WAVLINK WL-WN573HX1-US

WAVLINK AX1800 WiFi 6 Outdoor Extender (Model: WL-WN573HX1-US) Instruction Manual

Model: WL-WN573HX1-US | Brand: WAVLINK

1. Introduction

The WAVLINK AX1800 WiFi 6 Outdoor Extender is designed to provide robust and reliable wireless network coverage for outdoor environments. Its IP67 weatherproof housing ensures durability in harsh conditions, offering stable wireless connectivity up to 200-300 meters. This device supports the latest Wi-Fi 6 standard (IEEE 802.11ax/ac/a/b/g/n) with dual-band speeds up to 1201Mbps on 5GHz and 574Mbps on 2.4GHz, enabling simultaneous connections for up to 128 devices.

Key Features:

- **AX1800 Dual Band WiFi 6:** Supports speeds up to 1201Mbps (5GHz) and 574Mbps (2.4GHz) for seamless HD video streaming and online gaming.
- **Designed for Harsh Outdoor Conditions:** Features IP67 waterproof housing, 15 KV ESD protection, and 6 KV lightning protection. Equipped with fiberglass tube high-gain antennas for increased WiFi coverage and resistance to environmental factors.
- **Optional PoE Power Supply:** Supports 802.3AF/AT active PoE and passive PoE, allowing data and power transfer via a single Ethernet cable for flexible outdoor installation. (Note: PoE converter is not waterproof; use CAT5E or higher cable, max 100m/328ft).
- **Seamless WiFi Roaming:** Utilizes 4 x 8 dBi omnidirectional antennas and two high-performance amplifiers for extreme WiFi coverage and penetration. Supports Mesh technology for extended WiFi coverage and elimination of dead zones.
- **Multiple Operating Modes:** Supports Mesh, AP, Router, Repeater, and AP + Repeater modes to suit various outdoor connection scenarios.

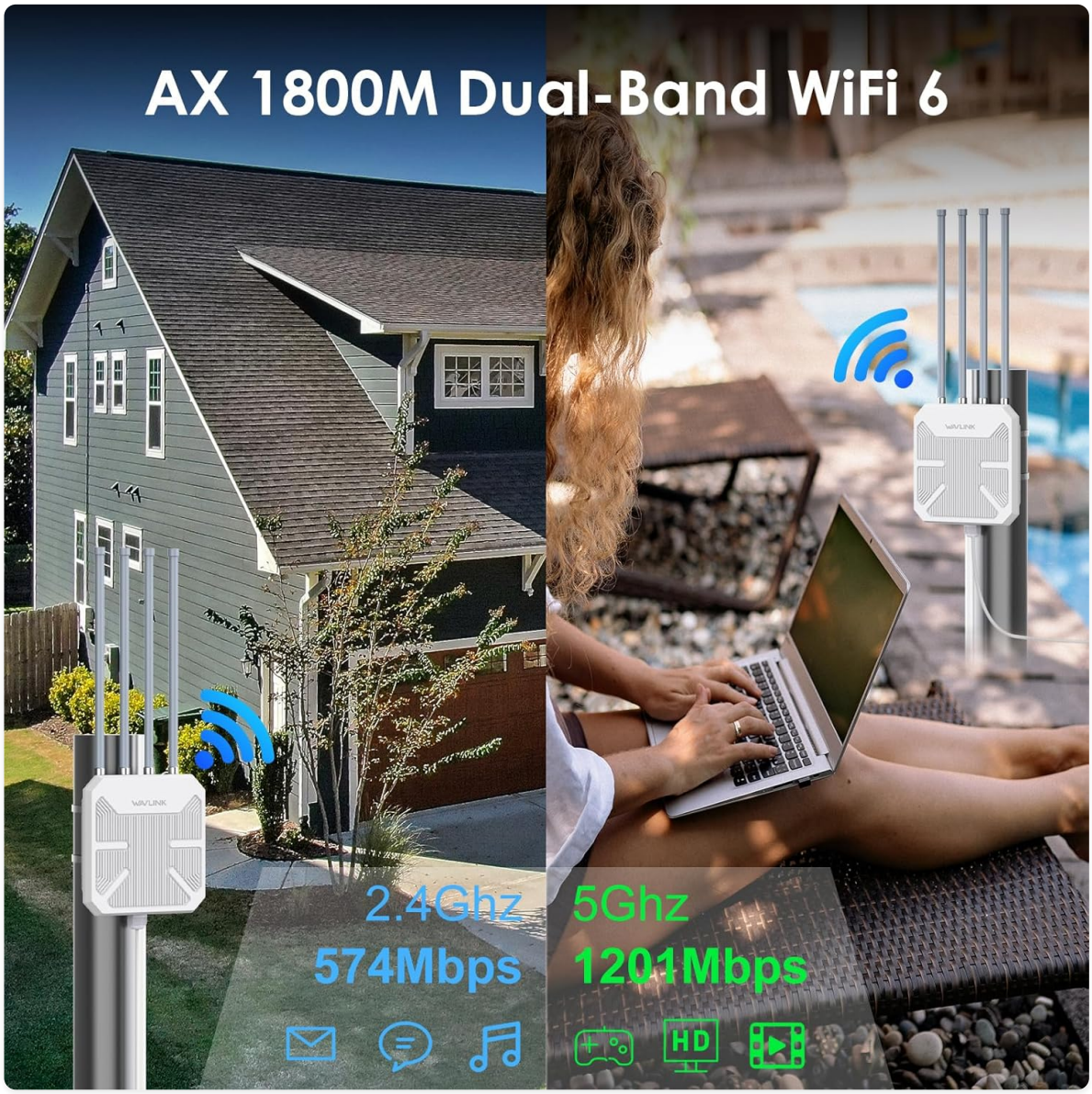

Figure 1: WAVLINK AX1800 WiFi 6 Outdoor Extender highlighting dual-band speeds (2.4GHz 574Mbps, 5GHz 1201Mbps) and outdoor usage.

Figure 2: WAVLINK AX1800 WiFi 6 Outdoor Extender demonstrating extended WiFi coverage up to 300 meters in an outdoor setting.

2. Package Contents

Verify that all items listed below are included in your package:

- AP body
- Power adapter
- RJ45 cable
- PoE adapter

Figure 3: All components included in the WAVLINK AX1800 WiFi 6 Outdoor Extender package, laid out on a surface.

3. Setup

3.1 Antenna Assembly

1. Carefully unpackage the four 8 dBi omnidirectional antennas.
2. Screw each antenna securely into the designated ports on the AP body. Ensure they are finger-tight to maintain weather sealing.

3.2 Mounting the Device

The device can be mounted on a wall or a pole. Use the provided mounting accessories and template (if applicable) to secure the AP body in your desired outdoor location. Ensure the device is positioned for optimal signal coverage and away from obstructions.

3.3 PoE Connection

1. Connect one end of the RJ45 Ethernet cable to the LAN/WAN port on the AP body. Ensure the waterproof RJ45 connector is properly sealed.
2. Connect the other end of the RJ45 cable to the 'PoE' port on the PoE adapter.
3. Connect a standard Ethernet cable from your router/network switch to the 'LAN' port on the PoE adapter.
4. Plug the power adapter into the PoE adapter and then into a power outlet. The device will power on.

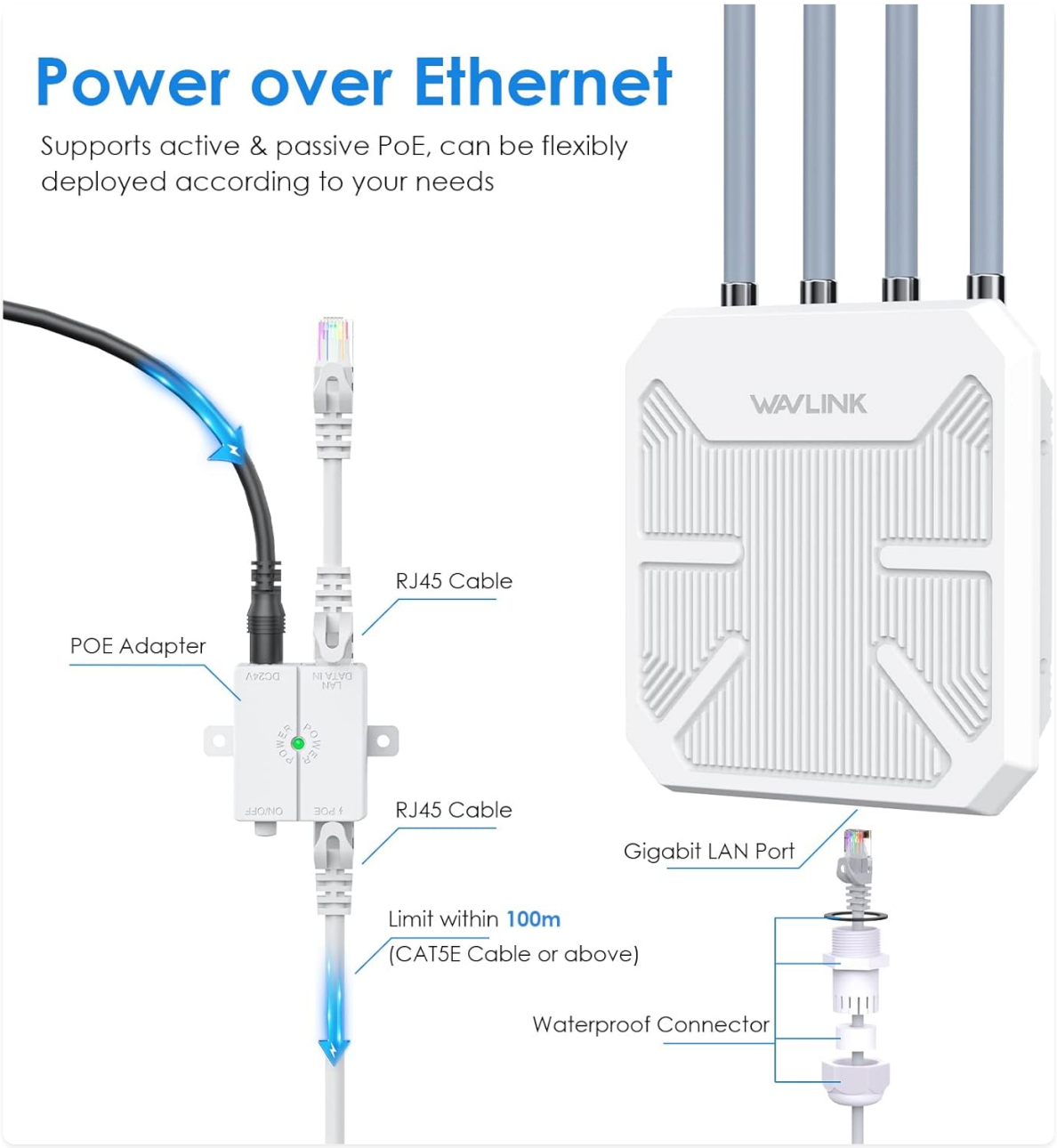

Figure 4: Diagram illustrating the Power over Ethernet (PoE) connection for the WAVLINK AX1800 WiFi 6 Outdoor Extender, showing the PoE adapter, RJ45 cables, and waterproof connector.

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Video 1: A seller demonstrates the unboxing and setup process of the WAVLINK AX3000 Outdoor WiFi Extender, including antenna attachment and PoE connection.

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Video 2: A seller provides a detailed unboxing and installation guide for the WAVLINK Greenwood 6 AX3000 WiFi Extender, showing mounting and cable connections.

4. Operating Modes

The WAVLINK AX1800 WiFi 6 Outdoor Extender supports multiple operating modes to adapt to various network requirements and outdoor scenarios:

- **Mesh Mode:** Allows multiple extenders to create a unified network with a single SSID, providing seamless roaming across a large area.

- **AP (Access Point) Mode:** Converts a wired network connection into a wireless one, ideal for extending an existing wired network wirelessly.
- **Router Mode:** Functions as a primary router, creating a new wireless network from a wired internet connection.
- **Repeater Mode:** Extends the coverage of an existing wireless network by receiving and re-transmitting the signal.
- **AP + Repeater Mode:** Combines the functionalities of Access Point and Repeater modes.

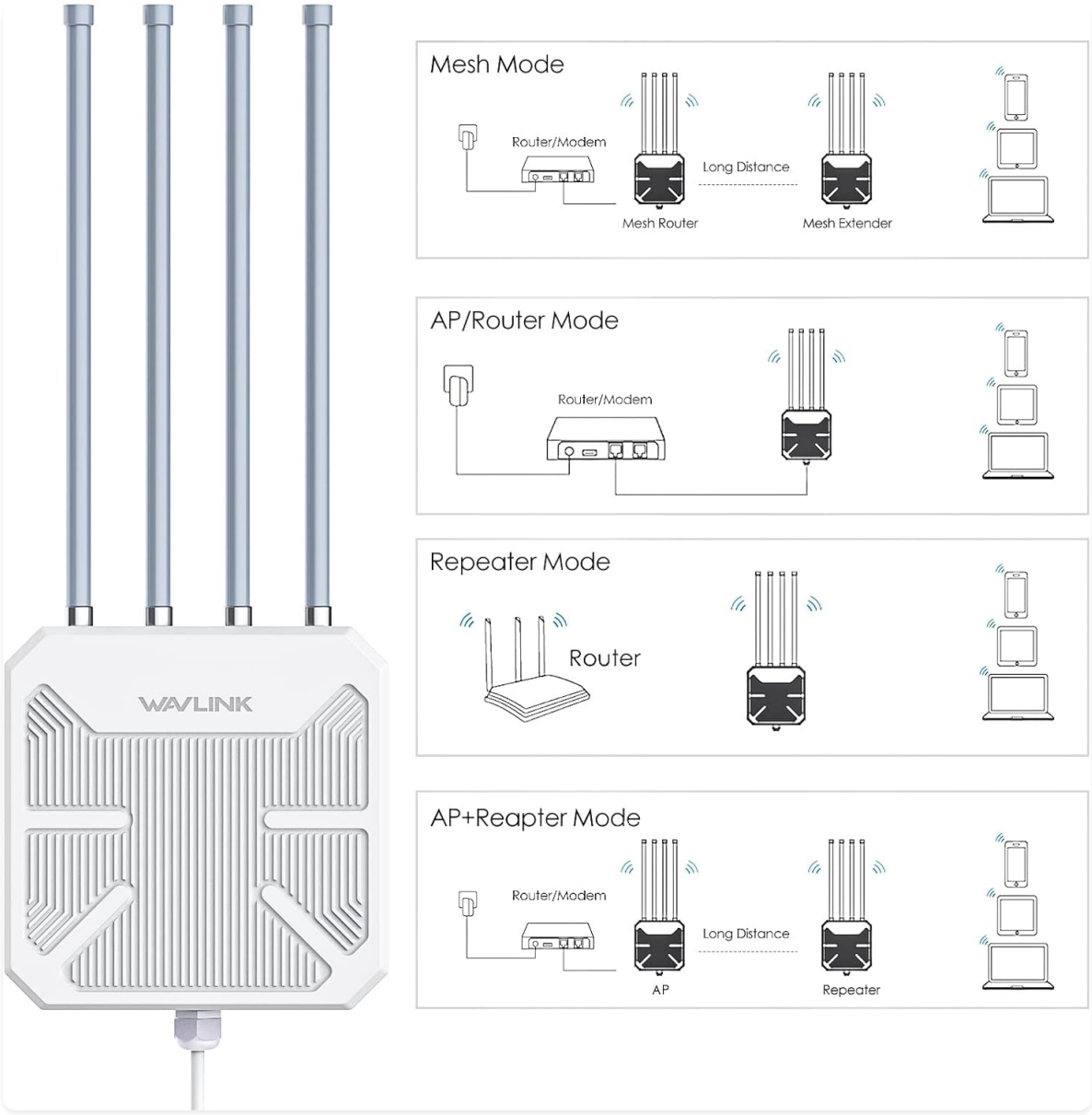

Figure 5: Diagrams illustrating different operating modes: Mesh Mode, AP/Router Mode, Repeater Mode, and AP+Repeater Mode.

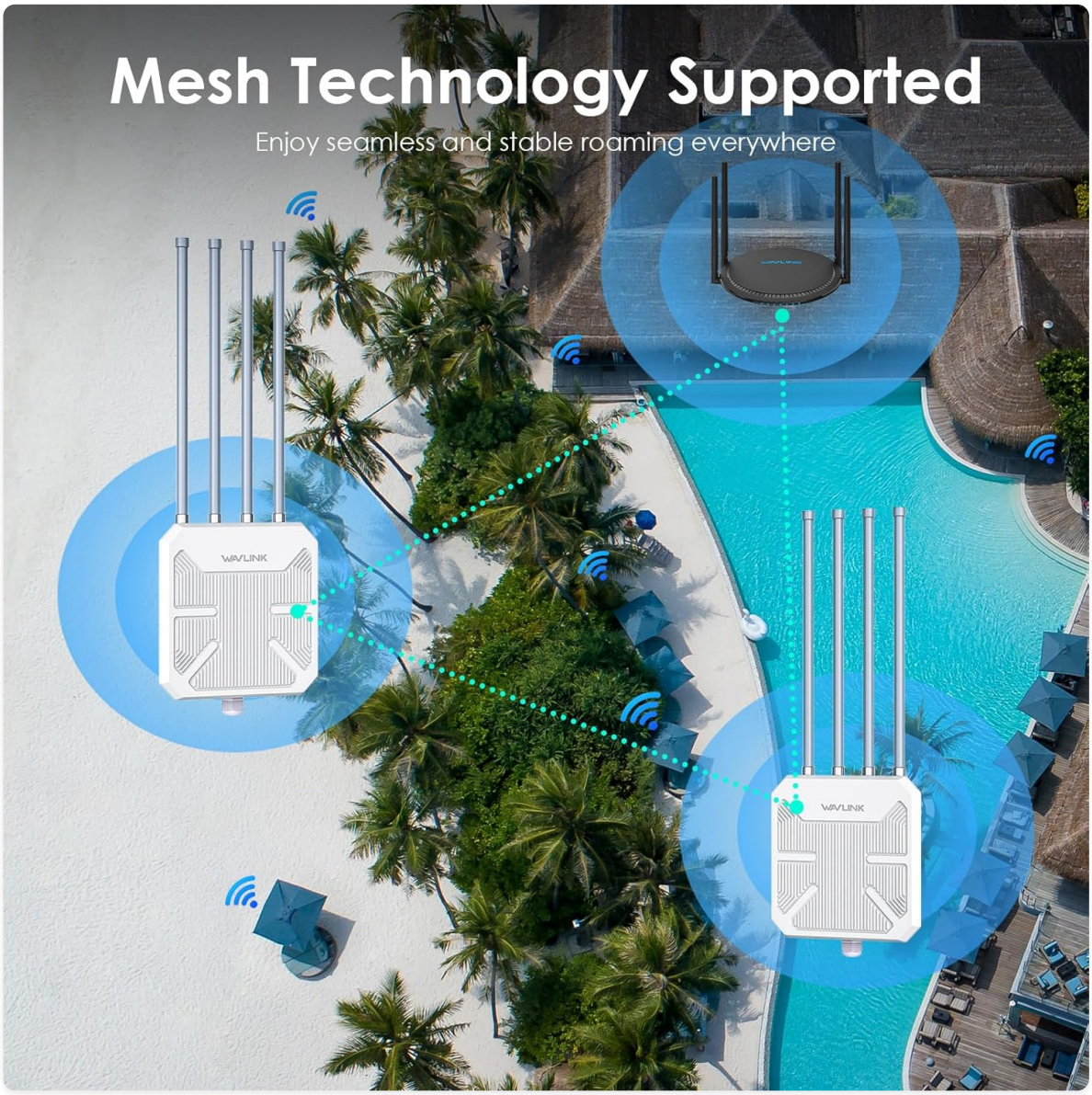

Figure 6: Visual representation of the WAVLINK AX1800 WiFi 6 Outdoor Extender integrated into a Mesh network, providing seamless coverage around a pool area.

5. Configuration

After physical setup and power-up, configure your WAVLINK Outdoor WiFi Extender via its web interface:

1. Connect your computer directly to the PoE adapter's LAN port using an Ethernet cable, or connect wirelessly to the extender's default SSID (usually found on the device label or quick start guide).
2. Open a web browser and enter the default IP address (e.g., 192.168.10.1) or the domain name (e.g., wifi.wavlink.com) provided in the manual.
3. Log in using the default username and password (e.g., admin/admin). You will be prompted to change the default password for security.
4. Follow the on-screen wizard to select your desired operating mode (Mesh, AP, Router, Repeater).
5. Configure your wireless network settings, including SSID (network name) and password.
6. Adjust advanced settings such as signal adjustment (High, Low, Middle) as needed for optimal performance and coverage.

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Video 3: A seller demonstrates the web interface login and initial configuration steps for the WAVLINK AX3000 Outdoor WiFi Extender, including setting up network details.

6. Performance Testing

The WAVLINK AX1800 WiFi 6 Outdoor Extender is designed to provide robust performance over long distances. Testing has shown strong signal retention and speed even at extended ranges:

- At approximately 50 meters (164 ft) from the access point, download speeds can reach over 700 Mbps.
- At around 100 meters (328 ft), speeds remain strong, often exceeding 400 Mbps.
- Even beyond 150 meters (492 ft) in Repeater Mode, the device can significantly boost signal strength, providing usable internet speeds where previous networks failed.

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Video 4: A seller demonstrates speed tests at various distances (50m, 100m, 150m+) from the WAVLINK AX3000 Outdoor WiFi Extender, showcasing its range and performance in different modes.

7. Specifications

- **Package Dimensions:** 17.76 x 12.99 x 3.54 inches
- **Item Weight:** 4.99 pounds
- **ASIN:** B0FF41PK5R
- **Item model number:** WL-WN573HX1-US
- **Wireless Communication Standard:** 2.4 GHz Radio Frequency, 5 GHz Radio Frequency, 802.11a/b/g/n/ac, 802.11ax
- **Data Transfer Rate:** 1800 Megabits Per Second
- **Frequency Band Class:** Dual-Band
- **Special Feature:** WiFi Mesh, PoE, Weatherproof

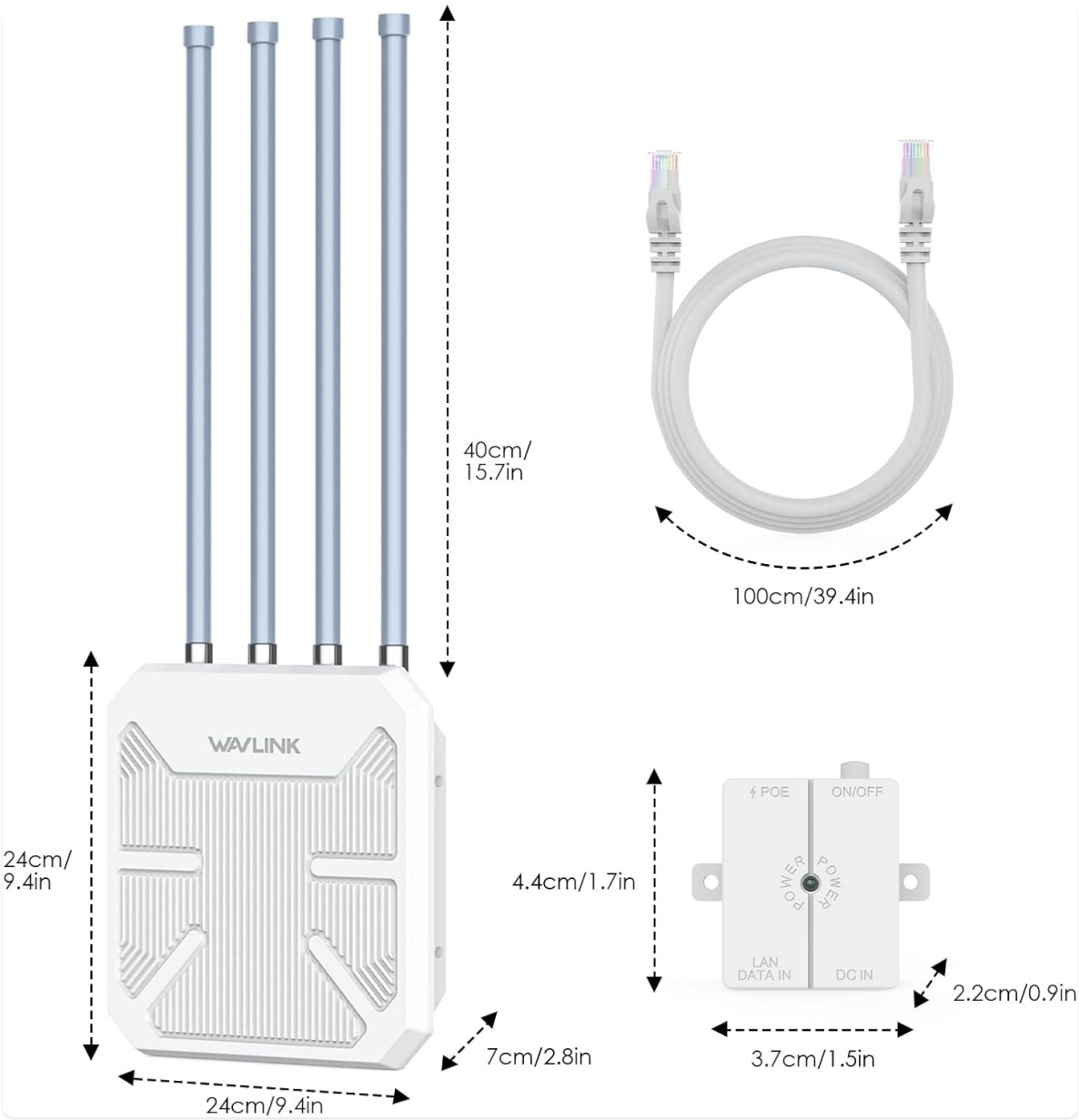

Figure 7: Detailed dimensions of the WAVLINK AX1800 WiFi 6 Outdoor Extender and its PoE adapter.

8. Maintenance

The WAVLINK AX1800 WiFi 6 Outdoor Extender is built for durability in outdoor conditions. To ensure optimal performance and longevity:

- **Weather Protection:** The IP67 weatherproof housing, 15 KV ESD protection, and 6 KV lightning protection are designed to withstand rain, snow, wind, and thunderstorms.
- **Regular Inspection:** Periodically check the device and cable connections for any signs of wear or damage, especially after severe weather events.
- **Cleaning:** Gently clean the exterior of the device as needed to remove dirt or debris that may accumulate.

Figure 8: The WAVLINK AX1800 WiFi 6 Outdoor Extender is designed to withstand various harsh outdoor conditions including sun, snow, rain, thunder, wind, and hail.

9. Troubleshooting

If you encounter issues with your WAVLINK Outdoor WiFi Extender, try the following basic troubleshooting steps:

- **No Power:** Ensure the power adapter is securely connected to the PoE adapter and a working power outlet. Check the PoE adapter's indicator light.
- **No Internet Connection:** Verify that the Ethernet cable from your router/switch is correctly connected to the PoE adapter's LAN port. Check your main router's internet connection.
- **Weak Signal:** Adjust the device's position for better line-of-sight to your main router or client devices. Check the signal adjustment settings in the web interface.
- **Cannot Access Web Interface:** Ensure your computer is connected to the extender's network (wired or wireless) and the correct IP address/domain name is used. Try resetting the device to factory defaults (refer to the quick start guide for reset instructions).

10. Warranty and Support

For warranty information, technical support, or further assistance, please refer to the official WAVLINK website or contact their customer service. Details can typically be found in the quick start guide or on the product packaging.