

MC-AWR11
ADSL WIRELESS ROUTER

user's manual



MODECOM

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MC-AWR11

I. Introduction

The GD-W810N is an ADSL access device that supports multiple line modes. It provides one 10/100Base-T Ethernet interface at the user end. The device provides high-speed ADSL broadband connection to the Internet or Intranet for high-end users, such as net cafes and office users. The device provides high performance access to the Internet, downlink up to 24 Mbps and uplink up to 1 Mbps.

The device supports WLAN access. It can connect to the Internet through a WLAN AP or WLAN device. It complies with IEEE 802.11, 802.11b/g/n specifications, WEP, WPA, and WPA2 security specifications.

1. Packing List

- Wireless router x1
- Power adapter (DC) x1
- ADSL splitter x 1
- Quick Installation Guide x1
- RJ45 Cable x1
- RJ11 Cable x1
- CD x1(user manual)
- Warranty card X1

2. Safety Precautions

Follow the following instructions to prevent 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 dissipation is necessary to avoid damage caused by overheating to the device. The long and thin holes on the device are designed for heat dissipation to ensure that the device works normally. Do not cover these heat dissipation holes.
- Do not put this device close to a 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 it is over damp or watery. Do not spill any fluid on this device.
- Do not connect this device to any PCs or electronic products, unless our customer engineer or your broadband provider instructs you to do this, because any wrong connection may cause power or fire risk.
- Do not place this device on an unstable surface or support.

3. LEDs and Interfaces

Front Panel



The following table describes the LEDs of the device:

LEDs	Color	Status	Description
Power	Green	On	The initialization of the device is successful.
		Off	The device is powered off.
ADSL	Green	On	Connection between the device and the physical layer of the office is established.
		Slow Blinks	No signal is being detected.
		Fast Blinks	The device is handshaking with the physical layer of the office.
Internet	Green	On	The Internet connection is normal in the routing mode (for example: PPP dial-up is successful), and no Internet data is being transmitted.
		Blinks	Internet data is being transmitted in the routing mode.
		Off	The device is in the bridge mode.
LAN 4/3/2/1	Green	On	The LAN connection is normal and activated.
		Blinks	Data is being transmitted in the LAN or Internet data is being transmitted in the bridge mode.
		Off	The LAN interface is not connected.
WLAN	Green	On	The WLAN connection has been activated.
		Blinks	Data is being transmitted in the WLAN.
		Off	The WLAN connection is not activated.
WPS	Green	Blinks	WPS is enabled, and is waiting for client to negotiate.
		Off	WPS is disabled.

Rear Panel



The following table describes the interfaces of the device:

Interface	Description
WLAN/WPS	Press the button and hold it for 1 second, to enable WLAN. Press the button and hold it for 1 second to 3 seconds, it does not take effect. Press the button and hold it for 3 or more than 3 seconds, to initialize WPS negotiation.
DSL	RJ-11 interface, for connecting to the ADSL interface or a splitter through a telephone cable.
LAN1/2/3/4	RJ-45 interface, for connecting to the Ethernet interface of a computer or the Ethernet devices through an Ethernet cable.
Power	Power interface, for connecting to the power adapter
ON/OFF	Power switch, power on or power off the device.
Reset	Reset to the factory default configuration. Keep the device powered on, and insert a needle into the hole for 3 to 6 seconds, then release it. The device is reset to the factory default configuration.

4. System Requirements

Recommended system requirements are as follows:

- A 10/100 base-T Ethernet card is installed on your PC
- A hub or Switch. (connected to several PCs through one of Ethernet interfaces on the device)
- Operating system: Windows 98SE, Windows 2000, Windows ME, Windows XP

- Internet Explorer V5.0 or higher, Netscape V4.0 or higher, or Firefox 1.5 or higher

5. Features

The device supports the following features:

Various line modes

External PPPoE dial-up access

Internal PPPoE/PPPoA dial-up access

1483Briged/1483Routed/MER/IPoA access

Multiple PVCs (up to eight) and these PVCs can be isolated from each other

A single PVC with multiple sessions

Multiple PVCs with multiple sessions

802.1Q and 802.1P protocol

DHCP server

NAPT

Static route

Firmware upgrading through Web, TFTP, or FTP

Resetting to the factory defaults through Reset button or Web

DNS

Virtual server

- DMZ
- Two-level passwords and usernames
- Web interface
- Telnet CLI
- System status display
- PPP session PAP/CHAP
- IP filter
- IP quality of service (QoS)
- Remote access control
- Line connection status test

- Remote managing through Telnet or HTTP
- Backup and restoration of configuration file
- Ethernet interface supporting crossover detection, auto-correction, and polarity correction
- Universal plug and play (UPnP)

II. Hardware Installation

Step 1

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

The splitter has three interfaces:

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

Step 2

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



Note:

Use twisted-pair cables to connect with the hub or switch.

Step 3

Plug one end of the power adapter to the wall outlet and connect the other end to the **Power** interface of the device.

Connection 1

Figure 1 shows the application diagram for the connection of the router, PC, splitter and the telephone sets, when no telephone set is placed before the splitter.

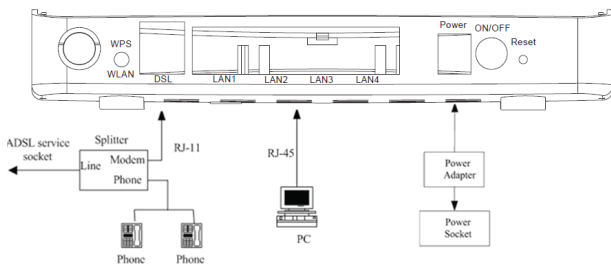


Figure 1 Connection diagram (Without connecting telephone sets before the splitter)

Connection 2

Figure 2 shows the connection when the splitter is installed close to the router.

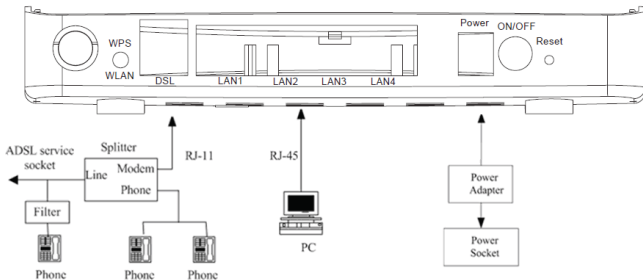


Figure 2 Connection diagram (Connecting a telephone set before the splitter)



Note:

When connection 2 is used, the filter must be installed close to the telephone cable. See Figure2. Do not use the splitter to replace the filter.

Installing a telephone directly before the splitter may lead to failure of connection between the device and the central office, or failure of Internet access, or slow connection speed. If you really need to add a telephone set before the splitter, you must add a microfilter before a telephone set. Do not connect several telephones before the splitter or connect several telephones with the microfilter.

III. About the Web Configuration

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

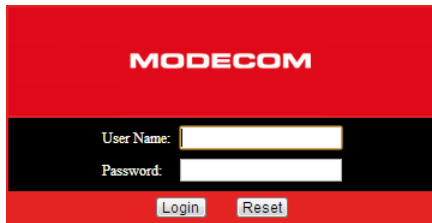
1. Access the Router

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

Step 1: Open the Internet Explorer (IE) browser and enter `http://192.168.1.1`.

Step 1: In the **Login** page that is displayed, enter the username and password.

- The username and password of the super user are **admin** and **admin**.
- The username and password of the common user are **user** and **user**.



MODECOM

User Name:

Password:

Login Reset

If you log in as a super user, the page shown in the following figure appears. You can check, configure and modify all the settings.

The screenshot shows the MODECOM Router web interface. The top navigation bar includes tabs for Wizard, Status, Network, Service, Advance, Admin, and Diagnostic. The 'Status' tab is selected, and the 'System' sub-tab is active. The main content area displays the 'System Status' page, which includes a table of system information.

System	
Alias Name	MC-AWR11
Uptime(hh:mm:ss)	0 04:49
Software Version	MODECOM_V1.0
DSP Version	2920b804
DSL	
Operational Status	G992.5
Upstream Speed	1087 kbps
Downstream Speed	23120 kbps

If you log in as a common user, you can check the status of the router, but can not configure the most of the settings.



Note:

In the Web configuration page, you can click **Apply Changes** to save the settings temporarily. If you want to save the settings of this page permanently, click **save of Attention** that appears at the bottom of the Web page after the configuration.

2. Wizard

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 PPP, ADSL, or both. The technical information about the properties of your Internet connection is 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, and the protocol that you use to communicate on the Internet.

In the navigation bar, choose **Wizard**. The page shown in the following figure appears. The **Wizard** page guides fast and accurate

configuration of the 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.

The screenshot shows the 'Wizard' configuration page. The top navigation bar includes 'Wizard', 'Status', 'Network', 'Service', 'Advance', 'Admin', and 'Diagnostic'. The main content area is titled 'Wizard' and contains the following text:

The Wizard page guides you to configure the device step by step.
After finishing the following steps, you will be online and free to enjoy high-speed Internet access.

Step 1: Web Account Setup
Step 2: Time Zone Setup
Step 3: WAN Interface Setup
Step 4: WLAN Interface Setup
Step 5: Configuration Saving

Step 1: Web Account Setup

Set a new account for accessing the Web server of the device.

User Name:

New Password:

Confirmed Password:

Enter the correct password and then click **NEXT**. The page shown in the following figure appears. In this page, you can set the system time and Network Time Protocol (NTP) server.

The screenshot shows the 'Wizard' configuration page. The top navigation bar includes 'Wizard', 'Status', 'Network', 'Service', 'Advance', 'Admin', and 'Diagnostic'. The main content area is titled 'Wizard' and contains the following text:

Step 2: Time Zone Setup

Set up the system time and the Network Time Protocol (NTP) server.

NTP Configuration:

State: Disable Enable

Server IP:

Interval: Every hours

Time Zone:

GMT time: Fri Nov 30 11:25:3 2012

The following table describes the parameters of this page:

Field	Description
State	You can disable or enable NTP function. You have to enable it if you want to configure the parameters in this page.
Server IP	Enter the IP address of the specified time server manually.
Interval	Set the interval that the router obtains the time from the time server. That is, the interval that the router verifies the time with the server.
Time Zone	Choose the time zone of your country.
GMT time	It displays the Greenwich mean time.

After finishing the configuration, click **NEXT**. The page shown in the following figure appears.

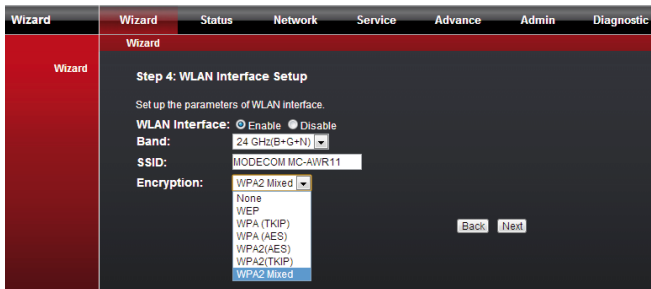
The screenshot shows the 'Wizard' configuration interface. The main heading is 'Step 3: WAN Interface Setup'. Below the heading, there are instructions: '(1) Select the country.', '(2) Select the ISP.', and a note: 'Note: If the country and ISP are not available in the drop-down list, you can select Others. In this case, you need to select the protocol and connection type, manually enter the VPI and VCI. For the correct values, please contact your ISP.' Below these instructions are four numbered steps: '(3) Enter the correct values.', '(4) Click "Next" to continue.' The form fields are: Country (Poland), ISP (Others), Protocol (PPPoE), Connection Type (VC-Mux), VPI (0), VCI (35), User Name (modemcom), Password (*****), and Confirmed Password (*****).

The following table describes the parameters of this page:

Field	Description
Country	Select the Country from the drop-down list.
ISP	Select the ISP according to the country from the drop-down list. If you do not find the ISP that matches the country, you can select Others .

Field	Description
Protocol	Select the WAN connection type. You can select from the drop-down list.
Connection Type	You can select LLC or VC-Mux .
VPI/VCI	= VPI : Virtual path between two points in an ATM network. Its valid value range is from 0 to 255. = VCI : The virtual channel between two points in an ATM network, ranging from 32 to 65535 (0 to 31 is reserved for local management of ATM traffic).
User name	The correct user name that your ISP provides to you.
Password	The correct password that your ISP provides to you.

After finishing the configuration, click **NEXT**. The page shown in the following figure appears.



The following table describes the parameters of this page:

Field	Description
WLAN Interface	You can choose Enable or Disable . By default, WAN interface is enabled. You need to enable WAN interface, and then you can set the parameters in this page.

Field	Description
Band	Choose the working mode of the router. You can choose 802.11b , 802.11g , and Mixed(802.11b/11g) .
SSID	The service set identification (SSID) is a unique name to identify the router in the wireless LAN. Wireless stations associating to the router must have the same SSID. Enter a descriptive name that is used when the wireless client connecting to the router.
Encryption	<p>Configure the wireless encryption mode. You can choose None, WEP, WPA (TKIP), WPA (AES), WPA2 (AES), WPA2 (TKIP), or WPA2 Mixed.</p> <ul style="list-style-type: none"> ● Wired equivalent privacy (WEP) encrypts data frames before transmitting over the wireless network. ● Wi-Fi protected access (WPA) is a subset of the IEEE802.11i security specification draft. ● WPA2 Mixed is the collection of WPA and WPA2 encryption modes. The wireless client establishes the connection between the router through WPA or WPA2. <p>Key differences between WPA and WEP are user authentication and improved data encryption.</p>

After finishing the configuration, click **NEXT**. The page shown in the following figure appears.

The screenshot shows a web-based configuration wizard for a Modecom router. The interface has a dark theme with a red sidebar on the left containing the word 'Wizard'. At the top, there are navigation tabs: Wizard (selected), Status, Network, Service, Advance, Admin, and Diagnostic. The main content area is titled 'Step 5: Configuration Saving'. Below the title, there is a message: 'Click "Finish" to save the settings. Click "Back" to make more modifications. Click "Reset" to cancel the settings.' Underneath, it says 'The parameters you set:' followed by a list of settings: User Name: admin, Password: admin, NTP State: Enable, NTP Server IP: 80.50.231.226, NTP Interval: 1, Time Zone: 1, VPI: 0, and VCI: 35.

 Note:

If the WAN connection type is set to **PPPoA**, the parameters of the

WAN connection type are the same as that of **PPPoE**. For the parameters in these pages, refer to the parameter description of **PPPoE**.

1483 Bridged

In the **WAN Interface Setup** page, set the WAN connection type to **1483 Bridged**. The page shown in the following figure appears.

Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
Wizard	Wizard						
	<p>Step 3: WAN Interface Setup</p> <p>This page allows you to configure the ADSL settings of the device. A predefined list of country and internet service provider (ISP) is available for easy configuration.</p> <p>(1) Select the country. (2) Select the ISP. Note: If the country and ISP are not available in the drop-down list, you can select Others. In this case, you need to select the protocol and connection type, manually enter the VPI and VCI. For the correct values, please contact your ISP. (3) Enter the correct values. (4) Click "Next" to continue.</p> <p>Country: Poland ISP: Others Protocol: 1483 Bridged Connection Type: VC-Mux VPI: 0 (0-255) VCI: 35 (32-65535)</p>						

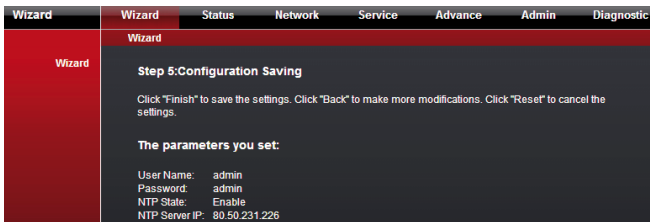
Click **NEXT**. The page shown in the following figure appears.

Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
Wizard	Wizard						
	<p>Step 4: WLAN Interface Setup</p> <p>Set up the parameters of WLAN interface.</p> <p>WLAN interface: <input checked="" type="radio"/> Enable <input type="radio"/> Disable Band: 24 GHz(B+G+N) SSID: MODECOM MC-AWR11 Encryption: WPA2 Mixed None</p>						

The following table describes the parameters of this page:

Field	Description
WLAN Interface	You can choose Enable or Disable . By default, WAN interface is enabled. You need to enable WAN interface, and then you can set the parameters in this page.
Band	Choose the working mode of the router. You can choose 802.11b , 802.11g , and Mixed (802.11b/11g) .
SSID	The service set identification (SSID) is a unique name to identify the router in the wireless LAN. Wireless stations associating to the router must have the same SSID. Enter a descriptive name that is used when the wireless client connecting to the router.
Encryption	Configure the wireless encryption mode. You can choose None , WEP , WPA (TKIP) , WPA (AES) , WPA2 (AES) , WPA2 (TKIP) , or WPA2 Mixed . <ul style="list-style-type: none"> ● Wired equivalent privacy (WEP) encrypts data frames before transmitting over the wireless network. ● Wi-Fi protected access (WPA) is a subset of the IEEE802.11i security specification draft. ● WPA2 Mixed is the collection of WPA and WPA2 encryption modes. The wireless client establishes the connection between the router through WPA or WPA2. <p>Key differences between WPA and WEP are user authentication and improved data encryption.</p>

After finishing the configuration, click **NEXT**. The page shown in the following figure appears.



1483 MER: DHCP

In the **WAN Interface Setup** page, set the WAN connection type to be **1483 MER: DHCP**. The page shown in the following figure appears.

Wizard **Wizard** Status Network Service Advance Admin Diagnostic

Wizard

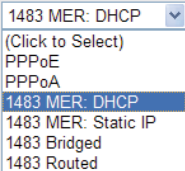
Step 3: WAN Interface Setup

This page allows you to configure the ADSL settings of the device. A predefined list of country and Internet service provider (ISP) is available for easy configuration.

(1) Select the country.
 (2) Select the ISP.
 Note: If the country and ISP are not available in the drop-down list, you can select Others. In this case, you need to select the protocol and connection type, manually enter the VPI and VCI. For the correct values, please contact your ISP.
 (3) Enter the correct values.
 (4) Click "Next" to continue.

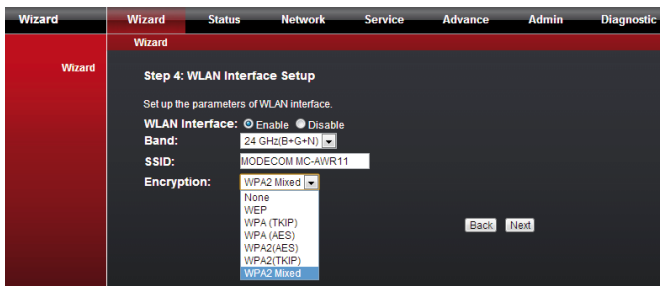
Country: Poland
 ISP: Others
 Protocol: 1483 MER: DHCP
 Connection Type: VCI-Mux
 VPI: 0 (0-255)
 VCI: 35 (32-65535)

The following table describes the parameters of this page:

Field	Description
Country	Select the Country from the drop-down list.
ISP	Select the ISP according to the country from the drop-down list. If you do not find the ISP that matches the country, you can select Others
Protocol	Select the WAN connection type. You can select from the drop-down list. 

Connection Type	You can select LLC or VC-Mux .
VPI/VCI	<ul style="list-style-type: none"> = VPI: Virtual path between two points in an ATM network. Its valid value range is from 0 to 255. = VCI: The virtual channel between two points in an ATM network, ranging from 32 to 65535 (0 to 31 is reserved for local management of ATM traffic).

Click **NEXT**, the page shown in the following figure appears.

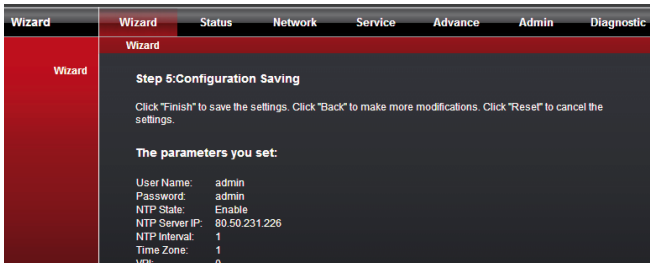


The following table describes the parameters of this page:

Field	Description
WLAN Interface	You can choose Enable or Disable . By default, WAN interface is enabled. You need to enable WAN interface, and then you can set the parameters in this page.
Band	Choose the working mode of the router. You can choose 802.11b , 802.11g , and Mixed (802.11b/11g) .

Field	Description
SSID	The service set identification (SSID) is a unique name to identify the router in the wireless LAN. Wireless stations associating to the router must have the same SSID. Enter a descriptive name that is used when the wireless client connecting to the router.
Encryption	<p>Configure the wireless encryption mode. You can choose None, WEP, WPA (TKIP), WPA (AES), WPA2 (AES), WPA2 (TKIP), or WPA2 Mixed.</p> <ul style="list-style-type: none"> ● Wired equivalent privacy (WEP) encrypts data frames before transmitting over the wireless network. ● Wi-Fi protected access (WPA) is a subset of the IEEE802.11i security specification draft. ● WPA2 Mixed is the collection of WPA and WPA2 encryption modes. The wireless client establishes the connection between the router through WPA or WPA2. <p>Key differences between WPA and WEP are user authentication and improved data encryption.</p>

After finishing the configuration, click **NEXT**. The page shown in the following figure appears.



1483 Routed/1483 MER: Static IP

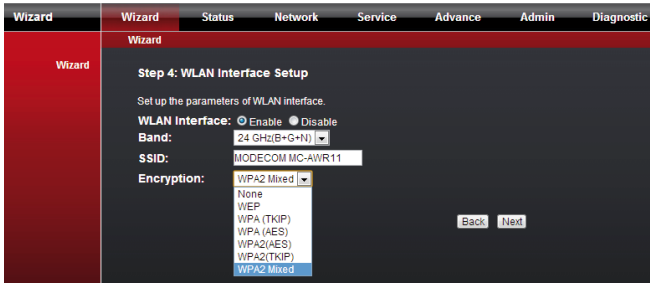
Wizard	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
Wizard							
Wizard	<p style="text-align: center;">Step 3: WAN Interface Setup</p> <p>This page allows you to configure the ADSL settings of the device. A predefined list of country and Internet service provider (ISP) is available for easy configuration.</p> <p>(1) Select the country.</p> <p>(2) Select the ISP.</p> <p>Note: If the country and ISP are not available in the drop-down list, you can select Others. In this case, you need to select the protocol and connection type, manually enter the VPI and VCI. For the correct values, please contact your ISP.</p> <p>(3) Enter the correct values.</p> <p>(4) Click "Next" to continue.</p> <p>Country <input type="text" value="Poland"/></p> <p>ISP <input type="text" value="Others"/></p> <p>Protocol <input type="text" value="1483 Routed"/></p> <p>Connection Type <input type="text" value="VC-Mux"/></p> <p>VPI <input type="text" value="0"/> (0-255)</p> <p>VCI <input type="text" value="35"/> (32-65535)</p> <p>WAN IP Address <input type="text" value="10.10.10.2"/></p> <p>Subnet Mask <input type="text" value="255.0.0.0"/></p> <p>Default Gateway <input type="text" value="10.10.10.1"/></p> <p>Primary DNS Server <input type="text" value="194.204.159.1"/></p> <p style="text-align: right;">Back Next</p>						

The following table describes the parameters of this page:

Field	Description
Country	Select the Country from the drop-down list.
ISP	Select the ISP according to the country from the drop-down list. If you do not find the ISP that matches the country, you can select Others
Protocol	Select the WAN connection type. You can select from the drop-down list. <div style="border: 1px solid gray; padding: 5px; margin: 5px 0;"> <input type="text" value="1483 Routed"/> <ul style="list-style-type: none"> (Click to Select) PPPoE PPPoA 1483 MER: DHCP 1483 MER: Static IP 1483 Bridged <li style="background-color: #0070C0; color: white;">1483 Routed </div>
Connection Type	You can select LLC or VC-Mux .

VPI/VCI	= VPI : Virtual path between two points in an ATM network. Its valid value range is from 0 to 255. = VCI : The virtual channel between two points in an ATM network, ranging from 32 to 65535 (0 to 31 is reserved for local management of ATM traffic).
WAN IP Address	Enter the IP address of the WAN interface provided by your ISP
Subnet Mask	Enter the subnet mask concerned to the IP address of the WAN interface provided by your ISP

Click **NEXT**, the following page appears.



The following table describes the parameters of this page:

Field	Description
WLAN Interface	You can choose Enable or Disable . By default, WAN interface is enabled. You need to enable WAN interface, and then you can set the parameters in this page.
Band	Choose the working mode of the router. You can choose 802.11b , 802.11g , and Mixed (802.11b/11g) ...

Field	Description
SSID	The service set identification (SSID) is a unique name to identify the router in the wireless LAN. Wireless stations associating to the router must have the same SSID. Enter a descriptive name that is used when the wireless client connecting to the router.
Encryption	<p>Configure the wireless encryption mode. You can choose None, WEP, WPA (TKIP), WPA (AES), WPA2 (AES), WPA2 (TKIP), or WPA2 Mixed.</p> <ul style="list-style-type: none"> ● Wired equivalent privacy (WEP) encrypts data frames before transmitting over the wireless network. ● Wi-Fi protected access (WPA) is a subset of the IEEE802.11i security specification draft. ● WPA2 Mixed is the collection of WPA and WPA2 encryption modes. The wireless client establishes the connection between the router through WPA or WPA2. <p>Key differences between WPA and WEP are user authentication and improved data encryption.</p>

After finishing the configuration, click **NEXT**. The page shown in the following figure appears.

The screenshot shows the 'Wizard' configuration page for a Modecom router. The navigation bar at the top includes 'Wizard', 'Status', 'Network', 'Service', 'Advance', 'Admin', and 'Diagnostic'. The 'Wizard' tab is active, and the sub-tab 'Wizard' is selected. The main content area is titled 'Step 5: Configuration Saving' and contains the following text:

Click "Finish" to save the settings. Click "Back" to make more modifications. Click "Reset" to cancel the settings.

The parameters you set:

- User Name: admin
- Password: admin
- NTP State: Enable
- NTP Server IP: 80.50.231.226
- NTP Interval: 1
- Time Zone: 0
- VPI: 0
- VCI: 35
- Encapsulation: VC Mux
- Channel Mode: 1483 router
- WAN IP Settings: Use the following IP address:
- WAN IP Address: 10.10.10.2
- Subnet Mask: 255.0.0.0
- DNS Settings: Use the following DNS server address:
- Primary DNS Server: 194.204.159.1
- WLAN Interface: Enable

At the bottom right, there are three buttons: 'Back', 'Finish', and 'Reset'.



Note:

If the WAN connection type is set to **1483 MER: Static IP**, the parameters of the WAN connection type are the same as that of **1483 Routed**. For the parameters in these pages, refer to the parameter description of **1483 Routed**.

Click **BACK** to modify the settings.

Click **FINISH** to save the settings.

Click **RESET** to cancel the settings

3. Status

In the navigation bar, choose **Status**. In the **Status** page that is displayed contains: **System**, **LAN**, **WLAN**, **WAN**, **Port Mapping**, **Statistics**, and **ARP Table**.

3.1 System

Choose **Status > System**. The page that is displayed shows the current status and some basic settings of the router, such as *software version*, *DSP version*, *uptime*, *upstream speed*, and *downstream speed*.

The screenshot shows the router's web interface. The top navigation bar includes 'Status', 'Wizard', 'Status', 'Network', 'Service', 'Advance', 'Admin', and 'Diagnostic'. Below this, a secondary bar shows 'System', 'LAN', 'WLAN', 'WAN', 'Port Mapping', 'Statistics', and 'ARP Table'. The main content area is titled 'System Status' and contains the following information:

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

System	
Alias Name	MC-AWR11
Uptime(h:mm:ss)	0 2:0:10
Software Version	MODECOM_V1.0
DSP Version	2920b804
DSL	
Operational Status	G992.5
Upstream Speed	1087 kbps
Downstream Speed	23120 kbps

3.2 LAN

Choose **Status > LAN**. The page that is displayed shows some basic LAN settings of the router. In this page, you can view the LAN IP

address, DHCP server status, MAC address, and DHCP client table. If you want to configure the LAN network, refer to chapter 3.4.1.1 LAN IP.

The screenshot shows the 'LAN Status' page in the router's web interface. The navigation menu at the top includes Wizard, Status, Network, Service, Advance, Admin, and Diagnostic. The 'Status' menu is expanded to show System, LAN, WLAN, WAN, Port Mapping, Statistics, and ARP Table. The 'LAN' sub-menu is selected.

LAN Status

This page shows basic LAN settings of the device.

LAN Configuration	
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
DHCP Server	Enable
MAC Address	00:1F:A4:DD:F6:CA

DHCP Client Table				
Name	IP Address	MAC Address	Expiry(s)	Type
USER-Computer	192.168.1.106	ac:72:89:5a:a5:8c	In 0 days 21:58:26	Automatic

3.3 WLAN

Choose **Status > WLAN**. The page that is displayed shows some basic settings of wireless LAN (WLAN).

The screenshot shows the 'WLAN Status' page in the router's web interface. The navigation menu at the top includes Wizard, Status, Network, Service, Advance, Admin, and Diagnostic. The 'Status' menu is expanded to show System, LAN, WLAN, WAN, Port Mapping, Statistics, and ARP Table. The 'WLAN' sub-menu is selected.

WLAN Status

This page shows some basic settings of wireless LAN (WLAN).

Wireless Configuration	
Wireless	Enabled
Band	2.4 GHz (B+G+N)
Mode	AP
Broadcast SSID	Enabled
Root	
Status	Enabled
SSID	MODECOM MC-AWR11
Authentication Mode	Auto
Encryption Mode	WPA2 Mixed
VAP0	
Status	Disabled
VAP1	
Status	Disabled
VAP2	
Status	Disabled
VAP3	
Status	Disabled

Wireless Client List					
MAC Address	Tx Packet	Rx Packet	Tx Rate (Mbps)	Power Saving	Expired Time (s)
ac:72:89:5a:a5:8c	79475	75311	66	no	300

Current Access Control List	
Mode	Disabled

3.4 WAN

Choose **Status > WAN**. The page that is displayed shows some basic WAN settings of the router. In this page, you can view basic status of WAN and DNS server. If you want to configure the WAN network, refer to chapter 3.4.2.1 WAN.

WAN	Wizard	Status	Network	Service	Advance	Admin	Diagnostic																							
WAN	System	LAN	WLAN	WAN	Port Mapping	Statistics	ARP Table																							
	<h3>WAN Status</h3> <p>This page shows some basic WAN settings.</p> <table border="1"> <thead> <tr> <th>Interface</th> <th>VPI/VCI</th> <th>Encapsulation</th> <th>Default Route</th> <th>Protocol</th> <th>IP Address</th> <th>Gateway</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>a0</td> <td>0/35</td> <td>LLC</td> <td>Off</td> <td>mer1483</td> <td>192.168.20.11</td> <td>192.168.20.1</td> <td>up</td> </tr> <tr> <td colspan="2">DNS Servers</td> <td colspan="6">213.199.255.14 82.160.1.1</td> </tr> </tbody> </table>							Interface	VPI/VCI	Encapsulation	Default Route	Protocol	IP Address	Gateway	Status	a0	0/35	LLC	Off	mer1483	192.168.20.11	192.168.20.1	up	DNS Servers		213.199.255.14 82.160.1.1				
Interface	VPI/VCI	Encapsulation	Default Route	Protocol	IP Address	Gateway	Status																							
a0	0/35	LLC	Off	mer1483	192.168.20.11	192.168.20.1	up																							
DNS Servers		213.199.255.14 82.160.1.1																												

3.5 Port Mapping

Choose **Status > Port Mapping**. In this page, you can view the mapping relation and the status of port mapping.

Port Mapping	Wizard	Status	Network	Service	Advance	Admin	Diagnostic																	
Port Mapping	System	LAN	WLAN	WAN	Port Mapping	Statistics	ARP Table																	
	<h3>Port Mapping</h3> <p>This page shows the mapping relation and the status of port mapping.</p> <p>Status: Disabled</p> <p>Mapping Relation</p> <table border="1"> <thead> <tr> <th>Select</th> <th>Interfaces</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Default</td> <td>LAN1,LAN2,LAN3,LAN4,wlan,wlan-vap0,wlan-vap1,wlan-vap2,wlan-vap3,a0</td> <td>Enabled</td> </tr> <tr> <td>Group1</td> <td></td> <td>--</td> </tr> <tr> <td>Group2</td> <td></td> <td>--</td> </tr> <tr> <td>Group3</td> <td></td> <td>--</td> </tr> <tr> <td>Group4</td> <td></td> <td>--</td> </tr> </tbody> </table>							Select	Interfaces	Status	Default	LAN1,LAN2,LAN3,LAN4,wlan,wlan-vap0,wlan-vap1,wlan-vap2,wlan-vap3,a0	Enabled	Group1		--	Group2		--	Group3		--	Group4	
Select	Interfaces	Status																						
Default	LAN1,LAN2,LAN3,LAN4,wlan,wlan-vap0,wlan-vap1,wlan-vap2,wlan-vap3,a0	Enabled																						
Group1		--																						
Group2		--																						
Group3		--																						
Group4		--																						

3.6 Statistics

Choose **Status > Statistics**. The **Statistics** page that is displayed contains **Traffic Statistic** and **ADSL Statistic**.

Traffic Statistic

Click **Traffic Statistic** in the left pane. The page shown in the following figure appears. In this page, you can view the statistics of each network port.

Traffic Statistics

This page shows the packet statistics for transmission and reception regarding to network interface.

Interface	Rx Packet	Rx Error	Rx Drop	Tx Packet	Tx Error	Tx Drop
e1	0	0	0	0	0	0
e0	78576	3	0	65686	0	102
e1	0	0	0	0	0	0
e2	0	0	0	0	0	0
e3	0	0	0	0	0	0
e4	0	0	0	0	0	0
e5	0	0	0	0	0	0
e6	0	0	0	0	0	0
e7	0	0	0	0	0	0

ADSL Statistic

Click **ADSL Statistic** in the left pane. The page shown in the following figure appears. In this page, you can view the ADSL line status, upstream rate, downstream rate, and other information.

ADSL Statistics

This page shows the ADSL settings of the device.

ADSL Line Status	SHOWTIME L0
ADSL Mode	G992.5
Upstream	1087 kbps
Downstream	23120 kbps
Attenuation Downstream(dB)	3
Attenuation Upstream(dB)	0
SNR Margin Downstream(dB)	6.0
SNR Margin Upstream(dB)	12.0
Vendor ID	RETK
DSP Version	2920804
CRC Errors	496
Upstream BER	0e-7
Downstream BER	1e-7
Up Output Power	12.5
Down Output Power	5
ES	473
SES	0
OAS	0

3.7 ARP Table

Choose **Status > ARP Table**. In the **ARP Table** page, you can view the table that shows a list of learned MAC addresses.

ARP Table

This page shows current ARP entries by interrogating the current protocol data.

IP Address	MAC Address
192.168.20.1	00:0E:EB:52:09:F1
192.168.1.1	00:1F:A4:DD:F6:CA
192.168.1.106	AC:72:89:5A:A5:8C
192.168.20.11	00:1F:A4:DD:F6:CA

4. Network

In the navigation bar, click **Network**. The **Network** page that is displayed contains **LAN**, **WAN**, and **WLAN**.

4.1 LAN

Choose **Network** > **LAN**. The **LAN** page that is displayed contains **LAN IP**, **DHCP**, and **DHCP Static IP**.

LAN IP

Click **LAN IP** in the left pane, the page shown in the following figure appears. In this page, you can change IP address of the router. The default IP address is 192.168.1.1, which is the private IP address of the router.

The screenshot shows the 'LAN Interface Setup' page. The navigation bar at the top includes 'Network', 'Wizard', 'Status', 'Network' (selected), 'Service', 'Advance', 'Admin', and 'Diagnostic'. Below the navigation bar, there are tabs for 'LAN', 'WAN', and 'WLAN'. The left sidebar contains 'LAN IP', 'DHCP', and 'DHCP Static IP', with 'LAN IP' selected.

LAN Interface Setup

This page is used to configure the LAN interface of your ADSL Router. Here you may change the setting for IP address, subnet mask, etc.

Interface Name: e1

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Secondary IP

IGMP Snooping: Disable Enable

[Apply Changes](#)

LAN Port: [Dropdown]

Link Speed/Duplex Mode: [Dropdown]

[Modify](#)

ETHERNET Status Table:

Select	Port	Link Mode
<input checked="" type="checkbox"/>	LAN1	Auto Negotiation
<input checked="" type="checkbox"/>	LAN2	Auto Negotiation
<input checked="" type="checkbox"/>	LAN3	Auto Negotiation
<input checked="" type="checkbox"/>	LAN4	Auto Negotiation

MAC Address Control: LAN1 LAN2 LAN3 LAN4 WLAN

[Apply Changes](#)

New MAC Address: [Text] [Add](#)

Current Allowed MAC Address Table:

MAC Addr	Action
----------	--------

The following table describes the parameters of this page:

Field	Description
IP Address	Enter the IP address of LAN interface. It is recommended to use an address from a block that is reserved for private use. This address block is 192.168.1.1- 192.168.255.254.
Subnet Mask	Enter the subnet mask of LAN interface. The range of subnet mask is from 255.255.0.0-255.255.255.254.
Secondary IP	Select it to enable the secondary LAN IP address. The two LAN IP addresses must be in the different network.
LAN Port	You can choose the LAN interface you want to configure.
Link Speed/ Duplex Mode	You can select the following modes from the drop-downlist: 100Mbps/FullDuplex, 100Mbps/ Half Duplex, 10Mbps/FullDuplex, 10Mbps/Half Duplex, Auto Negotiation.
MAC Address Control	It is the access control based on MAC address. Select it, and the host whose MAC address is listed in the Current Allowed MAC Address Table can access the modem.
Add	Enter MAC address, and then click it to add a new MAC address.

DHCP

Dynamic Host Configuration Protocol (DHCP) allows the individual PC to obtain the TCP/IP configuration from the centralized DHCP server. You can configure this router as a DHCP server or disable it. The DHCP server can assign IP address, IP default gateway, and DNS server to DHCP clients. This router can also act as a surrogate DHCP server (DHCP Relay) where it relays IP address assignment from an actual real DHCP server to clients. You can enable or disable DHCP server.

Click **DHCP** in the left pane, the page shown in the following figure appears.

DHCP	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
LAN IP DHCP DHCP Static IP	LAN		WAN		WLAN		
	<h2>DHCP Mode</h2> <p>This page is used to configure DHCP mode. You can set DHCP mode to None, DHCP Relay or DHCP Server.</p> <p>(1) Set the DHCP mode to DHCP Server if you are using this device as a DHCP server. This page lists an IP address pool available to hosts on your LAN. The device assigns IP addresses in the pool to hosts on your network when they request Internet access.</p> <p>(2) Set the DHCP mode to DHCP Relay if you are using another DHCP server to assign IP address to your hosts on the LAN. You can set the IP address of the DHCP server.</p> <p>(3) If you set the DHCP mode to None, the device does not assign IP addresses to the hosts when they request an IP address.</p> <hr/> <p>LAN IP Address: 192.168.1.1 Subnet Mask: 255.255.255.0</p> <p>DHCP Mode: <input type="text" value="DHCP Server"/></p> <p>Interface: <input checked="" type="checkbox"/> LAN1 <input checked="" type="checkbox"/> LAN2 <input checked="" type="checkbox"/> LAN3 <input checked="" type="checkbox"/> LAN4 <input checked="" type="checkbox"/> WLAN <input checked="" type="checkbox"/> VAP0 <input checked="" type="checkbox"/> VAP1 <input checked="" type="checkbox"/> VAP2 <input checked="" type="checkbox"/> VAP3</p> <p>IP Pool Range: <input type="text" value="192.168.1.100"/> - <input type="text" value="192.168.1.200"/> <input type="button" value="Show Client"/></p> <p>Default Gateway: <input type="text" value="192.168.1.1"/></p> <p>Max Lease Time: <input type="text" value="1440"/> minutes</p> <p>Domain Name: <input type="text" value="domain.name"/></p> <p>DNS Servers: <input type="text" value="192.168.1.1"/></p> <p><input type="text"/></p> <p><input type="text"/></p> <p><input type="button" value="Apply Changes"/> <input type="button" value="Reset"/></p> <p><input type="button" value="Set Vendor/Class IP Range"/></p>						

The following table describes the parameters of this page:

Field	Description
DHCP Mode	If set to DHCP Server , the router can assign IP addresses, IP default gateway and DNS Servers to the host in Windows95, Windows NT and other operation systems that support the DHCP client.
IP Pool Range	It specifies the first and the last IP address in the IP address pool. The router assigns IP address that is in the IP pool range to the host.
Show Client	Click it, the Active DHCP Client Table appears. It shows IP addresses assigned to clients.
Default Gateway	Enter the default gateway of the IP address pool.
Max Lease Time	The lease time determines the period that the host retains the assigned IP addresses before the IP addresses change.

Field	Description
Domain Name	Enter the domain name if you know. If you leave this blank, the domain name obtained by DHCP from the ISP is used. You must enter host name (system name) on each individual PC. The domain name can be assigned from the router through the DHCP server.
DNS Servers	You can configure the DNS server ip addresses for DNS Relay.
Set VendorClass IP Range	Click it, the Device IP Range Table page appears. You can configure the IP address range based on the device type.

Click **Show Client** in the **DHCP Mode** page, the page shown in the following figure appears. You can view the IP address assigned to each DHCP client.

Active DHCP Client Table				
This table shows the assigned IP address, MAC address and time expired for each DHCP leased client.				
Name	IP Address	MAC Address	Expiry(s)	Type
USER-Komputer	192.168.1.106	ac:72:89:5a:a5:8c	In 0 days 21:36:19	Automatic

Refresh Close

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

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

Field	Description
Refresh	Click it to refresh this page.
Close	Click it to close this page.

Click **Set VendorClass IP Range** in the **DHCP Mode** page, the page as shown in the following figure appears. In this page, you can configure the IP address range based on the device type.

Device IP Range Table

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

Device Name:

Start Address:

End Address:

Router Address:

Option60:

IP Range Table:

Select	Device Name	Start Address	End Address	Default Gateway	Option60
<input type="checkbox"/>					

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

DHCP
Wizard
Status
Network
Service
Advance
Admin
Diagnostic

LAN
WAN
WLAN

LAN IP
DHCP
DHCP Static IP

DHCP Mode

This page is used to configure DHCP mode. You can set DHCP mode to None, DHCP Relay or DHCP Server.

(1) Set the DHCP mode to DHCP Server if you are using this device as a DHCP server. This page lists an IP address pool available to hosts on your LAN. The device assigns IP addresses in the pool to hosts on your network when they request Internet access.

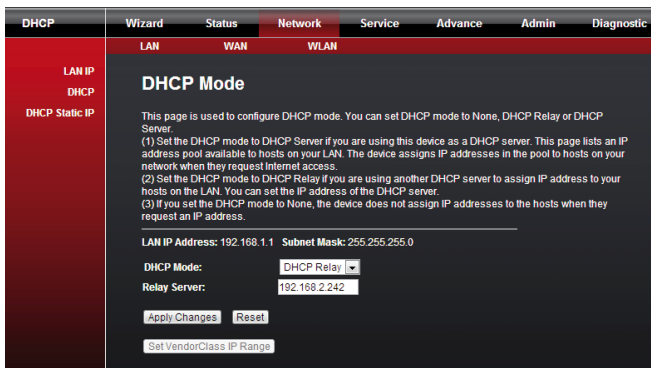
(2) Set the DHCP mode to DHCP Relay if you are using another DHCP server to assign IP address to your hosts on the LAN. You can set the IP address of the DHCP server.

(3) If you set the DHCP mode to None, the device does not assign IP addresses to the hosts when they request an IP address.

LAN IP Address: 192.168.1.1 Subnet Mask: 255.255.255.0

DHCP Mode: None

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



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

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

DHCP Static IP

Click **DHCP Static IP** in the left pane, the page shown in the following figure appears. You can assign the IP addresses on the LAN to the specific individual PCs based on their MAC address.

DHCP Static IP Configuration

This page lists the static IP address and MAC address on your LAN. The device assigns the IP addresses to hosts on your network when they request Internet access.

IP Address:

MAC Address: (ex. 00E086710502)

DHCP Static IP Table:

Select	IP Address	MAC Address
--------	------------	-------------

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

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

4.2 WAN

Choose **Network** > **WAN**. The **WAN** page that is displayed contains **WAN**, **ATM Setting**, and **ADSL Setting**.

WAN

Click **WAN** in the left pane, the page shown in the following figure appears.

In this page, you can configure WAN interface of your router.

Channel Configuration

The DSL WAN connection can be separated virtually into multiple channels by assigning different VPI/VCI in each Permanent Virtual Circuit (PVC). In each PVC you can also set the connection protocol to be PPP, Dynamic IP, Static IP or Bridge mode.

Default Route Selection: Auto Specified

VPI: VCI: Encapsulation: LLC VC-Mux

Channel Mode: Enable NAPT:

Enable IGMP:

PPP Settings:

User Name: Password:

Type: Idle Time (min):

WAN IP Settings:

Type: Fixed IP DHCP

Local IP Address: Gateway:

Netmask:

Default Route: Disable Enable Auto

Unnumbered

Current ATM VC Table:


Select	In	Mode	VPI	VCI	Encap	NAPT	IGMP	DRoute	IP Addr	Gateway	NetMask	User Name	Unnumber	Status	Edit
<input checked="" type="checkbox"/>	mer1483	0	35	LLC	On	Off	Off	Off	192.168.20.11	192.168.20.1	255.255.255.0	---	---	up	

The following table describes the parameters of this page:

Field	Description
Default Route Selection	You can select Auto or Specified .
VPI	The virtual path between two points in an ATM network, ranging from 0 to 255.
VCI	The virtual channel between two points in an ATM network, ranging from 32 to 65535 (1 to 31 are reserved for known protocols)
Encapsulation	You can choose LLC and VC-Mux .
Channel Mode	You can choose 1483 Bridged , 1483 MER , PPPoE , PPPoA , 1483 Routed or IPoA .

Field	Description
Enable NAPT	Select it to enable Network Address Port Translation (NAPT) function. If you do not select it and you want to access the Internet normally, you must add a route on the uplink equipment. Otherwise, the access to the Internet fails. Normally, it is enabled.
Enabel IGMP	You can enable or disable Internet Group Management Protocol (IGMP) function.
PPP Settings	
User Name	Enter the correct user name for PPP dial-up, which is provided by your ISP.
Password	Enter the correct password for PPP dial-up, which is provided by your ISP.
Type	You can choose Continuous , Connect on Demand , or Manual .
Idle Time (min)	If set the type to Connect on Demand , you need to enter the idle timeout time. Within the preset minutes, if the router does not detect the flow of the user continuously, the router automatically disconnects the PPPoE connection.
WAN IP Settings	
Type	You can choose Fixed IP or DHCP . <ul style="list-style-type: none"> ● If select Fixed IP, you should enter the local IP address, remote IP address and subnet mask. ● If select DHCP, the router is a DHCP client, the WAN IP address is assigned by the remote DHCP server.
Local IP Address	Enter the IP address of WAN interface provided by your ISP.
Netmask	Enter the subnet mask of the local IP address.
Unnumbered	Select this checkbox to enable IP unnumbered function.

Field	Description
Add	After configuring the parameters of this page, click it to add a new PVC into the Current ATM VC Table .
Modify	Select a PVC in the Current ATM VC Table , then modify the parameters of this PVC. After finishing, click it to apply the settings of this PVC.
Current ATM VC Table	This table shows the existed PVCs. It shows the interface name, channel mode, VPI/VCI, encapsulation mode, local IP address, remote IP address and other information. The maximum item of this table is eight.

Click  in the **PPPoE** mode, the page shown in the following figure appears. In this page, you can configure parameters of this PPPoE PVC.

WAN	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
WAN ATM Setting ADSL Setting	LAN	WAN	WLAN				
	PPP Interface - Modify						
Protocol:		PPPoE					
ATM VCC:		8/32					
Login Name:		test					
Password:		****					
Authentication Method:		AUTO					
Connection Type:		Continuous					
Idle Time(s):		0					
Bridge:		<input type="radio"/> Bridged Ethernet (Transparent Bridging) <input type="radio"/> Bridged PPPoE (Implies Bridged Ethernet) <input checked="" type="radio"/> Disable Bridge					
AC Name:							
Service Name:							
802.1q:		<input checked="" type="radio"/> Disable <input type="radio"/> Enable VLAN ID(1-4095): 0					
MTU (576-1492):		1400					
Static IP:							
Source Mac address:		00:E9:07:DD:F8:CA (ex.00:E0:86:71:05:02) <input type="checkbox"/> MAC Clone					
		<input type="button" value="Apply Changes"/> <input type="button" value="Return"/> <input type="button" value="Reset"/>					

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

Field	Description
Protocol	It displays the protocol type used for this WAN connection.
ATM VCC	The ATM virtual circuit connection assigned for this PPP interface (VPI/VCI).
Login Name	The user name provided by your ISP.
Password	The password provided by your ISP.
Authentication Method	You can choose AUTO , CHAP , or PAP .
Connection Type	You can choose Continuous , Connect on Demand , or Manual .
Idle Time (s)	If choose Connect on Demand , you need to enter the idle timeout time. Within the preset minutes, if the router does not detect the flow of the user continuously, the router automatically disconnects the PPPoE connection.
Bridge	You can select Bridged Ethernet , Bridged PPPoE , or Disable Bridge .
AC-Name	The accessed equipment type.
Service-Name	The service name.
802.1q	You can select Disable or Enable . After enable it, you need to enter the VLAN ID. The value ranges from 1 to 4095.
Apply Changes	Click it to save the settings of this page temporarily.
Return	Click it to return to the Channel Configuration page.
Reset	Click it to refresh this page.
Source Mac address	The MAC address you want to clone.
MAC Clone	Click it to enable the MAC Clone function with the MAC address that is configured.

4.3 ATM Setting

Click **ATM Setting** in the left pane, the page shown in the following figure appears. In this page, you can configure the parameters of the ATM, including QoS, PCR, CDVT, SCR, and MBS.

The following table describes the parameters of this page:

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

ADSL Setting

Click **ADSL Setting** in the left pane, the page shown in the following figure appears. In this page, you can select the DSL modu-

lation. Mostly, you need to remain this factory default settings. The router supports these modulations: **G.Lite**, **G.Dmt**, **T1.413**, **ADSL2**, **ADSL2+**, **AnnexL**, and **AnnexM**. The router negotiates the modulation modes with the DSLAM.

The screenshot shows the 'ADSL Settings' page. The top navigation bar includes 'Wizard', 'Status', 'Network' (selected), 'Service', 'Advance', 'Admin', and 'Diagnostic'. Below this, there are sub-tabs for 'LAN', 'WAN', and 'WLAN'. The left sidebar contains 'WAN', 'ATM Setting', and 'ADSL Setting'. The main content area is titled 'ADSL Settings' and contains the following configuration options:

- ADSL Modulation:**
 - G.Lite
 - G.Dmt
 - T1.413
 - ADSL2
 - ADSL2+
- AnnexL Option:** Enable
- AnnexM Option:** Enable
- ADSL Capability:**
 - Bitswap Enable
 - SRA Enable

An 'Apply Changes' button is located at the bottom of the configuration area.

4.4 WLAN

Basic Settings

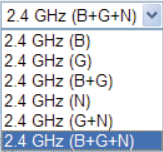
Choose **WLAN > Basic Settings** and the following page appears. In this page, you can configure the parameters for wireless LAN clients that may connect to the modem.

The screenshot shows the 'Wireless Basic Settings' page. The top navigation bar includes 'Wizard', 'Status', 'Network' (selected), 'Service', 'Advance', 'Admin', and 'Diagnostic'. Below this, there are sub-tabs for 'LAN', 'WAN', and 'WLAN'. The left sidebar contains 'Basic Setting', 'Security', 'Access Control', 'Multi-SSID', 'Advanced Setting', and 'WPS'. The main content area is titled 'Wireless Basic Settings' and contains the following configuration options:

- Disable Wireless LAN Interface
- Band:** 2.4 GHz (B+G+N)
- Mode:** AP
- SSID:** MODECOM MIC-AWR11
- Channel Width:** 40MHz
- Control Sideband:** Upper
- Channel Number:** Auto (Current Channel: 13)
- Radio Power (Percent):** 100%
- Associated Clients:** Show Active Clients

An 'Apply Changes' button is located at the bottom of the configuration area.

The following table describes the parameters of this page:

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

Field	Description
Apply Changes	Click it to apply the settings temporarily. If you want to save the settings of this page permanently, click Save in the lower left corner.

Security

Choose **Wireless > Security** and the following page appears.

The screenshot shows the 'Wireless Security Setup' page. At the top, there are tabs for 'Wizard', 'Status', 'Network', 'Service', 'Advance', 'Admin', and 'Diagnostic'. Under 'Network', there are sub-tabs for 'LAN', 'WAN', and 'WLAN'. The left sidebar has a red background with menu items: 'Basic Setting', 'Security', 'Access Control', 'Multi-SSID', 'Advanced Setting', and 'WPS'. The main content area is titled 'Wireless Security Setup' and includes the following fields and options:

- SSID Type: Radio buttons for Root, VAP0, VAP1, VAP2, and VAP3.
- Encryption: A dropdown menu set to 'WPA2 Mixed' and a 'Set WEP Key' button.
- Use 802.1x Authentication: A checkbox that is currently unchecked.
- WPA Authentication Mode: Radio buttons for Enterprise (RADIUS) and Personal (Pre-Shared Key).
- Pre-Shared Key Format: A dropdown menu set to 'Passphrase'.
- Pre-Shared Key: A text input field with asterisks.
- Authentication RADIUS Server: Fields for Port (1812), IP address (0.0.0.0), and Password.

Note: When encryption WEP is selected, you must set WEP key value.

The following table describes the parameters of this page:

Field	Description
Encryption	<p>Configure the wireless encryption mode. You can choose None, WEP, WPA (TKIP), WPA (AES), WPA2 (AES), WPA2 (TKIP), or WPA2 Mixed. Wired equivalent privacy (WEP) encrypts data frames before transmitting over the wireless network.</p> <p>Wi-Fi protected access (WPA) is a subset of the IEEE802.11i security specification draft.</p> <p>WPA2 Mixed is the collection of WPA and WPA2 encryption modes. The wireless client establishes the connection between the modem through WPA or WPA2.</p> <p>Key differences between WPA and WEP are user authentication and improved data encryption.</p>

Field	Description
Set WEP Key	It is available when you set the encryption mode to WEP . Click it, the Wireless WEP Key Setup page appears.
WPA Authentication Mode	<ul style="list-style-type: none"> Select Personal (Pre-Shared Key), enter the pre-shared key in the Pre-Shared Key field. Select Enterprise (RADIUS), enter the port, IP address, and password of the Radius server. You need to enter the username and password provided by the Radius server when the wireless client connects the modem. <p>If the encryption is set to WEP, the modem uses 802.1 X authentication, which is Radius authentication.</p>

Click **Set WEP Key**, and the following page appears.

The following describes the parameters of this page:

Field	Description
Key Length	Choose the WEP key length. You can Choose 64-bit or 128-bit .
Key Format	<ul style="list-style-type: none"> If you choose 64-bit, you can choose ASCII (5 characters) or Hex (10 characters). If you choose 128-bit, you can choose ASCII (13 characters) or Hex (26 characters).

Field	Description
Default Tx Key	Choose the index of WEP Key. You can choose Key 1 , Key 2 , Key 3 , or Key 4 .
Encryption Key 1 to 4	The Encryption keys are used to encrypt the data. Both the modem and wireless stations must use the same encryption key for data transmission. <ul style="list-style-type: none"> ● If you choose 64-bit and ASCII (5 characters), enter any 5 ASCII characters. ● If you choose 64-bit and Hex (10 characters), enter any 10 hexadecimal characters. ● If you choose 128-bit and ASCII (13 characters), enter any 13 ASCII characters. ● If you choose 128-bit and Hex (26 characters), enter any 26 hexadecimal characters.
Apply Changes	Click it to apply the settings temporarily. If you want to save the settings of this page permanently, click Save in the lower left corner.

Access Control

Choose **WLAN > Access Control** and the following page appears. In this page, you can configure the access control of the wireless clients.

The screenshot shows the 'Wireless Access Control' configuration page. The interface includes a top navigation bar with tabs for 'Access Control', 'Wizard', 'Status', 'Network', 'Service', 'Advance', 'Admin', and 'Diagnostic'. The 'Network' tab is active, and the 'WLAN' sub-tab is selected. On the left, a sidebar menu lists 'Basic Setting', 'Security', 'Access Control', 'Multi-SSID', 'Advanced Setting', and 'WPS'. The main content area is titled 'Wireless Access Control' and contains the following text: 'This page is used to configure the wireless access control. If you set the wireless access control mode to **Allowed Listed**, only those clients whose wireless MAC addresses are in the access control list are allowed to connect to your access point (AP). If you set the wireless access control mode to **Deny Listed**, those clients whose wireless MAC addresses are in the access control list are blocked from connecting to your AP.'

Below the text, there is a 'Wireless Access Control Mode:' section with a dropdown menu set to 'Disable' and an 'Apply Changes' button. Underneath is a 'MAC Address:' input field with the example '(ex. 00E0B710502)' and 'Add' and 'Reset' buttons. At the bottom, there is a 'Current Access Control List:' section with a table header 'MAC Address' and 'Select', and 'Delete Selected' and 'Delete All' buttons.

Choose **Allow Listed** as the access control mode to enable white list function. Only the devices whose MAC addresses are listed in the **Current Access Control List** can access the modem.

Choose **Deny Listed** as the access control mode to enable black list function. The devices whose MAC addresses are listed in the **Current Access Control List** are denied to access the modem.

Advanced Settings

Choose **Wireless > Advanced Settings** and the following page appears. In this page, you can configure the wireless advanced parameters. It is recommended to use the default parameters.



Note:

The parameters in the **Advanced Settings** are modified by the professional personnel, it is recommended to keep the default values.

The screenshot shows the 'Wireless Advance Settings' page. The left sidebar contains navigation links: Basic Setting, Security, Access Control, Multi-SSID, Advanced Setting, and WPS. The main content area is titled 'Wireless Advance Settings' and includes a warning: 'These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.' The settings are as follows:

- Authentication Type: Open System Shared Key Auto
- Fragment Threshold: 2345 (256-2346)
- RTS Threshold: 2347 (0-2347)
- Beacon Interval: 100 (20-1024 ms)
- DTIM Interval: 1 (1-255)
- Data Rate: Auto
- Preamble Type: Long Preamble Short Preamble
- Broadcast SSID: Enable Disable
- Relay Blocking: Enable Disable
- Ethernet to Wireless Blocking: Enable Disable
- WiFi Multicast to Unicast: Enable Disable
- Aggregation: Enable Disable
- Short GE: Enable Disable

An 'Apply Changes' button is located at the bottom of the settings area.

The following table describes the parameters of this page:

Field	Description
Authentication	<p>Select the modem operating in the open system or encryption authentication. You can choose Open System, Shared Key, or Auto.</p> <ul style="list-style-type: none"> ● In the open system, the wireless client can directly connect to the device ● In the encryption authentication, the wireless client connects to the modem through the shared key.

Field	Description
Data Rate	Choose the transmission rate of the wireless data. You can choose Auto, 1 M, 2 M, 5.5 M, 11 M, 6 M, 9 M, 12 M, 18 M, 24 M, 36 M, 48 M, 54M, MSC0-MSC15.
PreambleType	= Long Preamble: It means this card always use long preamble. = Short Preamble: It means this card can support short preamble capability.
Broadcast SSID	Select whether the modem broadcasts SSID or not. You can select Enable or Disable . <ul style="list-style-type: none"> ● Select Enable, the wireless client searches the modem through broadcasting SSID. ● Select Disable to hide SSID, the wireless clients can not find the SSID.
Relay Blocking	Wireless isolation. Select Enable , the wireless clients that are connected to the modem can not intercommunication.
Ethernet to Wireless Blocking	Whether the wireless network can communicate with the Ethernet network or not.
Wifi Multicast to Unicast	Enable it to using unicast to transmit multicast packet
Aggregation	It is applied when the destination end of all MPDU are for one STA.
Short GI	It is not recommended to enable GI in obvious environment of Multi-path effect.
Apply Changes	Click it to apply the settings temporarily. If you want to save the settings of this page permanently, click Save in the lower left corner.

WPS

Choose **WLAN > WPS** and the following page appears.



There are two ways for the wireless client to establish the connection with the modem through WPS. The modem generates PIN, see the above figure. Click **Regenerate PIN** to generate a new PIN, and then click **Start PBC**. In the wireless client tool, enter the PIN which is generated by the modem/start connection. The client will automatically establish the connection with the modem through the encryption mode, and you need not to enter the key. The other way is the wireless client generates PIN. In the above figure, enter PIN of the wireless client in the **Client PIN Number** field, then click **Start PIN** to establish the connection.

 Note:

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

5 Service

In the navigation bar, click **Service**. In the **Service** page that is displayed contains **DNS**, **Firewall**, **UPNP**, **IGMP Proxy**, **TR-069**, and **ACL**.

5.1 DNS

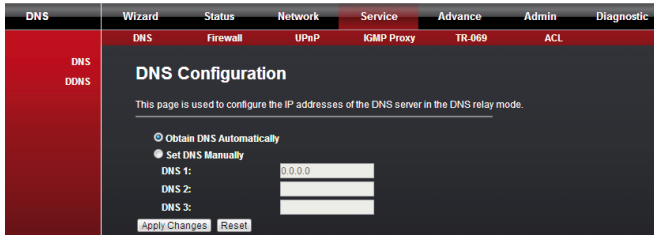
Domain Name System (DNS) is an Internet service that translates the domain name into IP address. Because the domain name is al-

phabetic, it is easier to remember. The Internet, however, is based on IP addresses. Every time you use a domain name, DNS translates the name into the corresponding IP address. For example, the domain name `www.example.com` might be translated to `198.105.232.4`. The DNS has its own network. If one DNS server does not know how to translate a particular domain name, it asks another one, and so on, until the correct IP address is returned.

Choose **Service > DNS**. The **DNS** page that is displayed contains **DNS** and **DDNS**.

DNS

Click **DNS** in the left pane, the page shown in the following figure appears.



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

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

DDNS

Click **DDNS** in the left pane, the page shown in the following figure appears. This page is used to configure the dynamic DNS address from DynDNS.org or TZO. You can add or remove to configure dynamic DNS.

The screenshot shows the 'Dynamic DNS Configuration' page. At the top, there is a navigation bar with tabs: Wizard, Status, Network, Service (selected), Advance, Admin, and Diagnostic. Below this is a sub-navigation bar with tabs: DNS, Firewall, UPnP, IGMP Proxy, TR-069, and ACL. The left sidebar has 'DNS' and 'DDNS' options. The main content area is titled 'Dynamic DNS Configuration' and contains the following fields:

- DDNS provider:** A dropdown menu with 'DynDNS.org' selected.
- Host Name:** A text input field.
- Interface:** A dropdown menu with 'e0' selected.
- Enable:** A checkbox that is checked.
- DynDns Settings:**
 - User Name:** A text input field.
 - Password:** A text input field.
- TZO Settings:**
 - Email:** A text input field.
 - Key:** A text input field.

At the bottom of the form, there are two buttons: 'Add' and 'Remove'.

The following table describes the parameters of this page:

Field	Description
DDNS provider	Choose the DDNS provider name. You can choose DynDNS.org or TZO .
Host Name	The DDNS identifier.
Interface	The WAN interface of the router.
Enable	Enable or disable DDNS function.
Username	The name provided by DDNS provider.
Password	The password provided by DDNS provider.
Email	The email provided by DDNS provider.
Key	The key provided by DDNS provider.

5.2 Firewall

Choose **Service > Firewall**. The **Firewall** page that is displayed contains **IP/Port Filter**, **MAC Filter**, **URL Blocking**, **Virtual Server**, **IP Address Mapping**, **DMZ Setting**, **NAT EXCLUDE IP**, **ALG Setting**, and **Anti-DoS**.

IP/Port Filter

Click **IP/Port Filter** in the left pane, the page shown in the following figure appears. Entries in the table are used to restrict certain types of data packets through the gateway. These filters are helpful in securing or restricting your local network.

The screenshot displays the 'IP/Port Filter' configuration page. The interface includes a sidebar on the left with the following menu items: IP/Port Filter, MAC Filter, URL Blocking, Virtual Server, IP Address Mapping, DMZ Setting, NAT EXCLUDE IP, ALG Setting, and Anti-DoS. The main content area has tabs for DNS, Firewall, UPnP, IGMP Proxy, TR-069, and ACL. The 'IP/Port Filter' tab is active, showing a description: '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.' Below this, there are settings for 'Outgoing Default Action' (radio buttons for Permit and Deny) and 'Incoming Default Action' (radio buttons for Permit and Deny). The 'Rule Action' section has radio buttons for Permit and Deny. Configuration fields include: Protocol (IP), Direction (Upstream), Source IP Address, Destination IP Address, Source Port, Destination Port, Subnet Mask (255.255.255.255), and Enable (checked). There are 'Apply Changes', 'Reset', and 'Help' buttons. At the bottom, a 'Current Filter Table' header is visible with columns: Rule, Protocol, Source IP/Mask, SPort, Dest IP/Mask, DPort, State, Direction, and Action.

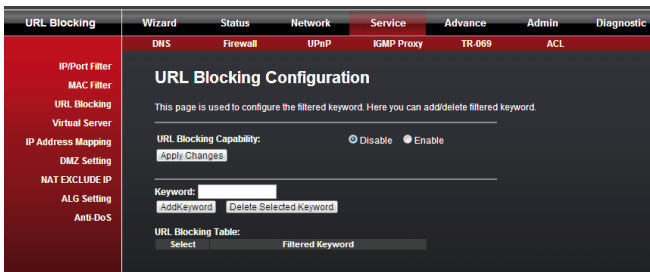
MAC Filter

Click **MAC Filter** in the left pane, the page shown in the following figure appears. Entries in the table are used to restrict certain types of data packets from your local network to Internet through the gateway. These filters are helpful in securing or restricting your local network.



URL Blocking

Click **URL Blocking** in the left pane, the page shown in the following figure appears. This page is used to block a fully qualified domain name, such as tw.yahoo.com and filtered keyword. You can add or delete FQDN and filtered keyword.



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

Field	Description
URL Blocking Capability	You can choose Disable or Enable . <ul style="list-style-type: none"> ● Select Disable to disable URL blocking function and keyword filtering function. ● Select Enable to block access to the URLs and keywords specified in the URL Blocking Table.
Keyword	Enter the keyword to block.
AddKeyword	Click it to add a keyword to the URL Blocking Table .
Delete Selected Keyword	Select a row in the URL Blocking Table and click it to delete the row.
URL Blocking Table	A list of the URL (s) to which access is blocked.

Virtual Server

Click **Virtual Server** in the left pane, the page shown in the following figure appears.

The screenshot shows the 'Virtual Server' configuration page. The left sidebar contains navigation options: IP/Port Filter, MAC Filter, URL Blocking, Virtual Server (selected), IP Address Mapping, DMZ Setting, NAT EXCLUDE IP, ALG Setting, and Anti-DoS. The main content area has tabs for Wizard, Status, Network, Service (selected), Advance, Admin, and Diagnostic. Under the 'Service' tab, there are sub-tabs for DNS, Firewall, UPnP, IGMP Proxy, TR-069, and ACL. The 'Virtual Server' title is displayed, followed by a brief description: 'The page is used to configure virtual server. So other users on the Internet can access the server on your LAN through the device.' Below this, the 'Service Type' is set to 'Usual Service Name' with a dropdown menu showing 'AUTH'. The 'Protocol' is set to 'TCP'. The 'WAN Setting' is 'Interface'. The 'WAN Interface' is '30'. The 'WAN Port' is '113' and the 'LAN Open Port' is '113'. There is a note '(ex. 5001-5010)' next to the port fields. An 'Apply Changes' button is located below the settings. At the bottom, there is a section for the 'Current Virtual Server Forwarding Table' with a table header: 'ServerName | Protocol | Local IP Address | Local Port | WAN IP Address | WAN Port | State | Action'.

The following table describes the parameters of this page:

Field	Description
Service Type	You can select the common service type, for example, AUTH , DNS , or FTP . You can also define a service name. <ul style="list-style-type: none"> ● If you select Usual Service Name, the corresponding parameter has the default settings. ● If you select User-defined Service Name, you need to enter the corresponding parameters.
Protocol	Choose the transport layer protocol that the service type uses. You can choose TCP or UDP .
WAN Setting	You can choose Interface or IP Address .
WAN Interface	Choose the WAN interface that will apply virtual server.
WAN Port	Choose the access port on the WAN.
LAN Open Port	Enter the port number of the specified service type.
LAN IP Address	Enter the IP address of the virtual server. It is in the same network segment with LAN IP address of the router.

IP Address Mapping

NAT is short for Network Address Translation. The Network Address Translation Settings window allows you to share one WAN IP address for multiple computers on your LAN.

Click **IP Address Mapping** in the left pane, the page shown in the following figure appears.

Entries in this table allow you to configure one IP pool for specified source IP address from LAN, so one packet whose source IP is in range of the specified address will select one IP address from the pool for NAT.

IP Address Mapping	Wizard	Status	Network	Service	Advance	Admin	Diagnostic										
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL											
IP/Port Filter MAC Filter URL Blocking Virtual Server IP Address Mapping DMZ Setting NAT EXCLUDE IP ALG Setting Anti-DoS	<h2 style="text-align: center;">NAT IP MAPPING</h2> <p>Entries in this table allow you to config one IP pool for specified source ip address from lan,so one packet which's source ip is in range of the specified address will select one IP address from pool for NAT.</p> <hr/> <p>Type: One-to-One</p> <p>Local Start IP: <input type="text"/></p> <p>Local End IP: <input type="text"/></p> <p>Global Start IP: <input type="text"/></p> <p>Global End IP: <input type="text"/></p> <p><input type="button" value="Apply Changes"/> <input type="button" value="Reset"/></p> <p>Current NAT IP MAPPING Table:</p> <table border="1"> <thead> <tr> <th>Local Start IP</th> <th>Local End IP</th> <th>Global Start IP</th> <th>Global End IP</th> <th>Action</th> </tr> </thead> <tbody> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/></td> </tr> </tbody> </table>							Local Start IP	Local End IP	Global Start IP	Global End IP	Action	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/>
Local Start IP	Local End IP	Global Start IP	Global End IP	Action													
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="button" value="Delete Selected"/> <input type="button" value="Delete All"/>													

DMZ Setting

Demilitarized Zone (DMZ) 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.

Click **DMZ Setting** in the left pane, the page shown in the following figure appears.

The following describes how to configure DMZ.

Step 1 Select **Enable DMZ** to enable this function.

Step 2 Enter an IP address of the DMZ host.

Step 3 Click **Apply Changes** to save the settings of this page temporarily.

DMZ Setting	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	
IP/Port Filter MAC Filter URL Blocking Virtual Server IP Address Mapping DMZ Setting NAT EXCLUDE IP ALG Setting Anti-DoS	<h2 style="text-align: center;">DMZ</h2> <p>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.</p> <hr/> <p><input checked="" type="checkbox"/> Enable DMZ</p> <p>DMZ Host IP Address: <input type="text"/></p> <p><input type="button" value="Apply Changes"/> <input type="button" value="Reset"/></p>						

NAT EXCLUDE IP

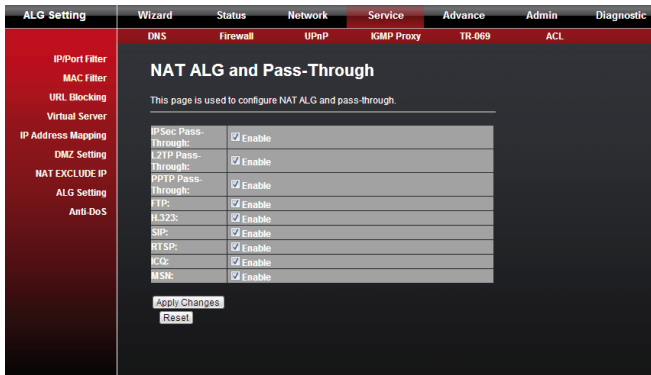
Click **NAT EXCLUDE IP** in the left pane, the page shown in the following figure appears.

In the page, you can configure some source IP addresses which use the purge route mode when accessing internet through the specified interface.



ALG Setting

Click **ALG Setting** in the left pane, the page shown in the following figure appears.



Anti-DoS

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

Click **Anti-DoS** in the left pane, the page shown in the following figure appears. In this page, you can prevent DoS attacks.

The screenshot shows the 'Anti-DoS Setting' page. The left sidebar contains a menu with 'Anti-DoS' selected. The main content area has a title 'Anti-DoS Setting' and a description: 'A "denial-of-service" (DoS) attack is characterized by an explicit attempt by hackers to prevent legitimate users of a service from using that service.'

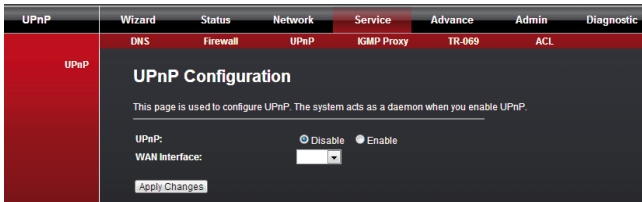
Below the description is a list of settings:

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

At the bottom, there are buttons for 'Select All', 'Clear All', and 'Apply Changes'.

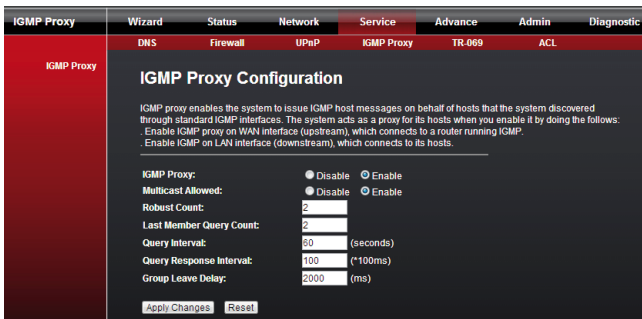
5.3 UPNP

Choose **Service > UPnP**, the page shown in the following figure appears. This page is used to configure UPnP. The system acts as a daemon after you enable it.



5.4 IGMP Proxy

Choose **Service** > **IGMP Proxy**, the page shown in the following figure appears. IGMP proxy enables the system to issue IGMP host messages on behalf of hosts that the system discovered through standard IGMP interfaces. The system acts as a proxy for its hosts after you enable it.



5.5 TR-069

Choose **Service** > **TR-069**, the page shown in the following page appears. In this page, you can configure the TR-069 CPE.

TR-069	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	DNS	Firewall	UPnP	IGMP Proxy	TR-069	ACL	
<h3>TR-069 Configuration</h3> <p>This page is used to configure the TR-069 customer premises equipment (CPE). In this page, you can configure the parameters of auto-configuration server (ACS).</p> <p>ACS:</p> <p>Enable: <input checked="" type="checkbox"/></p> <p>URL: <input type="text" value="http://20.20.20.20:9090/web/tr069"/></p> <p>User Name: <input type="text" value="hgw"/></p> <p>Password: <input type="password" value="***"/></p> <p>Periodic Inform Enable: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p>Periodic Inform Interval: <input type="text" value="300"/></p> <hr/> <p>Connection Request:</p> <p>User Name: <input type="text" value="trms"/></p> <p>Password: <input type="password" value="***"/></p> <p>Path: <input type="text" value="/tr069"/></p> <p>Port: <input type="text" value="7547"/></p> <hr/> <p>Debug:</p> <p>ACS Certificates CPE: <input type="radio"/> No <input checked="" type="radio"/> Yes</p> <p>Show Message: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p>CPE Sends GetRPC: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p>Skip MRReboot: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p>Delay: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p>Auto-Execution: <input type="radio"/> Disable <input checked="" type="radio"/> Enable</p> <p><input type="button" value="Apply Changes"/> <input type="button" value="Reset"/></p> <hr/> <p>Certificate Management:</p> <p>CPE Certificate: <input type="text" value="client"/> <input type="button" value="Apply"/> <input type="button" value="Reset"/></p> <p>Password: <input type="password"/></p> <p>CPE Certificate: <input type="button" value="Wybierz plik"/> Nie wybrano pliku <input type="button" value="Upload"/> <input type="button" value="Delete"/></p> <p>CA Certificate: <input type="button" value="Wybierz plik"/> Nie wybrano pliku <input type="button" value="Upload"/> <input type="button" value="Delete"/></p>							

The following table describes the parameters of this page:

Field	Description
ACS	
URL	The URL of the auto-configuration server to connect to.
User Name	The user name for logging in to the ACS.
Password	The password for logging in to the ACS.
Periodic Inform Enable	Select Enable to periodically connect to the ACS to check whether the configuration updates.

Field	Description
Periodic Inform Interval	Specify the amount of time between connections to ACS.
Connection Request	
User Name	The connection username provided by TR-069 service.
Password	The connection password provided by TR-069 service.
Debug	
Show Message	Select Enable to display ACS SOAP messages on the serial console.
CPE sends GetRPC	Select Enable , the router contacts the ACS to obtain configuration updates.
Skip MReboot	Specify whether to send an MReboot event code in the inform message.
Delay	Specify whether to start the TR-069 program after a short delay.
Auto-Execution	Specify whether to automatically start the TR-069 after the router is powered on.

5.6 ACL

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



Note:

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

ACL Configuration

You can specify which services are accessible from LAN or WAN side. Entries in this ACL table are used to permit certain types of data packets from your local network or Internet network to the Gateway. Using of such access control can be helpful in securing or restricting the Gateway management.

Direction Select: LAN WAN

LAN ACL Switch: Enable Disable

IP Address: (The IP 0.0.0.0 represent any IP)

Services Allowed:

Any

Current ACL Table:

Select	Direction	IP Address/Interface	Service	Port	Action
--------	-----------	----------------------	---------	------	--------

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

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

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



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

Field	Description
Direction Select	Select the router interface. You can select LAN or WAN . In this example, WAN is selected.
WAN Setting	You can choose Interface or IP Address .
WAN Interface	Choose the interface that permits data packets from WAN to access the router.
IP Address	Enter the IP address on the WAN. Only the IP address that is in the same network segment with the IP address on the WAN can access the router.
Services Allowed	You can choose the following services from WAN : Web , Telnet , FTP , TFTP , SNMP , or PING . You can also choose all the services.
Add	After setting the parameters, click it to add an entry to the Current ACL Table .
Reset	Click it to refresh this page.

6. Advance

In the navigation bar, click **Advance**. In the **Advance** page that is displayed contains **Bridge Setting**, **Routing**, **Port Mapping**, **QoS**, **SNMP** and **Others**.

6.1 Bridge Setting

Choose **Advance > Bridge Setting**, the page shown in the following figure appears. This page is used to configure the bridge parameters. You can change the settings or view some information on the bridge and its attached ports.



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

Field	Description
Aging Time	If the host is idle for 300 seconds (default value), its entry is deleted from the bridge table.
802.1d Spanning Tree	You can select Disable or Enable . Select Enable to provide path redundancy while preventing undesirable loops in your network.
Show MACs	Click it to show a list of the learned MAC addresses for the bridge.

Click **Show MACs**, the page shown in the following figure appears. This table shows a list of learned MAC addresses for this bridge.

MAC Address	Port	Type	Aging Time
01:80:c2:00:00:00	0	Static	300
00:1f:a4:d4:f6:ca	0	Static	300
01:00:5e:00:00:09	0	Static	300
ac:72:89:5a:a5:8c	10	Dynamic	300
ff:ff:ff:ff:ff	0	Static	300

Refresh Close

6.2 Routing

Choose **Advance > Routing**, the page shown in the following figure appears. The page that is displayed contains **Static Route** and **RIP**.

Static Route

Click **Static Route** in the left pane, the page shown in the following figure appears. This page is used to configure the routing information. You can add or delete IP routes.

The screenshot shows the 'Routing Configuration' page. The top navigation bar includes 'Static Route', 'Wizard', 'Status', 'Network', 'Service', 'Advance', 'Admin', and 'Diagnostic'. The 'Advance' tab is active, and the 'Routing' sub-tab is selected. The left sidebar shows 'Static Route' and 'RIP'. The main content area is titled 'Routing Configuration' and contains the following text: 'This page is used to configure the routing information. Here you can add/delete IP routes.' Below this text are input fields for 'Enable:' (checked), 'Destination:', 'Subnet Mask:', 'Next Hop:', 'Metric:' (set to 1), and 'Interface:'. At the bottom of the form are buttons for 'Add Route', 'Update', 'Delete Selected', and 'Show Routes'. Below the form is a 'Static Route Table' header with a table structure: Select, State, Destination, Subnet Mask, Next Hop, Metric, Interface.

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

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

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

IP Route Table

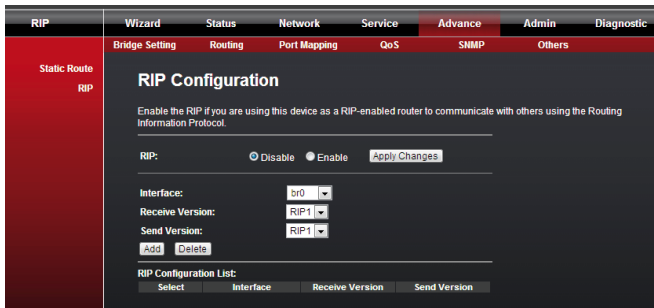
This table shows a list of destination routes commonly accessed by your network.

Destination	Subnet Mask	Next Hop	Interface
192.168.1.1	255.255.255.255	*	e1
192.168.20.11	255.255.255.255	*	a0

Refresh
Close

RIP

Click **RIP** in the left pane, the page shown in the following figure appears. If you are using this device as a RIP-enabled router to communicate with others using Routing Information Protocol (RIP), enable RIP. This page is used to select the interfaces on your devices that use RIP, and the version of the protocol used.



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

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

Field	Description
Send Version	The working mode for sending RIP messages. You can choose RIP1 or RIP2 . <ul style="list-style-type: none"> Choose RIP1 indicates the router broadcasts RIP1 messages only. Choose RIP2 indicates the router multicasts RIP2 messages only.
Add	Click it to add the RIP interface to the Rip Configuration List .
Delete	Select a row in the Rip Configuration List and click it to delete the row.

6.3 Port Mapping

Choose **Advance > Port Mapping**. The page shown in the following figure appears. In this page, you can bind the WAN interface and the LAN interface to the same group.

The screenshot shows the 'Port Mapping Configuration' page. It includes a navigation menu at the top with tabs for Wizard, Status, Network, Service, Advance, Admin, and Diagnostic. Under the 'Advance' tab, there are sub-tabs for Bridge Setting, Routing, Port Mapping, QoS, SNMP, and Others. The main content area is titled 'Port Mapping Configuration' and includes instructions for operating a mapping group, a note about interface selection, and a table for interface groups.

The procedure for operating a mapping group is as follows:

1. Enable port mapping.
2. Select a group from the table.
3. Select interfaces from the available interface list and add it to the grouped interface list by using the arrow buttons to bind the ports.
4. Click "Apply Changes" to save the settings.

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

Disable Enable

WAN

LAN

Interface Group

Add +

< Del

Select	Interfaces	Status
Default	LAN1,LAN2,LAN3,LAN4,wlan,wlan-vap0,wlan-vap1,wlan-vap2,wlan-vap3,a0	Enabled
Group 1		—
Group 2		—
Group 3		—

The procedure for manipulating a mapping group is as follows:

Step 1 Select **Enable** to enable this function.

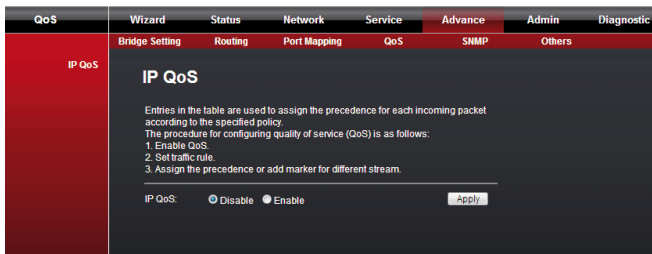
Step 2 Select a group from the table.

Step 3 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.

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

6.4 QoS

Choose **Advance > QoS**, the page shown in the following figure appears. Entries in the **QoS Rule List** are used to assign the precedence for each incoming packet based on physical LAN port, TCP/UDP port number, source IP address, destination IP address and other information.



Step 4 Enable IP QoS and click **Apply** to enable IP QoS function.

Step 5 Click **add rule** to add a new IP QoS rule.

The page shown in the following figure appears.

QoS Wizard Status Network Service **Advance** Admin Diagnostic

Bridge Setting Routing Port Mapping **QoS** SNMP Others

IP QoS

IP QoS

Entries in the table are used to assign the precedence for each incoming packet according to the specified policy.
The procedure for configuring quality of service (QoS) is as follows:

1. Enable QoS.
2. Set traffic rule.
3. Assign the precedence or add marker for different stream.

IP QoS: Disable Enable

QoS Policy:

Schedule Mode:

QoS Rule List

Stream Rule			Behavior							
Src IP	Src Port	Dest IP	Dest Port	Proto	Phy Port	Prior	IP Preced ToS	IP 802.1p	WAN Itf	Set
<input type="button" value="Add Rule"/> <input type="button" value="Delete"/> <input type="button" value="Delete All"/>										

Add QoS Rule

Source IP: Source Mask:

Destination IP: Destination Mask:

Source Port: Destination Port:

Protocol: Physical Port:

Set Priority:

Insert or Modify QoS Mark

IP Precedence:

IP ToS:

802.1p:

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

Field	Description
IP QoS	Select to enable or disable IP QoS function. You need to enable IP QoS if you want to configure the parameters of this page.
QoS Policy	You can choose stream based , 802.1p based , or DSCP based .
Schedule Mode	You can choose strict prior or WFQ (4:3:2:1) .
Source IP	The IP address of the source data packet.
Source Mask	The subnet mask of the source IP address.
Destination IP	The IP address of the destination data packet.
Destination Mask	The subnet mask of the destination IP address.
Source Port	The port of the source data packet.

Field	Description
Destination Port	The port of the destination data packet.
Protocol	The protocol responds to the IP QoS rules. You can choose TCP , UDP , or ICMP .
Physical Port	The LAN interface responds to the IP QoS rules.
Set priority	The priority of the IP QoS rules. P0 is the highest priority and P3 is the lowest.
IP Precedence	You can choose from 0 to 7 define the priority in the ToS of the IP data packet.
IP ToS	The type of IP ToS for classifying the data package You can choose Normal Service , Minimize Cost , Maximize Reliability , Maximize Throughput , or Minimize Delay .
802.1p	You can choose from 0 to 7.
delete	Select a row in the QoS rule list and click it to delete the row.
delete all	Select all the rows in the QoS rule list and click it to delete the rows.

6.5 SNMP

Choose **Advance > SNMP**, the page shown in the following figure appears. You can configure the SNMP parameters.

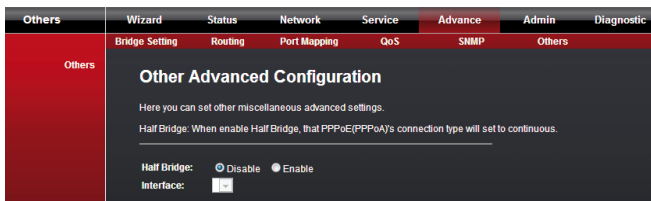
SNMP	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Bridge Setting	Routing	Port Mapping	QoS	SNMP	Others	
SNMP	<h3>SNMP Protocol Configuration</h3> <p>This page is used to configure the Simple Network Management Protocol (SNMP). In this page, you can modify the settings of system description, trap IP address, and community name and so on.</p> <p><input checked="" type="checkbox"/> Enable SNMP</p> <p>System Description: ADSL Router/Modem IGD</p> <p>System Contact: _____</p> <p>System Name: MC-AWR11</p> <p>System Location: _____</p> <p>Trap IP Address: _____</p> <p>Community Name (Read-only): public</p> <p>Community Name (Read-Write): public</p>						

The following table describes the parameters of this page:

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

6.6 Others

Choose **Advance** > **Others**, the page shown in the following figure appears.

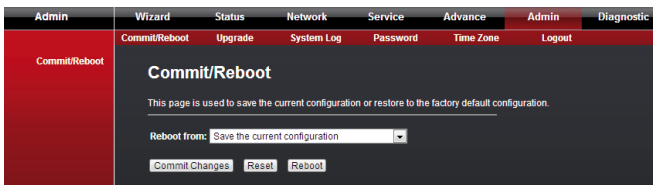


7. Admin

In the navigation bar, click **Admin**. The **Admin** page that is displayed contains **Commit/Reboot**, **Upgrade**, **System Log**, **Password**, **Time Zone** and **Logout**.

7.1 Commit/Reboot

Choose **Admin** > **Commit/Reboot**, the page shown in the following figure appears. You can set the router reset to the default settings or set the router to commit the current settings.



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

Field	Description
Reboot from	You can choose Save the current configuration or Restore to the factory default configuration . = Save the current configuration : Save the current settings, and then reboot the router. = Restore to the factory default configuration : Reset to the factory default settings, and then reboot the the router.
Reboot	Click it to reboot the router.

7.2 Upgrade

Choose **Admin > Upgrade**. The **Upgrade** page that is displayed contains **Upgrade Firmware** and **Backup/Restore**.



Caution:

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

Upgrade Firmware

Click **Upgrade Firmware** in the left pane, the page shown in the following figure appears. In this page, you can upgrade the firmware of the router.

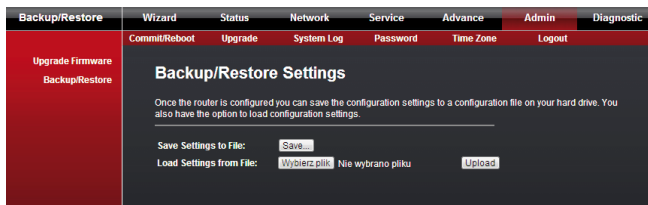


The following table describes the parameters and button of this page:

Field	Description
Select File	Click Browse to select the firmware file.
Upload	After selecting the firmware file, click Upload to starting upgrading the firmware file.
Reset	Click it to starting selecting the firmware file.

Backup/Restore

Click **Backup/Restore** in the left pane, the page shown in the following figure appears. You can backup the current settings to a file and restore the settings from the file that was saved previously.



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

Field	Description
Save Settings to File	Click it, and select the path. Then you can save the configuration file of the router.
Load Settings from File	Click Browse to select the configuration file.
Upload	After selecting the configuration file of the router, click Upload to start uploading the configuration file of the router.

7.3 System Log

Choose **Admin > System Log**, the page shown in the following figure appears. In this page, you can enable or disable system log function and view the system log.



7.4 Password

Choose **Admin > Password**, the page shown in the following figure appears. By default, the user name and password are **admin** and

admin respectively. The common user name and password are **user** and **user** respectively.

User Account Configuration

This page is used to add user account to access the web server of ADSL Router. Empty user name or password is not allowed.

User Name:

Privilege:

Old Password:

New Password:

Confirm Password:

User Account Table:

Select	User Name	Privilege
<input type="radio"/>	admin	Admin
<input type="radio"/>	user	User

The following table describes the parameters of this page:

Field	Description
User Name	Choose the user name for accessing the router. You can choose admin or user .
Privilege	Choose the privilege for the account.
Old Password	Enter the old password
New Password	Enter the password to which you want to change the old password.
Confirm Password	Enter the new password again.

7.5 Time Zone

Choose **Admin > Time Zone**, the page shown in the following figure appears. You can configure the system time manually or get the system time from the time server.

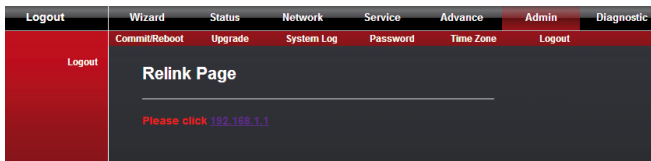
Time Zone	Wizard	Status	Network	Service	Advance	Admin	Diagnostic
	Commit/Reboot	Upgrade	System Log	Password	Time Zone	Logout	
Time Zone	<h3>System Time Configuration</h3> <p>This page is used to configure the system time and Network Time Protocol (NTP) server. In this page, you can modify the settings or view some information of the system time and NTP parameters.</p> <p>System Time: 1970 year Jan month 1 day 0 hour 39 min 33 sec DayLight: LocalTIME</p> <p>Apply Changes Reset</p> <p>NTP Configuration: State: <input checked="" type="radio"/> Disable <input type="radio"/> Enable Primary Server: 90.59.231.226 Secondary Server: Interval: Every 1 hours Time Zone: (GMT+01:00) Spain, Tunisia, France, Germany, Italy Local Time: Thu Jan 1 0:39:33 1970</p> <p>Apply Changes Reset</p> <p>NTP Start: Get GMT Time</p>						

The following table describes the parameters of this page:

Field	Description
System Time	Set the system time manually.
NTP Configuration	
State	Select enable or disable NTP function. You need to enable NTP if you want to configure the parameters of NTP.
Primary Server	Set the primary NTP server manually.
Secondary Server	Set the secondary NTP server manually.
Time Zone	Choose the time zone in which area you are from the drop down list.

7.6 Logout

Choose **Admin > Logout**, the page shown in the following figure appears.

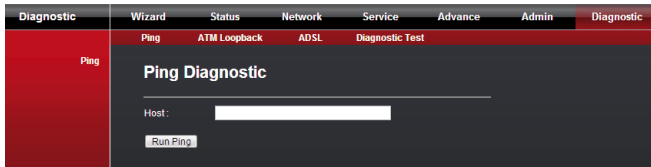


8. Diagnostic

In the navigation bar, click **Diagnostic**. The **Diagnostic** page that is displayed contains **Ping**, **ATM Loopback**, **ADSL** and **Diagnostic Test**.

8.1 Ping

Choose **Diagnostic** > **Ping**. The page shown in the following figure appears.



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

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

8.2 ATM Loopback

Choose **Diagnostic** > **ATM Loopback**. The page shown in the following figure appears. In this page, you can use VCC loopback function to check the connectivity of the VCC. The ATM loopback test is useful for troubleshooting problems with the DSLAM and ATM network.

OAM Fault Management - Connectivity Verification

Connectivity verification is supported by the use of the OAM loopback capability for both VP and VC connections. This page is used to perform the VCC loopback function to check the connectivity of the VCC.

Flow Type:

- F5 Segment
- F5 End-to-End
- F4 Segment
- F4 End-to-End

VPI:

VCI:

Click **Run Loopback** to start testing.

8.3 ADSL

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

Diagnostic ADSL

This page is used to diagnose the ADSL tone.

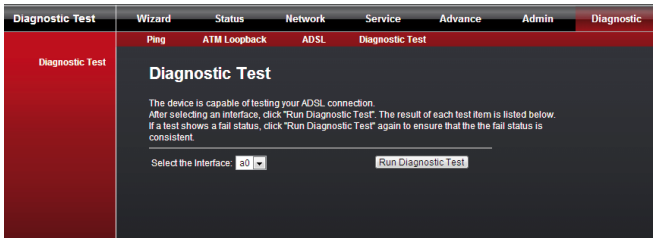
	Downstream	Upstream
HLin Scale	34194	0
Loop Attenuation(dB)	3.1	0.9
Signal Attenuation(dB)	3.1	0.0
SNR Margin(dB)	6.4	12.9
Attainable Rate(Kbps)	24440	1204
Output Power(dBm)	9.1	2.4

Tone Number	ILReal	ILImage	SNR	QLN	ILog
0	0.000	0.000	-32.0	-128.0	-96.3
1	0.000	0.000	-32.0	-130.0	-96.3
2	0.000	0.000	-32.0	-130.0	-96.3
3	0.000	0.000	-32.0	-130.0	-96.3

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


8.4 Diagnostic Test

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



Click **Run Diagnostic Test** to start testing.

Environment protection:

 This symbol on our product nameplates proves its compatibility with the EU Directive 2002/96 concerning proper disposal of waste electric and electronic equipment (WEEE). By using the appropriate disposal systems you prevent the potential negative consequences of wrong product take-back that can pose risks to the environment and human health. The symbol indicates that this product must not be disposed of with your other waste. You must hand it over to a designated collection point for the recycling of electrical and electronic equipment waste. The disposal of the product should obey all the specific Community waste management legislations. Contact your local city office, your waste disposal service or the place of purchase for more information on the collection. Weight of the device: 278 g

MODECOM

DECLARATION OF CONFORMITY

The undersigned, Plenipotentiary Representative in the
Community representing the manufacturer

MODECOM S.A.

Ul. Ceramiczna 7
05-850 Ożarów Mazowiecki

We hereby declare that the product :

ADSL Wireless Router MC-AWR11 150Mbps

complies with the provisions of the following EC directives (including all its
amendments and supplements):

2004/108/EC - Dyrektywa EMC
2006/95/WE - Dyrektywa LVD
1999/5/WE – Dyrektywa RTTE/R&TTE

and that uses the following harmonized standards:

EN 301 489-1 V.1.8.1: 2008
EN 301 489-17 V2.1.1: 2009
EN 300 328 V1.7.1: 2006
EN 62311: 2008
EN 60950-1: 2006+A11: 2009

The last two digits of the year in which the CE marking CE 12

The certificate was issued based on a report No. 2012/SIEC/GB/001

Warsaw, 2012-12-06

