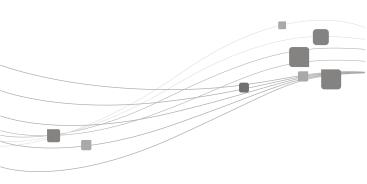
# **ZXHN H268A**

**Home Gateway** 

# **User Manual**



ZTE CORPORATION

## ZXHN H268A Home Gateway User Manual

**C€**0197①



Manual No: SJ-20150916162339-008 Edition Time: 2017-02-07(R1.0)

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# **1** Safety Guidance

## 1.1 Safety Check

Before installing the Home Gateway, check all the below listed items:

1. Electric safety

Ensure no inflammable, conductive or moist objects and no ageing-cables around the equipment. Place all electrical appliances safely.

## 2. Equipment position

- Install the equipment in a ventilated environment avoid of any electric devices nearby.
- ▶ Place the equipment on a stable and flat surface.
- ► The equipment must be protected from sunshine. It must be kept away from electro-magnet interference.
- ▶ The equipment must be protected from heat and water sources.
- ▶ Ensure the power supply is available. The fluctuation range of input voltage should be in the range of ±10%. Do not share the power socket with other electrical devices.

## 1.2 Safety Cautions

Please pay attention to the following cautions:

- Read the user manual carefully before using the equipment.
- Note all cautions in the user manual and product guide.
- Do not use any accessory or components that are not belonging to the equipment.
- Use the power adapter, which is provided in the package.
- Connect the phone with the DSL or WAN line directly, and lead the line out from the phone interface of the splitter.
- Do not place any object on the equipment.
- The equipment must be kept dry and clean. Ensure the equipment environment has ventilation and rainproof capability.
- To protect the equipment against lightning and thunderstorm, please remove the power plug and all connection cables.
- Use a soft and dry cloth to clean the equipment. Ensure the equipment is power Off before cleaning.
- Power Off the idle equipment.
- Keep the ventilation-hole clean and unblocked. Otherwise, it may cause short circuit, fire or damage the equipment. Do not spray liquid on the equipment surface.
- Do not open the equipment especially in power On state.
- Confirm the power is Off before plugging/unplugging the power.
- Keep all components and accessories of the equipment away from children.



Please read the above safety guidance carefully before equipment use. Users should assume responsibilities for any accidents due to incompliance with the above instructions.

## 2 Overview

## 2.1 Features

ZXHN H268A is an advanced home gateway. It provides high speed internet, IPTV and voice over IP services through the DSL or GE uplink. It supports the following features:

- It provides 4 Gigabit Ethernet LAN interfaces.
- It supports Dual-Band concurrent Wi-Fi up to 300 Mbps (compatible with IEEE 802.11n, 2.4 GHz compliant equipment) and 1.3 Gbps (compatible with IEEE 802.11ac, 5 GHz compliant equipment).
- It provides multiple lines via the FXS phone ports.
- It supports IPv4 / IPv6 dual stack mechanism for IPv6 network migration.
- It supports TR-069, including TR-098 data model and TR-104 voice provisioning.

## 2.2 Product Specifications

| Item                                    | Specification  |
|---|--|
| Dimensions                              | 221 mm × 180 mm × 33 mm<br>(Length × Width × Height) |
| Operation temperature                   | 0 °C~40 °C (32 °F~104 °F)                            |
| Storage temperature                     | -40 °C~70 °C(-40 °F~158 °F )                         |
| Operation humidity/<br>Storage humidity | 5% ~ 95% (non-condensing)                            |
| Dawar adapter                           | Input: AC 100 V~240 V, 50 Hz/60 Hz                   |
| Power adapter                           | Output: DC 12 V, 2 A                                 |

## 2.3 Package Check

After unpacking the ZXHN H268A product, check that the following items are complete.

| Name                  | Quantity |
|-----------------------|----------|
| ZXHN H268A            | 1        |
| Splitter              | 1        |
| Power Adapter         | 1        |
| RJ-45 Ethernet cable  | 1        |
| RJ-11 telephone cable | 2        |
| User Manual           | 1        |



If any item is found to be wrong, missing, or damaged, contact your service provider. Keep the package and all the items in good condition if you want to replace the product.

# 3 Installation Preparation

## 3.1 Hardware Description

### Front panel

Figure 3-1 shows the indicators on the front panel of the ZXHN H268A

Figure 3-1 The Front Panel

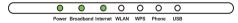


Table 3-1 describes the indicators on the front panel of the ZXHN H268A unit.

Table 3-1 Descriptions of Indicators

| LED Indicator | Status | Description                   |
|---------------|--------|-------------------------------|
| Power         |        | ZXHN H268A is powered on.     |
|               | •      | ZXHN H268A self-check failed. |
|               | Off    | ZXHN H268A is powered off.    |

| LED Indicator                                  | Status                   | Description  |
|--|--------------------------|--|
| Broadband<br>(The DSL link is<br>established.) | •                        | DSL synchronization is normal and the link connection is normal.                         |
|  | Fast Flashing<br>Green   | ZXHN H268A is in the handshaking process to establish the link connection.               |
|  | Slowly Flashing<br>Green | Physical link exists, however carrier wave has not been detected.                        |
|  | Off                      | ZXHN H268A is not powered on or link has not been established.                           |
| Draadhand                                      |                          | The link is activated.   |
| Broadband<br>(The WAN link is<br>established.) | Flashing Green           | Data is being transmitted.   |
| established.)                                  | Off                      | The equipment is not powered on or the WAN port is disabled.                             |
|  |                          | The connection is established and a correct IP address is obtained.                      |
| Internet                                       |                          | Internet connection failed.  |
|  | Flashing Green           | Data is being transmitted.   |
|  |                          | The WLAN RF switch is on.  |
| WLAN   | Flashing Green           | Data is being transmitted.   |
|  | Off                      | ZXHN H268A is not powered on or the WLAN RF switch is off.                               |
| WPS  |                          | WPS access is successful. This solid-on light will be automatically off after 5 minutes. |
|  | Fast Flashing<br>Green   | The WPS accessing of the WLAN terminal is Faulty.  |
|  | Slowly Flashing<br>Green | WLAN terminal is in WPS accessing process.   |
|  | Off                      | No WPS access or the WPS access of the terminal exceeds 5 minutes                        |
| Phone  | •                        | ZXHN H268A has registered on the VoIP network.   |
|  | Flashing Green           | Indicates when the associated telephone is off-hook.                                     |
|  | Off                      | ZXHN H268A is not powered on or ZXHN H268A has not been registered on the VoIP network.  |

| LED Indicator | Status         | Description  |
|---------------|----------------|--|
| USB           |                | The USB interface is connected and operating in host mode, but no data is being transmitted. |
|               | Flashing Green | Data is being transmitted on the interface.  |
|               | Off            | ZXHN H268A is not powered on or the USB interface is not connected.                          |

## Rear panel

Figure 3-2 shows the buttons on the side panel of the ZXHN H268A.

Figure 3-2 The Side Panel



Table 3-2 describes the buttons on the side panel of the ZXHN H268A.

Table 3-2 The Side Panel

| Button | Function  |
|--------|---|
| USB    | USB 2.0 host interface.                         |
| On/Off | Power switch. Power on or power off the device. |

Figure 3-3 shows the interfaces and buttons on the back panel of the ZXHN H268A.

Figure 3-3 The Back Panel



Table 3-3 describes the interfaces and buttons on the back panel of the ZXHN H268A.

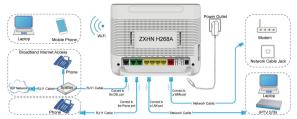
Table 3-3 The Back Panel

| Interface/Button | Function   |
|------------------|--|
| DSL              | RJ-11 port: It is used to connect to the DSL uplink access network.  |
| Phone1-Phone2    | RJ-11 port. It is used to connect to the phone through the telephone line.   |
| LAN1-LAN4        | RJ-45 port. It is used to connect the modem to computer, STBs or other network devices.  |
| WAN              | RJ-45 port. It is used to connect to the network provided by the ISP.  |
| WPS              | WLAN Protected Setup   |
| Reset            | After power on the ZXHN H268A, hold on this button for more than 5 seconds to reset the current settings to the factory default setting, and then the system automatically restarts. |
| WLAN             | WLAN switch. Turn on or turn off the WLAN.   |
| Power            | Power supply port. It is connected to the power adapter.   |

## 3.2 Hardware Connection

Figure 3-4 shows the devices that are connected to interfaces of the ZXHN H268A

Figure 3-4 Cable Connection



After the devices are connected to the ZXHN H268A device, press the power button. When the corresponding indicators on the front panel are On, you can enjoy various services provided by the service provider.

## Note:

The wireless network scope is affected by the number of walls, wall thickness, wall locations, wall materials, ceilings, and other objects. Meanwhile, the material types and background RF noise also affect the wireless network.

To maximize the wireless network scope, comply with the following methods:

 Reduce the number of walls and ceilings between the ZXHN H268A and other network devices.

Each wall or ceiling reduces the wireless network scope by 1 to 30 meters. Properly place the ZXHN H268A to reduce the number of walls and ceilings.

2. Comply with the straight line principle between network devices.

At 45 degree angle, a wall with the thickness being half a meter is as thick as one meter. To receive more signals, devices need to be placed to enable the signals to be transmitted directly through walls or ceilings.

3. The wireless network scope is also affected by building materials.

The scope is affected by solid metal doors or aluminum studs. Try to place accessing points, wireless routers, and computers, and then signals can be transmitted through dry walls or open channels, for example, FRP products, metal products, insulated walls, filing cabinet, bricks, and concrete weaken the wireless signals.

4. Make sure that the ZXHN H268A with the WiFi function keeps far away from the following devices:

Keep at least two meters far away from electrical devices or components that generate RF noise. Signals are greatly weakened or even completely disappeared by a 2.4 GHz wireless mobile or X-10, for example, a microwave oven, home security system, blue tooth device, or icebox.



Even through the 2.4 GHz wireless mobile is not used, the signals generated by the fixed phone also interfere with the wireless network.

## 3.3 Configure Your Internet

- 1. Open a browser on your computer or notebook PC that is connected to the router, and then enter http://l92.168.20.1 in the address bar.
- 2. At the login screen, type admin into both the Username and the Password fields and click Login.(There are two accounts, including username "admin"/password "admin" or username "user"/password "user". "admin" has full rights and "user" has limited rights.)

Figure 3-5 Login Page



# 4 Troubleshooting

■ All indicators are Off when the ZXHN H268A equipment is powered On.

First make sure that you have inserted the power adapter of the ZXHN H268A into a working power socket and that the ZXHN H268A has been powered On (the switch button is pressed down). If the indicators are still Off after confirmation of the above items, may be the hardware is damaged. You may contact local operator for maintenance. Never dismantle the equipment by yourself.

Sometimes, the DSL users cannot access to the Internet normally

First check whether the ZXHN H268A is in the normal state (Check the indicators according to this user manual). If yes, the computer or application network may be faulty. This is unrelated with DSL. If the ZXHN H268A is abnormal, check the status of indicators one by one to remove the fault.

It is suggested to check the following items before seeking help from operator:

- i. The DSL telephone cable connectors are proper.
- ii. The DSL is away from the power cable and large-power electronic devices.
- iii. No telephone extensions and fax machines are connected between the DSL incoming line and splitter.
- iv. The splitter has been installed correctly.
- v. The ZXHN H268A has good heat dissipation ratio.

## What are reasons for DSL synchronization failure (also referred as link down or link establishment failure)?

If the DSL suddenly fails to be synchronized (link down) during application, usually the Link indicator on the ZXHN H268A will not be On. It is suggested to check the following steps one by one:

- i. First check the quality of incoming cables and incoming cable connectors.
- ii. Install the ZXHN H268A correctly based on the user guidance. Minimize the number of taps.
- iii. Check whether the telephone cables and DSL are in good connection or whether the telephone cables are normal.
- iv. Try to disconnect the splitter and directly connect the ZXHN H268A to the incoming user cable end. Ensure the problem is not due to improper installation or incoming user line quality. If the DSL can be synchronized again, it means that installation of the incoming user side is improper. Please reinstall it according to the user guide.
- v. If the DSL still fails to be synchronized when the ZXHN H268A is connected to the incoming user cable end, contact the operators to check whether it is due to external line failure or ZXHN H268A failure.
- vi. If the splitter problem is determined, call the operator for maintenance or replacement.
- vii. If the problem is due to the end office equipment failure, call the operator to confirm it.
- viii. Too long connection cable between the splitter and ZXHN H268A may cause poor anti-interference performance and synchronization difficulty. Therefore, the connection cable should not be too long.



# CERTIFICATION CHECKER DATE ZTE

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