



SmartAX MT882 ADSL Router

User Manual

HUAWEI TECHNOLOGIES CO., LTD.



SmartAX MT882 ADSL Router User Manual

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This product has been designed to comply with the requirements on environmental protection. For the proper storage, use and disposal of this product, national laws and regulations must be observed.

Safety Precautions



Basic Requirements:

- Read this manual carefully before installing and using the equipment.
- Take waterproof measures during storage, transportation and operation of the equipment.
- Avoid collision during storage, transportation and operation of the equipment.
- Without prior written consent from Huawei, no company or individual is allowed to decompile, disassemble, modify or reverse engineer the equipment and shall be solely responsible for any effect resulted from such action.



Environmental Requirements:

- Place the equipment in a well-ventilated place. Avoid direct irradiation of any strong light (such as sunlight).
- Keep the equipment clean.
- Place the equipment on a flat and stable platform which is beyond the reach of children.
- Do not put heavy objects on the equipment.
- Leave at least 10 cm space around the equipment for heat dissipation. Do not cover the equipment with any object or block the ventilation holes of the equipment.
- Keep the equipment away from appliances with a strong electric field or magnetic field, such as a microwave oven and a refrigerator.



Usage:

- Use only the power adapter provided with the equipment.
- The power supply shall meet the equipment specifications.
- Before plugging or unplugging the cables, turn off the equipment and unplug the power supply.
- In a lightning storm, turn off the equipment and unplug the power supply, to avoid lightning strike.
- Unplug the power supply if the equipment is not used for a long time.

- In case of long-time operation, temperature of the equipment shell will go up. This is a normal phenomenon.



Cleaning:

- Before cleaning the equipment, turn off the equipment and unplug the power supply.
- Clean the equipment shell with a piece of soft cloth.
- It is forbidden to spray liquid onto the equipment, to avoid damage to the internal circuit.
- Keep the power socket clean and dry, to avoid electric shock or other dangers.

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Chapter 1 Introduction

This chapter introduces functions and structure of the SmartAX MT882 ADSL terminal (hereinafter referred to as the MT882).

1.1 Functions and Features

The MT882 is a kind of Asymmetric Digital Subscriber Line (ADSL) terminal. Through the MT882, data, video and audio are transmitted at high rate in the common telephone line. The features of the MT882 are shown as follows:

- High rate. The maximum downstream transfer rate is 24 Mbit/s; the maximum upstream transfer rate is 1.2 Mbit/s.
- Strong network adaptability. The MT882 can interconnect with multiple Digital Subscriber Line Access Multiplexes (DSLAMs)
- Strong maintainability. The MT882 provides multiple indicator status, which is convenient to locate failures.
- Simple operation of the configuration and management page.

1.2 Hardware Configuration

This section mainly introduces the appearance and structure of the MT882.

 Note:

Figures of the front panel and the rear panel are only for your reference.

1.2.1 Front Panel

Figure 1-1 shows the front panel of the MT882.

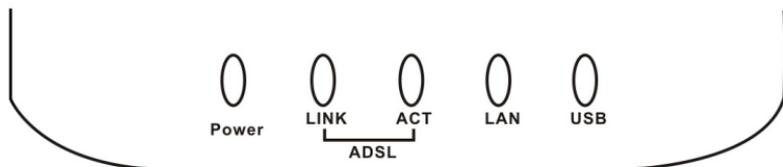


Figure 1-1 Front panel of the MT882

Table 1-1 shows descriptions of indicators of the MT882 in the front panel.

Table 1-1 Indicator descriptions

Indicator	Color	Status	Description
Power	Green	On	The MT882 is powered on.
	Green	Off	The MT882 is powered off.
ADSL LINK	Green	Blinking	The MT882 is being activated.
	Green	On	The MT882 is activated.
	Orange	Blinking	The built-in PPP dial-up software is dialing.
	Orange	On	The built-in PPP dial-up software succeeds in dialing.
	Orange/Green	Off	The telephone line is not connected or the next activation is being prepared.

Indicator	Color	Status	Description
ADSL ACT	Green	Blinking	There is traffic over the ADSL interface.
	Green	Off	No data is transmitted through the ADSL interface.
LAN	Orange/Green	On	The Ethernet interface is normally connected.
	Green	Blinking	There is traffic over the Ethernet interface and the data is transmitted at 10 Mbit/s.
	Orange	Blinking	There is traffic over the Ethernet interface and the data is transmitted at 100 Mbit/s.
	Orange/Green	Off	The Ethernet interface is not connected with the network cable.
USB	Green	On	The USB interface is normally connected.
	Green	Blinking	There is traffic over the USB interface.
	Green	Off	The USB interface is not connected with the network cable or there is no traffic over the USB interface.
<p>Note: <i>PPP = Point-to-Point Protocol</i></p>			

 **Note:**

If the MT882 fails to be activated, it tries again after an interval. In such an interval (about 1 minute), the ADSL LINK indicator is off.

1.2.2 Rear Panel

Figure 1-2 shows the rear panel of the MT882.

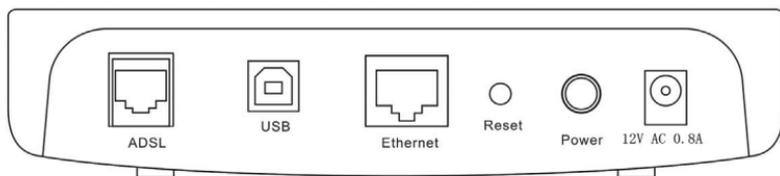


Figure 1-2 Rear panel of the MT882

Table 1-2 shows descriptions of interfaces and buttons of the MT882 in the rear panel.

Table 1-2 Descriptions of Interfaces and Buttons

Interface/Button	Description
ADSL	It is used to connect with the Modem interface of a splitter.
USB	It is used to connect with a computer.
Ethernet	It is used to connect with a computer or a switch.
Reset	It is used to restore the default settings of the MT882. Once you use this function, all your customized settings will be lost. Therefore, be careful with it.
Power	It is used to power on/off the MT882.
12V AC 0.8A	It is used to connect with the power adapter.

1.2.3 Splitter

The external splitter can efficiently reduce the signal disturbance on the telephone line. When voice and data are transmitted on the same telephone line at the same time, you need to use the external splitter to separate the voice and data signals:

- LINE: Connecting to the phone jack on the wall.

- PHONE: Connecting to the telephone.
- MODEM: Connecting to the ADSL interface of the MT882.

Chapter 2 Installation of the MT882

This chapter introduces the installation preparation before the MT882 is used at the first time.

2.1 Preparation

Connect your computer and the MT882 through the Ethernet interfaces. Before installing the MT882, make sure your computer is installed with the Ethernet card.

2.2 Connecting the MT882

Figure 2-1 shows the connection of the the MT882.

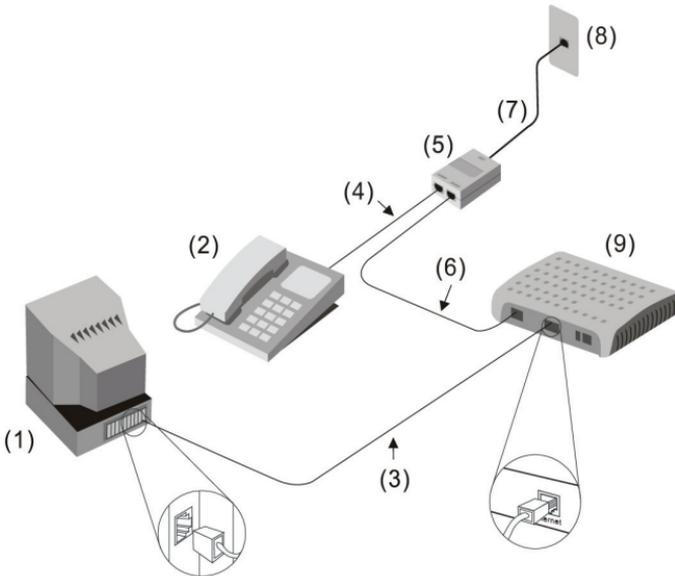


Figure 2-1 Connection of the MT882

- | | | |
|--------------------------|----------------|--------------------------|
| (1) PC | (2) Phone | (3) RJ-45 Ethernet cable |
| (4) RJ-11 telephone line | (5) Splitter | (6) RJ-11 telephone line |
| (7) RJ-11 telephone line | (8) Phone jack | (9) MT882 |

Connect the MT882 as follows:



Caution:

Before connecting the MT882, power off the MT882 and your computer.

- (1) Connect the interfaces of the splitter with the corresponding equipment by using the telephone line.
 - Connect the LINE interface of the splitter with the telephone jack on the wall.
 - Connect the MODEM interface of the splitter with the ADSL interface of the MT882.
 - Connect the PHONE interface of the splitter with the interface of the telephone line of the telephone.
- (2) Connect the Ethernet interface of the MT882 with the Ethernet interface of the computer by using the straight-through network cable.
- (3) Plug the output end of the provided power adaptor into the power input interface of the MT882; plug the other end to the power socket.
- (4) Press the Power button of the MT882 in the rear panel to power on the MT882.
Check the Power indicator in the front panel of the MT882. If it is on, the MT882 is powered on.

2.3 Installing the USB Driver

You need to install the USB driver on your PC before using the USB connection. The installation process of the USB driver varies on different systems. The following provides instructions for three systems: Linux, MAC OS 9/10, and Windows.

2.3.1 Installing the USB Driver in Linux

To install the USB driver in a Linux system, do as follows.

- (1) Start **RedHat 8.0**, and select **install all**.
- (2) Log in as root.
- (3) Execute the following commands:

```
# cd /usr/src
```

```
[root@ys src]# pwd
/usr/src
[root@ys src]# ls -l
total 8
lrwxrwxrwx  1 root    root          15 Feb 28  2006 linux-2.4 -> linux-2.4.1
8-14
drwxr-xr-x  17 root    root        4096 Feb 28 12:15 linux-2.4.18-14
drwxr-xr-x   7 root    root        4096 Feb 28  2006 redhat
```

```
# ln -s linux-2.4.18-14 linux (it is Kernel 2.4.20-8 in RedHat
9.0)
```

```
[root@ys src]# ln -s linux-2.4.18-14 linux
[root@ys src]# ls -l
total 8
lrwxrwxrwx  1 root    root          15 Feb 28 14:58 linux -> linux-2.4.18-14
lrwxrwxrwx  1 root    root          15 Feb 28  2006 linux-2.4 -> linux-2.4.1
8-14
drwxr-xr-x  17 root    root        4096 Feb 28 12:15 linux-2.4.18-14
drwxr-xr-x   7 root    root        4096 Feb 28  2006 redhat
```

- (4) Copy the original codes to the /root/MT882 directory

```
[root@ys MT882]# pwd
/root/MT882
[root@ys MT882]# ls
inc  makefile  src
```

- (5) Execute the following commands:

```
# cd /root/MT882
```

```
# make clean
```

```
# make all

[root@ys MT8821]# pwd
/root/MT882
[root@ys MT8821]# make clean
rm -f ./src/CDCEther.o ./src/CDCEther.o *.o .depend ./VKGether
[root@ys MT8821]# make all
gcc -c -O2 -Wall -Wno-missing-braces -Wstrict-prototypes -fomit-frame-pointer -
fno-strict-aliasing -pipe -fno-strength-reduce -mcpu=i486 -falign-loops=2 -falign
n-jumps=2 -falign-functions=2 -I/usr/src/linux/include -I./inc -D__KERNEL__ -DM
ODULE -Dlinux -DDBG=0 -o src/CDCEther.o src/CDCEther.c
ld -r -o ./VKGether ./src/CDCEther.o
```

(6) Add alias eth1 VKGether to /etc/modules.conf.

```
# vi /etc/modules.conf

alias parport_lowlevel parport_pc
alias eth0 vmnic5
alias scsi_hostadapter BusLogic
alias sound es1371
post-install sound-slot-0 /bin/aumix-minimal -f /etc/.aumixrc -L >/dev/null 2>&1
!! :
pre-remove sound-slot-0 /bin/aumix-minimal -f /etc/.aumixrc -S >/dev/null 2>&1 !
! :
alias usb-controller usb-uhci
alias eth1 VKGether
```

(7) Add ifcfg-eth1 file to /etc/sysconfig/network-scripts.

```
#/etc/sysconfig/network-scripts/ifcfg-eth1
```

Set IP to 192.168.1.3

```
DEVICE=eth1
BOOTPROTO=static
BROADCAST=192.168.1.255
IPADDR=192.168.1.3
NETMASK=255.255.255.0
NETWORK=192.168.1.0
ONBOOT=yes
```

(8) Reboot Linux, and connect the USB cable to the ADSL modem.

(9) Execute the following commands to configure the USB Network Interface Card:

```
#cd /root/MT882

#insmod ./VKGether

[root@ys MT8821]# pwd
/root/MT882
[root@ys MT8821]# ls
VKGether  inc  makefile  src
[root@ys MT8821]# insmod ./VKGether

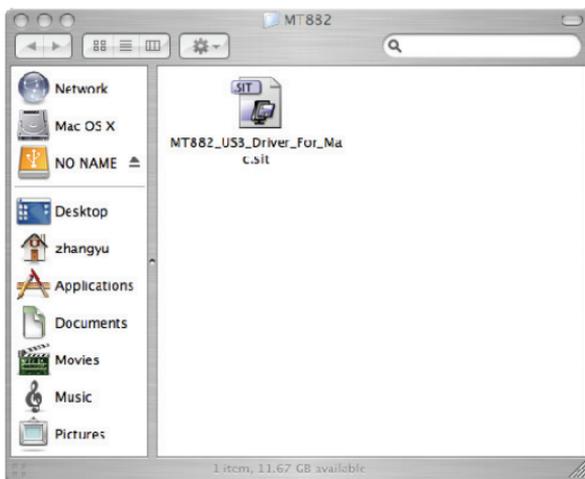
#ifconfig eth0 down

#ping 192.168.1.2
```

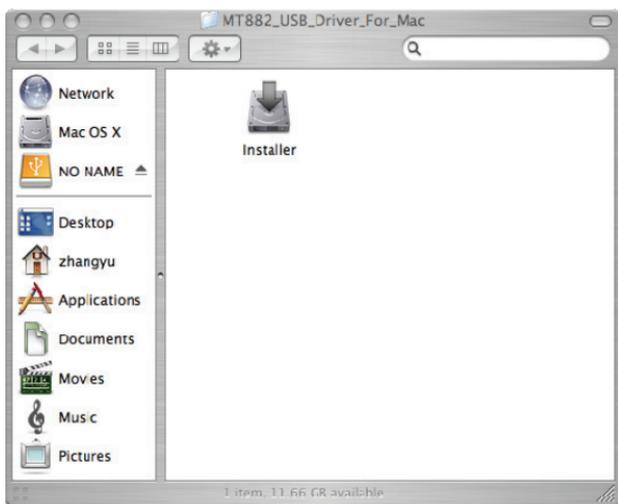
2.3.2 Installing the USB Driver in MAC OS X

To install the MT882 USB Driver on a MAC OS X system, do as follows.

- (1) Run the MAC USB driver from the CD-ROM provided with MT882, and decompress it.



- (2) Double-click the Installer to start the installation.



- (3) Click **Next** to display the **Authenticate** page.



- (4) Enter the name and password of the administrator, and click **OK**.



- (5) Read the information carefully and click **Accept**.



- (6) Select a destination folder to install and click **Next**.

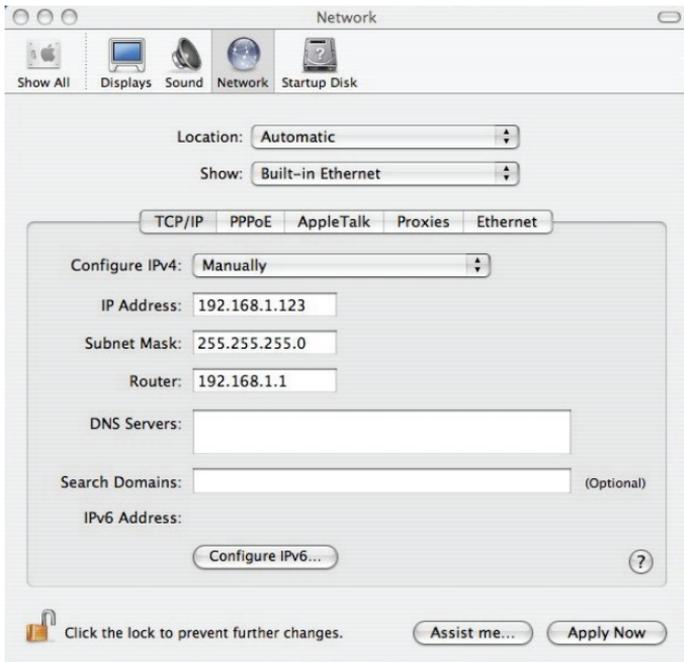


- (7) When the installation is complete, select **Restart now** and click **Finish** to restart your computer.



Then you need to configure the MAC network as follows:

- (8) On the menu bar, select **System Preferences > Network** to display the page as shown in the following figure.



- (9) Enter the **values** for these parameters and click **Apply Now**.
- (10) Launch your Web Browser and access <http://192.168.1.2> to display the **Login** page.

Server	192.168.1.2
Message	MT882
Username	admin
Password	••••••
	<input type="checkbox"/> Remember password
	Cancel OK

- (11) Enter the username and password, and click **OK** to log in to the Web GUI of MAC OS.

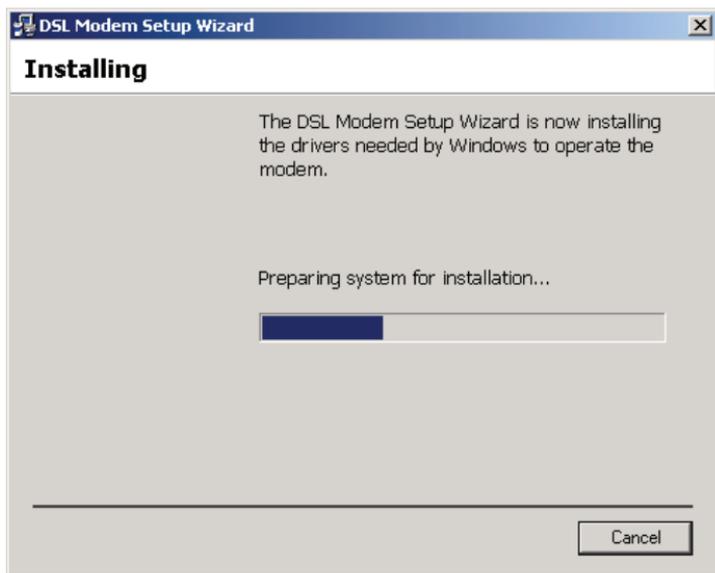
2.3.3 Installing the USB Driver in Windows XP/2K/ME/98SE

To install the USB driver on a Windows system, do as follows.

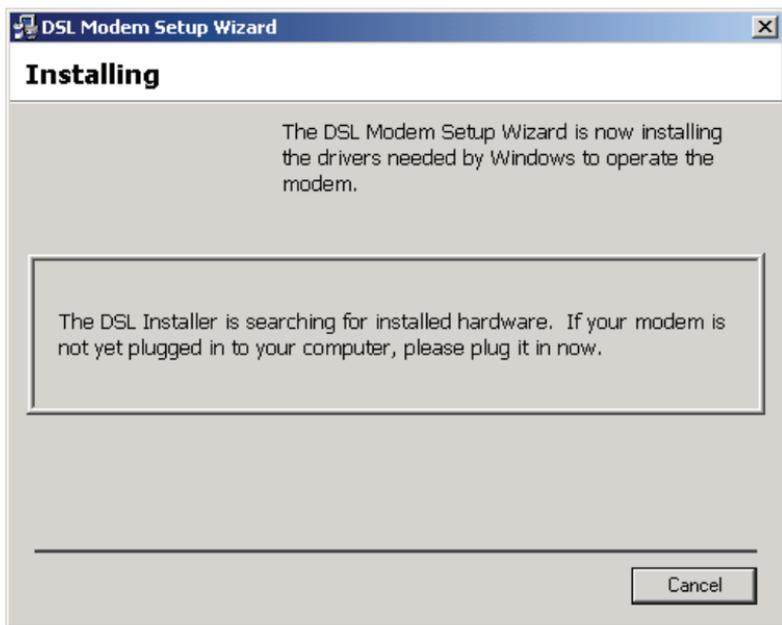
 **Note:**

Before installation, please do not connect the modem.

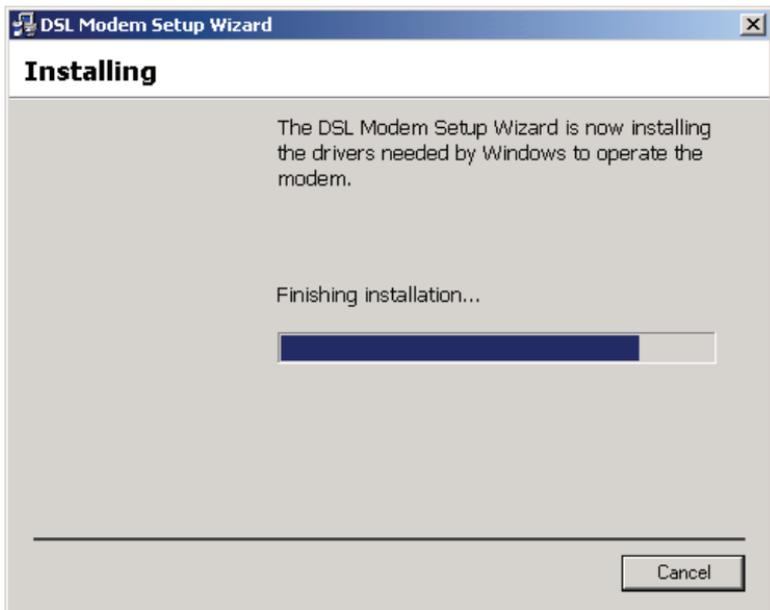
- (1) Double-click **Setup.exe** on the CD-ROM provided with MT882 to display the **Setup Wizard** window.



- (2) Connect the modem and power it on.
Then the Installer will search the USB device for installation.



- (3) The system will automatically finish the installation of Huawei USB ADSL modem.



2.4 Establishing Configuration Environment

You can configure the MT882 through the Web configuration page. This chapter introduces to you how to establish the configuration and management environment of the MT882.

2.4.1 Parameter Configuration

Before establishing the configuration environment, set the following parameters.

Table 2-1 Parameters for the configuration environment

Name	Description
Username and password of Administrator of the MT882	Default: <ul style="list-style-type: none"> ● Username: admin ● Password: admin
IP address and subnet mask of the LAN of the MT882	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	Set them to be in the same network segment as the IP address of the LAN of the MT882 For example: <ul style="list-style-type: none"> ● IP address: 192.168.1.100 ● Subnet mask: 255.255.255.0

2.4.2 Steps

Follow the steps to establish the configuration environment.

Step	To...	Do...
1	Connect the MT882	For the concrete method to connect the MT882, refer to 2.2 "Connecting the MT882".
2	Make sure to unselect Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections)	Do as follows to unselect this function by using the Internet Explorer 6.0 as an example. <ol style="list-style-type: none"> (1) Start the Internet Explorer. Select Tools > Internet Options... to display the Internet Options dialog box. (2) Select the Connections tab. Click LAN Settings... (3) Deselect Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).

Step	To...	Do...
3	Log in to the Web configuration page	(1) In the address bar of Internet Explorer, enter http://192.168.1.1 (the default IP address of the MT882). Then press Enter . The login window is displayed. (2) Enter the username and the password of the administrator in the login window. When the password authentication is passed, you can access the Web configuration page.

 Note:

After configuring the working parameters for the MT882, configure the computer (such as reset the IP address of the computer or install the dial-up software) according to the configuration status of the MT882. Then the computer can access the Internet through the MT882. For details, refer to Chapter 3 "Service Configuration".

2.5 Introduction to the Configuration Management Interface

The Web configuration page of the MT882 is divided to the following two parts:

- The navigation tree. It is in the left side of the page. If you click a link of it, you can enter the corresponding configuration and management interface.
- Configuration and management area. It is in the right side of the page.

Chapter 3 Service Configuration

This chapter introduces how to use the Web configuration page to configure the MT882.

 Note:

The pages in the introduction to the configuration operation are only for your reference.

3.1 Method

3.1.1 Protocol Model

Figure 3-1 shows the protocol model of the connection of the MT882 and the access equipment DSLAM in the office end.

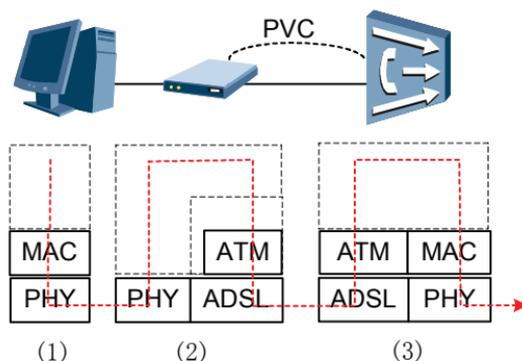


Figure 3-1 Protocol model

(1) PC

(2) MT882

(3) DSLAM

From the table, you can know that the transmission of the MT882 and the DSLAM is based on the Asynchronous Transfer Mode (ATM). To realize all kinds of service modes of the MT882, configure parameters of the MT882. For example, configure the Permanent Virtual Channel (PVC) parameter.

3.1.2 Steps

By configuring the working parameters of the MT882, different service modes can be realized.

Follow the steps to realize a service mode.

Step	To...	Do...
1	Establish the configuration environment	Refer to 2.4 "Establishing Configuration Environment".
2	Configure the MT882	(1) Select the PVC which needs configuring. (2) Select the service model of this PVC and configure the working parameters of the PVC. (3) Configure functions according to the requirement. For example, configure the DHCP function. (4) Save the configuration and reboot the MT882.
3	Configure your computer	Configure the working parameters of the computer NIC or install the dial-up software in the computer according to the service mode of the MT882.
Note: <i>NIC = Network Interface Card</i> <i>DHCP = Dynamic Host Configuration Protocol</i>		

3.2 Service Modes of the MT882

The MT882 supports multiple service modes. Select a service mode by considering the configuration of the DSLAM in the office end and referring to Table 3-1.

Table 3-1 the MT882 service model introduction

Service Mode	Working Method	Configuration
Pure bridge	<ul style="list-style-type: none">• Take the MT882 as pure bridge equipment.• Use the PPPoE 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 MT882 as a router.• Use the built-in PPPoE dial-up software of the MT882 to dial a number.• Use the PPPoE/PPPoA encapsulation mode to encapsulate the packets.	Refer to 3.4 "Configuring the PPPoE Mode".
PPPoA	<ul style="list-style-type: none">• Take the MT882 as a router.• Use the PPPoE dial-up software of the MT882 to dial a number.• Use the PPPoA encapsulation mode to encapsulate the packets.	Refer to 3.5 "Configure the PPPoA mode".
DHCP	<ul style="list-style-type: none">• Take the MT882 as a router.• The IP address for the MT882 to access the Internet is dynamically allocated by the ISP.• Use the IPoE/IPoA encapsulation mode to encapsulate the packets.	Refer to 3.6 "Configuring the DHCP Mode".
Static IP	<ul style="list-style-type: none">• Take the MT882 as a router.• The MT882 uses the static public IP address to access the Internet.• Use the IPoE/IPoA encapsulation mode to encapsulate the packets.	Refer to 3.7 "Configuring the Static IP Mode".

Service Mode	Working Method	Configuration
IPoA	<ul style="list-style-type: none"> • Take the MT882 as a router. • The MT882 uses the static public IP address to access the Internet. • Use the IPoA encapsulation mode to encapsulate the packets. 	Refer to 3.8 "Configuring the 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 Protocols over ATM</i></p>		



Caution:

After the configuration, some configuration are validated only after it is saved and the MT882 is rebooted. Perform this operation according to the prompt in this configuration page.

3.3 Configuring the Pure Bridge Mode

In the pure bridge mode, the MT882 serves as a bridge. You need to install the PPP dial-up software to realize the dial-up access to the Internet.

This section mainly introduces how to configure the MT882 to work in the pure bridge mode and how to configure your computer to access the network through the MT882.

3.3.1 Preparation

Table 3-2 shows the configuration preparation.

Table 3-2 Configuration for the pure bridge mode

Name	Configuration
PVC Mode	Pure Bridge
PVC Operation Mode	Enable
VPI/VCI	Provided by the ISP
Encapsulation	Provided by the ISP
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

Configure the following equipment:

- The MT882
- Your computer

1. Configuring the MT882

Do as follows to configure the MT882:

- (1) Log in to the Web configuration page of the MT882. For the method, refer to 2.4 "Establishing Configuration Environment".
- (2) Select **Basic > WAN Settings** in the navigation tree to display the WAN configuration page.
- (3) Select the PVC, which needs configuring, in the WAN configuration page. Click the editing icon of the PVC to open the change page.

- (4) Select **Pure Bridge** in the PVC change page. Set the operation mode to **Enable**. Configure relevant parameters in Figure 3-2 according to the values in the Table 3-2.

PVC	PVC-0
Operation Mode	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
VPI/VCI	0 / 35
Mode	Pure Bridge
Encapsulation	<input checked="" type="radio"/> LLC <input type="radio"/> VC-Mux
Configured MTU	9164
Actual MTU	9164
Traffic Index	0
<input type="button" value="Submit"/>	

Figure 3-2 Configuring the pure bridge mode

- (5) Click **Submit**.
- (6) Select **Tools > Save & Reboot** in the navigation tree.
- (7) Select **Save** in the Save/Reboot page. Click **Submit** to save the configuration.
- (8) Select **Reboot** in the Save/Reboot page. Click **Submit** to reboot the MT882.

2. Configuring your computer

After completing the configuration of the MT882, you need to install the PPP dial-up software to access the network.

The Windows XP (Professional) operating system has a built-in PPPoE dial-up software. To set up a dial-up connection in Windows XP system, do as follows:

- (1) Select **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) Select **Connect to the Internet** and click **Next**.
- (5) Select **Set up my connection manually** and click **Next**.
- (6) Select **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) Select **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 MT882 uses the built-in PPP dial-up software to dial a number. The MT882 serves as a router to connect your computer to the network.

This chapter introduces how to configure the MT882 to work in the PPPoE mode and how to configure your computer to access the network through the MT882.

3.4.1 Preparation

Table 3-3 shows the configuration preparation.

Table 3-3 Configuration for the PPPoE mode

Name	Configuration
PVC mode	PPPoE
PVC operation mode	Enable
Default route	Enable
DNS	Enable
VPI/VCI	Provided by the ISP
Encapsulation	Provided by the ISP

Name	Configuration
Username and password for the PPPoE dial-up	Provided by the ISP
DHCP mode of the MT882	Enable the DHCP server

 Note:

After the DHCP server is enabled, the MT882 can allocate the private IP address for the computer.

3.4.2 Steps

1. Configuring the MT882

Do as follows to configure the MT882:

- (1) Log in to the Web configuration page. For the method, refer to 2.4 "Establishing Configuration Environment".
- (2) Select **Basic** > **WAN Settings** in the navigation tree to display the WAN configuration page.
- (3) Select the PVC, which needs configuring, in the WAN configuration page. Click the editing icon of the PVC to open the change page.
- (4) Select **PPPoE** in the PVC change page. Set the operation mode to **Enable**. Configure relevant parameters in Figure 3-3 according to the values in the Table 3-3.

PVC	PVC-0
Operation Mode	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
VPI/VCI	0 / 35
Mode	PPPoE
Encapsulation	<input checked="" type="radio"/> LLC <input type="radio"/> VC-Mux
Default Route	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
IGMP	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Traffic Index	0
Service Name	
Username	guest
Password	•••••
IP Unnumber	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Use DNS	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Configured MTU	1500
Actual MTU	9164
Submit	

Figure 3-3 Configuring the PPPoE mode

- (5) Click **Submit**.
- (6) Select **Basic > DHCP** in the navigation tree to display the DHCP configuration page.
- (7) Select **DHCP Server** in the DHCP configuration page. Click **Submit**.
- (8) Select **Tools > Save & Reboot** in the navigation tree.
- (9) Select **Save** in the Save/Reboot page. Click **Submit** to save the configuration.
- (10) Select **Reboot** in the Save/Reboot page. Click **Submit** to reboot the MT882.

2. Configuring Your Computer

Configure your computer NIC, to make the computer to auto obtain information, such as the IP address, gateway and Domain Name Server (DNS).

3.5 Configure the PPPoA mode

In the PPPoA mode, the MT882 uses the built-in PPP dial-up software to dial a number.

It is similar to configure the PPPoA mode as to configure the PPPoE mode. The differences are: if configure the PPPoA, select **PPPoA** in the PVC configuration mode; if configure the PPPoE, select **PPPoE** in the PVC configuration mode. For details, refer to 3.4 "Configuring the PPPoE Mode".

3.6 Configuring the DHCP Mode

This section mainly introduces how to configure the MT882 in the DHCP mode and how to configure your computer to access the network through the MT882.

3.6.1 Preparation

Table 3-4 shows the configuration preparation.

Table 3-4 Configuration for the DHCP mode

Name	Configuration
PVC mode	DHCP
PVC operation mode	Enable
Default route	Enable
VPI/VCI	Provided by the ISP
Encapsulation	Provided by the ISP

Name	Configuration
The DHCP mode of the MT882	Enable the DHCP server

3.6.2 Steps

1. Configuring the MT882

Do as follows to configure the MT882:

- (1) Log in to the Web configuration page. For the method, refer to 2.4 "Establishing Configuration Environment".
- (2) Select **Basic** > **WAN Settings** in the navigation tree to display the WAN configuration page.
- (3) Select the PVC, which needs configuring, in the WAN configuration page. Click the editing icon of the PVC to open the change page.
- (4) Select **Bridged+DHCP** in the PVC change page. Set the operation mode to **Enable**. Configure relevant parameters in Figure 3-4 according to the values in the Table 3-4.

PVC	PVC-0
Operation Mode	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
VPI/VCI	0 / 35
Mode	Bridged+DHCP
Encapsulation	<input checked="" type="radio"/> LLC <input type="radio"/> VC-Mux
Default Route	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
IGMP	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Traffic Index	0
Configured MTU	9164
Actual MTU	9164
Submit	

Figure 3-4 Configuring the DHCP mode

- (5) Click **Submit**.
- (6) Select **Basic > DHCP** in the navigation tree to display the DHCP configuration page.
- (7) Select **DHCP Server** in the DHCP configuration page. Click **Submit**.
- (8) Select **Tools > Save & Reboot** in the navigation tree.
- (9) Select **Save** in the Save/Reboot page. Click **Submit** to save the configuration.
- (10) Select **Reboot** in the Save/Reboot page. Click **Submit** to reboot the MT882.

2. Configuring Your Computer

Configure your computer NIC, to make the computer to auto obtain information, such as the IP address, gateway and DNS.

3.7 Configuring the Static IP Mode

This section mainly introduces how to configure the MT882 in the static IP mode and how to configure your computer to access the network through the MT882.

3.7.1 Preparation

Table 3-5 shows the configuration preparation.

Table 3-5 Configuration for the static IP mode

Name	Configuration
PVC mode	Static IP
PVC operation mode	Enable
Default route	Enable
VPI/VCI	Provided by the ISP
Encapsulation	Provided by the ISP

Name	Configuration
IP address/subnet mask	IP address and subnet mask for the MT882 to access the network are provided by the ISP
IP address of the gateway	IP address of the gateway for the MT882 to access the network is provided by the ISP
DHCP mode of the MT882	Enable the DHCP server

3.7.2 Steps

1. Configuring the MT882

Do as follows to configure the MT882:

- (1) Log in to the Web configuration page. For the method, refer to 2.4 "Establishing Configuration Environment".
- (2) Select **Basic** > **WAN Settings** in the navigation tree to display the WAN configuration page.
- (3) Select the PVC, which needs configuring, in the WAN configuration page. Click the editing icon of the PVC to open the change page.
- (4) Select **Bridged+Static IP** in the PVC change page. Set the operation mode to **Enable**. Configure relevant parameters in Figure 3-5 according to the values in the Table 3-5.

PVC	PVC-0			
Operation Mode	<input checked="" type="radio"/> Enable <input type="radio"/> Disable			
VPI/VCI	0 / 35			
Mode	Bridged+Static IP ▾			
Encapsulation	<input checked="" type="radio"/> LLC <input type="radio"/> VC-Mux			
IGMP	<input checked="" type="radio"/> Enable <input type="radio"/> Disable			
Traffic Index	0 ▾			
IP Address	0	0	0	0
Submask	0	0	0	0
Default Route	<input checked="" type="radio"/> Enable <input type="radio"/> Disable			
Gateway IP Address	0	0	0	0
Configured MTU	9164			
Actual MTU	9164			
<input type="button" value="Submit"/>				

Figure 3-5 Configuring the static IP

- (5) Click **Submit**.
- (6) Select **Basic > DHCP** in the navigation tree to display the DHCP configuration page.
- (7) Select **DHCP Server** in the DHCP configuration page. Click **Submit**.
- (8) Select **Tools > Save & Reboot** in the navigation tree.
- (9) Select **Save** in the Save/Reboot page. Click **Submit** to save the configuration.
- (10) Select **Reboot** in the Save/Reboot page. Click **Submit** to reboot the MT882.

2. Configuring Your Computer

Configure your computer NIC, to make the computer to auto obtain information, such as the IP address, gateway and DNS.

3.8 Configuring the IPoA Mode

It is similar to configure the IPoA mode as to configure the static IP mode. The differences are: if configure the IPoA mode, select **IPoA** in the PVC configuration mode; if configure the static IP mode, select **Static IP** in the PVC configuration mode. For details, refer to 3.7 "Configuring the Static IP Mode".

Chapter 4 Other Settings

4.1 Changing the IP Address of the LAN of the MT882

You can access the Web configuration page of the MT882 through the IP address of the LAN of the MT882. The IP address of the LAN of the MT882 is configured by default, you can change it as follows:

- (1) Log in to the Web configuration page of the MT882. For the method, refer to 2.4 "Establishing Configuration Environment".
- (2) Select **Basic** > **LAN Settings** in the navigation tree to display the WAN configuration page.
- (3) Enter the IP address and the subnet mask in the LAN page. Click **Submit**.
- (4) Confirm the change operation according to the prompt in the page.

 Note:

- After you configure the IP address of the MT882, if you want to continue to use the Web configuration page, you need to relog in.
 - Ensure that the IP address of the computer and the IP address of the MT882 are in the same segment, and then you can access the Web configuration page.
-

4.2 Changing the Administrator Password of the MT882

The Web manager of the MT882 provides the password protection function to prevent illegal users from changing the configuration of the MT882. The username and the password of the MT882 are configured by default. You can do as follows to change the administrator password:

- (1) Log in to the Web configuration page of the MT882. For the method, refer to 2.4 "Establishing Configuration Environment".
- (2) Select **Tools > System Management** in the navigation tree to display the system management configuration page.
- (3) Find the username in the system management configuration page. Click the corresponding editing icon to display the password change page.
- (4) Enter the new password in the password change page. Click **Submit**.

4.3 Restoring the Default Factory Settings



Caution:

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

Two methods are available for restoring the default factory settings:

1. Using the **Reset** button

Do as follows:

- (1) Find the **Reset** button in the rear panel of the MT882
- (2) Use the spiculate thing to press the **Reset** button, and then release it.

2. Using the Web Manager

Do as follows:

- (1) Select **Tools > Save & Reboot** in the navigation tree to display the Save & Reboot page.
- (2) Select **Factory Setting Reboot** in the factory setting reboot page. Click **Submit**.

Chapter 5 Troubleshooting

5.1 Quick Failure Location

Problem	Solution
The Power indicator is not on	<ul style="list-style-type: none">• Ensure that the power adapter matches the MT882.• Ensure that the MT882 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. You can test with 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 the provided network cable is used.• Ensure that the cables are connected properly.• Ensure that the network adapter indicator of your computer is on.• Ensure that the network adapter works normally. The method is as follows: Right-click My Computer to select Properties; Select Hardware > Device Manager; Check whether there are devices with the mark of ? or ! under Network Adapters. If there are such devices, delete and then re-install them, or change a slot for the network adapter.• If the problem remains, change a network adapter.

Problem	Solution
The Internet cannot be accessed	<ul style="list-style-type: none"> ● Ensure that all the previous problems are resolved. ● 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 set on your computer. ● Ensure that you have entered the right username and password. ● If you still cannot access the Internet after the dial-up operation, 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. ● Try to stop the dial-up connection and to re-establish the dial-up connection 5 minutes later.

5.2 FAQs

1. 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 MT882 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 old ISA network adapter with a new 10/100 M PCI network adapter and install the latest driver.
- (5) Find help on <http://www.huawei.com>.

2. What to do if the username and password of the Web configuration page are forgotten?

If the username and password of the Web configuration page are forgotten, configure the MT882 to the default factory settings. Use the default username and password to access the Web manager.

For restoring the default factory settings, refer to 4.3 "Restoring the Default Factory Settings". For the username and the password of the MT882, refer to 7.1 "Default Factory Settings".

Chapter 6 Technical Specifications

Main Technical Specifications		
Standard	ADSL standard	ITU G.992.1 (G.dmt) Annex A ITU G.992.2 (G.lite) Annex A ITU G.994.1 (G.hs) ANSI T1.413 Issue 2
	ADSL2 standard	ITU G.992.3 (G.dmt.bis) Annex A ITU G.992.4 (G.lite.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 downstream rate is 8 Mbit/s • The maximum upstream rate is 896 kbit/s
	G.lite	<ul style="list-style-type: none"> • The maximum downstream rate is 1.5 Mbit/s • The maximum upstream rate is 512 kbit/s
	G.992.5 (ADSL2+)	<ul style="list-style-type: none"> • The maximum downstream rate is 24 Mbit/s • The maximum upstream rate is 1.2 Mbit/s
Physical Features and Environment Requirements		
Power consumption	< 4 W	
Power adaptor	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)	135 mm × 110 mm × 28 mm	
Weight	180 g	

Chapter 7 Appendix

7.1 Default Factory 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	None
NAT	Enable

7.1.2 Default PVC Parameters

Sequence No.	Mode	VPI	VCI
1	Pure bridge	0	35
2	Pure bridge	8	35
3	Pure bridge	0	100
4	Pure bridge	0	32
5	Pure bridge	8	81
6	Pure bridge	8	32

7.2 Abbreviations

ADSL	Asymmetric Digital Subscriber Line
ATM	Asynchronous Transfer Mode
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name Server
DSLAM	Digital Subscriber Line Access Multiplex
IP	Internet Protocol
IPoA	Internet Protocols over ATM
ISP	Internet Service Provider
LAN	Local Area Network
PC	Personal Computer
NIC	Network Interface Card
PPP	Point-to-Point Protocol
PPPoA	PPP over ATM
PPPoE	PPP over Ethernet
PVC	Permanent Virtual Channel
VCI	Virtual Channel Identifier
VPI	Virtual Path Identifier
WAN	Wide Area Network

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