



SmartAX MT880 ADSL Router

User Manual

HUAWEI TECHNOLOGIES CO., LTD.



SmartAX MT880 ADSL Router User Manual

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Federal Communications Commission (FCC) Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Safety Precautions



General Requirements:

- Before you install and use the device, read these safety precautions carefully and observe them during operation.
- During storage, transportation and operation of the device, keep the device dry.
- During storage, transportation and operation of the device, avoid collision and crash of the device.
- Never attempt to dismantle the device by yourself. In case of any fault, contact the appointed maintenance center for repair.
- Without prior written consent, no organization or individual is permitted to make any change to the structure or safety design of the device. Huawei Technologies Co., Ltd. is not liable to any consequences or legal issues due to such changes.
- While using the device, observe all applicable laws, directives and regulations, and respect the legal rights of other people.



Environmental Requirements:

- Place the device at a well-ventilated place. Do not dispose the device to direct sunlight.
- Keep the device clean and free of dusts.
- Place the device on a stable platform.
- Do not place any object on top of the device. Otherwise, the device may be too hot during operation. It can even be deformed or damaged by the heavy load.
- Keep at least 10 cm between the device and the closest object for heat dissipation.
- Do not place the device on or near any object that can easily catch fire, such as something made of rubber.

- Keep the device far away from any heat source or bare fire, such as a candle or an electric heater.
- Keep the device far away from any household appliance with strong magnetic field or electromagnetic field, such as a microwave oven or a refrigerator.



Operating Requirements:

- Do not let a child operate the device without guidance.
- Do not let a child play with the device or any accessory. Swallowing the accessories may lead to peril.
- Use the accessories provided or authorized by the manufacturer only.
- The power supply of the device shall meet the requirements of the input voltage of the device.
- Before plugging or unplugging any cable, shut down the device and disconnect it from the power supply.
- While plugging or unplugging any cable, make sure that your hands are completely dry.
- Do not tread on, pull or over-bend any cable. Otherwise, the cable may be damaged, leading to malfunction of the device.
- Do not use an old or a damaged power cable.
- During lightning weather, stop using the device and disconnect it from the power supply. Unplug the power plug and the ADSL twisted pair, to avoid lightning strike.
- If the device is not used for a long time, disconnect it from the power supply and unplug the power plug.
- In any of the following cases, stop using the device, disconnect it from the power supply and unplug the power plug immediately: there is smoke emitted from the device, or there is some abnormal noise or smell. Contact the specified maintenance center for repair.
- Avoid any object (such as metal shavings) from entering the device from the heat dissipation intakes.
- Do not scratch or abrade the shell of the device. This may lead to malfunctions of the device. The shed painting material may also lead to skin allergy.



Cleaning Requirements:

- Before cleaning the device, stop using it and disconnect it from the power supply.
- Use a piece of soft cloth to clean the device.
- Keep the power plug clean and dry. Using a dirty or wet power plug may lead to electric shock or other perils.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

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



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Table of Contents

Chapter 1 Introduction	1
1.1 Functions and Features.....	1
1.2 Appearance	1
1.2.1 Front Panel	2
1.2.2 Rear Panel.....	4
Chapter 2 Installation of the MT880	6
2.1 Preparation.....	6
2.2 Connecting the MT880.....	6
2.3 Setting Up the Configuration Environment.....	8
2.3.1 Planning the Parameters	8
2.3.2 Operation	9
2.4 Web Setup Page	10
Chapter 3 Service Configuration.....	12
3.1 Configuration Method	12
3.1.1 Protocol Model.....	12
3.1.2 Steps.....	13
3.2 Service Modes of the MT880	14
3.3 Configuring the Pure Bridge Mode.....	16
3.3.1 Preparation	16
3.3.2 Steps.....	17
3.4 Configuring the PPPoE Mode	18
3.4.1 Preparation	19
3.4.2 Steps.....	20

3.5 Configuring the PPPoA Mode	22
3.6 Configuring the RFC2684B Mode	22
3.6.1 Preparation	23
3.6.2 Steps.....	23
3.7 Configuring the RFC2684(IPoA) Mode	26
Chapter 4 Other Configurations	27
4.1 Changing the LAN IP Address	27
4.2 Changing the Administrator Password.....	28
4.3 Restoring the Default Settings	28
4.4 Firmware Upgrade.....	29
Chapter 5 Troubleshooting	30
5.1 Fixing Common Problems	30
5.2 FAQs	31
Chapter 6 Technical Specifications	33
Chapter 7 Appendix	35
7.1 Default Settings	35
7.1.1 Common Default Parameters	35
7.1.2 Default PVC Parameters	35
7.2 Acronyms and Abbreviations	37

Chapter 1 Introduction

This chapter describes the functions and the appearance of the SmartAX MT880 ADSL Router (hereinafter referred to as the MT880).

1.1 Functions and Features

The MT880 is a type of Asymmetric Digital Subscriber Line (ADSL) terminal. Using the MT880 and a telephone line, you can enjoy data, video and audio services at a high speed.

The features of the MT880 are:

- High transmission rate: The maximum downlink transmission rate is 24 Mbit/s. The maximum uplink transmission rate is 1.2 Mbit/s.
- Strong network adaptability: The MT880 can interconnect with multiple Digital Subscriber Line Access Multiplexers (DSLAMs).
- Strong maintainability: The MT880 provides a number of indicators, helping you to locate failures.
- Easy operation: The MT880 provides user-friendly interfaces for configuration and management.

1.2 Appearance

This section describes the appearance of the MT880.

1.2.1 Front Panel

Figure 1-1 shows the front panel of the MT880.

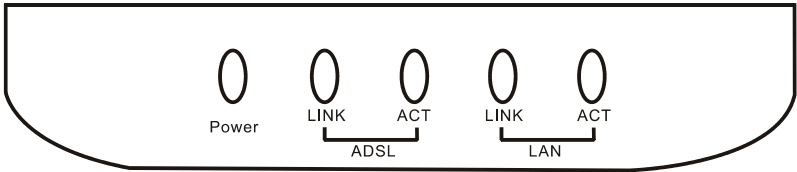


Figure 1-1 Front panel of the MT880

Note:

The figure of the front panel is only for your reference.

Table 1-1 describes the indicators on the front panel.

Table 1-1 Indicators on the front panel

Indicator	Status	Description
Power	Steady green light	The MT880 is powered on.
	Off	The MT880 is powered off.

Indicator	Status	Description
ADSL LINK	Blinking green light	The MT880 is being activated.
	On	The MT880 is activated.
	Blinking orange light	The built-in PPP dial-up software is dialing.
	Steady orange light	The built-in PPP dial-up software completes dialing successfully.
	Off	The telephone line is not connected or the MT880 is preparing for the next activation.
ADSL ACT	Blinking green light	Data is being transmitted over the ADSL interface.
	Off	No data is transmitted over the ADSL interface.
LAN LINK	Steady green light	The Ethernet interface is normally connected and the data is transmitted at 10 Mbit/s.
	Steady orange light	The Ethernet interface is normally connected and the data is transmitted at 100 Mbit/s.
	Off	The Ethernet interface is not connected with the network cable.
LAN ACT	Blinking green light	There is traffic over the Ethernet interface.
	Off	No data is transmitted through the Ethernet interface.

Note:

If the MT880 fails to activate, it tries again after one minute. The ADSL LINK indicator is off during this period.

1.2.2 Rear Panel

Figure 1-2 shows the rear panel of the MT880.

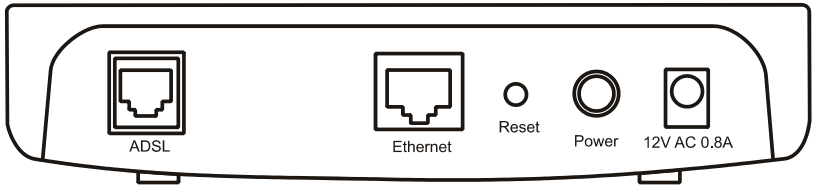


Figure 1-2 Rear panel of the MT880

Note:

The figure of the rear panel is only for your reference.

Table 1-2 describes the interfaces and buttons on the rear panel.

Table 1-2 Interfaces and buttons on the rear panel

Interface/Button	Description
ADSL	It connects with the Modem interface of a splitter.
Ethernet	It connects with a computer or a switch.
Reset	It restores the default settings of the MT880. Once you press this button, all your customized settings will be lost. Be cautious with this operation.
Power	It powers on or off the MT880.
12V AC 0.8A	It connects with the power adapter.

Chapter 2 Installation of the MT880

This chapter introduces the installation of the MT880.

2.1 Preparation

Before installing the MT880, prepare the following components:

- Ethernet card: The MT880 communicates with a computer through an Ethernet card. Make sure that an Ethernet card is installed on the computer before connecting the MT880 with the computer.
- Splitter (optional): A splitter can separate the data signals from the voice signals being transmitted over a telephone line. Only with this component can you make a telephone call and access the Internet at the same time.

2.2 Connecting the MT880

You can connect the MT880 according to Figure 2-1.

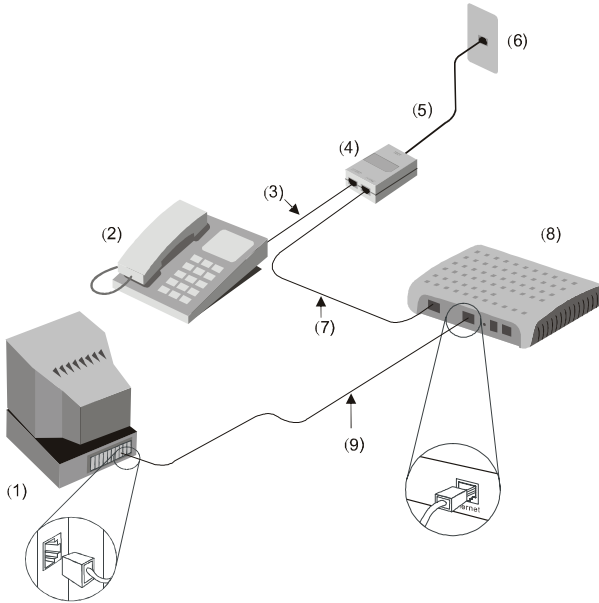


Figure 2-1 Connecting the MT880

- | | | |
|--------------------------|--------------------------|--------------------------|
| (1) PC | (2) Phone | (3) RJ-11 telephone line |
| (4) Splitter | (5) RJ-11 telephone line | (6) Phone jack |
| (7) RJ-11 telephone line | (8) MT880 | (9) RJ-45 Ethernet cable |

⚠ Caution:

Before connecting the MT880, power off the MT880 and the computer.

Operation:

- 1) Connect the interfaces of the splitter with other devices by using a telephone line:
 - LINE interface --> telephone jack on the wall
 - MODEM interface --> ADSL interface of the MT880
 - PHONE interface --> telephone
- 2) Connect the Ethernet interface of the MT880 with the Ethernet interface of the computer by using a straight through cable.
- 3) Connect the MT880 to a power socket by using the provided power adapter.
- 4) Press the **Power** button of the MT880 to power on the MT880.
- 5) Check the Power indicator on the front panel of the MT880. If it is on, the MT880 is powered on.

2.3 Setting Up the Configuration Environment

You can configure the MT880 through the Web setup page. This chapter describes how to set up the configuration environment of the MT880.

2.3.1 Planning the Parameters

Before setting up the configuration environment, plan the following parameters.

Table 2-1 Parameters for the configuration environment

Item	Description
Username and password of the administrator of the MT880	Default: <ul style="list-style-type: none">• Username: admin• Password: admin
LAN IP address and subnet mask of the MT880	Default: <ul style="list-style-type: none">• IP address: 192.168.1.1• Subnet mask: 255.255.255.0
IP address and subnet mask of the computer	Make sure that the IP address of the computer is in the same network segment as the LAN IP address of the MT880. For example: <ul style="list-style-type: none">• IP address: 192.168.1.100• Subnet mask: 255.255.255.0

2.3.2 Operation

Follow these steps to set up the configuration environment.

Step	To...	Do...
1	Connect the MT880	For details, see section 2.2 "Connecting the MT880."

Step	To...	Do...
2	Check and ensure that the proxy server is not used	Taking Internet Explorer 6.0 as an example: 1) Launch the Internet Explorer. 2) Choose Tools > Internet Options... to display the Internet Options dialog box. 3) Choose the Connections tab and click LAN Settings... 4) Deselect the Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections) checkbox.
3	Log in to the Web setup page	1) In the address bar of the Internet Explorer, enter http://192.168.1.1 (the default IP address of the MT880). 2) Press Enter to display the login page. 3) Enter the username and the password of the administrator. Then you can access the Web setup page.

 **Note:**

The computer must be set according to the parameters of the MT880. For details, see Chapter 3 "Service Configuration."

2.4 Web Setup Page

The Web setup page of the MT880 can be divided into two parts:

- The navigation tree: On the left of the page, it allows you to access different setup pages.
- Configuration area: On the right of the page, it displays the configuration data.

Chapter 3 Service Configuration

This chapter introduces how to configure the MT880.

Note:

The figures in the following configuration operations are only for your reference.

3.1 Configuration Method

3.1.1 Protocol Model

Figure 3-1 shows the protocol model for the connection between the MT880 and the DSLAM at the office end.

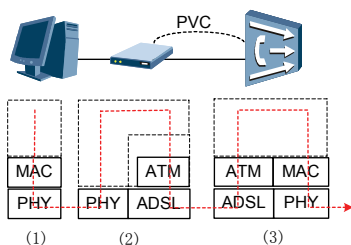


Figure 3-1 Protocol model

(1) PC

(2) MT880

(3) DSLAM

The data between the MT880 and the DSLAM are transmitted in the Asynchronous Transfer Mode (ATM). To configure the MT880 for different services, you need to configure the Permanent Virtual Channel (PVC) and other parameters.

3.1.2 Steps

The steps to configure the service modes are as follows.

Step	To...	Do...
1	Establish the configuration environment	See section 2.3 "Setting Up the Configuration Environment."
2	Configure the MT880	<ol style="list-style-type: none">1) Choose the PVC to be configured.2) Choose the service mode of the PVC and configure the parameters of the PVC.3) Configure other options, such as the DHCP function.4) Save the configuration and reboot the MT880.
3	Configure your computer	Configure the parameters of the Ethernet card on your computer according to the service mode of the MT880. Alternatively, install the dial-up software in the computer.
Note: <i>DHCP = Dynamic Host Configuration Protocol</i>		

3.2 Service Modes of the MT880

The MT880 supports multiple service modes. To choose a proper service mode, you need to take the DSLAM settings into consideration. Table 3-1 lists the available service modes.

Table 3-1 Service modes of the MT880

Service Mode	Working Method	Configuration
Bridge	<ul style="list-style-type: none">• Take the MT880 as bridge equipment.• Use the PPP dial-up software of the computer to dial a number.	Refer to 3.3 "Configuring the Pure Bridge Mode".
PPPoE	<ul style="list-style-type: none">• Take the MT880 as a router.• Use the built-in PPP dial-up software of the MT880 to dial a number.• Use the PPPoE encapsulation mode to encapsulate the packets.	Refer to 3.4 "Configuring the PPPoE Mode".
PPPoA	<ul style="list-style-type: none">• Take the MT880 as a router.• Use the PPP dial-up software of the MT880 to dial a number.• Use the PPPoA encapsulation mode to encapsulate the packets.	Refer to 3.5 "Configuring the PPPoA Mode".

Service Mode	Working Method	Configuration
RFC2684B	<ul style="list-style-type: none"> • Take the MT880 as a router. • The MT880 obtains an IP address from DHCP server or uses the static public IP to access the Internet. • Use the RFC2684B encapsulation mode to encapsulate the packets. 	Refer to 3.6 "Configuring the RFC2684B Mode".
RFC2684(IPoA)	<ul style="list-style-type: none"> • Take the MT880 as a router. • The MT880 uses the static public IP address to access the Internet. • Use the IPoA encapsulation mode to encapsulate the packets. 	Refer to 3.7 "Configuring the RFC2684(IPoA) Mode".
<p>Note: <i>ISP = Internet Service Provider</i> <i>PPPoE = PPP over Ethernet</i> <i>PPPoA = PPP over ATM</i> <i>IPoA = Internet Protocol over ATM</i></p>		



Caution:

Some settings are validated only after the MT880 is rebooted. Follow the instructions in the configuration page.

3.3 Configuring the Pure Bridge Mode

In the pure bridge mode, the MT880 functions as a bridge. You need to install the PPP dial-up software in your computer to access the Internet.

This section describes how to configure the MT880 to work in the pure bridge mode. It also describes how to configure your computer to access the network through the MT880.

3.3.1 Preparation

Table 3-2 lists the configuration items.

Table 3-2 Configuration items for the pure bridge mode

Item	Configuration
PVC Mode	Bridge
Active	Yes
VPI/VCI	Provided by the ISP
Encapsulation	RFC2684
PPP dial-up software	Install the PPP dial-up software to your computer to access the Internet (The Windows XP operation system is provided with the PPP dial-up software)
Username and password for the PPPoE dial-up	Provided by the ISP

3.3.2 Steps

You need to configure the MT880 and your computer in turn.

I. Configuring the MT880

The steps are as follows:

- 1) Log in to the Web setup page of the MT880. For details, see section 2.3 "Setting Up the Configuration Environment."
- 2) Choose **Basic > WAN Setting** in the navigation tree to display the WAN configuration page.
- 3) Select the PVC, which needs configuring, from the **PVC** drop-down menu of the WAN configuration page.
- 4) Select **Bridge** from the **Mode** drop-down menu. Set the **Active** to **Yes**. Configure relevant parameters in Figure 3-2 according to the values in the Table 3-2.
- 5) Click **Submit**.
- 6) Select **Tools > Reboot** in the navigation tree.
- 7) Select **Current Settings** in the **Reboot** page. Click **Restart** to save the configuration.

PVC	0
VPI	0
VCI	35
Active	Yes
Mode	Bridge
Encapsulation	RFC2684
Multiplex	LLC
<input type="button" value="Submit"/> <input type="button" value="Delete"/>	

Figure 3-2 Configuring the pure bridge mode

II. Configuring Your Computer

After configuring the MT880, install the PPP dial-up software in your computer to access the network.

The Windows XP (Professional) operating system has built-in PPPoE dial-up software. Take the Windows XP system as an example, the steps to set up a PPP dial-up connection are as follows:

- 1) Choose **Start > All Programs > Accessories > Communications > Network Connections**.
- 2) Click **Create a new connection** in the displayed page.
- 3) Click **Next** in the **New Connection Wizard** dialog box.
- 4) Choose **Connect to the Internet** and click **Next**.
- 5) Choose **Set up my connection manually** and click **Next**.
- 6) Choose **Connect using a broadband connection that requires a username and password** and click **Next**.
- 7) Enter the name of the connection you are creating. Then click **Next**.
- 8) Choose **Anyone's use** or **My use only** and click **Next**.
- 9) Enter the username and password. Then click **Next**.
- 10) Click **Finish**.

3.4 Configuring the PPPoE Mode

In the PPPoE mode, the MT880 uses the built-in PPP dial-up software for dialing. The MT880 functions as a router to connect your computer to the network.

This chapter describes how to configure the MT880 to work in the PPPoE mode. It also describes how to configure your computer to access the network through the MT880.

3.4.1 Preparation

Table 3-3 lists the configuration items.

Table 3-3 Configuration items for the PPPoE mode

Item	Configuration
PVC mode	Routing
Active	Yes
Default route	Enable
NAT	Enable
VPI/VCI	Provided by the ISP
Encapsulation	PPPoE
Username and password for the PPPoE dial-up	Provided by the ISP
Service Name	Specified by users
RIP	Disabled
DHCP mode of the MT880	Enable the DHCP server

 **Note:**

After the DHCP server is enabled, the MT880 can assign a private IP address to the computer.

3.4.2 Steps

I. Configuring the MT880

The steps are as follows:

- 1) Log in to the Web setup page. For details, see section 2.3 "Setting Up the Configuration Environment."
- 2) Choose **Basic > WAN Setting** in the navigation tree to display the WAN configuration page.
- 3) Choose the PVC to be configured and click the editing icon.
- 4) Select **Routing** in the PVC **Mode** field.
- 5) Select **PPPoE** from the **Encapsulation** drop-down menu. Set the **Active** to **Yes**. Configure relevant parameters in Figure 3-3 according to the values in the Table 3-3.

PVC	0	
VPI	0	
VCI	35	
Active	Yes	
Mode	Routing	
Encapsulation	PPPoE	
Multiplex	LLC	
Login Information		
Service Name		
Username		
Password		
IP Address		
Default Route	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
NAT	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
<input checked="" type="radio"/> Obtain an IP Address Automatically	<input type="radio"/> Static IP Address	
IP Address	0.0.0.0	
Subnet Mask	0.0.0.0	
Gateway	0.0.0.0	
Connection		
<input type="radio"/> Connect on Demand: Max Idle Timeout	0	Minutes
<input checked="" type="radio"/> Nailed-Up Connection		
<input type="radio"/> Connect Manually		
TCP MSS Option		
TCP MSS(0 means use default)	1400	bytes
MTU Option		
MTU(0 means use default)	0	bytes
RIP		
RIP	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
RIP Version	RIP-1	
RIP Direction	BOTH	
<input type="button" value="Submit"/> <input type="button" value="Delete"/>		

Figure 3-3 Configuring the PPPoE mode

- 6) Click **Submit**.
- 7) Choose **Basic > DHCP** in the navigation tree to display the **DHCP configuration** page.
- 8) Choose **DHCP Server** and click **Submit**.
- 9) Choose **Tools > Reboot** in the navigation tree.
- 10) Select **Current Settings** in the **Reboot** page. Click **Restart** to save the configuration.

II. Configuring Your Computer

Configure the Ethernet card on your computer, so that your computer can automatically obtain such information as the IP address, gateway and Domain Name Server (DNS).

3.5 Configuring the PPPoA Mode

In the PPPoA mode, the MT880 uses the built-in PPP dial-up software for dialing.

It is similar to configure the PPPoA mode as to configure the PPPoE mode. The differences are: if configure the PPPoA, select **PPPoA** from the **Encapsulation** drop-down menu; if configure the PPPoE, select **PPPoE** from the **Encapsulation** drop-down menu. For details, refer to 3.4 "Configuring the PPPoE Mode".

3.6 Configuring the RFC2684B Mode

This section mainly introduces how to configure the MT880 in the RFC2684B mode and how to configure your computer to access the network through the MT880.

3.6.1 Preparation

Table 3-4 shows the configuration preparation.

Table 3-4 Configuration for the RFC2684B mode

Name	Configuration
PVC mode	Routing
Active	Yes
Default route	Enable
NAT	Enable
VPI/VCI	Provided by the ISP
Encapsulation	RFC2684B
IP address/subnet mask	IP address and subnet mask for the MT880 to access the network are provided by the ISP
IP address of the gateway	IP address of the gateway for the MT880 to access the network is provided by the ISP
RIP	Disabled
DHCP mode of the MT880	Enable the DHCP server

3.6.2 Steps

I. Configuring the MT880

The steps are as follows:

- 1) Log in to the Web setup page. For details, see section 2.3 "Setting Up the Configuration Environment."
- 2) Choose **Basic > WAN Setting** in the navigation tree to display the WAN configuration page.
- 3) Choose the PVC to be configured and click the editing icon.
- 4) Select **Routing** in the PVC **Mode** field.
- 5) Select **RFC2684B** from the **Encapsulation** drop-down menu. Set the **Active** to **Yes**. Configure relevant parameters in Figure 3-4 according to the values in the Table 3-4.

PVC	0	
VPI	0	
VCI	35	
Active	Yes	
Mode	Routing	
Encapsulation	RFC2684B	
Multiplex	LLC	
IP Address		
Default Route	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
NAT	<input checked="" type="radio"/> Enable	<input type="radio"/> Disable
<input checked="" type="radio"/> Obtain an IP Address Automatically	<input type="radio"/> Static IP Address	
IP Address	0.0.0.0	
Subnet Mask	0.0.0.0	
Gateway	0.0.0.0	
MTU Option		
MTU(0 means use default)	0 bytes	
RIP		
RIP	<input type="radio"/> Enable	<input checked="" type="radio"/> Disable
RIP Version	RIP-1	
RIP Direction	BOTH	
<input type="button" value="Submit"/> <input type="button" value="Delete"/>		

Figure 3-4 Configuring the RFC2684B mode

- 6) Click **Submit**.
- 7) Choose **Basic > DHCP** in the navigation tree to display the DHCP configuration page.
- 8) Choose **DHCP Server** in the DHCP configuration page. Click **Submit**.
- 9) Select **Tools > Reboot** in the navigation tree.

- 10) Select **Current Settings** in the **Reboot** page. Click **Submit** to save the configuration.

II. Configuring Your Computer

Configure the Ethernet card on your computer, so that your computer can automatically obtain such information as the IP address, gateway and DNS.

3.7 Configuring the RFC2684(IPoA) Mode

It is similar to configure the RFC2684(IPoA) mode as to configure the RFC2684B mode. The differences are: if configure the RFC2684(IPoA) mode, select **RFC2684(IPoA)** from the **Mode** drop-down menu; if configure the **RFC2684B** mode, select **RFC2684B** from the **Encapsulation** drop-down menu. For details, refer to 3.6 "Configuring the RFC2684B Mode".

Chapter 4 Other Configurations

4.1 Changing the LAN IP Address

You can access the Web setup page of the MT880 through the LAN IP address of the MT880. The MT880 has a default LAN IP address. To change it, follow the steps described below:

- 1) Log in to the **Web setup page** of the MT880.
For details, see section 2.3 "Setting Up the Configuration Environment."
- 2) Choose **Basic > LAN Setting** in the navigation tree to display the **LAN configuration** page.
- 3) Enter the IP address and the subnet mask. Click **Submit**.
- 4) Confirm the operation according to the prompt in the page.

 **Note:**

- You need to log in again to use the Web setup page after configuring the LAN IP address of the MT880.
 - Ensure that the IP address of the computer and the IP address of the MT880 are in the same segment.
-

4.2 Changing the Administrator Password

The Web manager of the MT880 provides the password protection function to prevent illegal users from changing the configuration of the MT880. The username and the password of the MT880 administrator can be changed as follows:

- 1) Log in to the Web setup page of the MT880. For details, see section 2.3 "Setting Up the Configuration Environment."
- 2) Choose **Tools > System Management** in the navigation tree to display the system management page.
- 3) Find the username in the system management page. Click the editing icon to display the password configuration page.
- 4) Enter the new password in the password configuration page. Click **Submit**.

4.3 Restoring the Default Settings



Caution:

When you restore the default settings, the customized data may be lost.

There are two methods to restore default settings:

I. Using the Reset Button

The steps are as follows:

- 1) Find the **Reset** button on the rear panel of the MT880.
- 2) Use a pin to press the **Reset** button and then release it.

II. Using the Web Manager

The steps are as follows:

- 1) Choose **Tools > Reboot** in the navigation tree to display the **Reboot** page.
- 2) Choose **Factory Default Settings**.
- 3) Click **Restart**.

4.4 Firmware Upgrade

Select **Tools > Firmware Upgrade** in the navigation tree. Input the correct path of the upgrade file and then click **Upload**. It may take a few minutes to finish the upgrade.

Note:

Please do not power off the device during the upgrade. The process will complete in a few minutes.

Chapter 5 Troubleshooting

5.1 Fixing Common Problems

Problem	Solution
The Power indicator is not on	<ul style="list-style-type: none">• Ensure that the power adapter matches the MT880.• Ensure that the MT880 is connected to the power supply properly.• Ensure that the Power button is pressed.
The ADSL LINK indicator is not on	<ul style="list-style-type: none">• Ensure that the ADSL line is connected properly.• Ensure that the telephone line works normally. Run the check by using a telephone.• Ensure that there is no capacitor or diode in the connection box.
The LAN indicator is not on	<ul style="list-style-type: none">• Ensure that only the network cable provided with the MT880 is used.• Ensure that the cables are connected properly.• Ensure that the Ethernet card indicator of your computer is on.• Ensure that the Ethernet card works normally. Check as follows: Right-click My Computer to choose Properties. Choose Hardware > Device Manager. Check whether there is any device marked with ? or ! under Network Adapters. If yes, delete and re-install it. Alternatively, re-insert the Ethernet card into a different slot. If the problem persists, change the Ethernet

Problem	Solution
	card. Note: <i>"Network adapter" refers to a network interface card. In this context, it is the Ethernet card of your computer.</i>
The Internet cannot be accessed	<ul style="list-style-type: none"> • Ensure that all the previous problems are addressed. • Ensure that the PVC parameters provided by the ISP are not changed. Otherwise, restore the default settings. • Ensure that the dial-up software is correctly installed and properly set in your computer. • Ensure that you have entered the right username and password. • If you still cannot access the Internet after dial-up, check whether the proxy server on your IE is correctly configured. The proxy server must be disabled. • Try different Web sites, in case some Web site fails. • Stop the dialing connection and retry after 5 minutes.

5.2 FAQs

I. Why does the ADSL connection break so often?

Many possible factors may cause this problem, such as faults in your ISP's access server, line disconnection and line disturbance. You can check as follows:

- 1) Make sure that the ADSL line is connected properly.

- 2) Keep the MT880 away from appliances with strong electric fields or magnetic fields, such as a microwave oven and a refrigerator.
- 3) Make sure that no telephone or fax machine is connected directly to the ADSL line.
- 4) Replace the Ethernet card using the Industry Standard Architecture (ISA) bus with a 10/100M Ethernet card using the Peripheral Component Interconnect (PCI) bus. Install the latest driver.
- 5) Find help on <http://www.huawei.com>.

II. What should I do if the username and the password of the Web setup page are forgotten?

If you forget the username and the password of the Web setup page, restore the default settings of the MT880. Then use the default username and password to access the Web manager.

For restoring the default settings, see section 4.3 "Restoring the Default Settings." For the default username and password of the MT880, see section 7.1 "Default Settings."

Chapter 6 Technical Specifications

Main Technical Specifications		
Standard	ADSL standard	ITU G.992.1 (G.dmt) Annex A ITU G.994.1 (G.hs) ANSI T1.413 Issue 2
	ADSL2 standard	ITU G.992.3 (G.dmt.bis) Annex A
	ADSL2+ standard	ITU G.992.5 Annex A
Data transfer rate	G.dmt T1.413	<ul style="list-style-type: none"> • The maximum downlink rate is 8 Mbit/s • The maximum uplink rate is 896 kbit/s
	G.992.5 (ADSL2+)	<ul style="list-style-type: none"> • The maximum downlink rate is 24 Mbit/s • The maximum uplink rate is 1.2 Mbit/s

Physical Features and Environment Requirements	
Power consumption	< 5 W
Power adapter output	12 V AC 0.8 A
Temperature of the working environment	0°C–40°C (32°F–104°F)
Humidity of the working environment	5%–95% (non-condensing)
Dimensions (L × W × H)	136 mm × 113 mm × 34 mm
Weight	< 210 g

Chapter 7 Appendix

7.1 Default Settings

7.1.1 Common Default Parameters

Item	Default Value
Username of administrator	admin
Password of administrator	admin
IP address	192.168.1.1
Subnet mask	255.255.255.0
DHCP mode	Server
NAT	Disabled

7.1.2 Default PVC Parameters

Sequence No.	Mode	VPI	VCI
0	Bridge	0	35
1	Bridge	8	35
2	Bridge	0	32
3	Bridge	8	32
4	Bridge	8	81

Sequence No.	Mode	VPI	VCI
5	Bridge	0	100
6	Bridge	1	39
7	Bridge	0	16

7.2 Acronyms and Abbreviations

A

ADSL Asymmetric Digital Subscriber Line

ATM Asynchronous Transfer Mode

D

DHCP Dynamic Host Configuration Protocol

DNS Domain Name Server

DSLAM Digital Subscriber Line Access Multiplex

I

IP Internet Protocol

IPoA Internet Protocol over ATM

ISA Industry Standard Architecture

ISP Internet Service Provider

L

LAN Local Area Network

P

PC Personal Computer

PCI	Peripheral Component Interconnect
PPP	Point-to-Point Protocol
PPPoA	PPP over ATM
PPPoE	PPP over Ethernet
PVC	Permanent Virtual Channel

V

VCI	Virtual Channel Identifier
VPI	Virtual Path Identifier

W

WAN	Wide Area Network
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