seethelight

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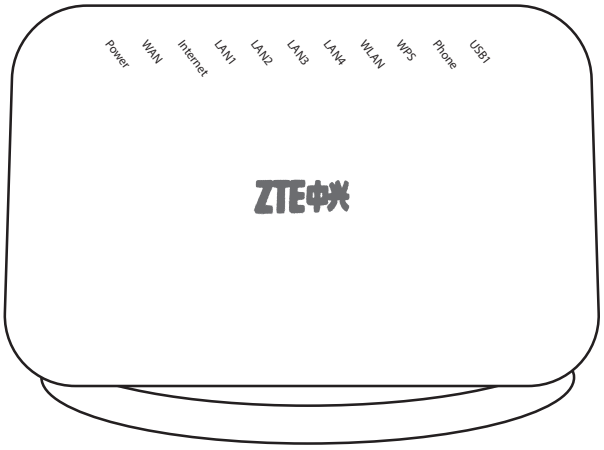
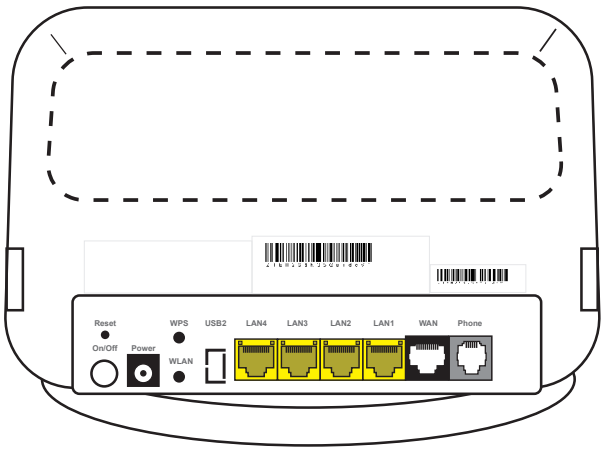
Wireless Networking Guide

Getting the best from your wireless network with the ZTE H298N router





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Contents

1. Connecting to a Wireless Network

You will find a sticker attached to the back of your router. It will contain the following information:

- **Your SSID:** The name of your wireless network associated with your router

- **WPA2 PSK:** The password you will need to enter on your PC's wireless client to gain access to this network

You will find more instructions on how to set up a wireless connection in our **Internet User Guide**

FYI:

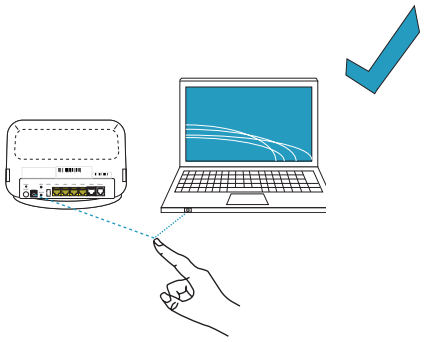
SSID: Or Service Set Identifier, is used to identify wireless networks. By displaying
a list of SSIDs in your range you can select one to connect to.

WPA2: Security protocols used to secure wireless computer networks.

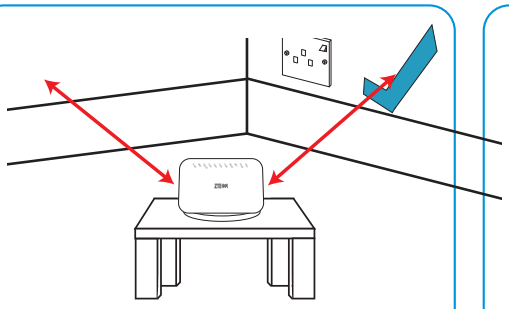
2. Troubleshooting a wireless connection

Wireless networking is a great way of accessing the internet. However, due to the nature of wireless networking and environmental influences - for example interference from other equipment or thickness of internal walls - we cannot guarantee that wireless will work in every location.

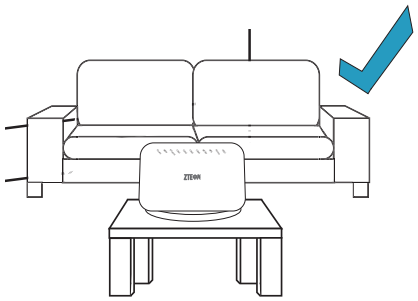
Like radio and television waves, wireless is subject to interference from electrical sources. If you have low signal strength, or you keep losing connection, it could be because some objects are interfering with your router and causing 'noise'. Your wireless signal will be the strongest when it is clear of any obstacles and is in a clear space. Try these tips to get the best out of your wireless:



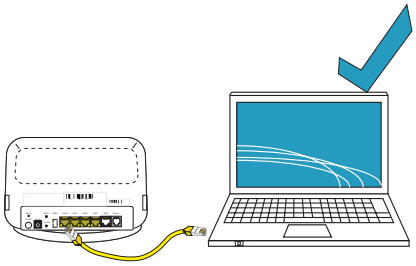
Power on and off your PC/laptop and router to see if this helps.



Thick walls can reduce the range of your wireless connection. Place the router away from walls



Move your router to a common area, such as a living room. Make sure your router isn't crowded and is in a central location.

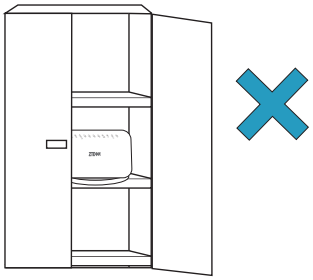


A wired connection is always going to be faster than wireless. For faster speeds, try connecting your PC and router with an ethernet cable and leave Wi-Fi for your other devices.

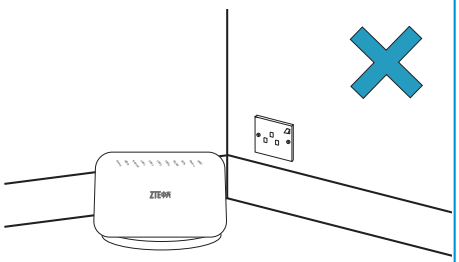
Keep your router away from reflective or shiny surfaces such as fish tanks, mirrors, windows and filing cabinets, as the signal can bounce of these objects.

Do not place your router next to metallic objects, microwaves, cordless phones or RF transmission devices as these send out radio signals which can interfere with your router,

Bluetooth equipped devices like mobile phones send out radio signals. which can interfere with your router. Try turning these off one at a time to see if it make a difference.



Do not place your router in an enclosed space, such as a cupboard as this can limit the signal. Your router needs space and should be in your line of sight.



Ensure your router is in an upright position and is NOT on the floor

3. Other things to consider when connecting wirelessly

- Most wireless routers will provide a range of approximately 100 meters. If you live in a larger property and need greater coverage then you may need to add an additional wireless access point. If you are unsure on how to do this we recommend you contact a local computer technician to assist.

- Your wireless performance could be slowing down due to interference from other wireless networks in your area. Your router will automatically look for the channel with the least interference or "noise", however from time to time, other devices in your area could overlap onto the channel your router is broadcasting on and will compete for the airwaves, causing the Wi-Fi to slow down. You can try and overcome this by changing the channel/frequency that your router will communicate on. We have provided instructions in section 4. Changing the wireless channel on how to do this.

- Try disabling your firewall software and then try to connect again. If this works then contact your firewall supplier for more help

- Remove any old wireless networks as your router may be trying to connect to these instead of the new one. See section 7. Removing wireless networks

- Change the Wireless Network Name (SSID) of the router and then try connecting to this newly named network. If you are using a router not supplied by seethelight from Sky then refer to the manufacturer's instructions.

- Check your computer for viruses by running an anti-virus software.

- And remember...wireless Encryption Keys are case sensitive

- Check the lights on your router to make sure there are no faults here. More about your routers' lights can be found in the internet user guide, hosted on our website at **www.seethelight.co.uk**

If none of the above solutions worked, we recommend connecting your PC to the router via an Ethernet cable and check for online solutions, or getting a computer technician to look at the problem.

4. Changing the wireless router's channel/frequency

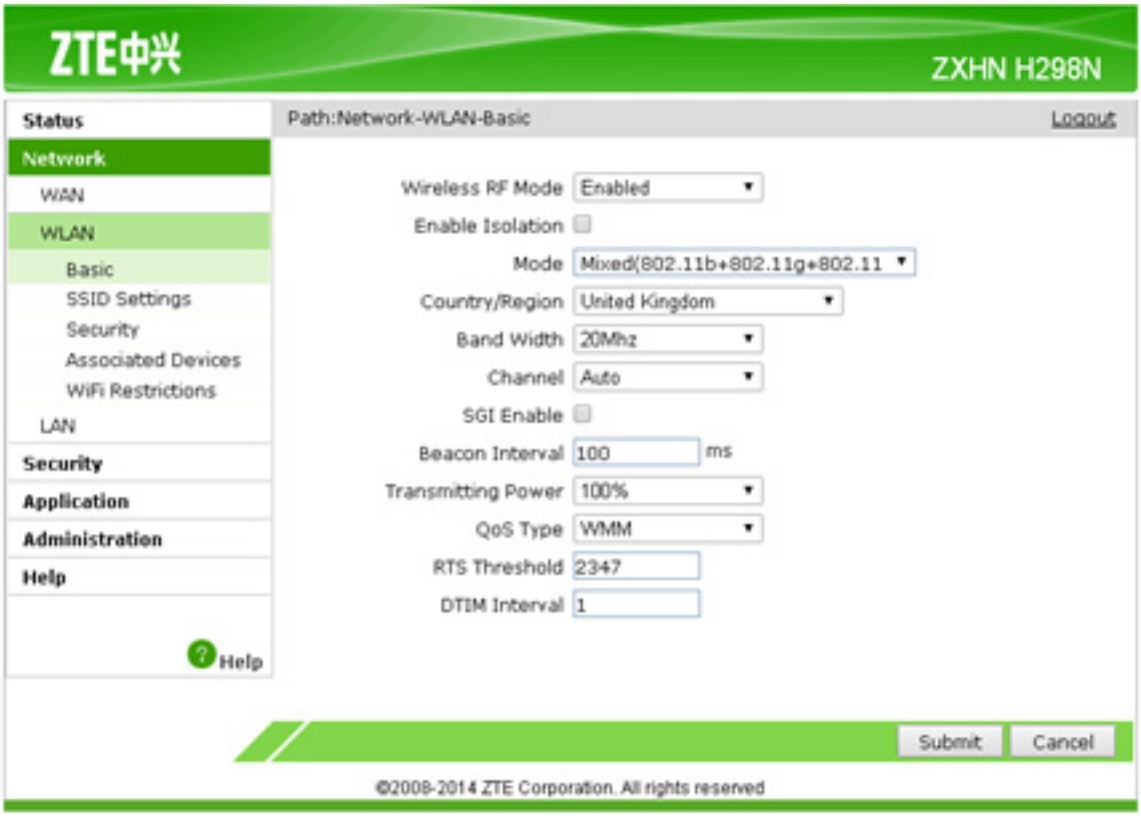
Your wireless performance could be slowing down due to interference from other wireless networks in your area.

From time to time, other devices in your area could overlap onto the channel your router is broadcasting on and will compete for the airwaves, causing interference, or "noise" which will in turn cause the Wi-Fi to slow down. You can try and overcome this by changing the channel/frequency that your router will communicate on.

Your router will automatically look for the channel with the least interference or "noise". If your laptop/PC is unable to "see" your Wireless Network Names (SSID), you may need to login to the router and change the channel manually.

To change the wireless router's channel/frequency:

1. Connect your router to your computer or laptop via an Ethernet Cable
2. Launch the wireless router's administration webpage by typing the address **http://192.168.1.254** into your web browser. When prompted, enter the username **admin** and the password **quick**
3. On the router's homepage, to go Network, then WLAN and select Basic.
4. Here you will be able to change the channel.



5. Changing the Encryption Type and Key

There are a number of options you can select:

No security

This is not recommended by seethelight from Sky as this will allow anyone with a wireless device to connect to your router and use your internet connection and possibly access devices and information in your home network. This option would generally be used for fault finding & turning it to this mode is at your own risk.

WEP

This is an older version of security and although it is secure, it is the weakest of the options. This works best with older router models.

WPA

This option is more secure than WEP and the password can be letters and numbers.

WPA2

This is the latest security standard and is the recommended security type. The password can be letters and numbers.

We recommend you regularly change the Encryption key/password to help keep your wireless network secure.

To change the Encryption Type and Key:

1. Connect your router to your computer or laptop using an Ethernet Cable
2. Launch the wireless router's administration webpage by typing the address **http://192.168.1.254** into your web browser. When prompted, enter the username **admin** and the password **quick**
3. On the router's homepage, click Network, then WLAN, then Security.

6. Changing the Wireless Network Name (SSID)

The wireless network name (SSID) is the name your router shows, enabling you to see your own network to connect. Changing the wireless name can sometimes correct or fix errors with wireless networks.

1. Connect your router to your computer or laptop using an Ethernet Cable
2. Launch the wireless router's administration webpage by typing the address **http://192.168.1.254** into your web browser. When prompted, enter the username **admin** and the password **quick**
3. On the router's homepage, click Network, then WLAN and then SSID settings.
4. You can then change the network name (SSID) here.

7. Removing Wireless Networks

7.1 Windows XP

1. Open network connections and right click Wireless Network Connections, then click properties.
2. Under preferred networks, click the wireless network you want to remove and select "Remove"

7.2 Windows Vista

1. Click "Start", right click "Network" and then select "Properties"
2. Find the task list for the "Network and Sharing Centre" dialogue box and click "Manage Wireless Networks".
3. Select the old connection you wish to remove from the list and select "Remove"

7.3 Windows 7 and 8

1. Open your Control Panel and select "Network and Sharing Centre" and then click on "Manage Wireless Networks"
2. Select the old connection you wish to remove from the list and select "Remove"