

NETGEAR RBKE962

NETGEAR Orbi RBKE962 Quad-Band WiFi 6E Mesh System User Manual

Model: RBKE962

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1. PRODUCT OVERVIEW

The NETGEAR Orbi RBKE962 Quad-Band WiFi 6E Mesh System is designed to provide extensive and high-performance wireless coverage throughout your home. This system utilizes WiFi 6E technology, which includes a new 6GHz band, to deliver faster speeds and reduce network congestion for compatible devices. The quad-band design ensures backward compatibility with existing devices while optimizing performance across all connected equipment.

Key Features:

- **Whole-Home WiFi 6E:** Delivers speeds up to 10.8 Gbps and covers up to 6,000 sq. ft.
- **Dedicated 6 GHz Band:** Provides exclusive, high-speed access for WiFi 6E-compatible devices.
- **Quad-Band Technology:** Ensures maximum speeds for up to 200 connected devices with a dedicated backhaul.
- **Enhanced Security:** Features automatic firmware updates and NETGEAR Armor for comprehensive network protection (30-day free trial included).
- **10 Gig Internet Port:** Supports internet service speeds up to 10 Gbps for future-proof connectivity.
- **Orbi App Management:** Easy setup, monitoring, and control of your WiFi network.

What's in the Box:

- One (1) Orbi WiFi 6E Router (RBRE960)
- One (1) Orbi WiFi 6E Satellite (RBSE960)
- One (1) 2m Ethernet cable
- Two (2) 19V/3.16A power adapters
- Quick start guide



Image 1.1: The NETGEAR Orbi RBKE962 system, showing both the router and satellite units.



Image 1.2: Visual representation of Orbi RBKE962 key features including streaming speed, device capacity, coverage area, and 10 Gig internet port.

2. PRODUCT COMPONENTS

The Orbi RBKE962 system consists of one Orbi Router (RBRE960) and one Orbi Satellite (RBSE960). Both units feature a sleek design and are equipped with multiple ports for wired connections.

Orbi Router (RBRE960) Ports:

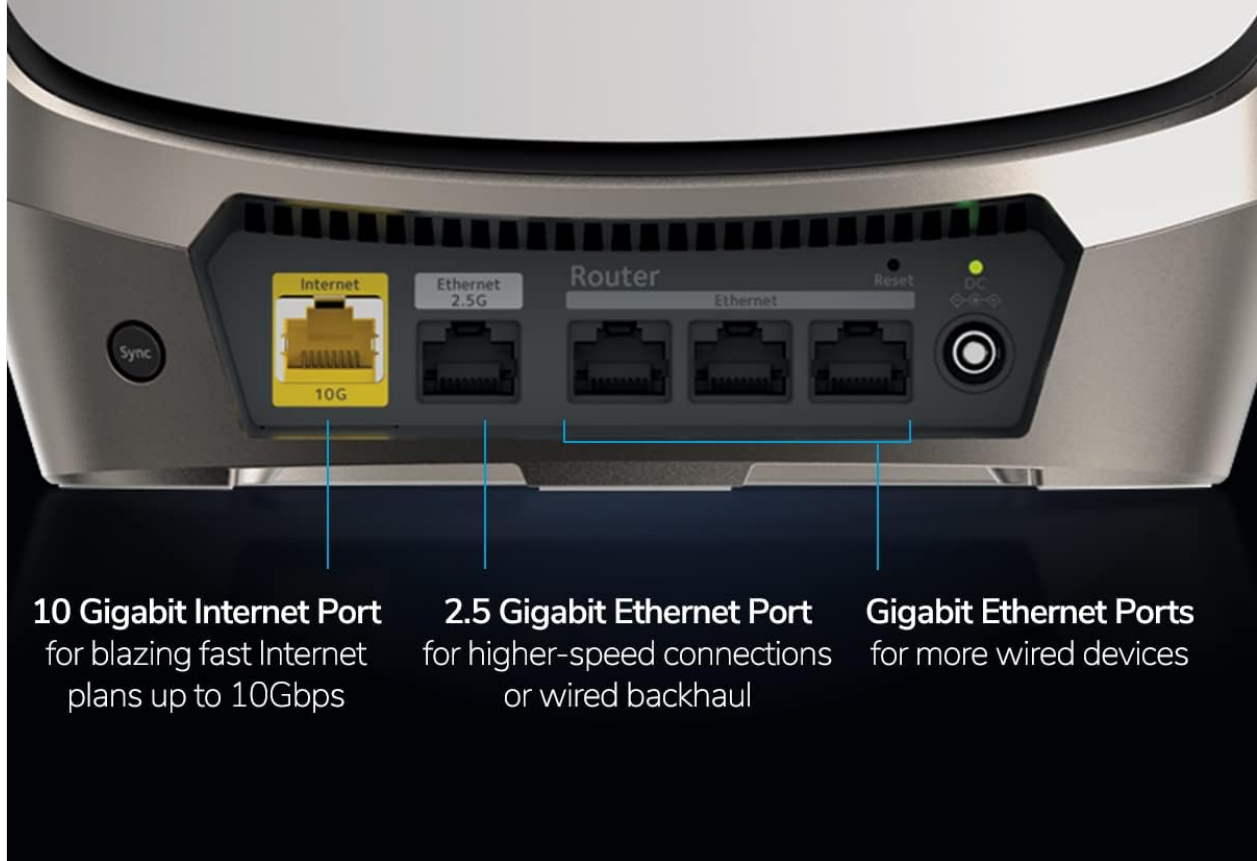
- **10 Gigabit Internet Port (WAN):** Connects to your modem for high-speed internet access.
- **2.5 Gigabit Ethernet Port:** For high-speed wired connections or wired backhaul.
- **Three (3) Gigabit Ethernet Ports:** For connecting wired devices such as computers, gaming consoles, or smart TVs.
- **Sync Button:** Used for pairing the router with satellites.
- **Reset Button:** To restore factory default settings.

- **DC Power Connector:** For connecting the power adapter.

Orbi Satellite (RBSE960) Ports:

- **2.5 Gigabit Ethernet Port:** For high-speed wired connections or wired backhaul.
- **Three (3) Gigabit Ethernet Ports:** For connecting wired devices.
- **Sync Button:** Used for pairing with the router.
- **Reset Button:** To restore factory default settings.
- **DC Power Connector:** For connecting the power adapter.

10 Gig Internet Port For The Fastest Speeds Today And Tomorrow



10 Gigabit Internet Port
for blazing fast Internet
plans up to 10Gbps

2.5 Gigabit Ethernet Port
for higher-speed connections
or wired backhaul

Gigabit Ethernet Ports
for more wired devices

Image 2.1: Detailed view of the Orbi Router's rear panel, highlighting the 10 Gigabit Internet Port, 2.5 Gigabit Ethernet Port, and standard Gigabit Ethernet Ports.

3. SETUP INSTRUCTIONS

Follow these steps to set up your NETGEAR Orbi RBKE962 Mesh WiFi System:

1. **Download the Orbi App:** Search for "NETGEAR Orbi" in your mobile device's app store (Apple App Store or Google Play Store) and download the application.
2. **Position Your Orbi Router:** Place your Orbi Router (RBRE960) in a central location near your internet modem. Avoid placing it in enclosed spaces or near large metal objects.
3. **Connect the Orbi Router:**
 - o Disconnect your modem from power.
 - o Connect one end of the provided Ethernet cable to the **10 Gigabit Internet Port** (yellow) on your Orbi Router.
 - o Connect the other end of the Ethernet cable to your modem's Ethernet port.
 - o Connect your modem to power and wait for it to fully boot up (usually indicated by stable lights).
 - o Connect the power adapter to your Orbi Router and plug it into a power outlet. Wait for the Orbi Router's LED to turn solid white.
4. **Position Your Orbi Satellite:** Place your Orbi Satellite (RBSE960) in another part of your home where you want to extend WiFi coverage. Ensure it is within range of the Orbi Router for optimal connection.
5. **Power On the Orbi Satellite:** Connect the power adapter to your Orbi Satellite and plug it into a power outlet. Wait for the Orbi Satellite's LED to turn solid white, then blue (indicating a good connection to the router).
6. **Complete Setup with Orbi App:** Open the Orbi app on your mobile device. Follow the on-screen instructions to detect your Orbi system, create your WiFi network name (SSID) and password, and configure any additional settings.



Image 3.1: Visual guide for the easy setup process using the Orbi app, connecting the router, and placing the satellite.

The Orbi App Makes It Easy To Setup, Monitor, And Protect Your Household



Simple setup and monitoring



Smart Parental Controls*



NETGEAR Armor™ cybersecurity protection*

*requires subscription after 30-day free trial

Image 3.2: Screenshots of the Orbi app demonstrating simple setup, smart parental controls, and cybersecurity protection features.

4. OPERATING YOUR ORBI SYSTEM

Once your Orbi system is set up, you can connect your devices and manage your network using the Orbi app or a web browser.

Connecting Devices:

Your Orbi system broadcasts a single WiFi network name (SSID). Devices will automatically connect to the optimal band (2.4GHz, 5GHz, or 6GHz) based on their capabilities and network conditions. For wired connections, use the Ethernet ports on both the router and satellite units.

Understanding WiFi Bands:

- **2.4 GHz:** Offers wider coverage and better penetration through walls, suitable for older devices and

smart home gadgets.

- **5 GHz:** Provides faster speeds over shorter distances, ideal for streaming, gaming, and general internet use.
- **6 GHz (WiFi 6E):** The newest band, offering the fastest speeds and lowest latency for WiFi 6E compatible devices. This band is less congested, providing a dedicated 'express lane' for high-bandwidth applications.



Image 4.1: Illustration of the three WiFi bands (2.4 GHz, 5 GHz, 6 GHz) utilized by WiFi 6E technology.

Orbi App Features:

The Orbi app provides comprehensive control over your network:

- **Network Monitoring:** View connected devices, network status, and internet speed.
- **Parental Controls:** Manage internet access, set time limits, and filter content for individual devices or profiles.
- **Guest WiFi:** Create a separate, secure network for guests without sharing your main network password.
- **NETGEAR Armor:** Activate and manage your cybersecurity protection, which scans for threats and protects all connected devices.
- **Firmware Updates:** Receive notifications and easily update your system's firmware for improved

performance and security.



Image 4.2: Diagram illustrating the dedicated backhaul connection between Orbi router and satellite, ensuring consistent high performance.

5. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your Orbi system.

Firmware Updates:

NETGEAR regularly releases firmware updates to improve performance, add features, and enhance security. It is recommended to enable automatic firmware updates through the Orbi app or check for updates manually. Always ensure your system is connected to a stable power source during updates.

Cleaning:

Gently wipe the exterior of your Orbi units with a soft, dry cloth. Avoid using liquid cleaners or abrasive

materials, as these can damage the device. Ensure ventilation openings are clear of dust and obstructions.

Optimal Placement:

For best performance, ensure your Orbi Router and Satellite are placed in open areas, away from large metal objects, concrete walls, and other electronic devices that may cause interference. Maintain a clear line of sight between the router and satellite if possible.



Image 5.1: Depiction of the Orbi WiFi 6E system providing extensive coverage throughout a large home and outdoor areas.

6. TROUBLESHOOTING

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

No Internet Connection:

- **Check Modem:** Ensure your internet modem is powered on and has an active internet connection

(check its indicator lights).

- **Cable Connections:** Verify that the Ethernet cable between your modem and the Orbi Router's 10 Gigabit Internet Port is securely connected.
- **Reboot System:** Power off your modem, Orbi Router, and Orbi Satellite. Wait 30 seconds, then power on the modem first. Once the modem is fully online, power on the Orbi Router, then the Orbi Satellite.

Slow WiFi Speed or Disconnections:

- **Orbi Satellite Placement:** Ensure your satellite is placed optimally, not too far from the router. The satellite's LED should be blue for a good connection. If it's amber, move it closer to the router.
- **Interference:** Move Orbi units away from other electronic devices (cordless phones, microwaves, Bluetooth devices) that might cause interference.
- **Firmware:** Ensure your Orbi system has the latest firmware installed.
- **Device Compatibility:** Verify that your devices support WiFi 6E to utilize the 6GHz band for optimal performance.

Orbi LED Indicators:

- **Solid White:** Orbi unit is booting up.
- **Solid Blue:** Good connection between Orbi Router and Satellite.
- **Solid Amber:** Fair connection between Orbi Router and Satellite (consider repositioning).
- **Solid Magenta:** No internet connection.
- **Pulsing White/Blue/Amber:** Firmware update in progress.

Factory Reset:

If other troubleshooting steps fail, you can perform a factory reset. This will erase all custom settings and restore the system to its default configuration. To factory reset, press and hold the **Reset** button on the back of the Orbi unit with a paperclip for about 10 seconds until the LED flashes.

7. TECHNICAL SPECIFICATIONS



Image 7.1: Detailed technical specifications for the Orbi RBKE962 Router and Satellite units.

Feature	Description
Model Name	Orbi 960 Series Quad-Band WiFi 6E Mesh System (RBKE962)

WiFi Speed	Up to 10.8 Gbps (AXE11000 WiFi 6E)
WiFi Coverage	Up to 6,000 sq. ft. (with router and 1 satellite)
Connected Devices	Up to 200 devices
Frequency Band Class	Quad-Band (2.4GHz, 5GHz, 6GHz)
Wireless Standard	802.11ax (WiFi 6E)
Router WAN Port	One (1) 10 Gigabit Ethernet WAN Port
Router LAN Ports	One (1) 2.5 Gigabit Ethernet Port, Three (3) Gigabit Ethernet Ports
Satellite LAN Ports	One (1) 2.5 Gigabit Ethernet Port, Three (3) Gigabit Ethernet Ports
Processor	Quad-core 2.2GHz processor
Memory	1GB RAM
Security Features	NETGEAR Armor, WPA3, VPN support
Product Dimensions	12.85 x 10.51 x 8.07 inches
Item Weight	11.33 pounds

8. WARRANTY AND SUPPORT

Warranty Information:

NETGEAR products come with a limited hardware warranty. The specific terms and duration of your warranty may vary by region and product. Please refer to the warranty card included with your product or visit the official NETGEAR website for detailed warranty information.

Technical Support:

For technical assistance, product registration, or to access additional resources, please visit the official NETGEAR support website. You can find FAQs, troubleshooting guides, and contact information for customer support.

- **NETGEAR Support Website:** www.netgear.com/support
- **Orbi App:** The Orbi app also provides access to support resources and community forums.

NETGEAR Armor includes a 30-day free trial. After the trial period, a subscription may be required to continue using all security features.

