

## X-Link LCM4121M

# X-Link AX3000 Dual Band WiFi 6, 4G LTE CAT12 Router User Manual

Model: LCM4121M

## 1. INTRODUCTION

This manual provides detailed instructions for setting up, operating, and maintaining your X-Link AX3000 Dual Band WiFi 6, 4G LTE CAT12 Router. This device is designed to provide high-speed internet connectivity through 4G LTE and advanced WiFi 6 technology, offering a reliable and efficient network solution for homes and small offices.

## 2. PRODUCT OVERVIEW

### 2.1 Package Contents

- 1x X-Link AX3000 LTE CPE (Router)
- 1x Quick Start Guide (QSG)
- 1x Power Adapter
- 1x Ethernet Cable

### 2.2 Device Layout



Figure 2.2.1: Front View of the Router. Shows the X-Link branding and the row of LED indicators for 5G, 2.4G, 4G, and power status.



Figure 2.2.2: Back View of the Router. Displays two Gigabit Ethernet ports (LAN/WAN) and the power input jack.



Figure 2.2.3: Router Dimensions, Interfaces, and LED Indicators. Provides a detailed diagram of the device's physical layout, including port labels and LED functions.

## 2.3 LED Indicators

Indicator	Status	Description
5G	Solid On	5GHz Wi-Fi is active.
2.4G	Solid On	2.4GHz Wi-Fi is active.
4G	Solid On	4G LTE connection is established.
Power	Solid On	Device is powered on.
Signal Strength (4 bars)	Varies	Indicates the strength of the 4G LTE signal. More bars mean stronger signal.

## 2.4 Interfaces

- **LAN1/WAN Port:** 1 x 10/100/1000Mbps Ethernet port. Can be configured as a WAN or LAN port.
- **LAN2 Port:** 1 x 10/100/1000Mbps Ethernet port.
- **Power Jack:** For connecting the power adapter.
- **SIM Card Slot:** For inserting a Nano SIM card.
- **WPS/Reset Button:** Press for WPS function; press and hold for factory reset.

## 3. SETUP GUIDE

### 3.1 Inserting the SIM Card

1. Ensure the router is powered off.
2. Locate the SIM card slot on the device (refer to Figure 2.2.3).
3. Insert a compatible Nano SIM card into the slot with the gold contacts facing down and the notched corner oriented correctly. Push until it clicks into place.
4. To remove, gently push the SIM card in again until it springs out.

*Note: The router supports Qualcomm Cat12 chipset for high-speed 4G LTE connectivity. Ensure your SIM card is activated and compatible with the router's network bands.*

### 3.2 Powering On the Router

1. Connect the provided power adapter to the Power Jack on the router.
2. Plug the other end of the power adapter into a power outlet.
3. The Power LED indicator will light up, and the router will begin to boot. This may take a few minutes.

### 3.3 Initial Network Connection

Once the router is powered on and the 4G LED is solid, you can connect your devices:

#### 3.3.1 Wireless Connection (Wi-Fi)

1. On your device (smartphone, laptop, tablet), open your Wi-Fi settings.
2. Search for the Wi-Fi network name (SSID) printed on the label at the bottom of your router.
3. Select the SSID and enter the Wi-Fi password (also found on the router's label).
4. Your device should now be connected to the internet.

#### 3.3.2 Wired Connection (Ethernet)

1. Connect one end of the Ethernet cable to a LAN port on the router (LAN1 or LAN2).
2. Connect the other end of the Ethernet cable to the Ethernet port on your computer or other wired device.
3. Your device should automatically obtain an IP address and connect to the internet.

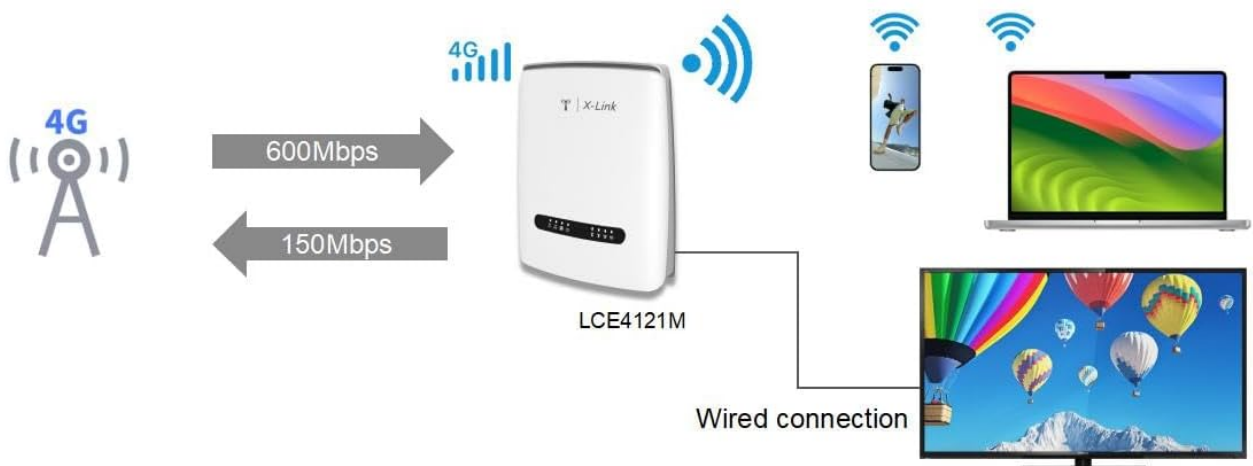
## 4. OPERATING MODES

### 4.1 Router/AP Mode

In Router/AP mode, the X-Link AX3000 converts your 4G LTE cellular connection into a high-speed Wi-Fi network. It acts as the primary internet gateway, providing internet access to all connected wireless and wired devices.

# Router/AP Mode

Perfectly converting your wired network into wireless.



## Mesh Mode

Wi-Fi experience with one WiFi name at whole home and seamless roaming.

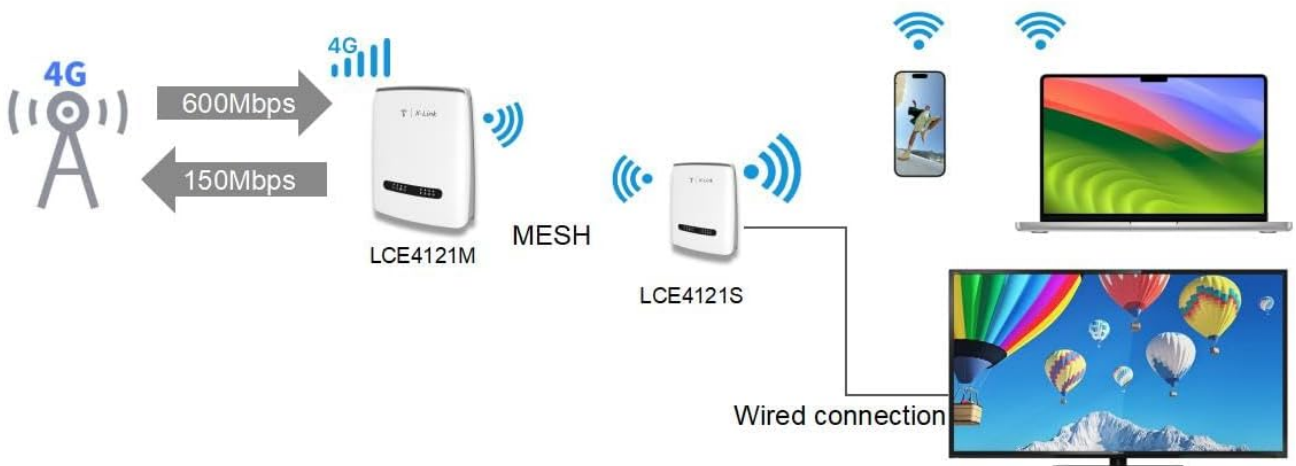


Figure 4.1.1: Router/AP Mode Operation. Shows the router receiving 4G LTE signal and distributing internet via Wi-Fi and wired connections to various devices.

### 4.2 Mesh Mode

The Mesh capability allows you to expand your Wi-Fi coverage seamlessly throughout your entire home or office. By adding compatible X-Link Mesh routers (sold separately), you can create a unified network with a single Wi-Fi name, eliminating dead zones and ensuring consistent, strong signal coverage.

**Next Generation WIFI  
AX3000 WIFI 6**

Amazing speeds up to 3Gbps  
Enjoy a better 8k/4K/FHD videos.  
Gaming, and Internet.

2402Mbps  
574Mbps

Figure 4.2.1: Mesh Mode Operation. Depicts multiple X-Link devices working together to provide seamless Wi-Fi coverage across a larger area.



Figure 4.2.2: Router Application Scenarios. Illustrates the router's versatility for use in home, lobby, and office environments, highlighting its broad applicability.

## 5. KEY FEATURES AND BENEFITS

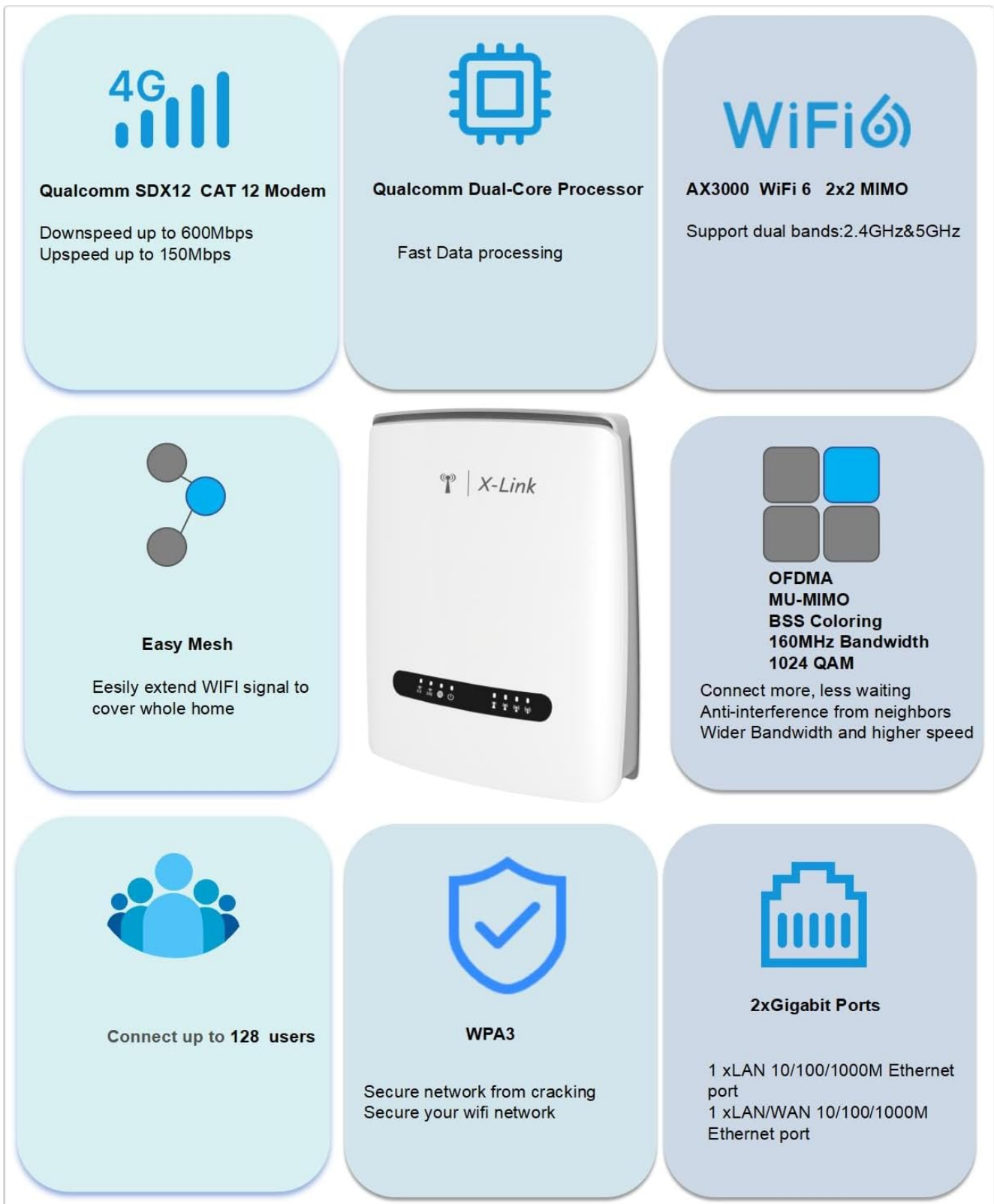


Figure 5.0.1: Key Features Overview. Summarizes the main technical advantages of the router, including chipset, Wi-Fi standards, and connectivity options.

- **4G LTE CAT12 Connectivity:** Equipped with a Qualcomm Cat12 chipset, offering download speeds up to 600Mbps and upload speeds up to 150Mbps. Ideal for areas without traditional wired broadband.
- **Dual-Band WiFi 6 (AX3000):** Delivers combined speeds of up to 2976Mbps (2402Mbps on 5GHz and 574Mbps on 2.4GHz) for smoother streaming, gaming, and browsing.
- **High Device Capacity:** Supports stable connections for up to 128 devices simultaneously, leveraging MU-MIMO and OFDMA technologies to improve transmission efficiency and reduce latency.
- **Gigabit Ethernet Ports:** Two 1000/100/10Mbps Ethernet ports provide stable and high-speed wired connections for devices like gaming consoles and PCs.

- **Mesh Capability:** Expand your Wi-Fi coverage by seamlessly integrating with other X-Link Mesh routers, creating a unified network with no dead zones.
- **Enhanced Security:** Supports WPA3 encryption for a secure network, protecting against unauthorized access.



Figure 5.0.2: Next Generation WiFi 6 Performance. Emphasizes the high speeds and benefits of AX3000 WiFi 6 technology for demanding applications like 8K/4K video and gaming.

## 6. SPECIFICATIONS

Feature	Detail
Model Name	X-Link 4G AX3000 WiFi 6 Router (LCM4121M)
Chipset	Qualcomm SDx12 (Cat12)
4G LTE Speeds	Download: Up to 600Mbps, Upload: Up to 150Mbps
Wi-Fi Standard	WiFi 6 (802.11ax)
Wi-Fi Speed	AX3000 (2402Mbps on 5GHz, 574Mbps on 2.4GHz)
Frequency Band	Dual-Band (2.4GHz & 5GHz)
Ethernet Ports	2 x Gigabit (10/100/1000Mbps) Ethernet Ports (1x LAN/WAN, 1x LAN)
SIM Card Type	Nano SIM
Max Devices	Up to 128
Dimensions	11.73 x 7.87 x 3.11 inches
Item Weight	1.94 pounds
Special Features	Mesh Capability, Internet Security, Parental Control, MU-MIMO, OFDMA
Included Components	1x LTE CPE, 1x QSG, 1x Power Adapter, 1x Cable

## 7. TROUBLESHOOTING

### 7.1 No Internet Connection

- **Check SIM Card:** Ensure the SIM card is correctly inserted and activated with a data plan.
- **Check 4G LED:** If the 4G LED is off or blinking, the router may not have a cellular signal. Try relocating the router to an area with better signal strength.
- **Restart Router:** Power off the router, wait 10 seconds, then power it back on.
- **Check APN Settings:** Access the router's web management interface (usually 192.168.1.1 or similar, check router label) and verify that the APN settings are correct for your mobile carrier.

### 7.2 Slow Wi-Fi Speed

- **Signal Strength:** Ensure your device is close enough to the router for a strong Wi-Fi signal.
- **Interference:** Move the router away from other electronic devices that might cause interference (e.g., microwaves, cordless phones).
- **Band Selection:** For faster speeds, connect to the 5GHz Wi-Fi band if your device supports it.
- **Too Many Devices:** While the router supports many devices, excessive simultaneous high-bandwidth usage can impact performance.
- **Firmware Update:** Check the router's web interface for available firmware updates.

### 7.3 Cannot Access Router Web Interface

- **IP Address:** Ensure you are using the correct default IP address (e.g., 192.168.1.1). Check the label on the router.
- **Wired Connection:** Try connecting your computer directly to the router via an Ethernet cable.

- **Browser Cache:** Clear your web browser's cache and cookies, or try a different browser.
- **Firewall/Antivirus:** Temporarily disable any firewall or antivirus software on your computer that might be blocking access.

## 7.4 Resetting to Factory Defaults

If you encounter persistent issues, you can reset the router to its factory default settings. This will erase all custom configurations (Wi-Fi name, password, etc.).

1. With the router powered on, locate the WPS/Reset button (often a small pinhole).
2. Use a paperclip or a thin object to press and hold the button for approximately 10 seconds until the LEDs flash.
3. Release the button. The router will restart with factory default settings.

## 8. MAINTENANCE

- **Regular Cleaning:** Keep the router clean and free from dust. Use a soft, dry cloth.
- **Ventilation:** Ensure the router is placed in a well-ventilated area to prevent overheating. Do not cover ventilation holes.
- **Firmware Updates:** Periodically check the manufacturer's website or the router's web interface for firmware updates. Updates can improve performance, add features, and fix bugs.
- **Secure Placement:** Place the router on a stable surface, away from direct sunlight, heat sources, and moisture.

## 9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the warranty card included with your product or visit the official X-Link website. You can also contact X-Link customer service for assistance with product setup, troubleshooting, and general inquiries.

**Manufacturer:** X-Link

**Contact Information:** Please refer to the Quick Start Guide or the official X-Link website for the most current support contact details.