SmartAX MT880a ADSL CPE

User Guide

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V100R001

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Issue   02

Date   2009-01-04

Part Number   103123

Huawei Technologies Co., Ltd. provides customers with comprehensive technical support and service. Please feel free to contact our local office or company headquarters.

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1 Safety Precautions

Thank you for purchasing SmartAX MT880a ADSL CPE (hereinafter referred to as the MT880a).

For safety purposes, carefully read through these safety precautions and observe them during operation.

Basic Requirements

- Keep the device dry during storage, transportation, and operation of the device.
- Prevent collision of the device with other objects during storage, transportation, and operation of the device.
- Do not attempt to dismantle the device. In case of any fault, contact the authorized maintenance center for assistance or repair.
- Without prior written consent, no organization or individual is permitted to make any change to the structure, safety, and performance design of the device.
- While using the device, observe all applicable laws, directives and regulations, and respect the legal rights of other people.

Environmental Requirements

- Place the device in a well-ventilated place. Do not expose the device to direct sunlight.
- Keep the device clean, free of dust and stain.
- Do not place the device near a water source or in a damp area.
- Place the device on a stable surface.
- Do not place any object on the top of the device. Reserve a minimum space of 10 cm at the four sides and on the top of the device for heat dissipation.
- Do not place the device on or near inflammable materials such as foam.
- Keep the device away from heat source or fire, such as a radiator or a candle.
- Keep the device away from any household appliances with strong magnetic field or electric field, such as microwave oven, refrigerator, or mobile phone.

Operation Requirements

- Do not allow children to play with the device or accessories.Swallowing the accessories may be fatal.

- Use the accessories such as the power adaptor provided or authorized only by the manufacturer.

- Make sure that the device does not get wet. If water gets into the device, disconnect the power supply immediately and unplug all the cables connected to the device.

- The power supply of the device must meet the requirements of the input voltage of the device.

- Before plugging or unplugging any cable, shut down the device and disconnect the power supply.

- While plugging or unplugging any cable, make sure that your hands are dry.

- Do not step on, pull, or stretch any cable. Otherwise, the cable may get damaged, leading to malfunction of the device.

- Do not use old or damaged cables.

- Keep the power plug clean and dry, to prevent electric shock or other dangers.

- During lightning, disconnect the device from the power supply and unplug all the cables connected to the device, such as the power cable, telephone cable, and RF cable, to prevent lightning strike.

- If the device is not used for a long time, disconnect the power supply and unplug the all the cables connected to the device.

- If smoke, sound, or smell is emitted from the device, stop using the device immediately, disconnect the power supply, unplug the power supply and other cables, and remove the batteries. Contact the authorized maintenance center for repair.

- Make sure that no object (such as metal shavings) enters the device through the heat dissipation vent.

- Do not scratch or abrade the shell of the device. The shed painting may lead to skin allergy or malfunctions of the device. If the shed painting material drops into the host, a short circuit may occur.

Cleaning Requirements

- Before cleaning the device, stop using it, disconnect the power supply, and unplug all the cables connected to the device.

- Do not clean the device cover with any cleaning solution or cleanser spray. Use a piece of soft cloth to clean the device cover.

Environmental Protection

Do not dispose the abandoned device or battery in a garbage can. You need to dispose it according to the local regulations on disposing of device packing materials, exhausted battery and abandoned device, and support the recycling activity.

After the MT880a is used for a certain period of time, the cover will be heated, which will not affect the function of the MT880a.

2 Connecting the Cables and Getting Started

2.1 Simple Connection

If your telephone line is used for the broadband network access only and you do not need to use a telephone, take the following figure as a reference for connecting the cables.
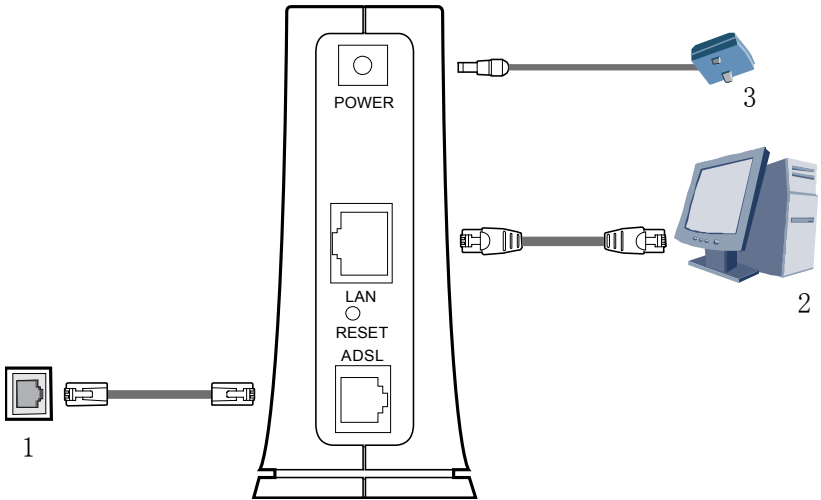
1 Telephone jack on the wall   2 Computer   3 Power adapter

2.2 Connecting One Telephone

If your telephone line is used for both the broadband network access and a telephone connection, take the following figure as a reference for connecting the cables.
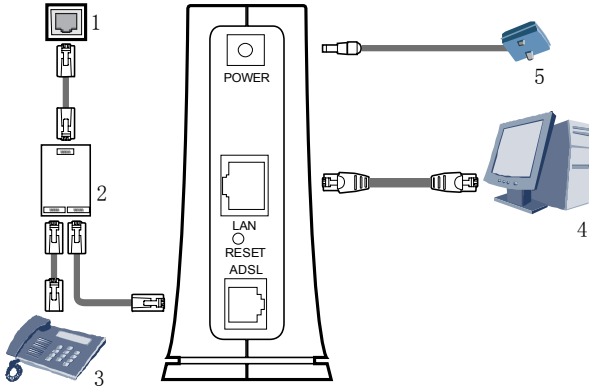
1 Telephone jack on the wall   2 Splitter

3 Telephone   4 Computer

5 Power adapter

2.3 Connecting Multiple Telephones

If your telephone line is used for the broadband network access, telephone connections, and fax connections, take the following figure as a reference for connecting the cables.
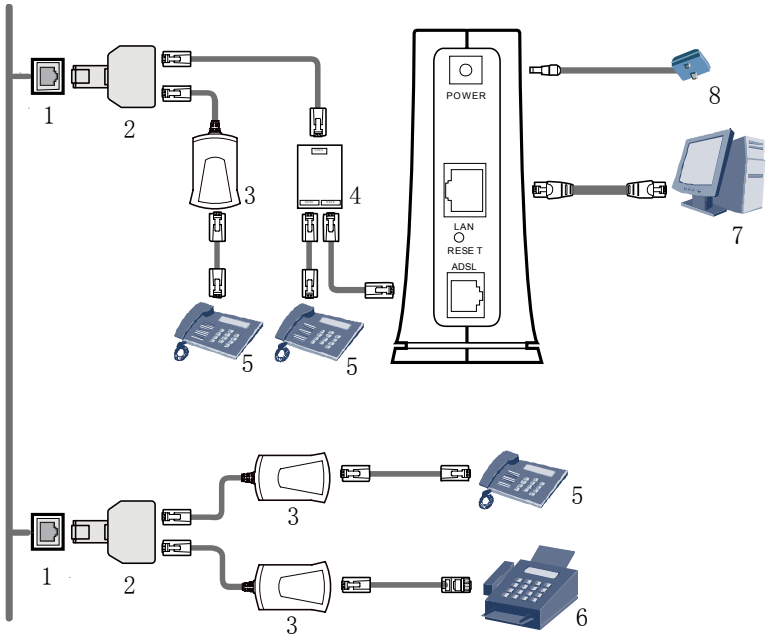
1 Telephone jack on the wall	2 T connector	3 Microfilter	4 Splitter
5 Telephone	6 Fax	7 Computer	8 Power adapter

2.4 Getting Started

Press the power button on the top of the MT880a to power on the MT880a.

After you power on the MT880a, the ADSL indicator blinks (for less than three minutes), indicating that the MT880a is being activated. Later, the ADSL indicator becomes on. The POWER indicator is also on, indicating that the MT880a is working.

3 Setting the Network-Access Parameters

By configuring the MT880a and the computer, you can choose any of the following methods to surf the Internet:

- Accessing the Network Through the Embedded PPP Dial-Up Software of the MT880a
- Accessing the Network Through the PPP Dial-Up Software on the Computer

3.1 Accessing the Network Through the Embedded PPP Dial-Up Software of the MT880a

If you select this method for accessing the network, the MT880a starts to set up dial-up connection automatically after the startup. You can access the network after you power on the computer. You do not need to install any special dial-up software on the computer or perform the dial-up operations on the computer. To configure the MT880a and the computer for the network access, do as follows:

Step 1   Log in to the Web configuration page.

1. Launch the Internet Explorer on the computer. Enter **http://192.168.1.1** in the address bar and press **Enter**.
2. In the displayed dialog box, enter the user name and the password, and then click **OK**.

By default, both the user name and the password are **admin**. After the password is verified, you can access the Web configuration page.

Step 2   Enable the embedded dial-up function.

1. In the navigation tree on the left of the configuration page, choose **Basic** > **WAN Setting**.
2. Select a PVC number, such as **1**, from the **PVC** drop-down combo box.
3. In the **VPI** and **VCI** text boxes, enter the VPI and VCI values that are provided by the network operator .
4. Select **Yes** from the **Active** drop-down combo box and select **Routing** from the **Mode** drop-down combo box.
5. Enter the operator name, user name, and password in the **Login Information** dialog box and keep the default settings of other parameters.
6. Click **Submit** to save the settings.

After you complete the preceding settings, you can surf the Internet.

You need to perform the preceding operations only once. The next time when you power on the computer, you can surf the Internet without performing any configuration.

3.2 Accessing the Network Through the PPP Dial-Up Software on the Computer

If you select this method for accessing the network, you need to install and configure the dial-up software on the computer. In addition, you need to perform the dial-up operations on the computer each time after the startup of the computer. To configure the MT880a and the computer for the network access, do as follows:

Step 1 Set the working mode of the MT880a to **Bridge**.

For details, refer to the procedure for enabling the embedded dial-up function described in Step 2 in section 3.1 "Accessing the Network Through the Embedded PPP Dial-Up Software of the MT880a." Select **Bridge** from the **Mode** drop-down combo box.

Step 2 Install and configure the PPP dial-up software on the computer.

The PPP dial-up software is preinstalled on certain computer operating systems. To create a dial-up connection, do as follows (taking the Windows XP operating system as an example):

1. Choose **Start** > **All Programs** > **Accessories** > **Communications** > **Network Connections**.
2. Click **Create a new connection** in **Network Tasks** to display the **New Connection Wizard** window, and then click **Next**.
3. Select **Connect to the Internet**, and then click **Next**.
4. Select **Set up my connection manually**, and then click **Next**.
5. Select **Connect using a broadband connection that requires a user name and password**, and then click **Next**.
6. Enter the name (as desired) of the dial-up connection in **ISP Name**, and then click **Next**.
7. Select **Anyone's use** or **My use only**, and then click **Next**.
8. Enter the user name and password provided by the operator and used for the dial-up connection, and then click **Next**.
9. Select **Add a shortcut to this connection to my desktop**, and then click **Finish**.

An icon for the dial-up connection is displayed on the desktop of the computer.

You need to perform the preceding operations only once for creating a network connection. After the network connection is created, to access the network, double-click the icon for the dial-up connection, and then click **Connect** in the displayed dialog box.

4 Configuring the MT880a

4.1 Changing the Administrator Password Used for Logging In to the Web Configuration Page

For safety reasons or to make the password easy to remember, you can change the log-in administrator password after logging in to the Web configuration page.

To change the password, do as follows:

Step 1   Choose **Tools** > **System Management** in the navigation tree to display the system management page.

Step 2   Click ✎ to display a dialog box.

Step 3   Enter the old password and the new password, and then enter the new password again in the **Retype to confirm** text box for confirmation.

Step 4   Click **Submit**.

After you change the password successfully, the current page jumps to the page for logging in to the Web configuration page. To log in to the Web configuration page, enter the new password, and then click **OK**.

> If you cannot remember the user name and password that have been changed, you can restore the default settings of the MT880a by pressing the RESET button on the panel. In this way, the user name and the password used for logging in to the Web configuration page are restored to default values.

4.2 Changing the IP Address

To make the IP address easy to remember, you can change the IP address after logging in to the Web configuration page.

To change the IP address, do as follows:

Step 1   Choose **Basic** > **LAN Setting** in the navigation tree to display the LAN settings page.

Step 2   Enter a new IP address in the **IP Address** text box.

Step 3   Click **Submit**.

After the IP address is changed successfully, to log in to the Web configuration page, you need to launch the Internet Explorer and enter the new IP address in the address bar.

Ensure that the IP address of the computer is in the same network segment as that of the IP address of the MT880a so that the computer can access the Web configuration page.

4.3 Restoring Default Settings

To restore default settings, log in to the Web configuration page, and then do as follows:

Step 1   Choose **Tools** > **Reboot** in the navigation tree to display the reboot page.

Step 2   Select **Factory Default Settings**.

Step 3   Click **Restart**.

After the preceding operations, the page jumps to the login page. You can log in to the Web configuration page by entering the user name and the password that are **admin**.

5 FAQs

What can I do if I cannot visit Web sites through the terminal?

Step 1   Check whether the POWER indicator of the terminal is on.

If the POWER indicator is off, perform further checks as follows:

1. Ensure that the power switch of the terminal is turned on.
2. Ensure that electricity comes from the socket and that the input power of the socket meets the requirements described on the label of the terminal power adapter. If the voltage is unsteady, for example, if the voltage is too high or too low, do not use the terminal. Wait until the voltage restores to its normal level, and then use the terminal.
3. Ensure that the terminal is properly connected to the socket through the power adapter.

If the POWER indicator is still off, contact an authorized maintenance center.

Step 2   After powering on the terminal, wait for about three minutes. Then check whether the ADSL indicator of the terminal is on.

If the ADSL indicator blinks for a long time, perform further checks as follows:

1. Ensure that telephone lines are properly connected. Pay special attention to the connection between the telephone line and splitter.
2. Ensure that terminal cables or telephone lines are far from the electric appliances that generate strong magnetic or electric fields.
3. Replace telephone lines.

If the ADSL indicator still blinks, contact your network operator.

Step 3   Check whether the LAN indicator of the terminal is on.

If the LAN indicator is off, perform further checks as follows:

1. Ensure that the network adapter of the computer is enabled.
2. Ensure that the network cable between the terminal and the computer is properly connected.
3. Remove and then insert the network cable or replace the network cable.

If the LAN indicator is still off, contact an authorized maintenance center.

Step 4 Check whether the driver for the network adapter is properly installed.

Take a computer that runs Windows XP as an example. To check whether the driver for the network adapter is installed, do as follows:

1. On the desktop, right-click **My Computer** and choose **Manage**.
2. In the navigation tree of the **Computer Management** window, choose **Device Manager**.
3. In the right pane of the **Computer Management** window, click **Network adapters** to view the information about the network adapter of the computer.

If no network adapter is found or if a question mark (?) or an exclamation mark (!) is displayed next to the icon of the network adapter, you can infer that the driver for the network adapter is not properly installed. In this case, re-install the driver for the network adapter of the computer.

Step 5 Ensure that you have entered the correct user name and user password that are required by the PPP dialing software.

The user name and the user password are provided by your network operator.

Step 6 Check whether you can use the PPP dialing software to dial successfully.

If you cannot use the PPP dialing software to dial successfully, perform further checks as follows:

1. Stop the PPP dialing software and then power off the terminal. After five minutes, power on the terminal and use the PPP dialing software to dial again.
2. Restore the default settings of the terminal.

If the problem persists, contact your network operator.

Step 7 Check whether the proxy server of the Web browser is correctly configured. Take the Internet Explorer installed on a computer that runs Windows XP as an example. To check whether the proxy server of the Web browser is correctly configured, do as follows:

1. Launch the Internet Explorer.
2. Choose **Tools** > **Internet Options**.
3. In the **Internet Options** dialog box, click the **Connections** tab.
4. In the **Local Area Network (LAN) settings** group box, click **LAN Settings**.
5. In the **Proxy server** group box of the **Local Area Network (LAN)**

Settings dialog box, ensure that **Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections).** check box is not selected.

Step 8   Try to access multiple other Web sites to check whether the terminal can access.

If the terminal still cannot access other Web sites, contact your network service provider.

What can I do if Web pages often cannot be displayed during Web page browsing and can be displayed after the terminal is restarted?

Step 1   Ensure that the terminal and other devices such as telephones or fax machines are connected to the telephone line through a splitter.

For details about how to install a splitter, see the related description in the manual.

Step 2   Ensure that telephone lines are properly connected.

If the telephone lines are improperly connected, the stability of the network connection is affected.

Step 3   Check the positions of your terminal and computer. Ensure that they are far from the electric appliances such as microwave ovens, refrigerators, or cordless telephones that generate strong magnetic or electric fields.

If the problem persists, contact your service provider.

After a broadband terminal is installed, does Internet access degrade call quality or do telephone calls lower the Internet access rate?

No. The terminal uses the frequency division multiplexing (FDM) and splitter technologies to separate voice signals from data signals. Although the two types of signals are transmitted through one telephone line, they are carried by different frequency bands. Therefore, they do not interfere with each other. In this case, you can make a telephone call and access the Internet at the same time, without degrading call quality or lowering the Internet access rate.

How can I quickly restore the default settings of the terminal?

To restore the default settings of the terminal, power on the terminal, press and hold the RESET button for a while, and then release the RESET button.

6 Appendix

6.1 Indicators

Indicator	Status	Description
POWER	On	The MT880a is powered on.
	Off	The MT880a is powered off.
ADSL	Blinking	The MT880a is being activated.
	On	The MT880a is activated.
	Off	The MT880a is powered off.
LAN	Blinking	Data is being transmitted through the Ethernet interface.
	On	The Ethernet connection is set up.
	Off	The Ethernet connection is not set up.

6.2 Interfaces and Buttons

Interface/Button	Description
POWER	It is used to connect to the power adapter.
LAN	It is used to connect to the Ethernet interface on the computer.
RESET	You can restore the default settings by pressing this button. Note: After you restore the default settings, the customized data will be lost. Therefore, use this function with caution.
ADSL	It is used to connect to the MODEM interface on the splitter.
⊖	It is the power button on top of the MT880a and is used to power on or power off the MT880a.

6.3 Default Settings

Parameter	Setting
IP address of the LAN interface	192.168.1.1
Subnet mask of the LAN interface	255.255.255.0
DHCP server	Enable
User name used to log in to the Web configuration page	admin
Password used to log in to the Web configuration page	admin

6.4 Technical Specifications

Item		Specification
Standards	ADSL standards	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 transmission	G.dmt T1.413	• Maximum downstream rate: 8 Mbit/s • Maximum upstream rate: 896 kbit/s
	G.992.5 (ADSL2+)	• Maximum downstream rate:24 Mbit/s • Maximum upstream rate: 1024 kbit/s
Power supply for the MT880a		5 V DC, 1 A
Power consumption		< 3 W
Ambient temperature for operation		0°C to 40°C
Ambient humidity for operation		5% to 95% (non-condensing)
Dimensions (W × D × H)		118.4 mm × 90.3 mm × 40.4 mm
Weight		< 210 g