Router is 10.0.0.2/255.255.255.0, you can set the IP address of the computer to **10.0.0.x/255.255.0**. The range for x is from 3 to 254.

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

Step1 Open a Web browser on your computer.

- Step2 Enter http://192.168.1.1 (the default IP address of the DSL router) in the address bar. The login page appears.
- Step3 Enter the user name and the password. The default username and password of the super user are admin and admin. The username and password of the common user are user and user. You need not enter the username and the password again if you select the option Remember my password. It is recommended to change these default values after logging in to the DSL router for the first time.
- **Step4** Click **OK** to log in to the Web page. Otherwise, please click **Cancel** to exit the login page.



After logging in to the DSL router as a super user, you can query, configure, and modify all the settings, and diagnose the system.

4 Quick Setup

Choose Quick Setup, and the following page appears.

In the boxes below, enter the PPP user name and password that your ISP has provided to you.

PPP Username:
PPP Password:

Apply/Save

After configuring a PVC of PPPoE type and connecting the ADSL line to the router, input the username and password to access the Internet

5 Advanced Setup

5.1.1 ATM Interface

Choose Advanced Setup > Layer2 Interface > ATM Interface , and the following page appears.

DSL ATM Interface Configuration

Choose Add, or Remove to configure DSL ATM interfaces.

Interface	Vpi	Vci	DSL Latency	Category	Link Type	Connection Mode	IP QoS	Scheduler Alg		Group Precedence	Remove
atm0	0	33	Path0	UBR	EoA	DefaultMode	Enabled	SP	1	8	
atm1	0	35	Path0	UBR	EoA	DefaultMode	Enabled	SP	1	8	
atm2	8	35	Path0	UBR	EoA	DefaultMode	Enabled	SP	1	8	

Add Remove

In this page, you can add or remove the DSL ATM Interfaces. Click the **Add** button to display the following page.

ATM PVC Configuration

This screen allows you to configure an ATM PVC identifier (VPI and VCI), select DSL latency, select a service category. Otherwise choose an existing interface by selecting the checkbox to enable it.

VPI: [0-255] 0 VCI: [32-65535] 35		
Select DSL Latency Path0 Path1		
Select DSL Link Type (EoA is for PP EoA PPPoA IPoA	POE, IPOE, and Bridge.)	
Select Connection Mode Telephone Default Mode - Single service of VLAN MUX Mode - Multiple Vlan		
Encapsulation Mode:	LLC/SNAP-BRIDGING 🗸	
Service Category:	UBR Without PCR 🗸	
Select IP QoS Scheduler Algorithm Strict Priority Precedence of the default queue: Weighted Fair Queuing Weight Value of the default queue: MPAAL Group Precedence:	8	(lowest
	Back Apply/Sa	ave

In this page, you can set the VPI and VCI values, and select the DSL latency, link type (EoA is for PPPoE, IPoE and Bridge.), connection mode, encapsulation mode, service category, and IP QoS scheduler algorithm.

- VPI (Virtual Path Identifier): The virtual path between two points in an ATM network, and its valid value is from 0 to 255.
- VCI (Virtual Channel Identifier): The virtual channel between two points in an ATM network, ranging from 32 to 65535 (1 to 31 are reserved for known protocols).
- Select DSL Latency: You may select Path0 or Path1.
- Select DSL Link Type: You may select EoA (for PPPoE, IPoE and Bridge), PPPoA or IPoA.

- Select Connection Mode: You may select the Default Mode or the VLAN MUX Mode.
- Encapsulation Mode: You may select LLC/SNAP-BRIDGING or VC/MUX in the drop-down list.
- Service Category: you may select UBR Without PCR, UBR With PCR,
 CBR, Non Realtime VBR or Realtime VBR from the drop-down lsit.
- Select IP QoS Scheduler Algorithm: You may select Strict Priority and Weighted Fair Queuing.

M Note:

QoS cannot be set for CBR and Realtime VBR.

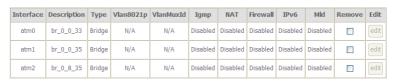
After finishing setting, click the **Apply/Save** button to enable the settings.

5.1.2 WAN Service

Choose Advance Setup > WAN Service, and the following page appears.

Wide Area Network (WAII) Service Setup

Choose Add, Remove or Edit to configure a WAN service over a selected interface.





In this page, you may add, remove or edit a WAN service.

Adding a PPPoE WAN Service

Step1 In the Wide Area Network (WAN) Service Setup page, click the Add button to display the following page. (First a proper ATM configuration should be added for this WAN service.)

WAN Service Interface Configuration

Select a layer 2 interface for this service

Note: For ATM interface, the descriptor string is (portId_vpi_vci)

For PTM interface, the descriptor string is (portId_high_low)

Where portId=0 --> DSL Latency PATH0

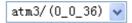
portId=1 --> DSL Latency PATH1

portId=4 --> DSL Latency PATH0&1

low =0 --> Low PTM Priority not set

low =1 --> Low PTM Priority set

high =0 --> High PTM Priority set





Step2 In this page, you can select an ATM Interface for the WAN service. After selecting the ATM interface, click **Next** to display the following page.

Step3 In this page, select the WAN service type to be PPP over Ethernet (PPPoE). You may also select Enable IPv6 for this service. Click Next to display the following page.

Back

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	sername:	
PPP	assword:	
PPPc	E Service Name:	
Auth	ntication Method: AUTO	~
	Enable Fullcone NAT	
	Dial on demand (with idle timeout timer)	
	PPP IP extension	
	Use Static IPv4 Address	
	Enable PPP Debug Mode	
	Bridge PPPoE Frames Between WAN and Local Ports	
Mult	cast Proxy Enable IGMP Multicast Proxy	
	Back Next	

Step4 In this page, you can modify the PPP username, PPP password, PPPoE service name and authentication method.

- PPP Username: The correct user name provided by your ISP.
- PPP Password: The correct password provided by your ISP.
- PPPoE Service Name: If your ISP provides it to you, please enter it. If not, do not enter any information.
- Authentication Method: The value can be AUTO, PAP, CHAP, or MSCHAP.
 Usually, you can select AUTO.
- Enable Fullcone NAT: NAT is one where all requests from the same internal IP address and port are mapped to the same external IP address and port.
 Furthermore, any external host can send a packet to the internal host, by sending a packet to the mapped external address.

- Dial on demand (with idle timeout timer): If this function is enabled, you need to enter the idle timeout time. Within the preset minutes, if the modem does not detect the flow of the user continuously, the modem automatically stops the PPPoE connection. Once it detects the flow (like access to a webpage), the modem restarts the PPPoE dialup. If this function is disabled, the modem performs PPPoE dial-up all the time. The PPPoE connection does not stop, unless the modem is powered off and DSLAM or uplink equipment is abnormal.
- PPP IP extension: If you want to configure DMZ Host, you should enable it first.
- Use Static IPv4 Address: If this function is disabled, the modem obtains an IP address assigned by an uplink equipment such as BAS, through PPPoE dial-up. If this function is enabled, the modem uses this IP address as the WAN IP address.
- Enable PPP Debug Mode: Enable or disable this function.
- Bridge PPPoE Frames Between WAN and Local Ports: Enable or disable this function.
- Enable IGMP Multicast Proxy: If you want PPPoE mode to support IPTV, enable it.

Step5 After setting the parameters, click **Next** to display the following page.

Routing -- Default Gateway

Default gateway interface list can have multiple WAN interfaces served as system default gateways but only one will be used according to the priority with the first being the higest and the last one the lowest priority if the WAN interface is connected. Priority order can be changed by removing all and adding them back in again.



Step6 In this page, select a preferred WAN interface as the system default gateway interface and then click **Next** to display the following page.

DNS Server Configuration

Select DNS Server Interface from available WAN interfaces OR enter static DNS server IP addresses for the system. In ATM mode, if only a single PVC with IPoA or static IPoE protocol is configured, Static DNS server IP addresses must be entered.

DNS Server Interfaces can have multiple WAN interfaces served as system dns servers but only one will be used according to the priority with the first being the higest and the last one the lowest priority if the WAN interface is connected. Priority order can be changed by removing all and adding them back in again.

Select DNS Server Interface from available WAN interfaces: Selected DNS Server Interfaces Available WAN Interfaces Ppp0 -> -> -> Back Next

Step7 In this page, you may select a DNS server interface from the available WAN interfaces. Click **Next**, and the following page appears.

WAN Setup - Summary

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

Connection Type:	PPPoE
NAT:	Enabled
Full Cone NAT:	Disabled
Firewall:	Enabled
IGMP Multicast:	Disabled
Quality Of Service:	Enabled

Click "Apply/Save" to have this interface to be effective. Click "Back" to make any modifications.



Step8 In this page, it displays the information about the PPPoE settngs. Click **Apply/Save** to save and apply the settings.