

see the world

N300 4G WiFi Router

Model: WL-WN529E4

@WavlinkOfficial @WavlinkTechSupport

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## **About This Guide**

This guide serves as a companion to the Quick Installation Guide for your wired USB product. The Quick Installation Guide provides essential steps for immediate setup, while this document offers detailed explanations of product features and advanced configuration options.

Please note that product functionality may vary slightly depending on your specific model, software version, geographic region, language, and connected devices. Screenshots, parameters, and descriptions in this guide are for illustrative purposes only.

#### **Conventions**

In this guide the following conventions are used:

Convention	Description
<u>Underlined</u>	Underlined words or phrases are hyperlinks. You can click to redirect to a website or a specific section.
Teal	The content and text that needs to be emphasized on the web page is the theme color $\#1D428A$ , including menus, items, buttons, etc.
Note:	Critical reminders to prevent operational errors or functionality issues.
Tips:	Best practices or optimization suggestions for enhanced performance.

#### **More Info**

The latest software, management app and utility are available from the Download Center at https://docs.wavlink.xyz/Firmware/.

A quick installation guide can be found in this guide.

Specifications can be found on the product page at https://docs.wavlink.xyz/.

If you encounter any issues, please don't hesitate to email contact@wavlink.com to provide feedbacks or contact online customer service, thank you!

## **Speed/Coverage Disclaimer**

\*Maximum wireless signal rates are the physical rates derived from IEEE Standard 802.11 specifications. Actual wireless data throughput and wireless coverage are not guaranteed and will vary as a result of 1) environmental factors, including building materials, physical objects, and obstacles, 2) network conditions, including local interference, volume and density of traffic, product location, network complexity, and network overhead, and 3) client limitations, including rated performance, location, connection, quality, and client condition.

Information in this document is subject to change without notice. The manufacturer does not make any representations or warranties (implied or otherwise) regarding the accuracy and completeness of this document and shall in no event be liable for any loss of profit or any commercial damage, including but not limited to special, incidental, consequential, or other damage.

## **Safety Instructions**

Always read the safety instructions carefully.

Keep this Quick Start Guide for future reference.

Keep this equipment away from humidity.

If any of the following situation arises, get the equipment checked by a service technician:

]The equipmen	t has	been ex	posed to	o moisture.
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The equipment has been dropped and damaged.

The equipment has an obvious sign of breakage.

The equipment has not been working well or you cannot get it work according to Quick start Guide.

## **Copyright Statement**

No part of this publication may be reproduced in any form by any means without the prior written permission.

Other trademarks or brand names mentioned herein are trademarks or registered trademarks of their respective companies.

## **WEEE Directive & Product Disposal**

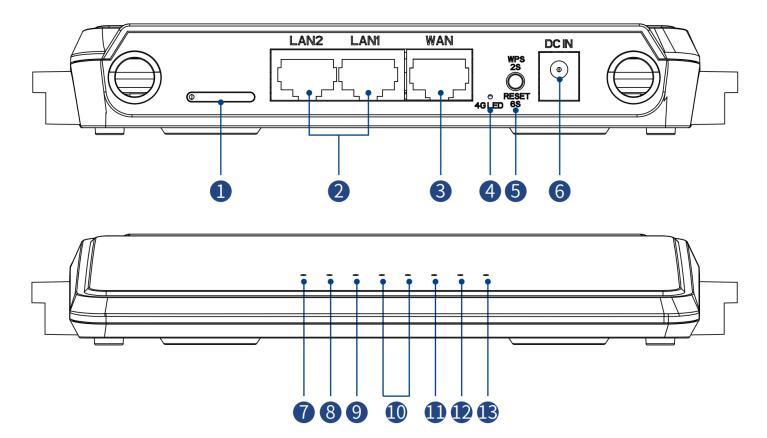
At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.



## **Chapter 1 Basic Product Info**

- Overview
- In the Box
- Basic Info
- LED Indicator

#### **Overview**



- Built-in SIM Card Slot
- 2 LAN Ports
- **3** WAN Port
- 4 4G LED
- **5** RESET/WPS Button
- 6 DC In Port
- Power LED
- 8 WiFi LED

- WAN LED
- 10 LAN LED
- 11 Internet LED
- 12 SYS LED
- **13 WPS LED**

**Reset:** press and hold RESET button for **6-8** seconds. **WPS:** press and hold WPS button for **2** seconds.

#### In the Box

- 1 x N300 4G WiFi Router
- 1 x Power Adapter
- 1 x RJ45 Ethernet Cable
- 1 x SIM Card Needle
- 1 x Quick Start Guide

#### **Basic Info**

Default IP: 192.168.40.1

Login: http://wavlogin.link

Default Password: admin

2.4G SSID: WAVLINK-N\_XXXX

Official Website: www.wavlink.com

Technical Support: support@wavlink.com

### **LED Indicator**

LED	Status	Indication
WiFi LED	On	Wi-Fi is active and working normally
Internet LED	Solid On	Internet is connected

LED	Status	Indication		
Internet LED	Flashing	The WAN port is connected but no Internet access; The 4G network is connected but no Internet access		
Internet LED	Off	No Internet connection		
SYS LED	On	System is starting up		
WPS LED	Flashing	The WPS process is activated		
WPS LED	Off	The WPS process is completed or disabled		
4G LED	Flashing Slowly	SIM card is not detected		
4G LED	Flashing Rapidly	SIM card is detected		

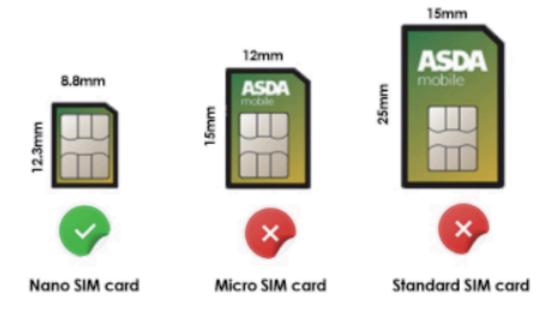
## **Chapter 2 4G LTE Mode Configuration**

This chapter introduces the steps to configure 4G LTE mode.

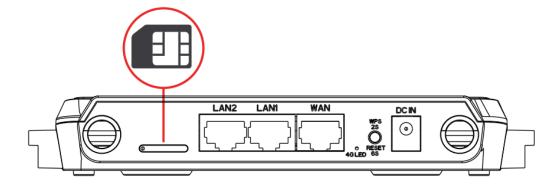
• 4G LTE Mode Configuration

## **4G LTE Mode Configuration**

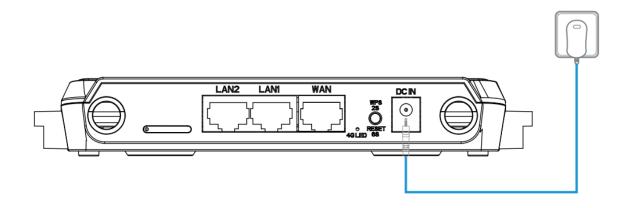
- 1. Hardware Connection
- 1.1 Prepare a compatible Nano SIM card in advance.



• 1.2 Carefully insert the SIM card into the slot until it clicks into place.

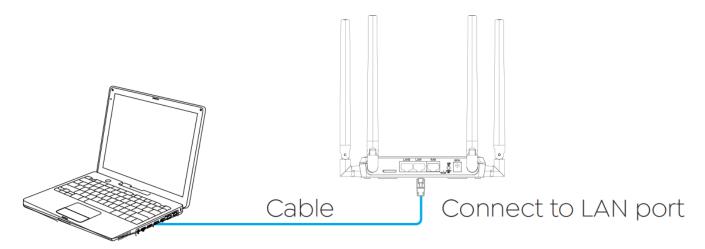


• 1.3 Insert the power adapter into the router's DC IN port and check the LED's Status.



#### 2. Router Connection Methods

• 2.1 Wired Connection: Use another Ethernet cable to connect your computer to one of the LAN ports on the router.



2.2 Wireless Connection: On your laptop or smartphone, connect to the default SSID printed on the router: WAVLINK-N\_XXXX

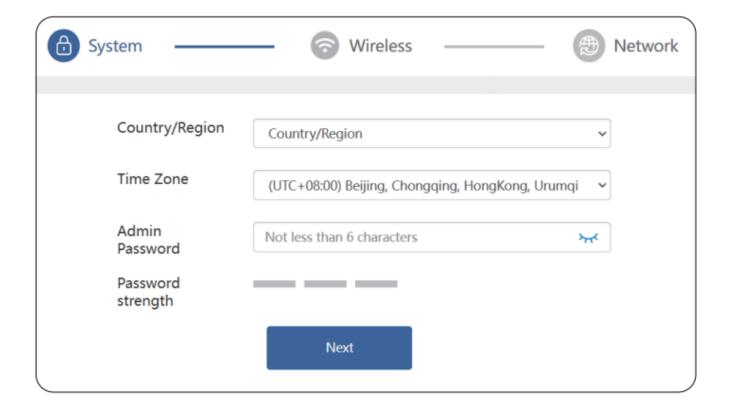


3. Software Configuration

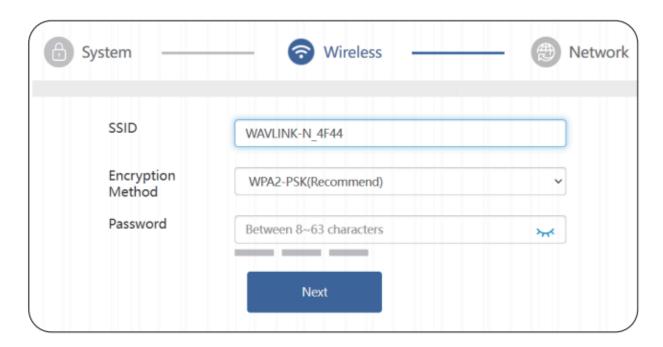
 3.1 Open a web browser (via wired or wireless connection) and enter http://wavlogin.link in the address bar. You will automatically enter the Wavlink router initial setup page. If not, manually enter 192.168.40.1 in the browser's address bar.



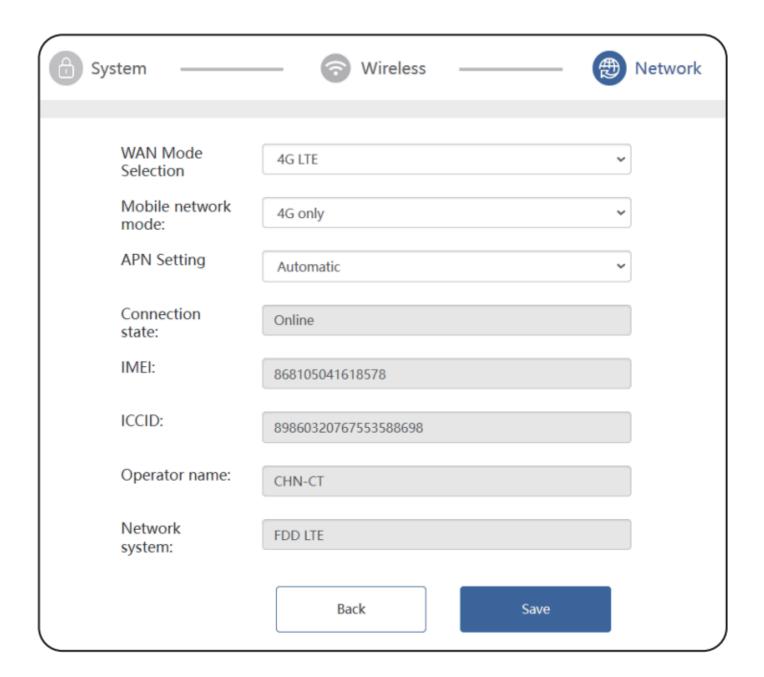
• 3.2. After logging in, select **Country/Region** and **Time Zone**, create a **New Login Password**. Click **Next** to continue.



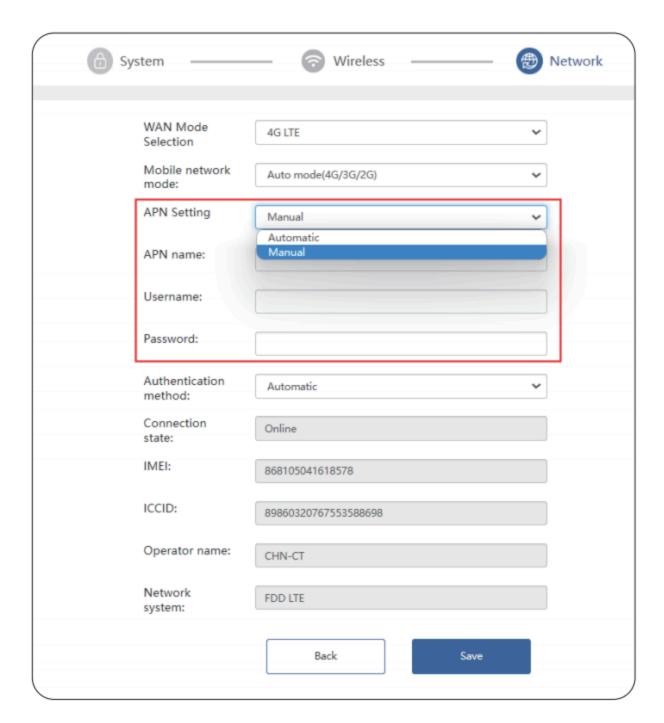
• 3.3 Customize the Wi-Fi **SSID, Encryption Method and Password**. Click **Next** to continue.



• 3.4 At the Network page, choose **4G LTE** for **WAN Mode Selection**, the system automatically identifies and displays the SIM card information.



- **Note**: For most service providers, a 4G router will automatically detect APN (Access Point Name) settings. However, on rare occasions, you may need to manually configure the APN settings before accessing the internet. To do so, you must obtain the correct configuration from your mobile service provider in advance.
- Solution: Set the APN manually Please select Manual to manually enter APN Settings, including APN name, User name, Password, and Authorization information.



- 3.5 Click **Save** to complete the settings.
- 3.6 Connect to the new Wi-Fi network after the setup is complete.

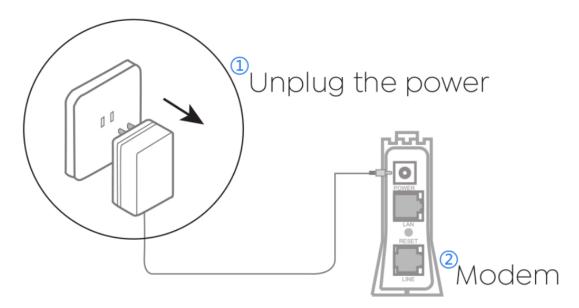
## **Chapter 3 Router Mode Configuration**

The 4G LTE router can not only act as a 4G LTE router, but also operate as a common home router.

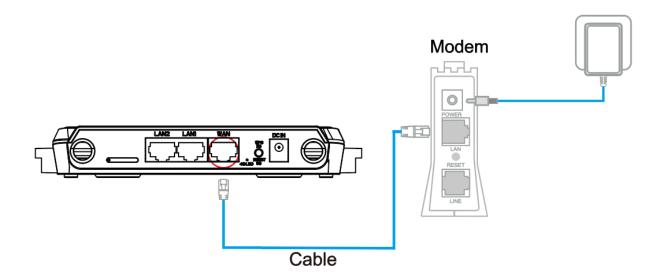
• Router Mode Configuration

## **Router Mode Configuration**

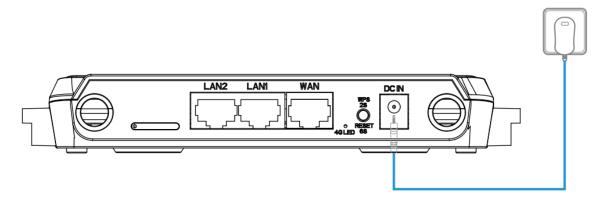
- 1. Prepare the Modem
- 1.1 Unplug the power adapter from your DSL modem. If he modem has backup battery, please remove it.
- Note: If using a DSL Internet connection, obtain the login credentials (username/password) from your Internet Service Provider (ISP) to properly configure your wireless router.



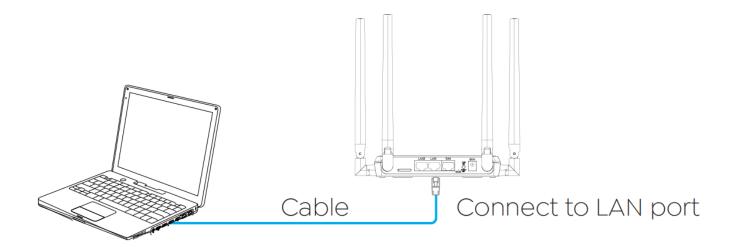
- ① Unplug the power ② Modem
  - 1.2 Use the provided Ethernet cable to connect the modem to the WAN port of the router.



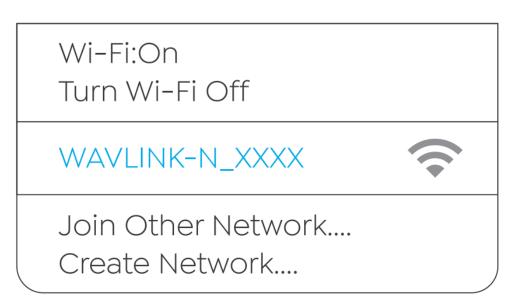
- 1.3 Plug the modem into a power outlet and turn it on.
- 2. Install Your Router
- 2.1 Insert the power adapter into the router's DC IN port and press the power switch (if applicable; some models lack a physical switch).



- 2.2 Wait for about 2-3 minutes, then the router is ready.
- 2.3 Note: After waiting 2 or 3minutes, if the router sitll can not connect to the Internet, please try to plug and unplug the Internet LAN Backhaul port's network cable.
- 3. Configure the Router via Web Browser
- 3.1 Wired Connection: Use another Ethernet cable to connect your computer to one of the LAN ports on the router.



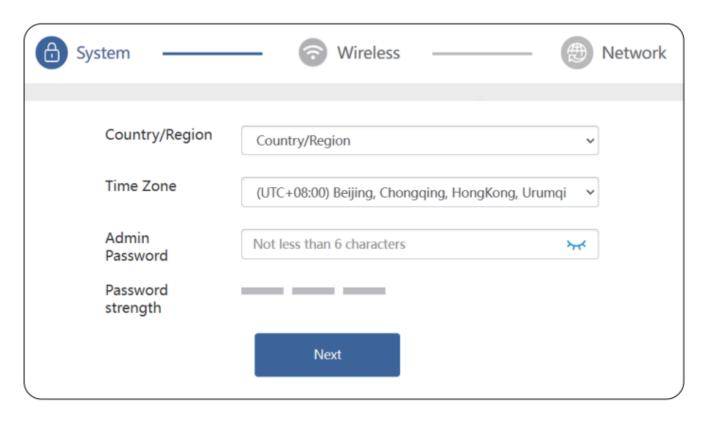
• 3.2 Wireless Connection: On your laptop or smartphone, connect to the default SSID printed on the router: **WAVLINK-N\_XXXX** 



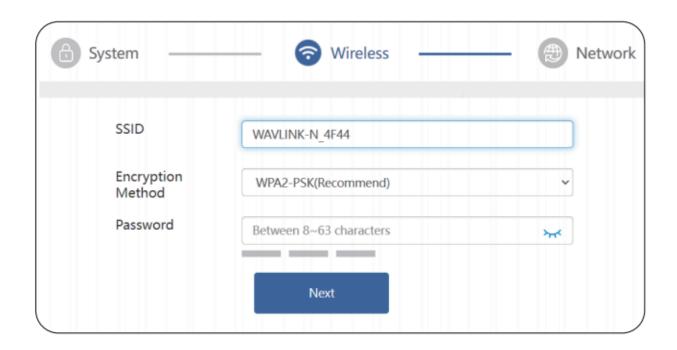
 3.3 Open a web browser (via wired or wireless connection) and enter http://wavlogin.link in the address bar. You will automatically enter the Wavlink router initial setup page. If not, manually enter 192.168.40.1 in the browser's address bar.



• 3.4. After logging in, select **Country/Region** and **Time Zone**, create a **New Login Password**. Click **Next** to continue.



• 3.5 Customize the Wi-Fi **SSID, Encryption Method and Password**. Click **Next** to continue.



 3.6 At the Network page, Choose WAN Ethernet for WAN Mode Selection, and Select DHCP/Static IP/PPPoE for WAN(Ethernet) Type.



- Which WAN Type am I supposed to choose?
- ① If you choose "DHCP", you will need to select whether to clone the MAC address. Some ISPs register the MAC address of your computer when you first access the Internet through their cable modem , we need to clone the MAC address of your computer to the router.
- ② If you choose "PPPoE", enter the "Username" and "Password" provided by your ISP. PPPoE is usually designed for such as DSL or fiber optics.

- ③ If you choose "Static IP", enter a specified IP parameters including IP address, Subnet Mask, Gateway, DNS1 and DNS2 provided by your ISP.
- 3.7 Click **Save** to complete the settings.
- 3.8 Join the new Wi-Fi after setting.

## **Chapter 4 FAQ & After Sales**

This chapter includes FAQ and After Sales.

- FAQ
- After Sales

#### **FAQ**

#### Q1. SIM card cannot be detected

#### Potential cause:

- 1. SIM card is not matched or destroyed.
- 2. SIM card slot issue on router.

#### Troubleshooting:

- 1. Ensure that the SIM card is correctly installed and that it has good contact with the SIM card slot.
- 2. Try another SIM card.
- 3. Turn off the WAVLINK router, then remove the SIM card and gently wipe the metal contacts with a dry, soft cloth. Insert the SIM card into the slot in the correct direction. Turn on the WAVLINK router and try again.

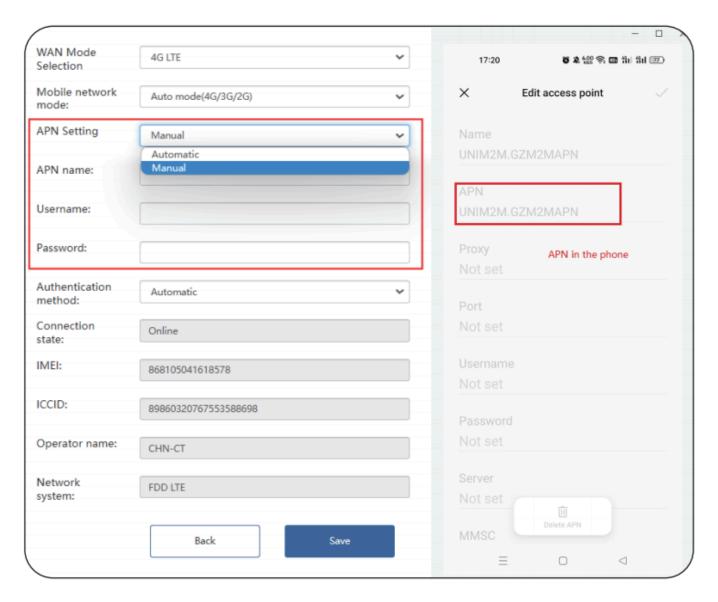
## Q2. No internet access when SIM card is detected

#### Potential cause:

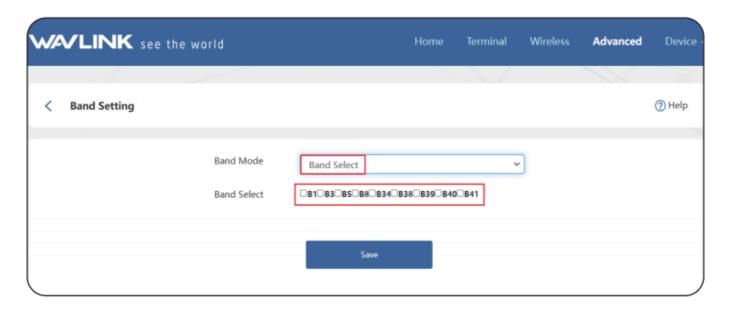
- 1. The default APN profile of the router does not match the SIM card.
- 2. The SIM card is bound to the IMEI of a specific device.
- 3. Weak mobile signal or damaged LTE antenna.
- 4. The SIM card may be overdue on payment or have no data plan.
- 5. The supported band of the SIM card does not match the router.

#### Troubleshooting:

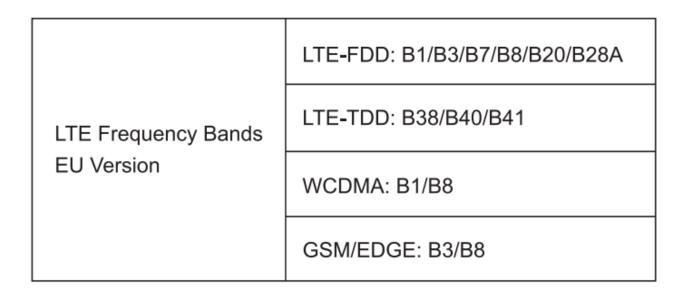
 Get the APN (Access Point Name) settings from your Mobile Service Provider or insert the same SIM card into your phone and find APN settings from phone. Then log into the web-base setup page of the router and select MANUAL to manually enter APN Settings, including APN Name, User Name, Password, and Authorization information.



- 2. Remove the IMEI binding with your SIM card carrier.
- 3. Relocate the router in a suitable place to get better 4G signal.
- Note: If you know the band your SIM card supports, go to the WAVLINK device's management page and select the corresponding band to optimize connection performance.



4. Please check with your carrier to confirm which bands your SIM card supports.



#### **GNU General Public License Notice**

This product includes software codes developed by the third parties. These software codes are subject to either the GNU General Public Licence(GPL), Version 2, June 1991 or the GNU Lesser General Public License(LGPL), Version 2.1, February 1999. You can copy, distribute, and/or modify in accordance with the terms and conditions of GPL or LGPL. The source code should be complete, if you want us to provide any additional source code files under GNU General Public License (GPL), please contact us in these matters. We are committed to meeting the requirements of the GNU General Public License (GPL). You are welcome to contact our local office to get the corresponding sofware and licenses. Please inform us your contact details (full address) and the product code. We

will send you a software package with the sofware and license for free. The respective programs are distributed WITHOUT ANY WARRANTY, without even the implied warranty of MERCHANTABILITY Or FITNESS FOR A PARTICULAR PURPOSE.Please refer to the GNU General Public License Website for further information. http://www.gnu.org/licenses/old-licenses/lgpl-2.0.html http://www.gnu.org/licenses/gpl.html

#### WEEE Directive & Product Disposal



At the end of its serviceable life, this product should not be treated as household or general waste. It should be handed over to the applicable collection point for the recycling of electrical and electronic equipment, or returned to the supplier for disposal.

#### **After Sales**

# Need help?

## We're here for you!



## Online support: wavlink.com

Available Mon-Fri 8:30 am-5:30pm (UTC+8)



## support@wavlink.com

Available Mon-Fri 8:30 am-5:30pm (UTC+8)



+18889730883

Mon-Fri 9:00 am - 10:00 pm (UTC-5)

www.wavlink.com



Thank you for purchasing WAVLINK product!

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# **Chapter 5 Safety and Emission Statement**

Safety and Emission Statement

## **Safety and Emission Statement**

#### **CE Mark Warning**

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

#### NOTE:

- (1)The manufacturer is not responsible for any radio or TV interference caused by unaut horized modifications to this equipment.
- (2)To avoid unnecessary radiation interference, it is recommended to use a shielded RJ4 5 cable.

#### **Declaration of Conformity**

Hereby, Winstars Technology Limited, declares that the radio equipment type WL-WN529E4 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following Internet add ress:https://www.wavlink.com/en\_us/ce.html

#### **FCC Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 dose cause harmful interference to radio or

television reception, which can be determined by tuming the equipment off and on, the user is encouraged to try to correct the interference by one 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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.

Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### **NOTE:**

- (1) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment.
- (2) To avoid unnecessary radiation interference, it is recommended to use a shielded RJ45 cable.