

ZXHN H108N Home Gateway User Manual

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1 Safety Instructions

1.1 Safety Checklist

Check the following items before installing the ZXHN H108N ADSL equipment.

Electrical safety

- Do not place inflammable/combustible objects around the equipment. Cables should be in good condition. All electrical appliances should be placed safely.
- Devices should be placed in a well-ventilated environment.
- Place the devices on a stable and flat surface.
- Do not expose the equipment to direct sunlight, do not place the equipment on a computer.
- Keep the equipment away from heat and water.
- Make sure power supply is available. The input voltage fluctuation range must be less than 10%. The power plug must not share the same socket with that of a hair drier, an iron or a refrigerator.

Equipment placement

- Read the User Manual carefully before handling the equipment.
- Attention is required for all the safety cautions in this manual and the ZXHN H108N Maintenance Management Manual.
- Do not use an accessory that does not belong to the equipment without prior consent of the manufacturer as it may lead to equipment damage or even a fire.
- Use the power adapter in the package.
- Do not connect phones to the ADSL line directly. Instead, connect them to the splitter.
- Do not place any objects on the equipment.
- Install the equipment in a dry, well-ventilated, rainproof, and clean place.
- Unplug the power cables during thunderstorms to protect the equipment against lightning strikes.
- Clean the equipment by using a soft and dry cloth. Power off the equipment before cleaning it.
- Power off the idle equipment.

2.2 Product Specifications

Item	Specification
Environmental temperature	0 °C ~ +40 °C (32 °F ~ 104 °F)
Humidity	5% ~ 95% (non-condensing)
Power adapter	Input: AC 100 V-240 V, 50 Hz / 60 Hz Output: DC 12 V, 1000 mA (with a USB interface) Output: DC 12 V, 500 mA (without USB interface)

2.3 Packing List

Component Name	Count
ZXHN H108N	1
Splitter	1
Power Adapter	1
RJ-11 telephone cable	2
RJ-45 Ethernet cable	1
User Manual	1
CD (Optional)	1

2.1 Features

The ZXHN H108N is an ADSL access device that has multiple line transmission modes. At the user end, it not only provides four 10/100Base-T Ethernet interfaces but also supports wireless user accesses in compliance with the IEEE802.11g standard. With the high-speed ADSL access, the ZXHN H108N can provide the broadband internet service or enterprise network access service for users.

2.1 Features

- As a routing-capable ADSL modem, the ZXHN H108N modem has the following characteristics:
 - Supports G.992.1, G.992.3, G.992.5.
 - Supports data transmission among ADSL, Ethernet, and WLAN.
 - Supports 802.11b, 802.11g, 802.11n.
 - Supports dynamic NAT configuration.
 - Supports up to 3 PVCs.
 - Supports bridging/routing mode.
 - Supports NAT.
 - Supports DHCP Client/DHCP Server.

2.4 System Requirements

Please check the following items before installing the ZXHN H108N.

ADSL Service Subscription

If you have subscribed for the ADSL service, your ADSL operator will provide you at least one valid IP address through static allocation or dynamic IP address allocation.

Computer Configuration

Please make sure that the system is equipped with a 10M/100M Ethernet adapter and supports the TCP/IP protocol.

It is recommended to use a computer with the below configurations: Pentium III or a later version, 64M memory, 10G hard disk, graphic accelerating adapter with above 2M display memory, audio adapter, and sound box.

Operating System

The operating system can be one of the following: Windows 98SE, Windows Me, Windows 2000, Windows XP, Windows Vista, Windows 7, or Windows 8. The Internet Explorer 6.0 or a later version can be used to configure the device.

3 Installation Preparations

3.1 Hardware Description

Front Panel

Identification Status Description

Identification	Status	Description
Power	Off	Power off.
	Solid red	POST: Power On Self Test
	Flashing red	Software upgrade.
	Solid green	Power on and complete the self test.
DSL	Off	No signals are detected.
	Slowly flashing green	DSL line handshaking is in progress.
	Fast flashing green	DSL line training is in progress.
	Solid green	The modem has been activated.
Internet	Off	The system is under the Bridge mode or the ADSL has not been connected.
	Solid green	The data packet passes through the router interface on the WAN side. The system is under the Route mode and the ADSL has been connected. The modem IP data packet can be normally transmitted and received (For example, the built-in PPPoE has been established and the dynamic IP address has been obtained).
	Flashing green	The router interface on the equipment WAN side cannot send/receive data packet normally. (No DHCP response, no PPPoE response, PPPoE authentication failed, no IP address from PCP, and so on.)
	Solid red	

Identification Status Description

Identification	Status	Description
LAN1-LAN4	Solid green	The LAN interface is connected but no data is transmitted.
	Flashing green	The data packet passes through the LAN interface.
	Off	The device is not powered on or the LAN interface is not connected.
	Solid green	The wireless port is enabled.
WLAN	Flashing green	Data is transmitting. The flashing frequency indicates the WLAN traffic.
	Off	The equipment is not powered on or the wireless port is disabled.
	Off	The green indicator is off in the following situations: <ul style="list-style-type: none"> Did not press the WPS key. WIFI is off. No terminal is connected to the gateway through WPS and the connection exceeds five minutes.
	Off	There is terminal connected to the gateway through WPS. The indicator is on for 0.2s and then off for 0.2s. Session overlap detected. The indicator flashes five times during 1s and the indicator is off for 0.5s (this process is repeated).
WPS	Fast flashing green	There is terminal connected to the gateway through WPS. However, faults occur in this process. The indicator flashes with an interval of 0.1s.
	Slowly flashing green	Terminal is being connected to the gateway through WPS. The indicator is on for 0.2s and then off for 0.2s.
	Flashing and off on different intervals	There is terminal connected to the gateway through WPS and the connection time does not exceed five minutes.
	Solid green	

Identification Status Description

Identification	Status	Description
USB*	Solid green	A USB (such as a hard disk) is inserted.
	Flashing green	Data is transmitted.
On/Off	Off	The equipment is not powered on or a USB is not inserted.
	On	

* The item with * varies from device type.

Rear panel

Item Description

Item	Description
DSL	RJ-11 connection interface. The equipment is connected to the ADSL line or splitter via the telephone line.
LAN1-LAN4	RJ-45 connection interface. Connect it to the PC computer or other network devices by using the network cable.
Power	Power interface. Connect to the power adapter.
WPS	WPS switch.

3.2 Hardware Connections

Hardware Connections Introduction

Reset

This button is on the bottom of modem. In the power-on state, you can restore the system to the default configuration by using a thin needle to press this button for five seconds.

WLAN

Wi-Fi switch.

On/Off

Power switch.

USB*

USB host port, used for the USB storage device connection.

* The item with * varies from device type.

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4 FAQs

1. All indicators are off after the ZXHN H108N equipment is powered on.

First, make sure that you have inserted the power adapter of the ZXHN H108N into a working power socket and that the ZXHN H108N has been powered on (the switch button is pressed down). When the indicators are still off after the above checks are done, then the cause may be hardware damage. In such cases, you should contact local operators for maintenance. Do not perform maintenance by yourself.

2. Will ADSL affect the telephone conversation quality? Will the internet access rate slow down if one is making phone call and accessing internet at the same time?

ADSL separates voices from data through the frequency division multiplexing technology. Therefore, voices and data run in different paths without mutual interference. Neither the access rate nor conversation quality will deteriorate when you are in a call and on line at the same time.

Issue description: Sometimes, the ADSL users cannot access internet.

First, check whether the ZXHN H108N is in normal state (check the indicators against this User Manual). If yes, the computer or application network may be faulty, not the ADSL. If the ADSL modem has problems, then check the status of indicators one by one to remove the fault.

It is recommended that you check the following points before you seek help from operators:

- The ADSL telephone cable connectors are in good condition.
- The ADSL is away from the power cable and large-power electronic devices.
- No telephone extensions and fax machines are installed between the ADSL incoming line and splitter.
- The splitter is correctly installed.
- The ADSL modem is not over-heat.

What are reasons for ADSL synchronization failure (also referred to link down or link establishment failure)?

When the ADSL suddenly fails to be synchronized (link down) during application, the cause might be the DSL indicator of the modem is not Constantly On. It is suggested to do check in the following order:

- Check the quality of the incoming cables and the incoming cable connectors.
- Install the ADSL Modem correctly by following the user guide.
- Ensure the telephone cables are normal and are in good contact with ADSL.
- Disconnect the splitter and directly connect the ADSL Modem to the incoming customer cable end to ensure that the problem is not due to improper installation or incoming customer line quality. When the ADSL is synchronized again, it means that the incoming customer part is not installed properly. Re-install it according to the User Guide.
- When the ADSL still fails to be synchronized after the ADSL Modem has been connected to the incoming customer cable end, then you should contact the operator to check whether there are external line failures/modem failures.
- If it is the splitter problem, you should call the operator to perform maintenance or replacement.
- The problem may also lie with the operator equipment. Call the operator to confirm it.
- A long connection cable between the splitter and the ADSL Modem may cause poor anti-interference performance and poor synchronization. Therefore, the connection cable should not be too long.

5 Standards Compliance

The equipment complies with the following ADSL standards:

Standard	Note
ITU G.992.1	Asymmetric Digital Subscriber Line (ADSL) transceivers.
ITU G.992.3	Asymmetric Digital Subscriber Line transceivers 2 (ADSL2).

FCC Part 15 Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example: use only shielded interface cables when connecting to computer or peripheral devices.)

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

FCC Part 68 Statement

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the bottom of this equipment is a label that contains, among other information, a product identifier in the format US: ZTEUC019NH108N. If requested, this number must be provided to the telephone company. This equipment uses the following USOC jacks: RJ-11. The REN (0.110) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ren Equivalence Numbers of all the devices does not exceed 5.

This equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). This is confirmed by marking the equipment with the industry Canada certification number. The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The customer should also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment. Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution!

Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

ZTE

Tomorrow never waits

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CERTIFICATION CHECKER

DATE

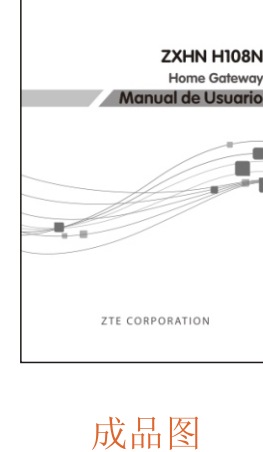
ZTE

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Tel: +86-755-26771900
URL: <http://support.zte.com.cn>
E-mail: support@zte.com.cn

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NOTES(技术要求):

- Dimension after folding(折叠后尺寸): 70*98mm.
 - Print colour(印刷颜色): black printing(黑色印刷).
 - Material(材质): 70g writing paper (70g书纸).
 - Coating(表面处理): 无.
 - Binding process(装订工艺): Paper folding(折页)——包心折再包心折
 - Output lpi(输出网线): 200 lpi.
 - Tolerance(公差): L(长)*W(宽):±1mm.
 - Raw materials and the corresponding post processing should meet requirements defined in the Environmental Protection Technical Standards.
- (原材料及后处理工艺均能满足我司《环保技术标准》要求).



DIM	TOL±			
	C1	C2	C3	C4
RANGE				
0~6	0.1	0.1	0.15	0.2
6~30	0.2	0.3	0.4	0.5
30~80	0.25	0.5	0.9	1.2
80~180	0.3	0.8	1.2	1.5
180~315	0.5	1.3	1.8	3
315~500	0.7	1.5	2.5	4
500~800	0.9	1.8	3	5
ANG.TOL±	0°-30°/0.1°	30°-60°/0.3°	60°-90°/0.5°	

CUSTOMER:		ZTE	
TITLE:		MANUAL	
MODEL:		ZXHN H108N	
PART NO:			
UNIT'S	mm	VER:	A0
MAT'L	/	SCALE	N/A
FINISH	/	SHEET	1/1
DRAW		DATE:	
CHECK		PDE	