Nexxt Solutions Amp300

Nexxt Solutions Amp300 Wireless N300 High Power Router/Repeater/Access Point User Manual

Model: Amp300

Overview   Features   Package Contents   Hardware Overview   Setup   Operation   Maintenance

Troubleshooting   Specifications   Warranty & Support

1. PRODUCT OVERVIEW

The Nexxt Solutions Amp300 is a versatile networking device designed to provide superior wireless performance based on 802.11n technology. It functions as a wireless router, a repeater, and an access point, offering a comprehensive solution for extending and managing your network. With its three external antennas, the Amp300 aims to deliver powerful coverage, reducing dead spots in large homes, offices, and hard-to-reach areas. Its MIMO technology supports HD streaming, large data transfers, and online gaming.

Image 1.1: Front view of the Nexxt Solutions Amp300 Wireless N300 Router with its three external antennas.

2. KEY FEATURES

- **High-Power Wireless Performance:** Delivers wireless speeds up to 300Mbps using 802.11n technology.

- **Multi-functional Device:** Operates as a Wireless Router, Access Point (AP), WISP Repeater, and Universal Repeater.

- **Extended Coverage:** Equipped with three external antennas for enhanced signal penetration and elimination of dead spots.

- **MIMO Technology:** Supports high-bandwidth activities like HD streaming, large file transfers, and multiplayer gaming.

- **Multiple Ports:** Features one (1) WAN port and four (4) LAN 10/100Mbps ports for wired connections.

- **Green AP Functionality:** Includes transmission power control for energy efficiency.

- **Advanced Security:** Provides extensive filtering options (IP, MAC, URL, Host, QQ) and advanced wireless encrypted security.

- **Bandwidth Control:** Prioritizes traffic for bandwidth-intensive applications to ensure smooth performance.

- **WDS Wireless Bridge:** Allows for easy connection and expansion of your network.

- **Wake-on-LAN (WoL):** Ready for remote device activation.

- **Multiple SSID:** Supports simultaneous transmission of multiple SSIDs for segmented networks.

Image 2.1: Product packaging illustrating key features and extended coverage capabilities.

3. PACKAGE CONTENTS

Please verify that all items are present and in good condition upon opening the package.

- Nexxt Solutions Amp300 Wireless N300 Router

- Three (3) Detachable Antennas

- Power Adapter

- Ethernet Cable

- Quick Installation Guide / User Manual

Image 3.1: Contents of the Amp300 package, including the router, antennas, power adapter, Ethernet cable, and documentation.

4. HARDWARE OVERVIEW

Familiarize yourself with the ports and buttons on your Amp300 device.

Image 4.1: Rear view of the Amp300 highlighting the WAN, LAN, Reset/WPS, and Power ports.

4.1. Rear Panel

- **LAN Ports (1-4):** Four 10/100Mbps Ethernet ports for connecting wired devices such as computers, gaming consoles, or network printers.
- **WAN Port:** One 10/100Mbps Ethernet port for connecting to your modem or internet service provider's network.
- **RESET/WPS Button:**
  - Press and hold for 5-10 seconds to reset the device to factory default settings.
  - Press briefly to activate Wi-Fi Protected Setup (WPS) for easy connection of WPS-compatible devices.
- **POWER Port:** Connect the included power adapter here.
- **Power Button:** Press to turn the device on or off.

4.2. LED Indicators

The front panel features LED indicators that provide status information:

- **Power LED:** Indicates if the device is powered on.

- **WAN LED:** Indicates connection status to the internet.
- **LAN LEDs (1-4):** Indicate activity on the respective LAN ports.
- **WLAN LED:** Indicates wireless network activity.

5. SETUP AND INSTALLATION

This section guides you through the initial setup of your Amp300 device. The Amp300 can operate in Router, Repeater, or Access Point mode.

5.1. Physical Connection

1. **Attach Antennas:** Screw the three detachable antennas onto the connectors on the rear panel of the Amp300.
2. **Power On:** Connect the power adapter to the POWER port on the Amp300 and plug it into a power outlet. Press the power button. The Power LED should illuminate.
3. **Positioning:** Place the router in a central location to maximize wireless coverage. Avoid placing it near large metal objects, concrete walls, or other electronic devices that may cause interference.
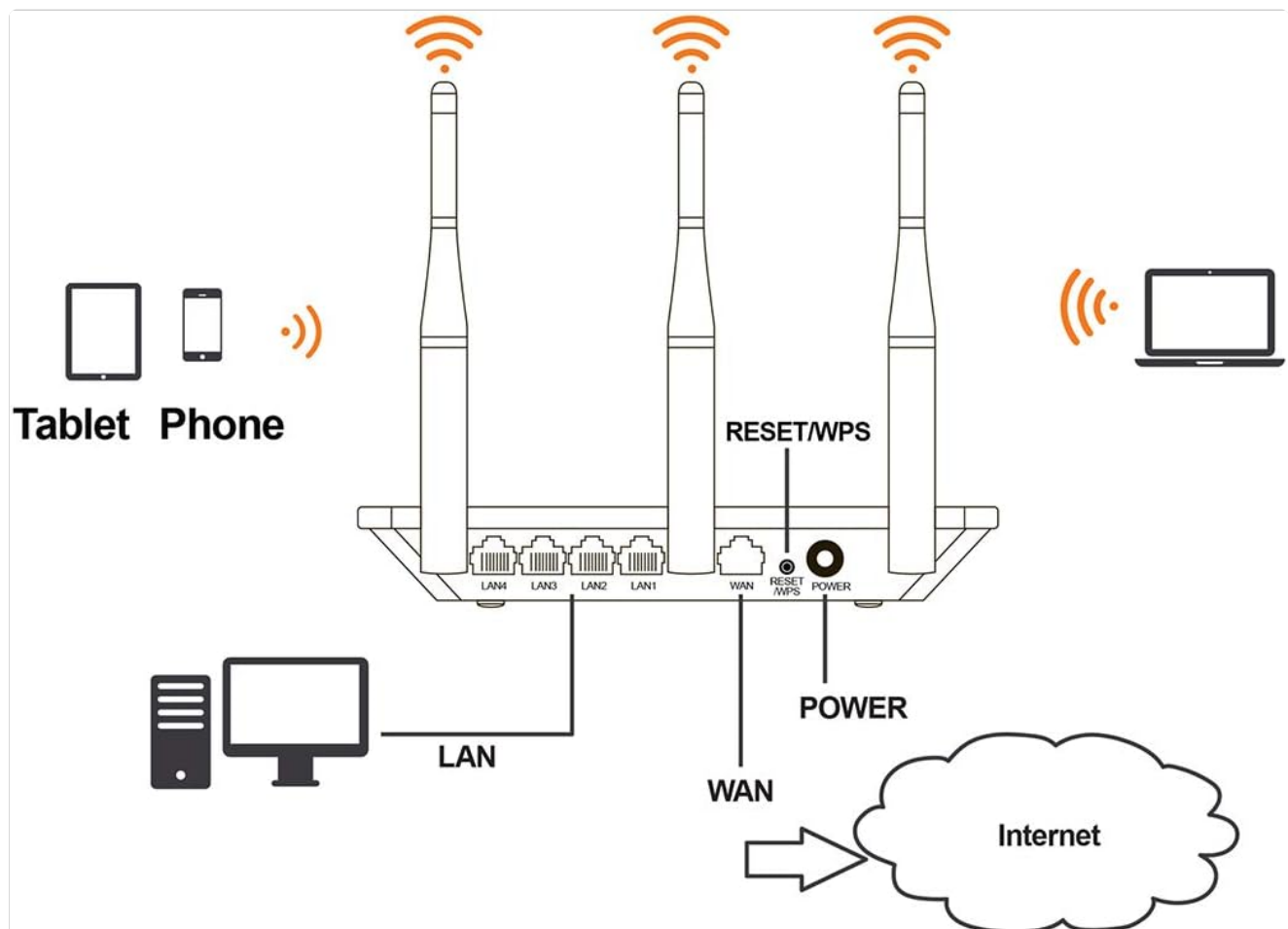

Image 5.1: Connection diagram for the Amp300, illustrating WAN, LAN, and wireless connections.

5.2. Configuration Modes

The Amp300 supports multiple operating modes. The configuration process typically involves accessing the device's web-based management interface.

1. **Connect to the Router:**
    - **Wired:** Connect your computer to one of the LAN ports on the Amp300 using an Ethernet cable.
    - **Wireless:** Connect to the default Wi-Fi network broadcast by the Amp300. The default SSID and password are usually printed on a label on the bottom of the device.

2. **Access Web Interface:** Open a web browser and enter the default IP address of the router (e.g.,192.168.0.1 or 192.168.1.1). Refer to the label on the device or the Quick Installation Guide for the exact IP address and default login credentials (username and password).

3. **Follow Setup Wizard:** Once logged in, a setup wizard will typically guide you through selecting the operating mode and configuring network settings.

5.2.1. Router Mode Setup

In Router Mode, the Amp300 connects to your modem and creates a new private network for your devices.

1. Connect your modem's Ethernet cable to the **WAN port** of the Amp300.

2. Select "Router Mode" in the setup wizard.

3. Configure your internet connection type (e.g., DHCP, Static IP, PPPoE) as provided by your Internet Service Provider (ISP).

4. Set up your desired Wi-Fi network name (SSID) and password.

5. Save settings and restart the router if prompted.

5.2.2. Repeater Mode Setup (WISP Repeater / Universal Repeater)

In Repeater Mode, the Amp300 extends the range of an existing wireless network.

1. Place the Amp300 within the range of your existing Wi-Fi network.

2. Select "Repeater Mode" in the setup wizard.

3. Scan for available Wi-Fi networks and select the one you wish to extend.

4. Enter the password for the existing Wi-Fi network.

5. You may choose to keep the same SSID or create a new one for the extended network.

6. Save settings and restart the router if prompted.

5.2.3. Access Point (AP) Mode Setup

In AP Mode, the Amp300 converts a wired network connection into a wireless one.

1. Connect an Ethernet cable from your existing router/network switch to one of the **LAN ports** (not WAN) on the Amp300.

2. Select "Access Point Mode" in the setup wizard.

3. Configure your desired Wi-Fi network name (SSID) and password.

4. Save settings and restart the router if prompted.

6. OPERATING INSTRUCTIONS

6.1. Connecting to the Wireless Network

After successful setup, you can connect your wireless devices (laptops, smartphones, tablets) to the Amp300's Wi-Fi network.

1. On your wireless device, open the Wi-Fi settings.

2. Select the SSID (network name) you configured during setup.

3. Enter the Wi-Fi password (security key) when prompted.

4. Your device should now be connected to the internet.

6.2. Using WPS (Wi-Fi Protected Setup)

WPS allows for easy and secure connection of WPS-compatible devices without manually entering the password.

1. Press the WPS button on your Amp300 (the same as the RESET button, usually a quick press). The WLAN LED may flash.

2. Within two minutes, activate WPS on your client device (e.g., by pressing its WPS button or selecting the WPS option in its Wi-Fi settings).

3. The devices will automatically establish a secure connection.

6.3. Bandwidth Control

The Amp300 features bandwidth control to prioritize network traffic. This is useful for ensuring critical applications (like online gaming or video conferencing) receive sufficient bandwidth.

- Access the web-based management interface (refer to Section 5.2).

- Navigate to the "Bandwidth Control" or "QoS (Quality of Service)" section.

- Configure rules to prioritize specific devices or applications based on your needs.

- Save your changes.

7. MAINTENANCE

Regular maintenance helps ensure optimal performance and longevity of your Amp300 router.

- **Firmware Updates:** Periodically check the Nexxt Solutions official website for firmware updates. Updating firmware can improve performance, add new features, and fix security vulnerabilities. Follow the instructions provided with the firmware update carefully.

- **Cleaning:** Keep the device clean and free from dust. Use a soft, dry cloth to wipe the exterior. Do not use liquid cleaners or aerosols.

- **Ventilation:** Ensure the router is placed in a well-ventilated area to prevent overheating. Do not cover ventilation openings.

- **Password Security:** Regularly change your Wi-Fi password and router login password to maintain network security.

- **Rebooting:** If you experience network issues, a simple reboot (power cycling the device) can often resolve minor problems.

8. TROUBLESHOOTING

This section addresses common issues you might encounter with your Amp300 router.

8.1. No Internet Access

- **Check Cables:** Ensure all Ethernet cables are securely connected, especially the one from your modem to the router's WAN port.

- **Modem Status:** Verify that your modem is working correctly and has an active internet connection. Try restarting your modem.

- **Router LEDs:** Check the WAN LED on the router. If it's off or red, there might be an issue with the internet connection from your ISP or modem.

- **Router Reboot:** Power cycle the Amp300 router (unplug, wait 10 seconds, plug back in).

- **Configuration:** Access the web interface and ensure your internet connection settings (WAN settings) are correctly configured for your ISP.

8.2. Weak or Intermittent Wi-Fi Signal

- **Router Placement:** Move the router to a more central location, away from obstructions like thick walls, metal objects, and other electronic devices (cordless phones, microwaves) that can cause interference.
- **Antenna Orientation:** Adjust the orientation of the three antennas for optimal signal strength.
- **Interference:** Try changing the wireless channel in the router's settings to avoid interference from neighboring Wi-Fi networks.
- **Repeater Mode:** If you are using the device in Repeater mode, ensure it is placed within good range of the main router.

8.3. Cannot Access Router's Web Interface

- **IP Address:** Ensure you are using the correct default IP address (e.g., 192.168.0.1) and that your computer is set to obtain an IP address automatically (DHCP).
- **Wired Connection:** Try connecting your computer directly to one of the LAN ports with 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.
- **Factory Reset:** If all else fails, perform a factory reset (refer to Section 4.1 for the RESET/WPS button).**Warning:** This will erase all your custom settings.

9. TECHNICAL SPECIFICATIONS

Model Name	Amp300
Wireless Standard	802.11n
Wireless Speed	Up to 300Mbps
Frequency Band Class	Single-Band (2.4GHz) - *Note: Product description mentions "Dual-Band" but specifications list 802.11n which is typically 2.4GHz. Clarification may be needed from manufacturer.*
Ethernet Ports	1x WAN 10/100Mbps, 4x LAN 10/100Mbps
Antennas	3x External, Detachable
Operating Modes	Router, Access Point, WISP Repeater, Universal Repeater
Special Features	Access Point Mode, WPS, Bandwidth Control, Green AP, Multiple SSID, Wake-on-LAN
Product Dimensions	7.3 x 5.4 x 1 inches
Item Weight	8 ounces
Manufacturer	Nexxt Solutions

10. WARRANTY AND SUPPORT

10.1. Warranty Information

The Nexxt Solutions Amp300 Wireless N300 Router comes with a **5-year warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims. For specific terms and conditions, refer to the warranty card included in your package or visit the official Nexxt Solutions website.

10.2. Technical Support

For technical assistance, troubleshooting, or further inquiries, please contact Nexxt Solutions customer support. You can typically find contact information (phone numbers, email, or support portals) on the official Nexxt Solutions website or in the documentation provided with your product.

Before contacting support, please have your product model (Amp300) and a description of the issue ready.