

HUAWEI HG533 Home Gateway

### **User Guide**





# HUAWEI HG533 Home Gateway V100R001

### **User Guide**

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Website:

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### **Contents**

1 Connecting the Cables and Getting Started	. 1
1.1 Connecting Cables Using the ADSL Interface	1
1.1.1 Connecting cables	1
1.1.2 Getting started	2
1.2 Connecting Cables Using the WAN Interface	2
1.2.1 Connecting the Cables	2
1.2.2 Getting Started	3
1.3 Connecting Cables Using the USB Interface	3
1.3.1 Connecting the Cables	3
1.3.2 Getting Started	
2 Setting Network-Access Parameters	. 5
2.1 Logging In to Web-based Configuration Utility	5
2.2 Setting the Parameters When Accessing Network through ADS	
2.2.1 Accessing the Network through the Embedded PPP Dial-Up Software on the HG533	
2.2.2 Accessing the Network through the PPP Dial-Up Softwa on Your Computer	
2.3 Setting the parameters When Accessing Network through Ethernet	9
2.3.1 Accessing the Network through the Embedded PPP Dial-Up Software on the HG533	9
2.3.2 Accessing the Network through the PPP Dial-Up Softwar	
2.4 Setting the parameters When Accessing Network through Dat card	
3 Accessing the Network Wirelessly	14

	3.1	Setting Up a Wireless Connection by Pressing Buttons	.14
	3.2	Setting Up a Wireless Connection Manually	.15
4	Con	figuring the Commonly Used Functions	18
	4.1	Enabling or Disabling the Wireless Network Function	.18
		4.1.1 Enable or disable the wireless network function by presbutton	
		4.1.2 Enable or disable the wireless network function through Web-based configuration utility	
	4.2	Using the Home Storage Function	.19
		4.2.1 Reading and Writing Files on the Portable Storage Dev	
		4.2.2 Playing Media Files on a Portable Storage Device	.20
	4.3	Power Saving	.21
5	Maiı	ntenance Guide	22
		Changing the Administrator Password Used for Logging in to b-based Configuration Utility	
		Changing the Wireless Network Name and the Access ssword	.23
	5.3	Changing the PIN code for your SIM card	.23
		Changing the IP Address Used for Logging in to the Web-bas nfiguration Utility	
	5.5	Restoring Default Settings	.25
6	FAC	ીક	26
7	App	endix	30
	7.1	Indicators	.30
	7.2	Interfaces and Buttons	.32
	7.3	Default Settings	.33
	7.4	Technical Specifications	.34

# 1 Connecting the Cables and Getting Started

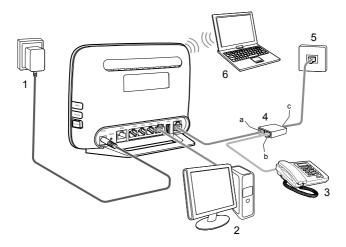
Thank you for purchasing the HUAWEI HG533 Home Gateway (hereinafter referred to as the HG533).

You can go online using the ADSL, LAN, and data card services. However, you can only use one type of service at one time. The default way of going online is using the ADSL service, though you can go online using the data card service when you cannot access the network using the ADSL or Ethernet services.

# 1.1 Connecting Cables Using the ADSL Interface

#### 1.1.1 Connecting cables

If there is at least one available telephone jack in your home, you can go online using the ADSL service.



- 1. Power adapter 2. Desktop Computer 3. Telephone
- 4. Splitter 5. Telephone wall jack 6. Laptop Computer
- a. MODEM interface b. PHONE interface c. LINE interface

### 1.1.2 Getting started

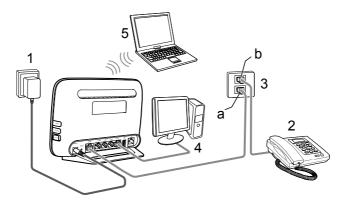
After connecting the cables, press the On/Off button on the side panel to power on the HG533.

The ADSL indicator lights up and starts blinking. This indicates that the ADSL port activation is in progress. The blinking may last less than 3 minutes. When the ADSL indicator stops blinking and remains on, the HG533 is working properly.

# 1.2 Connecting Cables Using the WAN Interface

### 1.2.1 Connecting the Cables

If there is at least one available network wall jack in your home, you can go online using the Ethernet service.



- 1. Power adapter
- 2. Telephone
- 3. Wall jack

- 4. Desktop Computer 5.
- 5. Laptop Computer
- a. Ethernet wall jack
- b. Telephone wall jack

#### 1.2.2 Getting Started

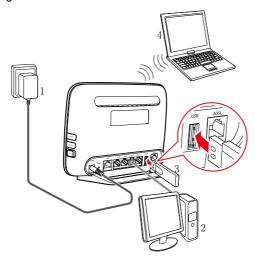
After connecting the cables, press the On/Off button on the side panel to power on the HG533.

The WAN indicator light turns on. This indicates that the HG533 is working properly. When the WAN indicator light starts blinking, data is being transmitted between the HG533 and the connected device.

# 1.3 Connecting Cables Using the USB Interface

#### 1.3.1 Connecting the Cables

If there are no available telephone or network jacks in your home, you can go online using the data card service.



1. Power adapter 2. Desktop Computer 3. Data card 4. Laptop Computer

### 1.3.2 Getting Started

Press down the On/Off button on the side of the HG533 to power on the HG533.

The USB indicator light turns on, this indicates that the HG533 is working properly. When the USB indicator light starts blinking, data is being transmitted between the HG533 and the connected device.

### 2 Setting Network-Access Parameters

# 2.1 Logging In to Web-based Configuration Utility

The HG533 provides an easy-to-use web-based configuration utility. You can view and set the parameters of the HG533 through this utility. The following example uses a computer running the Windows XP operating system to describe how to log in to the web-based configuration utility:

- Step 1 Set the network connection of your PC and ensure that your PC obtains an IP address automatically, do as follows:
  - 1. Choose Start > All Programs > Accessories > Communications > Network Connections.
  - 2. In the **Network Connections** window, right-click the working **Local Area Connection** and choose **Properties**.
  - In the This connection uses the following items group box of the Local Area Connection Properties dialog box, select Internet Protocol (TCP/IP). Click Properties.
  - 4. Ensure that your PC select **Obtain an IP address automatically**.



By default, the DHCP function of the HG533 is enabled. In this case, the HG533 assigns an IP address to your PC automatically and you do not need to configure the IP address of your PC.

- Step 2 Start the Internet Explorer on your PC and ensure that the Internet Explorer does not use any proxy server.
  - Take the Internet Explorer 6.0 as an example. To ensure that the Internet Explorer does not use any proxy server, do as follows:
  - 1. Start the Internet Explorer. Choose **Tools** > **Internet** Options.
  - On the Connections tab of the Internet Options dialog box, click LAN Settings.
  - In the Proxy Server area, ensure that Use the proxy server for your LAN is cleared. If Use the proxy server for your LAN is

selected, clear **Use the proxy server for your LAN**, and then click **OK**.

- 4. In **Internet Options** window, click OK to close the window.
- Step 3 Launch a browser on your computer. Enter http://192.168.1.1 in the address box, and press Enter.
- Step 4 On the login page, enter your user name and password.



By default, both the user name and password are **admin**. In order to prevent unauthorized users from modifing your configuration parameters, please change the password for login.

If the password has been changed, use the correct password to log in.

### Step 5 Click Login.

After the verification, the web-based configuration utility is displayed.

# 2.2 Setting the Parameters When Accessing Network through ADSL

By configuring the HG533 and your computer, you can choose any of the following methods to surf the Internet:

- Accessing the Network through the Embedded PPP Dial-Up Software on the HG533
- Accessing the Network through the PPP Dial-Up Software on Your Computer

## 2.2.1 Accessing the Network through the Embedded PPP Dial-Up Software on the HG533

If you select this method for accessing the network, the HG533 starts to set up a dial-up connection automatically after starting up. You can access the network after you power on your computer. You do not need to install any special dial-up software on your computer or perform dial-up operations on your computer.

To configure the HG533 and your computer for the network access, do as follows:

- Step 1 Verify the HG533 and the PC have connected properly, and the PC has obtained the IP address.
- Step 2 Log in to the web-based configuration utility of the HG533.
- Step 3 Enable the embedded dial-up function.
  - 1. In the navigation tree on the left of the web-based configuration utility, choose **Basic** > **WAN**.
  - 2. Select Enable for WAN connection.
  - Enter the VPI and VCI parameters that are provided by the network operator in the VPI/VCI text boxes.
  - 4. Select INTERNET from the Service list.
  - 5. Select **PPPoE** from the **Connection type** drop-down combo box.
  - Enter the user name and password that are provided by the network operator in the User name and Password text boxes.
  - 7. Keep the default settings of other parameters.
  - 8. Click Submit.

After completing the preceding configuration steps, you can begin browsing the Internet.

You only need to perform the preceding operations on a computer once. The next time you boot up your computer, you can browse the Internet without performing the same configurations.

## 2.2.2 Accessing the Network through the PPP Dial-Up Software on Your Computer

If you select this method for accessing the network, you need to install and configure the dial-up software on your computer. In addition, you need to perform dial-up operations on your computer upon each startup.

To configure the HG533 and your computer for the network access, do as follows:

- Step 1 Set the working mode of the HG533 to **Bridge**.
  - 1. Log in to the web-based configuration utility of the HG533.
  - 2. In the navigation tree on the left of the web-based configuration utility, choose **Basic** > **WAN**.

- Select Enable for WAN connection.
- Enter the VPI and VCI parameters that are provided by the network operator in the VPI/VCI text boxes.
- 5. Select INTERNET from the Service list.
- 6. Select Bridge from the Connection type drop-down combo box.
- 7. Keep the default settings of other parameters.
- 8. Click Submit.
- Step 2 Install and configure the PPP dial-up software on your computer.

  The PPP dial-up software is pre-installed on certain computer operating systems. To create a dial-up connection, do as follows (taking the Windows XP operating system as an example):
  - Choose Start > All Programs > Accessories > Communications > Network Connections.
  - 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.
  - 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 network operator and used for the dial-up connection.
  - Enter the password again in the Confirm Password text box to confirm the password, and click Next.
  - 10. 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 your 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.

### 2.3 Setting the parameters When Accessing Network through Ethernet

By configuring the HG533 and your computer, you can choose any of the following methods to surf the Internet:

- Accessing the Network through the Embedded PPP Dial-Up Software on the HG533
- Accessing the Network through the PPP Dial-Up Software on Your Computer

## 2.3.1 Accessing the Network through the Embedded PPP Dial-Up Software on the HG533

If you select this method for accessing the network, the HG533 starts to set up a dial-up connection automatically after the startup. You can access the network after you power on your computer. You do not need to install any special dial-up software on your computer or perform dial-up operations on your computer.

To configure the HG533 and your computer for the network access, do as follows:

- Step 1 Verify the HG533 and the PC have connected properly, and the PC has obtained the IP address
- Step 2 Log in to the web-based configuration utility of the HG533.
- Step 3 Enable the embedded dial-up function.
  - In the navigation tree on the left of the web-based configuration utility, choose Basic > WAN.
  - 2. Select Enable for WAN connection.
  - Select INTERNET from the Service list.
  - 4. Select **PPPoE** from the **Connection type** drop-down combo box.

- Enter the user name and password that are provided by the network operator in the User name and Password text boxes.
- 6. Keep the default settings of other parameters.
- 7. Click Submit.

After completing the preceding configuration steps, you can begin browsing the Internet.

You only need to perform the preceding operations on a computer once. The next time you boot up your computer, you can browse the Internet without performing the same configurations.

## 2.3.2 Accessing the Network through the PPP Dial-Up Software on Your Computer

If you select this method for accessing the network, you need to install and configure the dial-up software on your computer. In addition, you need to perform dial-up operations on your computer upon each startup. To configure the HG533 and your computer for the network access, do as follows:

- Step 1 Set the working mode of the HG533 to **Bridge**.
  - 1. In the navigation tree on the left of the web-based configuration utility, choose **Basic** > **WAN**.
  - Select Enable for WAN connection.
  - 3. Select INTERNET from the Service list.
  - 4. Select **Bridge** from the **Connection type** drop-down combo box.
  - 5. Keep the default settings of other parameters.
  - Click Submit.
- Step 2 Install and configure the PPP dial-up software on your computer.

  The PPP dial-up software is pre-installed on certain computer operating systems. To create a dial-up connection, do as follows (taking the Windows XP operating system as an example):
  - Choose Start > All Programs > Accessories > Communications > Network Connections.

- 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.
- 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 network operator and used for the dial-up connection,
- 9. Enter the password again in the **Confirm Password** text box to confirm the password, and click **Next**.
- 10. 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 your 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.

# 2.4 Setting the parameters When Accessing Network through Data card

When the HG533 is working in data card mode, you need to install the Huawei HSPA data card on the HG533 so that your PC can connect to the Internet through the HSPA uplink.

To create an HSPA uplink connection, do as follows:

- Step 1 Log in to the web-based configuration utility.
- Step 2 Click **Advanced > PIN** in the navigation tree on the left to display the PIN Page.
- Step 3 Enable the **UPLINK** function.

- 1. Choose the **UPLINK** page.
- 2. Select the **HSPA Backup** check box.
- 3. Click Submit.
- Step 4 Set the uplink working mode.
  - Choose the UMTS page.
  - Select 3G First from the Mobile Connection Type drop-down combo box.
  - 3. Click Submit.
- Step 5 Verify the PIN code of your SIM card.
  - 1. Choose the PIN page.
  - 2. Select **Verify** from the **PIN operation** drop-down combo box.
  - Enter the PIN code that provided by your SIM card operator in the PIN text box.
  - Click Submit.
- Step 6 Set the working mode of the HG533 to PPP.
  - In the navigation tree on the left of the web-based configuration utility, choose Basic > WAN.
  - 2. Click New.
  - 3. Select **UMTS** from the **Access type**.
  - Select INTERNET from the Service list.
  - 5. Select **PPP** from the **Connection type** drop-down combo box.
  - 6. Enter the user name and password provided by the network operator in the **User name** and **Password** text boxes.
  - 7. Enter the APN and Dial number that are provided by the network operator in the **APN** and **Dial number** text boxes.
  - 8. Keep the default settings of other parameters.

9. Click Submit.

### **3 Accessing the Network Wirelessly**

# 3.1 Setting Up a Wireless Connection by Pressing Buttons

The HG533 supports the Wi-Fi Protected Setup (WPS) function. If your network adapter also supports the WPS function, you can use the WPS function to set up a wireless connection between your PC and the HG533 quickly.

To configure the wireless network connection, do as follows:

- Step 1 Check whether the WLAN indicator of the HG533 is on. If the WLAN indicator is off, Press the WLAN button on the side panel of the HG533 to enable the WLAN function.
- Step 2 Press the WPS button on the side panel of the HG533 to enable the HG533 to enter the WPS negotiation state.
- Step 3 Enable the WPS negotiation function of the wireless network adapter on your PC within two minutes, and then wait for a moment (typically 10s and at most 120s).

The WPS indicator of the HG533 becomes on from the blinking state, indicating that the HG533 is connected to your PC through the WLAN. This state lasts 300s. Then the WPS indicator turns off.



The WPS applications may vary with different types of wireless network adapters. For details about the configuration and operations of the WPS application, refer to the operation guide provided by the application provider.

### 3.2 Setting Up a Wireless Connection Manually

If your network adapter does not support the WPS function, you can set up a wireless connection between your PC and the HG533 manually.

Takes Windows XP as an example, to set up a wireless connection between your PC and the HG533 manually, do as follows:

Step 1 Record the WLAN name and the WLAN access password of the HG533.



The WLAN name (SSID) and WLAN access password of the HG533 are preset before delivery. You can find them from the label on the bottom of the HG533.

In order to prevent unauthorized users from using your wireless network, please change them. For details, see section 5.2 "Changing the Wireless Network Name and the Access Password".

Step 2 Set the WLAN and WLAN access password of the HG533.

To set the wireless network name and the access password, do as follows (taking the authentication type WPA-PSK/WPA2-PSK as an example):

- Log in to the Web-based configuration utility.
- 2. In the navigation tree on the left of the web-based configuration utility, choose **Basic** > **WLAN**.
- 3. Choose the **WLAN** page.
- 4. Select the Enable WLAN check box.
- 5. Select the SSID1 from the SSID index drop-down combo box.
- 6. Enter the WLAN name in the **SSID** text box.
- Select WPA-PSK/WPA2-PSK from the Security drop-down combo box.
- Enter the WLAN access password in the WPA pre-shared key text box.
- Select TKIP+AES from the WPA encryption drop-down combo box.

- 10. Click **Submit** to save the settings.
- Step 3 Enable the wireless configuration service provided by Windows XP.
  - Right-click My Computer, and then choose Manage from the shortcut menu.
  - In the Computer Management window, choose Computer Management (Local) > Services and Applications > Services.
  - From the services listed in the right pane of the Computer Management window, right-click Wireless Zero Configuration, and then choose Properties from the shortcut menu.
  - In the Wireless Zero Configuration Properties (Local Computer) dialog box, check whether Service status is Started. If not, click Start.
  - 5. Click **OK** to close the dialog box, and then close the **Computer Management** window.
- Step 4 Configure the wireless network connection on your computer.
  - Choose Start > All Programs > Accessories > Communications > Network Connections.
  - In the Network Connections window, right-click Wireless Network Connection, and then choose Properties from the shortcut menu.
  - In the Wireless Network Connection Properties dialog box, select Wireless Networks.
  - 4. Select Use Windows to configure my wireless network settings.
  - 5. Click View Wireless Networks.
  - In the Wireless Network Connection dialog box, select the WLAN with the same name as the WLAN name that you have recorded from the WLAN list, and then click Connect in the lower right corner of the dialog box.
  - 7. In the displayed Wireless Network Connection dialog box, enter the WLAN access password that you have recorded in the Network key text box. Enter the WLAN access password again in the Confirm network key text box, and then click Connect.

After the password is authenticated, **Connected** is displayed in the upper right corner of the WLAN icon in the WLAN list, which indicates that a wireless connection is set up between your PC and the HG533.

- 8. Close the Wireless Network Connection dialog box.
- 9. Close the Network Connections dialog box.



You can also use the tool provided by your network adapter to set up a wireless connection manually. For details, see the user guide of your network adapter.

# 4 Configuring the Commonly Used Functions

# 4.1 Enabling or Disabling the Wireless Network Function

You can choose both of the following methods to enable or disable the wireless network function:

- Enable or disable the wireless network function by press button
- Enable or disable the wireless network function through web-based configuration utility

## 4.1.1 Enable or disable the wireless network function by press button

You can quickly enable or disable the wireless network function by pressing the WLAN button on the HG533.

- To enable the wireless network function, press and hold the WLAN button for over one second, and then release the button.
- To disable the wireless network function, press and hold the WLAN button in the same way.

The WLAN indicator turns on indicates that the wireless network function is enabled.

## 4.1.2 Enable or disable the wireless network function through Web-based configuration utility

In addition, you can enable or disable the wireless network function through the web-based configuration utility. To enable or disable the wireless network function, do as follows:

- Step 1 Log in to the web-based configuration utility.
- Step 2 In the navigation tree on the left, choose Basic > WLAN.
- Step 3 Choose the WLAN page.
- Step 4 Select or not select Enable WLAN option.



The WLAN indicator turns on indicates that the wireless network function is enabled.

### 4.2 Using the Home Storage Function

After a portable storage device is connected to the USB port on the rear panel of the HG533, you can configure the HG533 through the samba service to access the portable storage device. You can also play media files with the media player using the DLNA function.

## 4.2.1 Reading and Writing Files on the Portable Storage Device

To read and write files on a storage device and access the removable storage device through the HG533 (using usb1 as the name for the storage device as an example), do as follows:

Step 1 Set the user name and password of the portable storage device.

- 1. Log in to the web-based configuration utility.
- 2. Choose Advanced > USB Port > Samba.
- 3. Select the Enable Samba check box.
- 4. Click New.
- Select the portable storage device (usb1) from the **Device** drop-down combo box.
- Set the user name and the password of the portable storage device in the User name and Password text boxes.and then enter the password again in the Confirm password text box to confirm the password.



By default, both the user name and password for logging in to the samba server are **samba**. In order to prevent unauthorized users from accessing your portable storage device, please change them. If the user name and password has been changed, use the correct user name and password for logging in to the samba server.

- 7. Select an option from the Right drop-down combo box.
- Step 2 Access the portable storage device.

- Choose Start > Run on your computer to display the Run dialog box.
- Enter \\192.168.1.1\usb1 in the Open text box and click OK to display Connecting to 192.168.1.1 dialog box.
- 3. Enter the user name and the password that you set for logging in to the samba server and then click **Login**.

After the password is verified, you can access **samba server** window and the contents on the portable storage device that is connected to the HG533.

### 4.2.2 Playing Media Files on a Portable Storage Device

You can play media files on a portable storage device using the DLNA function of the HG533.

To play media files on the portable storage device with Windows Media Player, do as follows:

- Step 1 Enable the DLNA function.
  - 1. Log in to the web-based configuration utility.
  - 2. Choose Advanced > DLNA.
  - On the DLNA page, select the Enable check box to enable the Status.
  - 4. Select the **Use Root Path** check box to use root path of the usb device from the **Share directory**.



You can also specify a customer path as the DLNA directory by not selecting the check box of Use Root Path. In which case, you should select a usb device path and input the path in the Share directory.

- 5. Click **Submit** to saving the settings.
- Step 2 Access your portable storage device using Windows Media Player.
  - 1. Choose **File > Open** on Windows Media Player on your computer.
  - In the displayed window, enter \\192.168.1.1\usb1 in the File Name text box.
  - 3. In the **Connecting to 192.168.1.1** window, enter the user name and password that you set on the **Samba** page.
  - 4. Click Login.

You can then add media files to the media player and enjoy them.

### 4.3 Power Saving

The HG533 can work in power saving mode, if you want to reduce the electricity consumption of the HG533 and save power, do as follows:

- Step 1 Log in to the web-based configuration utility.
- Step 2 Choose Advanced > Power Saving.
- Step 3 On the **Power Saving** page, select the **Enable** check box.
- Step 4 Click Submit to saving the settings.



If no computer is connected to the HG533, you can enable the power saving function to make the HG533 switch to a lower power level and save energy.

### **5 Maintenance Guide**

# 5.1 Changing the Administrator Password Used for Logging in to the Web-based Configuration Utility

For safety reasons or to make the password easy to remember, you can change the administrator password for login after logging in to the web-based configuration utility.

To change the password, do as follows:

- Step 1 Log in to the web-based configuration utility.
- Step 2 Choose Maintenance > Account tree on the left to display the Account page.
- Step 3 Select admin from the User name drop-down combo box.
- Step 4 Enter the Current password and the new password. Then enter the new password again in the Confirm password text box for confirmation.
- Step 5 Click Submit.

After you change the password successfully, a confirmation dialog displayed, click **OK**, then the current page will jump to the login page. To log in to the web-based configuration utility, enter the new password, and then click **Login**.



- If you forget your user name or password, restore the HG533 to its default settings by pressing and holding the Reset button for longer than 6 seconds. Then, the user name and password that are used for logging in to the web-based configuration utility are restored to default values.
- After you restore the default settings, however, your customized data is lost. Therefore, use this function with caution.

# 5.2 Changing the Wireless Network Name and the Access Password

In order to prevent unauthorized users from using your wireless network, you can change them. To change the name and access password for the wireless network, do as follows (taking the authentication type WPA-PSK as an example):

- Step 1 Log in to the web-based configuration utility.
- Step 2 In the navigation tree on the left, choose **Basic** > **WLAN**.
- Step 3 Choose the WLAN page.
- Step 4 Enter a wireless network name in the SSID text box.
- Step 5 Select WPA-PSK/WPA2-PSK from the Security drop-down combo box.
- Step 6 Enter an access password in the WPA pre-shared key text box.
- Step 7 Select **TKIP+AES** from the **WPA encryption** drop-down combo box, and keep the default settings of other parameters.
- Step 8 Click **Submit** to save the settings.

### 5.3 Changing the PIN code for your SIM card

In order to prevent unauthorized users from using your SIM card, you can change it. To change the PIN code of your SIM card, do as follows:

- Step 1 Click Advanced > PIN in the navigation tree on the left.
- Step 2 Choose the PIN page.
- Step 3 Select Verify from the PIN operation drop-down combo box, and Click Submit.

- Step 4 After the PIN code is verified, select **Change** from the **PIN operation** drop-down combo box.
- Step 5 Enter the original PIN number in the **PIN** text box.
- Step 6 Enter the Current **PIN** code and the **New PIN** code. Then enter the new PIN again in the **Confirm PIN** text box for confirmation.
- Step 7 Click **Submit** to finish the settings.



Use the default values for the other parameters. In general, they do not need to be configured.

### 5.4 Changing the IP Address Used for Logging in to the Web-based Configuration Utility

To make the login IP address easy to remember or from avoiding the IP address of the router conflict with other device in your home, you can change the IP address of the router after logging in to the web-based configuration utility.

To change the IP address, do as follows:

- Step 1 Log in to the web-based configuration utility.
- Step 2 In the navigation tree on the left, choose **Basic** > **LAN**.
- Step 3 Choose the **DHCP** page.
- Step 4 In the LAN Host Settings area, enter a new IP address as desired in the IP address text box. Then, enter a subnet mask in Subnet mask text box.
- Step 5 Click Submit.



To log in to the web-based configuration utility after you change the IP address successfully, you need to launch the Internet Explorer, and then 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 HG533 so that the computer can access the web-based configuration utility.

### 5.5 Restoring Default Settings

You can quickly restore the default settings of the HG533 by pressing the Reset button on the rear panel. To restore the default settings, press and hold the Reset button for over six seconds after the HG533 is powered on, and then release the button.

In addition, you can restore the default settings of the HG533 through the web-based configuration utility. To restore the default settings through the web-based configuration utility, do as follows:

- Step 1 Log in to the web-based configuration utility.
- Step 2 In the navigation tree on the left, choose Maintenance > Device.
- Step 3 Choose the Reset page.
- Step 4 Click Restore Default Settings.



You can click **Reboot** to restart the HG533 with your customized data.

After the preceding operations, the current page jumps to the login page. You can log in to the web-based configuration utility by entering the default user name and password that are **admin**.

### 6 FAQs

How can I guickly enable or disable the wireless network function?

Press and hold the **WLAN** button for over one second, and then release the button to enable or disable the wireless network function. The **WLAN** indicator shows whether the wireless network function is enabled.

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

To restore the default settings, press and hold the **Reset** button on the rear panel for over six seconds after the HG533 is powered on, and then release the button.

What can I do if I cannot access the Internet through the terminal?

Step 1 Check whether the **Power** indicator on the terminal is solid on. If the **Power** indicator is off, perform further checks as follows:

- 1. Ensure that the terminal is turned on.
- 2. Ensure that electricity comes from the socket and that the power input from 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 on the terminal is solid 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 connections between the telephone lines and the splitter.
- 2. Ensure that the terminal or telephone lines are far from the

electric appliances that generate strong magnetic or electric fields. Replace telephone lines when necessary.

If the **ADSL** indicator still blinks and does not turn solid on, 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.
- Ensure that the network cable between the terminal and the computer is properly connected. Remove and then insert the network cable or replace the network cable when necessary.

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:
  - On the desktop, right-click My Computer, and then choose Manage.
  - 2. In the navigation tree of the **Computer Management** window, choose **Device Manager**.
  - 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 dial-up software.



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

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

If you cannot use the PPP dial-up software to dial successfully, perform

further checks as follows:

- Stop the PPP dial-up software and then power off the terminal. After five minutes, power on the terminal, and then use the PPP dial-up 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.
  - Choose Tools > Internet Options.
  - 3. In the **Internet Options** dialog box, click the **Connections** tab.
  - 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 the Use a proxy server for your LAN (These settings will not apply to dial-up or VPN connections). Check box is cleared.
- Step 8 Try to access multiple Web sites to check whether the terminal can access these Web sites.

If the terminal still cannot access 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 telephone lines 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 your computer.

Ensure that they are far from 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.

What can I do if sometimes the terminal cannot access the Internet through a WLAN connection or if the WLAN connection is unsteady?

- Step 1 Check the positions of your terminal and your 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.
- Step 2 Place your terminal in an open area.

  Although radio signals can pass through obstacles, the transmission effects of WLAN radio signals are affected if radio signals pass through too many obstacles, such as cement or wooden walls.
- Step 3 Place your computer close to your terminal.

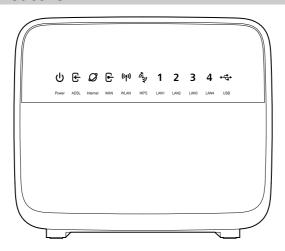
  If your computer is far from your terminal, the effects of the WLAN are affected.
- Step 4 Place your terminal and computer in another direction.
- Step 5 Do not use your terminal to access the WLAN during thunderstorms.

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 simultaneously, without degrading call quality or lowering the Internet access rate.

## 7 Appendix

### 7.1 Indicators

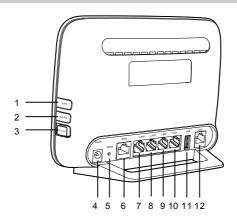


Indicator	Status	Description
Power	Steady on	The HG533 is powered on.
	Off	The HG533 is powered off.
ADSL	Blinking	The HG533 is being activated through ADSL.
	Steady on	The HG533 is activated through ADSL.
	Off	<ul><li>The HG533 is powered off.</li><li>The HG533 is activated through WAN or Data card.</li></ul>

Indicator	Status	Description
Internet	Blinking	Data is being transmitted.
	Steady on	<ul> <li>The dial-up operation through the embedded PPP dial-up function of the HG533 succeeded, but no data is being transmitted.</li> <li>The HG533 works in routing mode.</li> <li>The WAN connection is set up.</li> </ul>
	Off	The HG533 is working in bridging mode or the dial-up operation through the embedded PPP dial-up function of the HG533 failed.
WAN	Blinking	The HG533 is being activated through Ethernet.
	Steady on	The HG533 is activated through Ethernet.
	Off	<ul> <li>The HG533 is powered off.</li> <li>The HG533 is activated through ADSL or Data card.</li> </ul>
WLAN	Blinking	<ul> <li>The wireless network function is enabled.</li> <li>Data is being transmitted through the WLAN.</li> </ul>
	Steady on	<ul> <li>The wireless network function is enabled.</li> <li>No data is being transmitted through the WLAN.</li> </ul>
	Off	The wireless network function is disabled.
WPS	Blinking	<ul> <li>The HG533 is attempting to set up a wireless connection with a wireless client (such as a PC on which a wireless network adapter is installed) through the WPS function.</li> <li>This state lasts no more than 120s.</li> </ul>
	Steady on	A wireless connection is set up between the HG533 and a wireless client through the WPS function.      This state lasts 300s.
	Off	The WPS function is disabled.

Indicator	Status	Description
LAN1 ~ LAN4	Blinking	Data is being transmitted through the Ethernet interface.
	Steady on	The Ethernet connection is set up, but no data is being transmitted.
	Off	The Ethernet connection is not set up.
USB	Blinking	<ul> <li>The HG533 is being activated through Data card.</li> <li>Data is being transmitted on the USB port.</li> </ul>
	Steady on	<ul> <li>The HG533 is activated through Data card.</li> <li>The USB port is connected by portable storage device.</li> </ul>
	Off	<ul> <li>The USB port is not connected.</li> <li>The HG533 is activated through ADSL and WAN.</li> </ul>

### 7.2 Interfaces and Buttons



No.	Interface or Button	Description
1	WPS	It is used to set up a wireless connection between the HG533 and a wireless terminal easily and safely.
2	WLAN	It is used to enable or disable wireless network function quickly.
3	On/Off	It is the power switch and is used to power on or power off the HG533.
4	Power	It is used to connect the power adapter.
5	Reset	You can press and hold the Reset button for over six seconds to restore the default settings of the HG533.  Note
		After you restore the default settings, your customized data is lost. Therefore, use this function with caution.
6	WAN	It is used to connect to the Ethernet interface.
7~	LAN1 ~	It is used to connect to the Ethernet interface on the
10	LAN4	computer.
11	USB	It is used to connect the USB device.
12	ADSL	It is used to connect to the MODEM interface on the splitter.

## 7.3 Default Settings

Parameter	Setting
IP address of the LAN interface	192.168.1.1
Subnet mask of the LAN interface	255.255.255.0
User name used for logging in to the web-based configuration utility	admin
Password used for logging in to the web-based configuration utility	admin
DHCP server function	Enable

Parameter	Setting
Wireless network function	Enable

## 7.4 Technical Specifications

Item	Specification		
Ambient temperature for operation	0°C to 40°C (32°F to 104°F)		
Ambient humidity for operation	5% to 95%, non-condensing		
Dimensions (L × W × H)	143 mm × 186 mm× 38 mm		
Weight	About 250 g		
Standards	ADSL standards	<ul> <li>ITU G.992.1 (G.dmt) Annex A</li> <li>ITU G.994.1 (G. dmt/ G.lite)</li> <li>ITU G.994.1 (G.hs)</li> <li>ANSI T1.413 Issue 2</li> </ul>	
	ADSL2 standard	ITU G.992.3 (G.dmt.bis) Annex A     ITU G.992.3 (G.dmt.bis) Annex L	
	ADSL2+ standard	ITU G.992.5 Annex A	
	WLAN standard	802.11b, 802.11g, 802.11n	
DSL transmission	G.dmt T1.413	<ul><li> Maximum downlink rate: 8 Mbit/s</li><li> Maximum uplink rate: 896 kbit/s</li></ul>	
rates	G.992.5 (ADSL2+)	<ul><li>Maximum downlink rate: 24 Mbit/s</li><li>Maximum uplink rate: 1024 kbit/s</li></ul>	
Wireless	802.11b	Maximum rate of up to 11 Mbit/s	
transmission rates	802.11g	Maximum rate of up to 54 Mbit/s	
	802.11n (2×2)	Maximum rate of up to 300.0 Mbit/s	

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