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> WAVLINK AX3000 WiFi 6 Extender User Manual - Model WL-WN583HX3-A

WAVLINK WL-WN583HX3-A

WAVLINK AX3000 WiFi 6 Extender User Manual

MODEL: WL-WN583HX3-A

1. Introduction

The WAVLINK AX3000 WiFi 6 Extender is designed to expand your existing wireless network coverage, eliminate Wi-Fi dead zones, and provide high-speed internet access throughout your home or office. This device supports the latest Wi-Fi 6 (802.11ax) standard, offering dual-band speeds up to 3000Mbps (573Mbps on 2.4GHz and 2402Mbps on 5GHz) and features multiple operating modes including Repeater, Access Point (AP), Router, and Mesh.

This manual provides detailed instructions for setting up, operating, and maintaining your WAVLINK AX3000 WiFi 6 Extender to ensure optimal performance and connectivity.

2. Package Contents

Please verify that all items are present in your package:

- WAVLINK AX3000 WiFi 6 Extender (Model: WL-WN583HX3-A)
- Networking Cable
- Quick Installation Guide

Palm-Size & Effective Cooling

◆ Default Parameters

SSID: WAVLINK-AX_XXXX

Default IP: 192.168.10.1

Login: <http://waplogin.link>



Image: WAVLINK AX3000 WiFi 6 Extender and its included Ethernet cable.

3. Product Features

The WAVLINK AX3000 WiFi 6 Extender offers advanced features for enhanced network performance:

- **AX3000 Dual-Band WiFi 6:** Delivers combined speeds of up to 3000Mbps (573Mbps on 2.4GHz + 2402Mbps on 5GHz) with 160MHz bandwidth.
- **Five High-Gain Antennas:** Equipped with 5 external 5dBi antennas for superior signal penetration and extended coverage up to 3000 sq. ft.
- **Gigabit Ethernet Port:** Provides a 1000Mbps Ethernet port for reliable wired connections to devices like smart TVs, gaming consoles, or PCs.
- **Multi-Working Modes:** Supports Repeater, Access Point (AP), Router, and Mesh modes to adapt to

various networking needs.

- **WPS Functionality:** Allows for easy and secure setup with compatible routers using the Wi-Fi Protected Setup button.
- **Broad Device Compatibility:** Connects seamlessly with over 256 devices, including phones, tablets, smart home devices, and streaming devices.
- **Robust Security:** Supports WPA/WPA2-PSK/WPA3-PSK security protocols to protect your home network.
- **Effective Cooling:** Features an integrated cooling system to maintain stable performance.

5dBi High Gain Antennas

Cover the whole-home WiFi with five antennas,
Super Strong Signal Penetration

Get rid of

- Bad WiFi Signal
- No WiFi
- Constant Buffering

5 Antennas

Sq.FT

3000

WAVLINK

WPS

Coverage up to 3000 Sq.FT

256 Devices

Works with any router

Image: Key features of the WAVLINK AX3000 WiFi 6 Extender, including speed, Ethernet port, and dual-band capabilities.

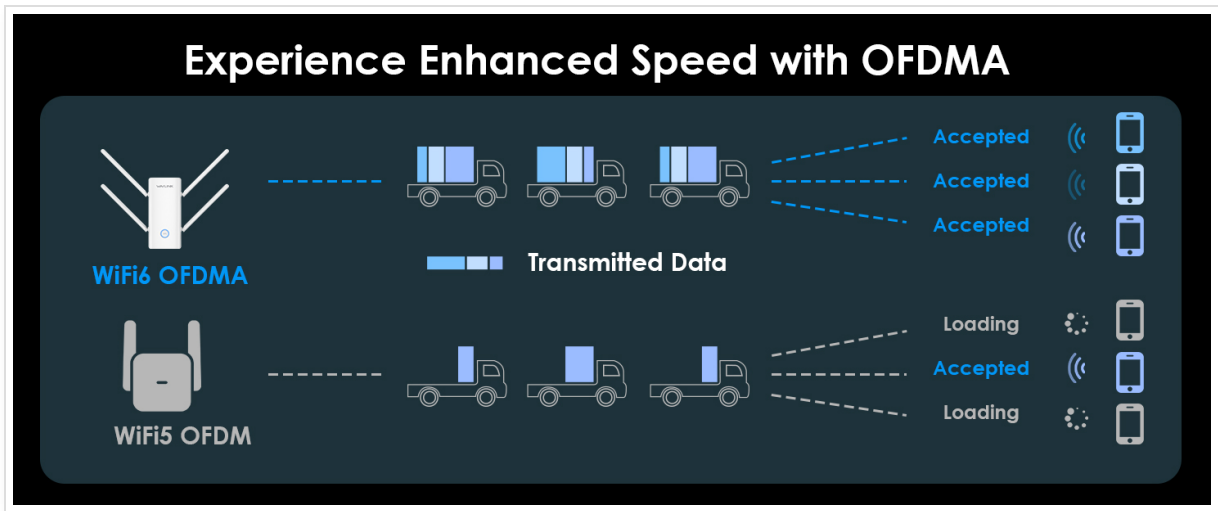


Image: Illustration of the WAVLINK AX3000 extending Wi-Fi coverage throughout a home.

4. Setup Guide

There are two primary methods to set up your WAVLINK AX3000 WiFi 6 Extender: using the WPS button or via the web interface.

4.1. WPS (Wi-Fi Protected Setup) Method

The WPS method is the quickest way to extend your Wi-Fi network if your main router supports WPS.

1. **Power On:** Plug the WAVLINK AX3000 Extender into an electrical outlet near your main router. Wait for the power LED to stabilize.
2. **Activate WPS on Router:** Press the WPS button on your main router. Refer to your router's manual for the exact location and timing.
3. **Activate WPS on Extender:** Within two minutes, press the WPS button on the WAVLINK AX3000 Extender for approximately 2 seconds. The WPS LED on the extender will start blinking.
4. **Connect:** The extender will automatically connect to your router. Once connected, the signal strength LEDs on the extender will illuminate, indicating a successful connection.
5. **Relocate:** Unplug the extender and move it to a location halfway between your router and the Wi-Fi dead zone. Ensure the signal strength LEDs indicate a good connection.



Image: Visual guide for setting up the extender in Repeater Mode using the WPS function.

4.2. Web Interface Method

The web interface provides more control over the extender's settings and is necessary for AP, Router, or Mesh modes.

1. **Power On:** Plug the WAVLINK AX3000 Extender into an electrical outlet.
2. **Connect to Extender:** On your computer or mobile device, connect to the extender's default Wi-Fi network (SSID: WAVLINK-AX_XXXX, where XXXX are the last four digits of the MAC address). No password is required initially.
3. **Access Web Interface:** Open a web browser and enter `http://waplogin.link` or `192.168.10.1` in the address bar.
4. **Login:** Follow the on-screen instructions to create a new login password for the extender's management interface.
5. **Select Mode:** Choose your desired operating mode (Repeater, AP, Router, or Mesh) and follow the wizard to configure the settings. For Repeater mode, select your existing Wi-Fi network and enter its password.
6. **Apply Settings:** Save the settings and wait for the extender to restart.
7. **Connect to New Network:** Your devices can now connect to the extended Wi-Fi network. If you chose Repeater mode, the extended network might have the same SSID as your main router or a new one (e.g., YourNetwork_EXT).

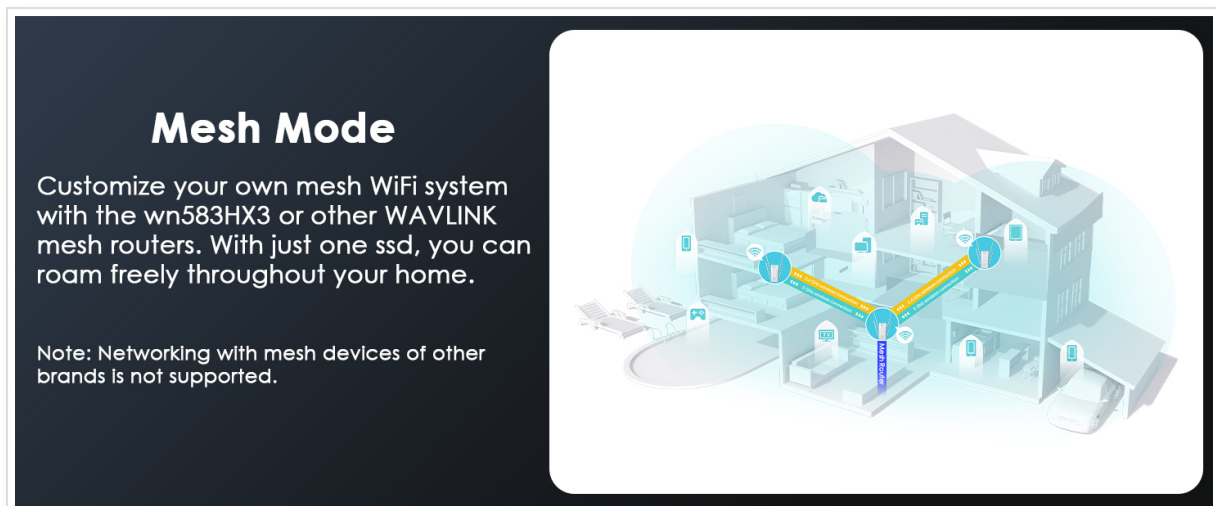


Image: Screenshots demonstrating the user-friendly web interface for setup and management.

5. Operating Modes

The WAVLINK AX3000 Extender supports four distinct operating modes:

- **Repeater Mode:** Extends the coverage of an existing wireless network. The extender connects wirelessly to your main router and rebroadcasts the signal.
- **Access Point (AP) Mode:** Transforms a wired internet connection into a wireless network. Connect the extender to your modem or router via an Ethernet cable, and it will create a new Wi-Fi hotspot.
- **Router Mode:** Functions as a primary router, providing internet access to multiple devices. Connect the extender to your modem via an Ethernet cable.
- **Mesh Mode:** Creates a seamless whole-home Wi-Fi system with a single SSID. This mode is ideal for eliminating dead zones and allowing devices to roam freely without manual reconnection. Note: Mesh mode is typically compatible with other WAVLINK mesh devices.

Multiple Working Modes

AP Mode: Turn wired network to wireless



Repeater Mode: Extend WiFi signal



Router Mode: Mini router for home use



Mesh Mode: Build Mesh system WiFi network



Image: Overview of the four operating modes: AP, Repeater, Router, and Mesh.

6. Maintenance

To ensure the longevity and optimal performance of your WAVLINK AX3000 Extender, consider the following maintenance tips:

- **Optimal Placement:** Position the extender in an open area, away from obstructions like thick walls, metal objects, and other electronic devices that may cause interference. For Repeater mode, place it roughly halfway between your router and the desired coverage area.
- **Firmware Updates:** Regularly check the WAVLINK official website for firmware updates. Updating the firmware can improve performance, add new features, and enhance security.
- **Cleaning:** Keep the device clean and free from dust. Use a soft, dry cloth to wipe the exterior. Ensure

ventilation openings are not blocked.

- **Power Cycle:** If you experience connectivity issues, try power cycling the extender (unplug it from the power outlet, wait 10 seconds, then plug it back in).
- **Reset:** In case of persistent issues or forgotten login credentials, you can perform a factory reset. With the extender powered on, press and hold the Reset button (usually a small pinhole) for about 8-10 seconds until the LEDs flash. Note that a factory reset will erase all custom settings.

7. Troubleshooting

If you encounter problems with your WAVLINK AX3000 Extender, refer to the following common issues and solutions:

Problem	Solution
No internet access after setup.	<ul style="list-style-type: none">• Ensure the extender is successfully connected to your main router (check signal LEDs).• Verify the Wi-Fi password entered during setup is correct.• Check if your main router has internet access.• Try power cycling both the extender and your main router.
Weak signal or frequent disconnections.	<ul style="list-style-type: none">• Relocate the extender closer to your main router, ensuring it's still within the desired coverage area.• Avoid placing the extender near large metal objects, concrete walls, or other sources of interference (e.g., microwaves, cordless phones).• Adjust the antennas for better signal reception.• Update the extender's firmware to the latest version.
Cannot access the web management page.	<ul style="list-style-type: none">• Ensure your device is connected to the extender's Wi-Fi network (or via Ethernet in AP/Router mode).• Verify you are using the correct address: http://waplogin.link or 192.168.10.1.• Clear your browser's cache or try a different browser.• If you forgot the login password, perform a factory reset.
WPS setup fails.	<ul style="list-style-type: none">• Ensure both WPS buttons are pressed within the 2-minute window.• Confirm your main router supports WPS and it is enabled.• Try the web interface setup method instead.

8. Specifications

Feature	Detail
Model Number	WL-WN583HX3-A

Feature	Detail
Wireless Standard	802.11a/b/g/n/ac, 802.11ax (WiFi 6)
Data Transfer Rate	Up to 3000 Mbps (2.4GHz: 573Mbps, 5GHz: 2402Mbps)
Frequency	Dual Band (2.4 GHz & 5 GHz), 160 MHz bandwidth
Antennas	5 x 5dBi High-Gain Antennas
Ethernet Port	1 x Gigabit Ethernet Port
Special Features	Access Point Mode, MU-MIMO, WiFi Mesh
Security Protocols	WPA/WPA2-PSK/WPA3-PSK
Product Dimensions	1.65 x 2.9 x 6.4 inches
Item Weight	1.08 pounds

9. Warranty and Support

For warranty information, technical support, and additional resources, please visit the official WAVLINK website or contact their customer service. Keep your purchase receipt for warranty claims.

WAVLINK Official Website: www.wavlink.com