## Wonderful Communication, Mobile Life.

Welcome to HUAWEI D100 Wi-Fi/LAN Adapter.

HUAWEI D100 Wi-Fi/LAN Adapter User Guide

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## **Safety Precautions**

Read the safety precautions carefully to ensure the correct and safe use of your wireless device. For detailed information, see "Warnings and Precautions."

	Do not switch on your device when the device use is prohibited or when the device use may cause interference or danger.
	Do not use your device while driving.
Ŧ	Follow the rules or regulations in hospitals and health care facilities. Switch off your device near medical apparatus.
Ŧ	Switch off your device in an aircraft. The device may cause interference to control signals of the aircraft.
	Switch off your device near high-precision electronic devices. The device may affect the performance of these devices.
	Do not attempt to disassemble your device or its accessories. Only qualified personnel are allowed to service or repair the device.
X	Do not place your device or its accessories in containers with strong electromagnetic field.
	Do not place magnetic storage media near your device. Radiation from the device may erase the information stored on them.
	Do not put your device in a high-temperature place or use it in a place with flammable gas such as a gas station.
	Keep your device and its accessories away from children. Do not allow children to use your device without guidance.
	Use approved accessories only to avoid explosion.
	Observe the laws or regulations on device use. Respect others' privacy and legal rights when using your device.

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# Quick Start

## D Note:

The supported functions and displayed appearance are subject to your product purchased. Pictures posted for illustration purpose only. Please refer to the product for actual appearance. For details of your product selection, consult your service provider.

## Appearance



## Installation

## Step 1: Connect with the data card through the USB interface.

## Note:

- Use the specified data card to connect with the device.
- The data card is provided by your operator. Please consult your operator for detailed information.
- Make sure that the SIM card is inserted into the data card.
- 2



## Step 2: Connect to a PC through an Ethernet cable or WLAN.

If the indicator of the Ethernet interface connecting with a network cable is on, the PC lineate connection is successful. The Ethernet cable cannot be longer than 100 meters (328 feet). To achieve better effect, use the shielded cable.

Whether the PC wireless connection is successful, please check your PC connected through WLAN. For details, please see "Configuring Your Computer".

If connect your device to one PC with the Ethernet cable and other PCs with WLAN simultaneously, you have constructed a LAN and can share the local resources.

## Step 3: Connect with the power adapter.

# ⚠ Caution:

- Use the compatible power adapter; otherwise, the device may be damaged.
- Please use the AC/DC power supply defined in the specifications of the charger. An improper power voltage can cause fire or malfunction of the charger.



## Step 4: Place the device

Caution:

To avoid electrical devices from interfering by the wireless signal, place electrical devices one meter away from the device.

The device can be placed horizontally or vertically on a table. Place the device on a higher place or near the window, or turn the USB interface connected with the data card upright, so it can receive stronger signals.

## Switching On/Off

Press the **Power** key to switch on the device; press and hold the **Power** key to switch off the device.

## Viewing the Running Status Through the Indicators

- · Power: Steady on and in green; the device is switched on successfully.
- Modem: Steady on and in green; the data card is connected successfully.
- Signal: Steady on and in green; the signal strength is strong. Blinking in green; the signal strength is weak; Indicator off, the SIM card faults (The SIM card does not exist or the PIN code is not authenticated) or the signal strength is inexistent.
- WLAN: Steady on and in green; the WLAN is enabled. Blinking in green; data is transmitting.

## **Dial-up Access**

By default, the device dials up to access the Internet as required. You can directly use the network services such as web browsing, and receiving or sending emails.

If you need to configure the other device-related parameters, you need to access the device management page (http://192.168.1.1). For details, please read on.

## **Restoring the Factory Defaults**

If you need to reconstruct the network or you forget the changes of some parameters, you can restore factory defaults and reconfigure the device.





Reset: Press and hold the Reset key to restore the factory defaults.

## D Note:

After this operation, all configurations are restored to the defaults.

**2** Using the Management Page

## Logging in to the Management Page

- 1. Start the Internet browser and enter the address http://192.168.1.1 in the address bar.
- 2. Select a user type, enter the password, and then click Login.
- Admin: This user type is authorized to view and change the configurations. The default password is admin.
- User: This user type is authorized to view only the basic status information. The default password is user.

## Note:

To avoid the configuration conflict, only one user is allowed to log in to the management page at a time.

## **Management Page Overview**

## **Operation Functions**

The following table shows the main operations in the management page.

Item	Description
Basic Status	Displays the parameter configuration status of the device.
Quick Setup	Quickly configures the device.
Connection	Displays the network connection status and connects to the network.
Advanced Settings	Configures the advanced settings.
Security	Configures the security settings.
Logout	Log out of the management page.

## **Device Status**

The following table shows the status information of the device.

Item	Des	cription
SIM	• The SIM card is valid.	The SIM card is not inserted or is invalid.
WAN	The PPP dial-up connection is established.	The PPP dial-up connection is not established.
WCDMA	The WCDMA network is available.	The WCDMA network is unavailable.
	Note:     If the device is registere     corresponding network	d with other network modes, the connection status is displayed.
SIG	The signal strength from weak t	o strong is shown as follows:

## **Viewing the Configuration Information**

On the configuration page, you can view the current parameter configuration information and the network connection status.

- 1. Click Basic Status.
- 2. Click Advanced on the right part of the page to view the advanced status.
- 3. Click Refresh to view the current status on the advanced status page.

## **Quick Setup**

You can use the quick setup wizard to configure and maintain the basic parameters of the device. Click **Quick Setup** to access the welcome page. Click **Next** to configure the PPP profile settings.

## Configuring PPP Profile Settings

- Profile Name: Enter a profile name when the text box is empty.
- Dial-up Number/PPP User Name/PPP Password: Enter these three parameters provided by the internet service provider (ISP). The dial-up number is used to initiate the network call; the PPP user name and PPP password is used to obtain the service authorization provided by the ISP.
- APN/IP Address: Select the mode for obtaining the access point name (APN) and IP address. If the carrier provides the relevant parameters, select **Static** and enter their values. Otherwise, select **Dynamic** and the device automatically obtains them.

#### Configuring PPP Dial-up Settings

PPP Connection: Select the dial-up access mode.

- Auto: The device automatically connects to the Internet and does not disconnect when no data is transmitted.
- **On Demand**: The device automatically connects to the Internet when data transmission exists. When the duration of no data transmission exceeds the maximum idle time, the device disconnects the Internet connection.
- Manual: The device connects to the Internet after you click Connect on the connection page. For details, see "错误!未找到引用源。."

**PPP Authentication**: This service is provided by your ISP. For details, consult your ISP.

## **Configuring WLAN Settings**

**(Name) SSID**: Enter a name for your wireless local area network (WLAN). The service set identifier (SSID) is used to identify a WLAN. A PC and the wireless device can perform normal data communication only when they have the same SSIDs. To ensure the WLAN security, do not use the default SSID. You can enter a character string as the SSID, such as **MyHome**.

#### SSID Broadcast: Enable or disable the SSID broadcast.

- Enabled: The device broadcasts the SSID of the WLAN and users can easily
  access the WLAN. In this case, unauthorized users can also access the WLAN
  because the SSID is broadcasted.
- Disabled: The device does not broadcast the SSID of the WLAN. Before accessing the WLAN, a user must obtain the SSID of the WLAN. In this case, the WLAN security is improved.

## Note:

For the convenience of users accessing the WLAN, you can select **Enabled** for **SSID Broadcast** when you configure the WLAN setting. After the setting, you can select **Disable** to improve the WLAN security.

#### Configuring the WLAN Encryption Mode

To access the WLAN, you must set the wireless security key on your PC to be the same as that of the wireless device.

## No Encryption

For the convenience of users accessing the WLAN, you can select **NO ENCRYPTION** for the **Encryption mode** when you set up a WLAN. It is not recommended to select this option in daily use.

	-		
5		4	2
		1	
2	•	-	

#### WPA-PSK/WPA2-PSK

- WPA-PSK: It is a 256-bit data encryption method that can automatically change the key.
- WPA2-PSK: It is a more secure version of WPA-PSK and it supports the IEEE 802.11 standard.
- WPA Encryption Algorithm: TKIP, AES, TKIP+AES.
- WPA Pre-Shared Key: You can enter a 64-character hexadecimal value or 8–63-character ASCII value as the key. The ASCII value contains all characters that can be entered through the PC keyboard, and the hexadecimal value contains numbers of 0–9 and characters of A–F. For example, you can enter the ASCII value of **1234abcde** as the key.
- Network Key Rotation Interval: It is used to set how long a network key is dynamically changed. By default, it is 0. To disable this function, you can set the value to 0 or null.

#### WEP

Wireless Equivalent Privacy (WEP) is a 64-bit or 128-bit data encryption method. The 128-bit WEP encryption provides higher security level.

**Network key 1**: You can enter 5 ASCII characters or 10-character hexadecimal numeral to form a 64-bit key. You can also enter 13 ASCII characters or 26-character hexadecimal numeral to form a 128-bit key.

#### Validating Quick Setup

The last page of the wizard displays all the settings you have configured.

- To accept the settings, click **Finish**.
- To change the settings, click **Back**.
- To quit the settings, click Cancel.

## Accessing the Internet

1. Click Connection.

- Note:
  - If you are required to enter the PIN code, enter the correct one. If you fail to enter the correct PIN or PUK code, the network-related functions are unavailable.
  - The SIM card is supplied by the service provider. For details, contact your service provider.
- 2. If **PPP Connection** is **Auto** or **On Demand**, refresh the page to view the current network connection status.
- 3. If **PPP Connection** is **Manual**, click **Connect / Disconnect** to connect to or disconnect from the network.

4. Wait for several minutes, if you are prompted that the connection is successful, you can start the browser and enter the website address to access the Internet.



This takes the Windows XP operating system (OS) as an example to describe how to configure your computer. For other OSs, the configurations may be different and you need to configure them as required.

## **Wireless Configuration**

The wireless configuration allows your PC to connect to the device through the wireless network. If you need only the Ethernet to connect your PC, you can skip this part.

## **Configuration Requirements**

- To set up wireless network connection, your PC must be configured with the WLAN adapter that supports the IEEE 802.11 b/g protocol.
- If the encryption function is enabled, you need to ensure that all PCs connecting to the device use the same key as that of the device.
- For the use of WLAN adapter, refer to the WLAN adapter user guide provided by the manufacturer.
- For the encryption configurations, see "错误!未找到引用源。."
- For SSID parameters configuration, see "错误!未找到引用源。."

## **Configuring the Wireless Network Connection**

- 1. Choose Start > Control Panel > Network Connections > Wireless Network Connection.
- 2. Click Show Wireless Networks to display the wireless network connection list.
- 3. Select the network connection that the SSID is the same as that of the device, and then click **Connect.**



 If the encryption parameter is set for the device, the Wireless Network Connection dialog box is displayed and requires the network key and confirmation. The value you entered must be the same as the WPA Pre-Shared Key or Network Key of the device.

Wireless Network Connection		
The network ' maamaa' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders' from connecting to this network.		
Type the key, and then click Connect.		
Network key:	•••••	
Confirm network key:	•••••	
	Connect Cancel	

5. Wait for a while after you enter the correct network key. The wireless connection icon displays in the status area in the lower right corner of the screen. Then, your PC can automatically connect to the device.



## **Configuring the PC Network**

The recommended configurations of the PC are as follows:

- Obtain an IP address automatically.
- Deselect Use a proxy server for your LAN.
- 12

## **Configuring the Network Connection**

- 1. Choose My Network Places > Properties > Local Area Connection. 2.
  - Right-click the Local Area Connection icon and select Properties.



3. In the Local Area Connection Properties dialog box, select Internet Protocol (TCP/IP) in the This connection uses the following items list box, and then click Properties.

🕂 Local Area Connection Properties 🛛 🔹 🔀
General Authentication Advanced
Connect using:
Intel[R] PR0/100 VE Network Connection
Configure This connection uses the following items:
Client for Microsoft Networks  Client for Microsoft Networks  Client Staring for Microsoft Networks  Client Staring for Microsoft Networks  Client Staring Restards (CCP/IP)
InstalUninstal Properties  Description  Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
Show icon in notification area when connected
OK Cancel

4. In the Internet Protocol (TCP/IP) Properties dialog box, select Obtain an IP address automatically and Obtain DNS server address automatically, and then click OK.

Internet Protocol (TCP/IP) Prope	rties 🛛 🖓 🔀
General Alternate Configuration	
You can get IP settings assigned autor this capability. Otherwise, you need to the appropriate IP settings.	natically if your network supports ask your network administrator for
<ul> <li>Obtain an IP address automatical</li> </ul>	y
Use the following IP address:	
IP address:	and the second second
Subnet masic	· · · · · · · · · ·
Default gateway:	
Obtain DNS server address autor	natically
Use the following DNS server ad	desses:
Preferred DNS server.	
Alternate DNS server:	
	Advanced
	OK Cancel

## **Disabling Proxy Settings**

- 1. Start the IE browser, and then choose **Tools > Internet Options**.
- Select the Connections tab, and then click LAN Settings.
   In the LAN Settings dialog box, deselect Use a proxy server for your LAN.



Click **Advanced Settings**, you can configure both the basic attributes and advanced parameters of the device, and also perform routine maintenance and management to the device.

## **Advanced Settings Overview**

The following table shows the functions of the shortcut icons.

lcon	Description
1	Click to access the <b>System</b> page.
2	Click to access the <b>SIM card setting</b> page.
	Click to access the Mobile Network Settings page.
	Click to access the <b>Dial-up Settings</b> page.
Ö.	Click to access the <b>DHCP Settings</b> page.
	Click to access the WLAN Settings page.

## System Management

Click to access the **System** page.

## **Changing the Password**

You can change the login password to prevent unauthorized users from logging in to the management page.



- Enter the current password, and then enter the new password and confirm it. 2.
- Click Modify. 3.

## Upgrading the device



- Enter the path or click **Browse** to select the software image file to be updated. Click **Upgrade**.
- 2. 3.

▲ Caution:

- After the system is upgraded, the system automatically restarts. The whole process takes two to three minutes.
- The software programs for upgrading must come from the official website • of Huawei or the official website of the carrier.
- · Upgrading the software does not change the configuration of the client.

## **Restoring the Factory Defaults**

If you need to reconstruct the network or you forget the changes of some parameters, you can choose to restore factory defaults and reconfigure the device.

Click V to access the **Restore Defaults** page, and then click **Restore**.

## Note:

After this operation, all configurations are restored to the defaults.

## **Restarting the Device**



**Viewing the Version Information** 

sto access the Version page. Click

You can view the hardware version, software version, and the release time.

## **SIM Card Settings**

Click to access the **SIM Setting** page.

When the device works in the ROM-SIM mode, the page is not available.

## **Enabling or Disabling the PIN Code**



- Select Enable/Disable in the PIN Code Operation list box. 2.
- 3. Enter the correct PIN code.
- Click Apply. 4.

1.

1.

5. If the PIN code is incorrect, the system prompts you to reset it.

## Changing the PIN Code

When the PIN code protection is enabled, you can reset the PIN code.



- Select Modify in the PIN Code Operation list box. 2.
- 3. Enter the current PIN code.
- Enter the new PIN code and confirm it. 4.
- 5. Click Apply.

## **Mobile Network Settings**

## 

to access the Mobile Network Settings page. Click

## **Configuring the Mode for Searching Network**



- Select the mode for searching the network. 2.
- · Auto: The device automatically searches the network and registers with it.
- ٠ Manual: You need to manually search the network and register with it.
- Click Apply. 3.
- 4. In Manual mode, select the searched network and click Log on.



## **Dial-up Settings**

Click for access the **Dial-Up Settings** page, you can configure the PPP settings and manage the profile settings.

## Configuring the PPP Settings

- 1. Click to access the PPP Settings page
- 2. Enter the correct parameters.
- **Profile List**: Select a profile from the established dial-up connection list. If the drop-down list is empty, you need to create a profile list.
- PPP Connection: Select the dial-up connection mode.
- **PPP Authentication:** The service is provided by your ISP. For details, consult your ISP.
- **PPP Max Idle Time**: The duration of the PPP connection is in idle. In **On Demand** mode, if no data is transmitted in this duration, the PPP connection automatically disconnects.
- **PPP MTU**: It is the maximum transmission unit (MTU) of the PPP connection. It is used to set the maximum number of bytes encapsulated in a single data frame.
- PPP Max Dial Time: Set the maximum waiting time when connecting to the Internet.

## Managing the Profile List



Click 😻 to access the **Profile settings** page and you can create, edit, save, and delete a dial-up connection list.

#### Creating a Profile

- 1. Enter the profile information in the text box according to the prompts.
- 2. Click Save.

## **Changing a Profile**

- 1. Select a profile to be changed in the **Profile List** drop-down list. Relevant information is displayed in the corresponding text box.
- 2. Enter the profile information.
- 3. Click Save.

## **Deleting a Profile**

- 1. Select a profile to be deleted in the Profile List drop-down list.
- 2. Click Delete.



## **DHCP Settings**

to access the DHCP Setting page, you can set the mode for assigning Click IP addresses in a LAN. DHCP automatically assigns IP addresses to the network devices. If you are using the DHCP server, you need to do the configurations on the PC connecting with the device. For details, see "Configuring the PC Network.".

- IP Address: The default IP address of the device is 192.168.1.1.
- Subnet Mask: The combination of the subnet mask and IP address enables the flexible subnetting. By default, the subnet mask is 255.255.255.0.
- DHCP Server: It is used to assign IP addresses dynamically. If the DHCP server is Enabled, it can automatically assign IP addresses for PCs. It is recommended to select **Disabled** for the DHCP server.
- · Start IP Address/End IP Address: It is used to define the IP address range that the host can use during the IP address assignment. For example, in the network segment 192.168.1.0/24, the default IP address of the device is 192.168.1.1. The host IP address can range from 192.168.1.2 to 192.168.1.254. The minimum range is a single IP address.
- DHCP Lease Time: The DHCP server automatically assigns an IP address to each device connected to the network. When the leased time expires, the DHCP server checks whether the device is connected to the network. If the device is disconnected from the network, the server assigns the IP address to another device. Thus, the IP address is not wasted.

D Note:

- · The Start IP Address must be smaller than or equal to the End IP Address.
- If the DHCP Server is Enabled, the configurations of Start IP Address, End IP address, and DHCP Lease Time are valid; otherwise, you cannot configure them.

## WLAN Settings

Click st to access the WLAN Settings page.

## **Enabling or Disabling the WLAN**

- to access the WLAN Enable page. 1. Click
- Select Enable/Disable to enable or disable the WLAN. 2.
- 3. Click Apply.

## WLAN Basic Settings

to access the WLAN Basic Settings page. Click

## **Selecting Interface IDs**

Wireless Interface: It refers to the SSID and MAC address, and is used to identify the wireless device.

## SSID

- Entering a name (SSID) for your WLAN.
  Enabling or Disabling the SSID Broadcast

## Enabling or Disabling the AP Isolation

- On: The terminals (PCs) connecting to the device through the WLAN cannot communicate with each other.
- Off: The terminals (PCs) connecting to the device through the WLAN can communicate with each other.

#### Selecting a Country

Country: It is used to identify the country. Different countries have different standards on channel usage.

## Selecting a WLAN Channel

Channel: It refers to the channel that the device works with. If you do not know which channel to select, select Auto and the device can automatically search for the channel.

## Configuring the 802.11 Mode

There are four available modes, as shown in the following table.

Mode	Description
54g Auto	The WLAN has the best compatibility in this mode.
54g Performance	The WLAN has the best performance in this mode.
54g LRS	If the device has difficulties in communicating with devices conforming to the IEEE 802.11b standards, select this mode.
802.11b Only	The device can only work in the low performance 802.11b standard network mode.

## **Configuring the Transmission Rate**

1. Select Auto, the device automatically searches the transmission rate.

2. Click Apply to submit the setting.



## WLAN Advance Settings

Click 4 to access the WLAN Advance Settings page.

A security key can protect your WLAN from illegal data attacking. The security key of your wireless device must be consistent with that of the PC.

## Configuring the 802.11 Authentication

- Open: Open system authentication. A user accessing the WLAN can choose WEP, WPA-PSK, or WPA2-PSK key to pass the authentication or choose No encryption to skip the authentication.
- Shared: Shared key authentication. It can use only WEP. The user accessing the WLAN must use the WEP to authenticate.

## **Configuring the Encryption Mode**

There are four encryption modes: No Encryption, WPA-PSK, WPA2-PSK, and WEP. For details, refer to "错误!未找到引用源。."

## **Configuring the MAC Filter**

Click Y to access the WLAN MAC Filter page. You can control and manage the clients accessing the WLAN, and improve the WLAN security performance.

#### MAC Restrict Mode

The following table shows the MAC address filter modes:

Parameter	Description
Disabled	The MAC address filter function is disabled.
Allow	The clients with addresses in the <b>MAC Address</b> list are allowed to connect with the device through the WLAN.
Deny	The clients with addresses in the <b>MAC Address</b> list are not allowed to connect with the device through the WLAN.

## **MAC Addresses**

Enter MAC addresses in the list. The device can perform the access control over the clients whose MAC addresses are in the list.

## WLAN Bridge

Click sto access the WLAN Bridge page.

- Preamble Type: It has two options: Long and Short. In the case that the client (PC) supports the Short type, the WLAN can have a better performance if it is Short.
- MAX Associations Limit: It refers to the maximum number of connections. It is used to set the maximum number of concurrent WLAN users on the device.
- Mode: It refers to the WLAN accessing mode. The device can work in two modes, as shown in the following table. The default value is Access Point.

Mode	Description
Wireless Bridge	It is used to connect two or more access points.
Access Point	The access points meeting the IEEE 802.11b/g standard or the wireless terminals can connect the wireless device.

- Bridge Restriction: It refers to the limitation to the peer MAC addresses. When it is **Disabled**, the device can access all the remote bridges; when it is **Enabled**, the device can only access the remote bridges that the addresses are in the address list.
- Bridges: It refers to the physical address of the remote peer bridge. The device supports the point-to-multipoint (PTM) bridge mode.
- Peer MAC Address: It refers to the physical address list of the remote peer bridges..
- Link Status: Up shows the successful connection and Down shows the failed connection.



Click Security, you can configure the advanced security settings.

## **Firewall Switch**

Your device has a true firewall that controls the incoming and outgoing data flow and protects your computer from illegal intrusion.



Select the Enable the firewall (main switch of the firewall) check box to 2. enable the firewall.

Note:

- · Only when the Enable the firewall check box is selected, the other functions such as the IP address filter function, the MAC address filter function, and the WAN port ping function are available.
- When the Enable LAN MAC address filter check box is selected, the default filter rules are available.
- 3. Select other options as required, and then click Apply.

## LAN MAC Filter

Your device supports MAC filtering based on a list of either denied or allowed computers. A common method to restrict network access is to specify the Media Access Control (MAC) address.

To locate the MAC address in the Windows OS, choose Start > Run, and then enter cmd.

The command window is displayed, enter ipconfig /all, and then press Enter.

The MAC address is displayed as the Physical Address.



- Select MAC Filter Mode. 2.
- Enter the MAC addresses of the clients and click Apply. 3.

## LAN IP Filter

You can configure the device to block the specific IP address from accessing the

## LAN.

Click to access the LAN IP Filter page.

## Adding an IP Address

- Select the protocol and status. 1.
- Enter the IP address and corresponding port to be blocked from accessing the 2. LAN.
- Click Ok. 3.

## **Changing an IP Address**

- Click in the Modification column. The corresponding IP address filter is 1. displayed.
- Change the contents as required. Click **Ok**. 2.
- 3.

## **Deleting an IP Address**

#### 🗱 in the Modification column. Click

The corresponding IP address filter is deleted.

## Validating an IP Filter

- 1. Add a new IP address or select a record in the IP address filter table.
- 2. Select On for Status.
- 3. Click Ok.
- 4. Click Apply.

#### Virtual Server

Your device supports the virtual server to enable external computers to access WWW, FTP, or other services provided by the LAN.



to access the Virtual Server page.

## Adding a Virtual Server

- 1. Select the protocol and status.
- 2. Enter values in the following text boxes:
- Name: Enter a name to the service provided by the LAN.
- · WAN Port: Enter the WAN port of the LAN in which the computer provides services.
- IP Address: Specify a computer in the LAN to provide services.
- · LAN Port: Enter the LAN port of the computer that provides services.
- 24

- 3. Click Ok.
- You can also add a virtual server in the following way:
- Select a port from the Common Port list. The Protocol, Status, Name, WAN 1. Port, and LAN Port will be set as the default values. If required, you can change them.
- 2. Enter the IP Address.
- 3. Click Ok.

## **Changing a Virtual Server**

- in the Modification column. The relevant virtual server is displayed. Click 1.
- Change the contents as required.
- 2. 3. Click Ok.

## **Deleting a Virtual Server**

Click 🗱 in the Modification column. The corresponding virtual server is deleted.

## Validating a Virtual Server

- 1. Add a virtual server or select a record in the virtual server table.
- 2. Select On for Enabled.
- 3. Click Ok.
- 4. Click Apply.

## **DMZ Settings**

If your PC cannot run network applications through the device, you can set the computer to access the Internet unlimitedly by configuring the IP address of the computer in the demilitarized zone (DMZ).

However, the DMZ computer is not protected by the firewall. It is vulnerable to attack and may also put other computers in the home network at risk.



- Select Enabled /Disabled for DMZ Status to enable or disable the DMZ 2. service.
- 3. Enter the local IP address of the computer that is specified as a DMZ host. 4. Click Apply.

## Note:

Only one computer can be specified as a DMZ host at a time.



## **UPnP Settings**

The Universal Plug and Play (UPnP) service allows other network users to control your device's network features to realize the intelligent interconnection.



- 2. Select Enabled/Disabled for UPnP Status to enable or disable the UPnP service.
- 3. Click Apply.

## **Remote Management**

The remote web management allows the access and control of the device either from the home network or from the Internet.

When you are on a trip, you can maintain your device through the remote web management service. It also allows your ISP to help you solve the device problems from a remote location.



- 2. Select **Enabled** or **Disabled** for **Remote Status** to enable or disable the service.
- 3. Enter the IP address that can access and control your device.
- 4. Click Apply.



## What to do if a PC in the LAN cannot access the Internet?

- 1. If the power indicator is off, you need to check whether the power adapter is normally connected.
- 2. If the modem indicator if off, you need to check whether the data card is connected normally.
- 3. If the signal strength indicator is off, you need to check whether the area is covered by the network.
- If the area is covered by the network, you need to check whether the network mode is correct. For information about network mode, see "Mobile Network Settings"
- 5. If the indicator of the Ethernet interfaces blinks, the corresponding Ethernet interface is normally connected. If the indicator is off, you need to check and ensure that the related Ethernet connection is normal.
- 6. You must configure the correct PPP user name and PPP password when you access the Internet through the device. Check whether they are correct, and see "错误!未找到引用源。" for details.
- 7. If the DHCP service is disabled and the PC obtains the IP address dynamically, the PC also cannot access the Internet. You can change the mode to manually assign an IP address. See "Configuring the PC Network."
- 8. Check whether the driver of the network adapter is correctly installed.
- 9. If the preceding methods cannot solve the problem, please consult you service provider.

#### What to do if a PC in the WLAN cannot access the WLAN?

- 1. If interferences or shields near the device exist, you can adjust the position of the device. When the signal strength is strong, you can move to the next step.
- 2. Check and record the following data on the network adapter of your PC: SSID, WEP type, and key.
- Check and record the following data on the device: SSID, WEP type, and key.
   Compare the recorded data, the SSID on the network adapter should be ANY or
- 4. Compare the recorded data, the SSID on the network adapter should be ANY of be the same as that on the device. The WEP type and key on the network adapter and device should be the same. Otherwise, you need to change the data on the network adapter.

## What if I forgot the IP address of the LAN interface?

If you forgot the IP address of the LAN interface, you can enter <u>http://e.home</u> and log in to the management page when the PC obtains the IP address automatically.

## What to do if bridging between two devices is unsuccessful?

- 1. Make sure that the two devices work on the same channel. For details, see "Selecting a WLAN Channel."
- 2. Make sure that the MAC address of one device is in the peer MAC address list of the other device. For details, see "WLAN Bridge."

# When the signal strength is normal, what to do if the downloading rate is low?

In this case, you need to set the value in the registry as follows:

- 1. Choose Start > Run.
- 2. Enter regedit in the Open text box and then click OK.

Run	? 🛛
:	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	regedt 🗸
	OK Cencel Browse

3. Select parameters in the following directory: \HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\Tcpip.

🖬 Registry Editor 📃 🗖 🔀				
File Edit View Favori	tes Help			
📄 sym_u3 🛛 🔼	Name	Туре	Data	^
symc810	(Default)	REG_SZ	(value not set)	
symclitox	DataBasePath	REG_EXPAN	%SystemRoot%\System	
SymEvent	DeadGWDetectDefault	REG_DWORD	0x00000001(1)	
Sysaudio	DhopDomain	REG_SZ	huawei.com	
Tanifay	DhcpNameServer	REG_SZ	10.110.0.20 10.72.55.10	(
		REG_5Z	china.huawei.com	
- Enum	DontAddDefaultGate	REG_DWORD	0x00000000 (0)	
- Linkage =	EnableICMPRedirect	REG_DWORD	0x00000001(1)	
Parameters	EnableSecurityFilters	REG_DWORD	0x00000000 (0)	
- Performance 🛩	Forwardbroadcasts	REG_DWORD	0x00000000 (0)	¥
< < ×	<		>	
My Computer(HKEY_LOCAL_MACHINE\SYSTEM)CurrentControlSet(Services)TopiplParameters				



4. Choose Edit > New > DWORD.

File	View Favor	ites Help				
	New		Key	1	Data	^
	Permissions		String Value		(value not set) %SystemRoot%\System	
21	Delete	Del	DWORD Value		0x00000001(1)	
21	Rename		Multi-String Va	Aue .	huawei.com	
😑 1	Copy Key Name		Expandable S	ring Value	10.110.0.20 10.72.55.10 china huawai com	
- J.	Find	Ctrl+F	dDefaultGate	REG_DWORD	0x00000000 (0)	
- 6	Find Next	F3	<b>CMPRedirect</b>	REG_DWORD	0×00000001 (1)	
a 🗟	Parameters	Enab	eSecurityFilters	REG_DWORD	0×00000000 (0)	
-6	Performance 👻	Form	ardbroadcasts	REG_DWORD	0×00000000 (0)	×
<		<			2	

5. Rename New Value #1 to TcpWindowSize.

💣 Registry Editor	iter title			
File LOC View Period sym_L0 symc800 symc8cx SymBvent sysaudio	Name EnableSecurityFilters ForwardBroadcasts Hostname DEnableRouter	Type REG_DWORD REG_DWORD REG_SZ REG_DWORD	Data 0::00000000 (0) 0::00000000 (0) wahaha 0::00000000 (0)	~
Taptinv Taptinv Topip Enum Linkage	WaneServer	REG_SZ REG_SZ REG_SZ REG_SZ	china.huawei.com wahaha	
Performance	C Hod	REG_DWORD If y fy Binary Data	0×00000001 (1) 0×000000000 (0)	2
My Computer(HKEY_LOC/	AL_MACHENE(SYSTEP Dele	te	s\Tcpip\Parameters	đ

6. Right-click **TcpWindowSize** and then select **Modify**.

🖄 Registry Editor				
File Edit View Favo	ites Help			
📥 ຊາຫຼຸມລິ 🔼 🔺	Name	Type	Data	^
symc810 symc81x SymEvent sysaudio SysaunoLog Taplinv Topip Enum	Enable Security F Forward Broadca Hostname DEnable Router Name Server W Hostname Sawch Lie Sawch Lie	Rers REG_DWORD sts REG_DWORD REG_SZ REG_DWORD REG_SZ REG_SZ REG_SZ REG_SZ REG_SZ REG_SZ REG_SZ	0x00000000 (0) 0x00000000 (0) wahaha 0x00000000 (0) china.huawei.com wahaha	
Parameters     Performance	UseDomainName	Dev REG_DWORD	0x00000001 (1)	~
<	<	Modify Binary Data		2
My Computer(#WEY_LOC	N, MACHINE/SYSTEM	Delete Rename	(Tcpip)Parameters	- E

7. Select Decimal and enter 65535 in the  $\textbf{Value}\ \textbf{data}$  text box, and then click OK.

Edit DWORD Value	? 🛛
Value name:	
TcpWindowSize	
Value data:	Base
65535	<ul> <li>Hexadecimal</li> </ul>
	<ul> <li>Decimal</li> </ul>
	OK Cancel

8. For the DWORD value of **DefaultRcvWindow**, do the same operations as that of **TcpWindowSize**.

Edit DWORD Value	? 🛛
Value name: DefaultRcvWindow	
Value data:	Base
65535	<ul> <li>Hexadecimal</li> </ul>
	<ul> <li>Decimal</li> </ul>

## **Electronic Device**

- Turn off your device near high-precision electronic devices. The wireless device may affect the performance of these devices.
- Such devices include hearing aids, pacemakers, fire alarm systems, automatic gates, and other automatic-control devices can be affected. If you are using an electronic medical device, consult the device manufacturer to confirm whether the radio wave affects the operation of this device.

#### Notice

The information in this manual is subject to change without notice. Every effort has been made in the preparation of this manual to ensure accuracy of the contents, but all statements, information, and recommendations in this manual do not constitute the warranty of any kind, expressed or implied.

CE statements:

Please observe the national local regulations in the location where product is to be used. This product may be restricted for use in some or all countries of European Union.

Warning: This is a radio frequency device! The spectrum usage is regulated on a country base, by the spectrum authorities. National restrictions may apply! Please read the user manual carefully and check the local regulation before importing this product to any particular country.

Warning: When carrying or using the wireless device, keep the antenna at least 25 centimeters away from your body, to avoid negative impact on your health caused by radio frequency leakage.

Warning: Do not go closer that 20 cm to the device while in operation.

Warning: this product is restricted to indoor use in France! The User must observe local regulations before putting the WLAN Adaptor into use.

FCC statements:

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

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this equipment not expressly approved by (manufacturer name) may void the FCC authorization to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

#### Hospital

Pay attention to the following points in hospitals or health care facilities:

- Do not take your wireless device into the operating room (OR), intensive care unit (ICU), or coronary care unit (CCU).
- Do not use your wireless device at places for medical treatment where wireless device use is prohibited.

## Traffic Safety

- Please observe local laws and regulations on wireless device use. Do not use your wireless device while driving to avoid traffic accident.
- Secure the wireless device on its holder. Do not place the wireless device on the seat or other places where it can get loose in a sudden stop or collision.
- Use the wireless device after the vehicle stops at a safe place.

- Do not place the wireless device over the air bag or in the air bag outspread area. Otherwise, the wireless device may hurt you owing to the strong force when the air bag inflates.
- Observe the rules and regulations of airline companies. When boarding or approaching a plane, turn off the wireless device. In areas where wireless device use is prohibited, turn off the wireless device. Otherwise, the radio signal of the wireless device may disturb the plane control signals. Turn off your wireless device before boarding an aircraft.

## Storage Environment

- Do not place magnetic storage media such as magnetic cards and floppy disks near the wireless device. Radiation from the wireless device may erase the information stored on them.
- Do not put your wireless device, and other accessories in containers with strong magnetic field, such as an induction cooker and a microwave oven. Otherwise, circuit failure, fire, or explosion may occur.
- Do not leave your wireless device, and other accessories in a very hot or cold place. Otherwise, malfunction of the products, fire, or explosion may occur.
- Do not place sharp metal objects such as pins near the earpiece. The earpiece
  may attract these objects and hurt you when you are using the wireless device.
- Do not subject your wireless device, and other accessories to serious collision or shock. Otherwise, wireless device malfunction, overheat, fire, or explosion may occur.
- Do not put your wireless device in the back pocket of your trousers or skirt to avoid wireless device damage while seated.

#### **Children Safety**

- Put your wireless device, and other accessories in places beyond the reach of children. Do not allow children to use the wireless device, or other accessories without guidance.
- Do not allow children to touch the small fittings. Otherwise, suffocation or gullet jam can be caused if children swallow the small fittings.

#### **Operating Environment**

- The wireless device, and other accessories are not water-resistant. Keep them dry. Protect the wireless device, or other accessories from water or vapor. Do not touch the wireless device with a wet hand. Otherwise, short-circuit and malfunction of the product or electric shock may occur.
- Do not use the wireless device in dusty, damp and dirty places or places with magnetic field. Otherwise, malfunction of the circuit may occur.
- When carrying or using the wireless device, keep the wireless device at least 20 centimeters away from your body, to avoid negative impact on your health caused by radio frequency leakage.

- On a thunder stormy day, do not use your wireless device outdoors or when it is being charged.
- The wireless device may interfere with nearby TV sets, radios and PCs.
- In accordance with international standards for radio frequency and radiation, use wireless device accessories approved by the manufacturer only.
- The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons.

## **Cleaning and Maintenance**

- Before you clean or maintain the wireless device, turn off it and disconnect it from the power adapter. Otherwise, electric shock or short-circuit may occur.
- Do not use any chemical detergent, powder, or other chemical agent (such as alcohol and benzene) to clean the wireless device and the other accessories. Otherwise, part damage or a fire can be caused. You can clean the wireless device and the other accessories with a piece of soft antistatic cloth that is a little wet.
- Do not scratch the shell of the wireless device. Otherwise, the shed coating may cause skin allergy. Once it happens, stop using the wireless device at once and go to see a doctor.
- If the wireless device or any of its fittings does not work, turn to the local authorize service center for help.

# Abbreviations

3G	The Third Generation
AP	Access Point
APN	Access Point Name
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name Server
EDGE	Enhanced Data rates for GSM Evolution
GSM	Global System for Mobile communications
GPRS	General Packet Radio Service
HSPA	High Speed Packet Access
HSDPA	High Speed Downlink Packet Access
HSUPA	High Speed Uplink Packet Access
IP	Internet Protocol
LAN	Local Area Network
LED	Light Emitting Diode
NAT	Network Address Translation
POTS	Plain Old Telephone Service
PPPoE	Point-to-Point Protocol over Ethernet
SOHO	Small Office Home Office
UMTS	Universal Mobile Telecommunications System
WAN	Wide Area Network
WLAN	Wireless Local Area Network
WCDMA	Wideband CDMA
WI-FI	Wireless Fidelity

Version: V100R001\_01, English, Normal