DBIT WRAX1800

DBIT AX1800 WiFi 6 Router User Manual

Model: WRAX1800 | Brand: DBIT

1. Introduction

This manual provides detailed instructions for setting up, operating, maintaining, and troubleshooting your DBIT AX1800 WiFi 6 Router. The DBIT AX1800 is a dual-band wireless internet router designed to deliver high-speed, reliable network connectivity using Wi-Fi 6 (802.11ax) technology.

Key features include:

- **Dual-Band WiFi 6:** Offers faster speeds, greater capacity, and reduced network congestion.
- **Next-Gen 1.8 Gbps Speeds:** Provides up to 1200 Mbps on the 5 GHz band and 574 Mbps on the 2.4 GHz band for smooth streaming and gaming.
- **Connect More Devices:** Utilizes OFDMA technology to communicate with multiple devices simultaneously.
- **Extensive Coverage:** Features Beamforming technology and four high-gain antennas for strong, reliable WiFi coverage.
- **EasyMesh Support:** Enables seamless whole-home networking when multiple devices are used.
- **Advanced TWT Technology:** Reduces power consumption of connected devices.
- **WPA3 Security:** Enhanced WiFi security with improved encryption.

Image 1.1: The DBIT AX1800 WiFi 6 Router, a black rectangular device with four external antennas.

Image 1.2: Illustration highlighting the WiFi 6 capabilities of the DBIT AX1800 router, emphasizing speeds up to 1.8 Gbps for 4K/HD streaming and gaming.

2. What's in the Box

Please verify that all items are present in your package:

- DBIT AX1800 WiFi Router
- Power Adapter
- RJ45 Ethernet Cable
- Quick Installation Guide

3. Setup

3.1 Physical Connection

1. **Position the Router:** Place the router in a central location in your home, away from obstructions and electronic devices that may cause interference.
2. **Connect the Power Adapter:** Plug one end of the power adapter into the router's DC IN port and the other end into a standard electrical outlet. Ensure the power LED on the router illuminates.
3. **Connect to Modem:** Connect one end of the provided RJ45 Ethernet cable to your modem's Ethernet port and the other end to the router's WAN port.
4. **(Optional) Connect Wired Devices:** For devices requiring a wired connection, connect an Ethernet cable from the device to any of the router's LAN ports.

Image 3.1: Rear view of the DBIT AX1800 router showing the Reset button, WPS/EasyMesh button, three LAN ports, one WAN port, and the DC IN power jack.

3.2 Initial Configuration

Refer to the included Quick Installation Guide for specific steps to access the router's web interface and configure your network settings. Generally, the process involves:

1. **Connect to the Router:** Connect your computer or mobile device to the router's default Wi-Fi network (SSID and password usually found on a label on the router) or via an Ethernet cable to a LAN port.
2. **Access Web Interface:** Open a web browser and enter the default IP address (e.g.,192.168.0.1 or 192.168.1.1) or domain name (e.g., dlinkrouter.local) provided in the Quick Installation Guide.
3. **Login:** Enter the default username and password (also found on the router label or in the guide). It is highly recommended to change these default credentials immediately for security.
4. **Configure Wi-Fi Settings:** Follow the on-screen wizard to set up your preferred Wi-Fi network name (SSID) and a strong password for both 2.4 GHz and 5 GHz bands.
5. **Complete Setup:** Save your settings and restart the router if prompted.

4. Operating

4.1 Connecting Devices

- **Wireless Connection:** On your device (smartphone, laptop, tablet), search for available Wi-Fi networks. Select your router's SSID and enter the Wi-Fi password you configured during setup.
- **Wired Connection:** Connect an Ethernet cable from your device to one of the router's available LAN ports.

Image 4.1: Illustration demonstrating the router connecting to multiple devices simultaneously, highlighting OFDMA technology for improved wireless rates and reduced latency.

4.2 Advanced Features

- **Dual-Band Operation:** The router broadcasts two separate Wi-Fi networks: 2.4 GHz and 5 GHz. The 2.4 GHz band offers wider coverage, while the 5 GHz band provides faster speeds over shorter distances. You can connect devices to the band that best suits their needs.
- **MU-MIMO and OFDMA:** These technologies allow the router to communicate with multiple devices simultaneously, improving efficiency and reducing latency, especially in busy networks.
- **Beamforming:** This technology detects the location of your connected devices and focuses the Wi-Fi signal directly towards them, enhancing signal strength and coverage, particularly for devices further away.

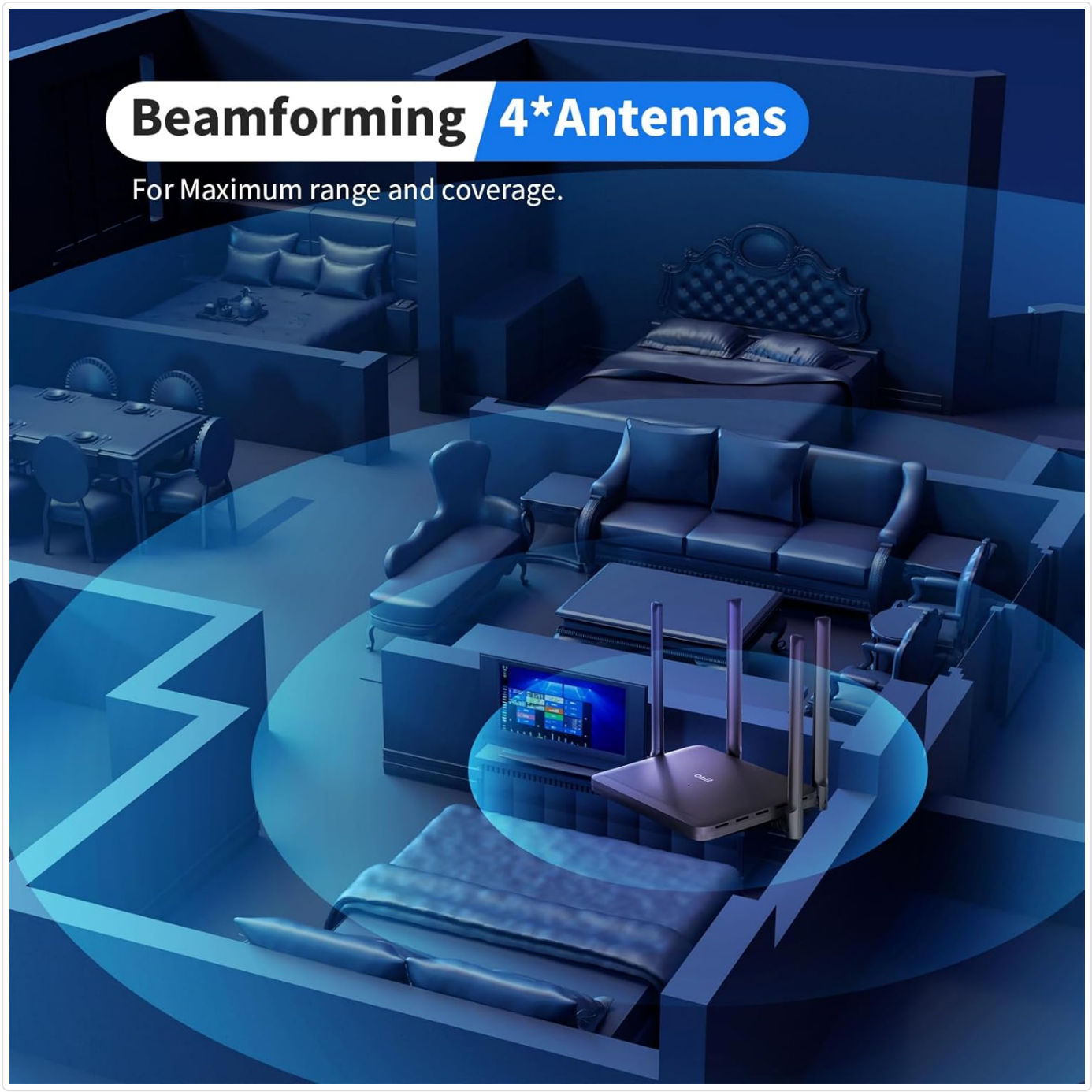

Image 4.2: Diagram illustrating Beamforming technology, showing the router directing Wi-Fi signals to various rooms for maximum range and coverage using its four antennas.

- **EasyMesh Networking:** If you have multiple EasyMesh-compatible DBIT routers, you can create a seamless whole-home mesh network. This allows devices to automatically switch to the strongest Wi-Fi signal as you move around your home, eliminating dead zones.

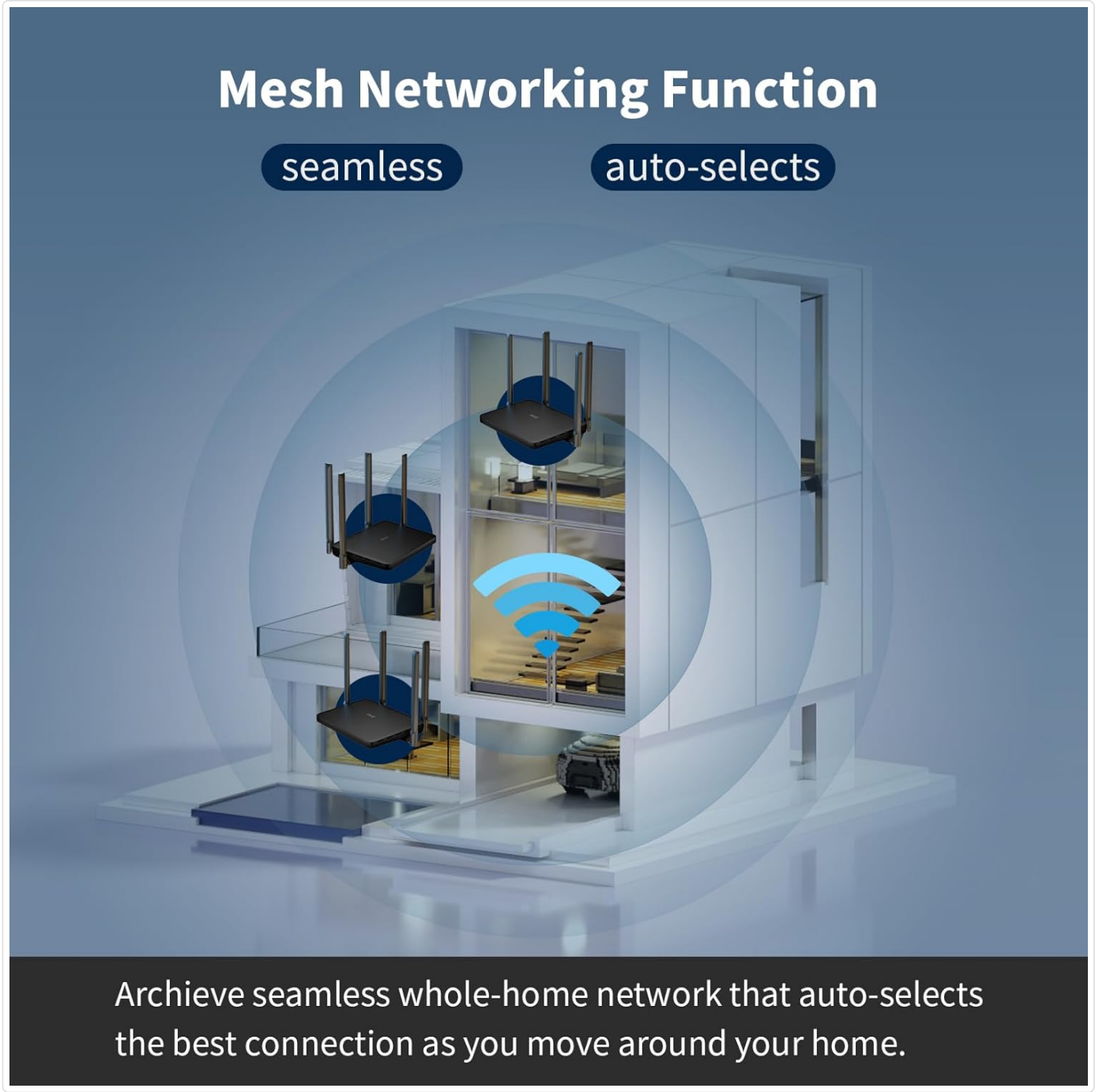

Image 4.3: Architectural rendering showing multiple routers creating a mesh network across different floors of a house, ensuring seamless connectivity.

- **Guest WiFi:** Create a separate Wi-Fi network for guests, keeping your main network secure and private.
- **Parental Controls:** Manage internet access for specific devices, set time limits, and block inappropriate content through the router's web interface.
- **WPA3 Security:** The router supports the latest WPA3 WiFi security protocol, providing enhanced encryption and protection against brute-force attacks for your home network.
- **Target Wakeup Time (TWT):** This technology allows devices to negotiate when they will wake up to send and receive data, reducing power consumption and extending battery life for compatible devices.

Image 4.4: Comparison graphic showing how TWT (Target Wakeup Time) technology in the DBIT router helps reduce power consumption and improve battery life of connected devices compared to other routers.

5. Maintenance

Regular maintenance helps ensure optimal performance and security for your router.

- **Firmware Updates:** Periodically check the DBIT support website for firmware updates. Updating your router's firmware can improve performance, add new features, and address security vulnerabilities. Follow the instructions provided with the firmware update carefully.
- **Regular Reboots:** Rebooting your router every few weeks can help clear its memory and resolve minor performance issues. Simply unplug the power adapter, wait 10-15 seconds, and then plug it back in.
- **Physical Cleaning:** Keep the router free from dust and debris. Use a soft, dry cloth to gently clean the exterior. Ensure ventilation openings are not blocked.
- **Security Best Practices:**

- Change the default administrator password for the router's web interface.
- Use strong, unique passwords for your Wi-Fi networks.
- Enable WPA3 encryption for maximum security.
- Disable WPS if not in use, as it can be a security vulnerability.

6. Troubleshooting

If you encounter issues with your router, try the following troubleshooting steps:

- **No Internet Connection:**
  - Check if your modem is working correctly.
  - Ensure the Ethernet cable between the modem and the router's WAN port is securely connected.
  - Reboot both your modem and router.
  - Verify your internet service provider (ISP) connection status.
- **Slow Speeds:**
  - Ensure your devices are connected to the appropriate Wi-Fi band (5 GHz for faster speeds, 2.4 GHz for wider range).
  - Reduce the number of active devices or bandwidth-intensive activities.
  - Check for interference from other electronic devices.
  - Try repositioning the router for better signal strength.
- **Wi-Fi Signal Issues:**
  - Move closer to the router.
  - Ensure antennas are properly oriented.
  - Minimize physical obstructions (walls, large furniture).
  - Consider using EasyMesh with additional compatible routers for extended coverage.
- **Resetting the Router:** If issues persist, you may need to perform a factory reset. Locate the 'Reset' button on the back of the router (refer to Image 3.1). With the router powered on, use a paperclip or similar pointed object to press and hold the Reset button for approximately 10 seconds until the router's lights flash. This will restore the router to its factory default settings, requiring you to reconfigure it.

7. Specifications

Feature	Specification
Product Dimensions	9 x 5.7 x 6.9 inches
Item Weight	9.3 ounces
Item Model Number	WRAX1800
Brand	DBIT
Special Features	Access Point Mode, Beamforming, Guest Mode, Parental Control, QoS, MU-MIMO, WPS, EasyMesh
Frequency Band Class	Dual-Band

Feature	Specification
Wireless Communication Standard	802.11ax (WiFi 6)
Compatible Devices	Personal Computer/Laptop/Smartphone/TV/Printer/IP Camera
Recommended Uses	Business, Gaming, Home
Included Components	Power Adapter, Quick Installation Guide, RJ45 Ethernet Cable, WiFi Router
Connectivity Technology	Ethernet, Wi-Fi
Color	Black

8. Warranty and Support

For warranty information and technical support, please refer to the documentation included with your product or visit the official DBIT website. If you require assistance with setup, troubleshooting, or have questions about your DBIT AX1800 WiFi 6 Router, please contact DBIT customer support.

Related Documents

	DBIT AC1200 Firmware Upgrade Guide A guide on how to upgrade the firmware for the DBIT AC1200 Dual Band WiFi Router to resolve issues such as inability to change WiFi name and password.
	N300 Wireless Router User Manual User manual for the N300 Wireless Router, providing setup instructions, connection guides, and troubleshooting tips.
	DBIT X30 4G LTE Router User Manual User manual for the DBIT X30 4G LTE Router, providing setup instructions, product specifications, interface descriptions, indicator details, working environment guidelines, and factory reset procedures.

	[Wi-Fi 6 USB Adapter User Guide] User guide for the Wi-Fi 6 USB Adapter, covering installation and uninstallation procedures.