Tenda RE6L Pro

Tenda BE5100 Dual Band Wi-Fi 7 Router (RE6L Pro) User Manual

Model: RE6L Pro | Brand: Tenda

1. INTRODUCTION

The Tenda BE5100 Dual Band Wi-Fi 7 Router (RE6L Pro) is designed to provide a high-speed, reliable, and secure wireless network for your home. Leveraging the latest Wi-Fi 7 technology, this router delivers exceptional performance for demanding applications such as 8K streaming, virtual reality, and large file transfers. Its advanced features, including Multi-Link Operation (MLO) and 4K QAM modulation, ensure efficient data transmission and reduced latency.

The innovative vertical design enhances heat dissipation, contributing to stable and long-term operation. With multiple Gigabit ports, robust security protocols, and user-friendly setup options, the BE5100 RE6L Pro is an ideal solution for modern connected households.

Image 1.1: The Tenda BE5100 Dual Band Wi-Fi 7 Router (RE6L Pro) in its vertical orientation.

Image 1.2: Overview of the router's key features, including Wi-Fi 7 speeds, coverage, device capacity, vertical heat dissipation, port configuration, VPN, Wi-Fi+, easy setup, and NFC.

2. PACKAGE CONTENTS

Please verify that all items are present in your package:

- BE5100 Smart Dual-band Wi-Fi 7 Router RE6L Pro (x1)
- Ethernet Cable (x1)
- Power Adapter (x1)
- Quick Installation Guide (x1)

3. SETUP GUIDE

3.1 Initial Connection

1. **Power On:** Connect the provided power adapter to the router's power port and plug it into a power outlet.
2. **Connect to Modem:** Use the included Ethernet cable to connect your modem's LAN port to the 2.5Gbps WAN/LAN port on the Tenda BE5100 router.
3. **Connect Devices:** For initial setup, you can connect a computer to one of the router's 1Gbps LAN ports using an Ethernet cable, or connect wirelessly to the default Wi-Fi network (SSID and password are usually found on a label on the router).

3.2 Configuration via Tenda App or Web Interface

The Tenda BE5100 RE6L Pro can be easily set up using the Tenda App or a web browser interface.

- **Tenda App:** Download the Tenda App from your mobile device's app store. Follow the on-screen instructions to detect and configure your new router.
- **Web Interface:** Open a web browser on a connected device and enter the default IP address (e.g., 192.168.0.1 or tendawifi.com) in the address bar. Follow the setup wizard to configure your internet connection and Wi-Fi settings.

Image 3.1: The Tenda BE5100 RE6L Pro can be easily set up using the Tenda app on a smartphone or through a web interface on a

3.3 NFC One-Tap Connection

For compatible NFC-enabled devices, you can connect to your Wi-Fi network instantly with a single tap.

1. Ensure NFC is enabled on your smartphone or tablet.
2. Tap your device near the NFC tag on the Tenda BE5100 router.
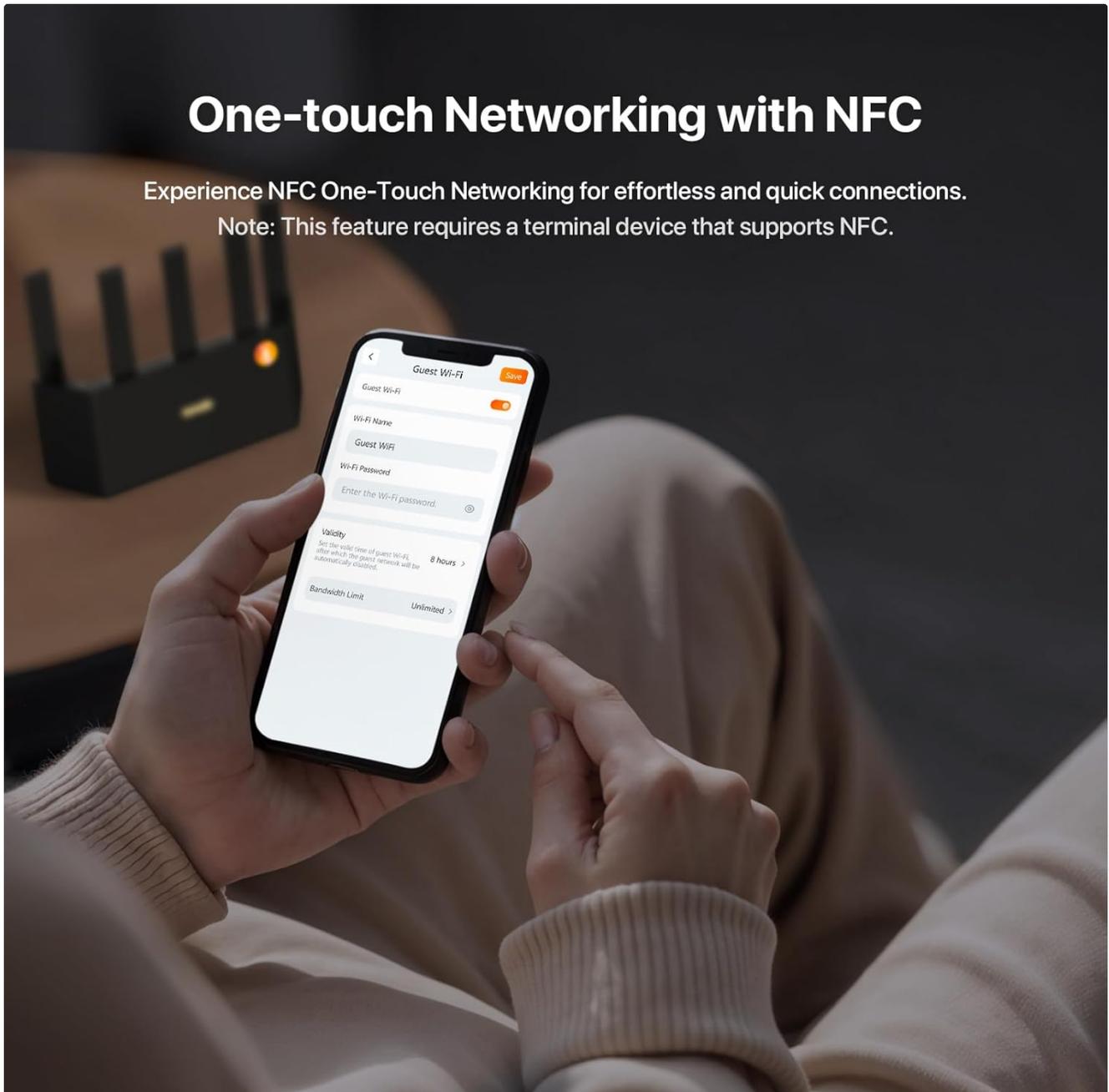3. Confirm the connection prompt on your device.

Image 3.2: A smartphone being used to connect to the router via NFC one-touch networking.

4. OPERATING THE ROUTER

4.1 Wi-Fi Connectivity

The BE5100 RE6L Pro operates on dual bands (2.4GHz and 5GHz) to provide optimal performance for various devices. The 2.4GHz band is suitable for wider coverage and older devices, while the 5GHz band offers higher

speeds for bandwidth-intensive tasks.

Image 4.1: Visual representation of the dual-band speeds (2.4GHz at 688 Mbps and 5GHz at 4323 Mbps) provided by the BE5100 router, enabling smooth experiences for streaming, VR, and gaming.
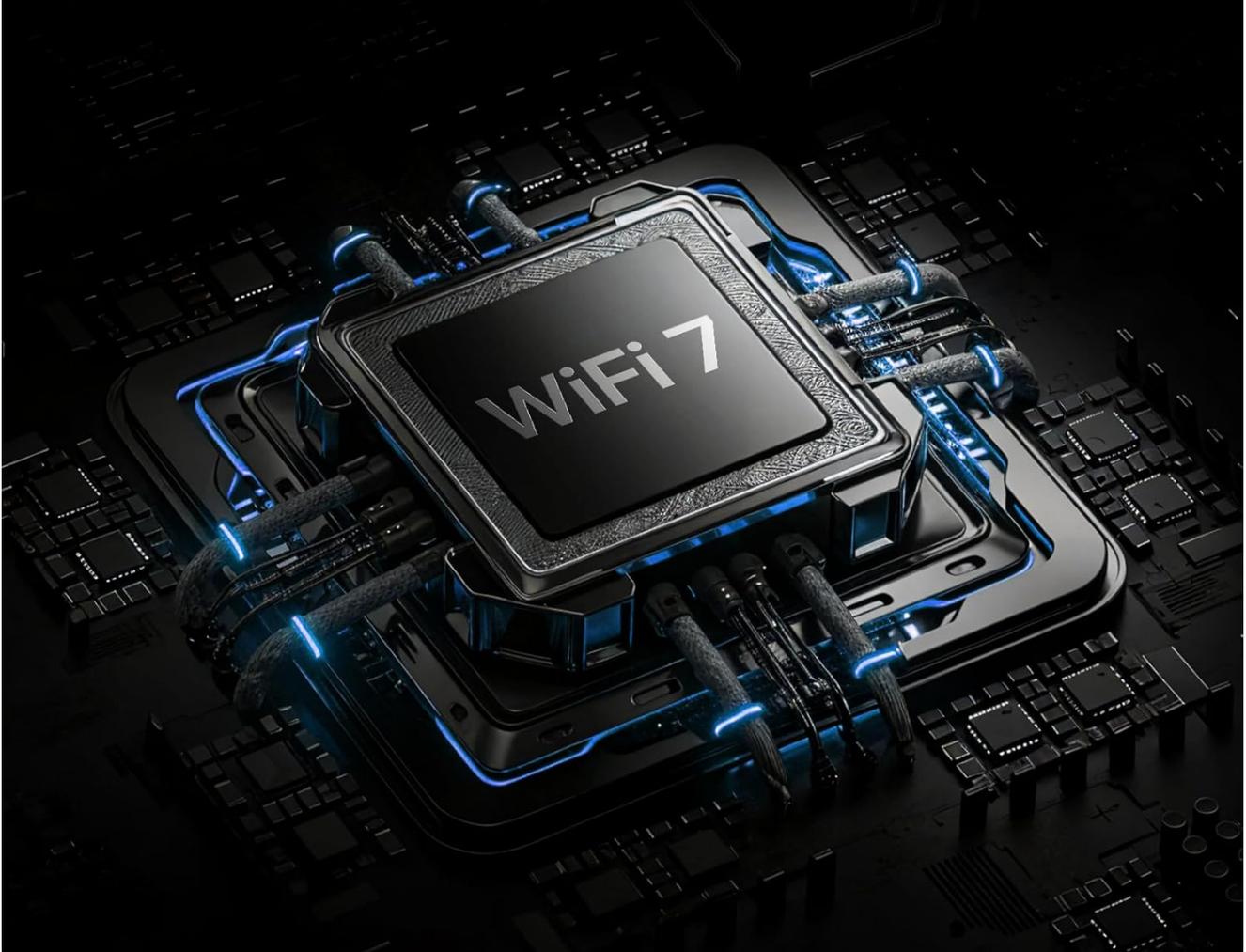
Image 4.2: An illustration of the powerful 6nm Wi-Fi 7 chip, highlighting its role in enhancing signal stability and providing a reliable networking experience.

4.2 Wired Connections

The router features one 2.5Gbps WAN/LAN port and three 1Gbps LAN ports, supporting high-speed wired connections for devices like PCs, gaming consoles, and NAS (Network Attached Storage) devices.
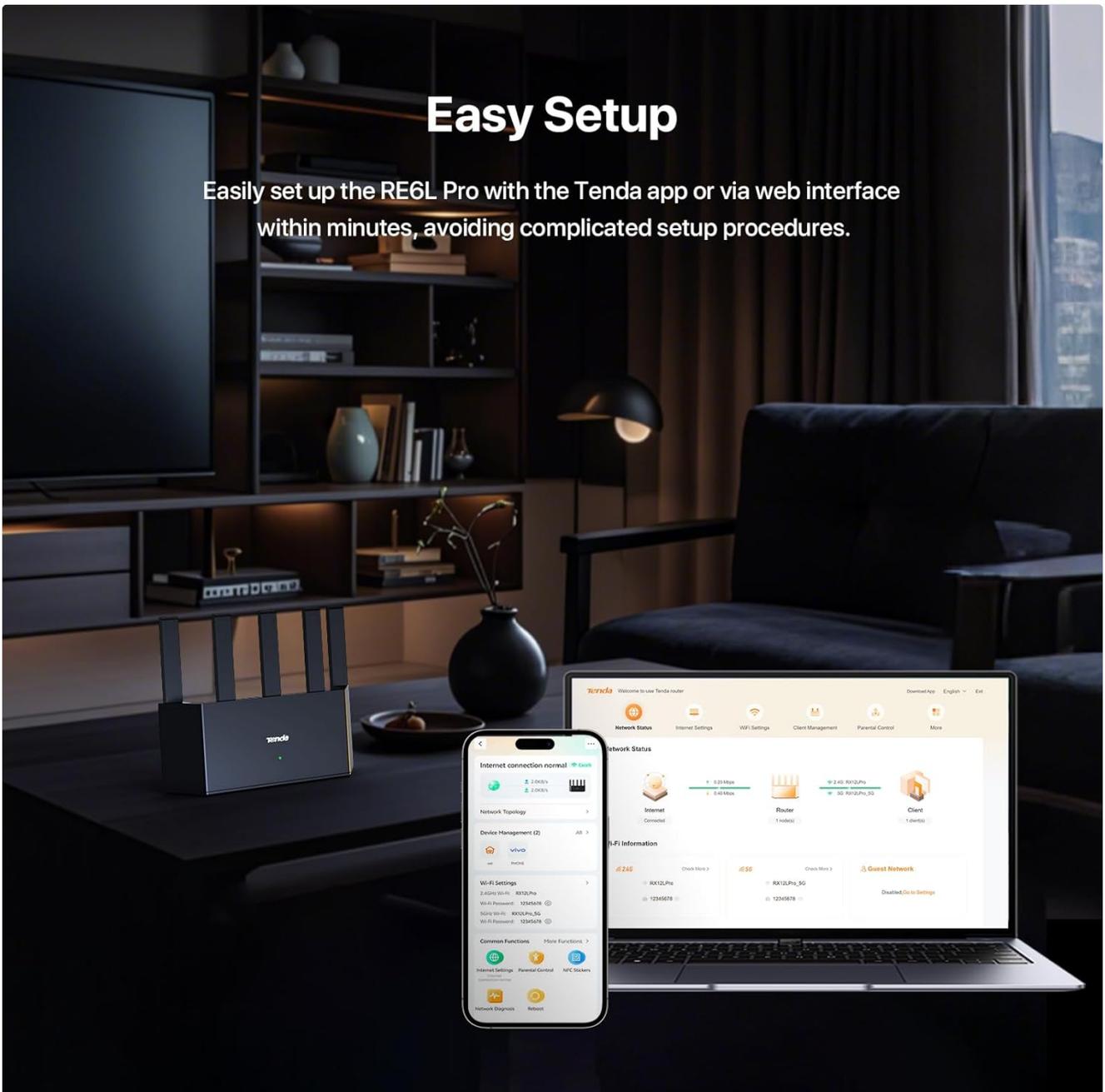
Image 4.3: A detailed view of the router's rear panel, showing the WPS/RESET button, 2.5 Gbps WAN/LAN port, 1 Gbps WAN/LAN ports, and the power connector.

4.3 Connecting Multiple Devices

With 512MB of memory and support for OFDMA and MU-MIMO technologies, the BE5100 RE6L Pro can efficiently manage over 100 concurrent devices, ensuring stable connections even in busy network environments.

Image 4.4: Various devices such as gaming consoles, laptops, smartphones, and smart TVs connected simultaneously to the Tenda BE5100 router, demonstrating its capacity to handle over 100 concurrent devices.

4.4 Advanced Features

- **Parental Controls:** Manage internet usage for children by setting time limits, filtering websites, and blocking specific devices.

- **Security:** The router supports WPA3 encryption and includes firewall protection against DDoS attacks, safeguarding your network from unauthorized access and threats.

- **Access Point Mode:** Convert your router into an access point to extend your existing wired network wirelessly.

- **Mesh Networking:** Expand your Wi-Fi coverage seamlessly throughout your home by adding compatible Tenda Mesh devices.

- **VPN Support:** The product supports both VPN Server and VPN Client (PPTP/L2TP). OpenVPN support will be available in July 2025.

5. Maintenance

- **Optimal Placement:** Place the router in a central location, away from obstructions and interference sources (e.g., microwaves, cordless phones) to maximize Wi-Fi coverage.
- **Cleaning:** Keep the router clean and free from dust. Use a soft, dry cloth for cleaning. Do not use liquid cleaners.
- **Firmware Updates:** Regularly check for firmware updates via the Tenda App or the web interface. Firmware updates often include performance improvements, new features, and security patches.
- **Heat Dissipation:** The vertical design of the router is optimized for efficient heat dissipation. Ensure adequate airflow around the device to maintain stable performance.

6. Troubleshooting

6.1 No Internet Connection

- Check if the Ethernet cable from your modem is securely connected to the router's WAN/LAN port.
- Verify that your modem is working correctly and has an active internet connection.
- Reboot both your modem and the Tenda router. Wait a few minutes for them to re-establish connection.

6.2 Slow Wi-Fi Speed

- Ensure your devices are connected to the 5GHz band for higher speeds, if supported.
- Reduce the distance between your device and the router, or minimize physical obstructions.
- Check for Wi-Fi interference from other electronic devices.
- Limit the number of concurrent devices or bandwidth-intensive activities.

6.3 Cannot Connect to Wi-Fi Network

- Double-check the Wi-Fi password. Ensure you are entering it correctly (case-sensitive).
- Move closer to the router to improve signal strength.
- Restart your device and try connecting again.
- If the issue persists, try resetting the router to factory defaults (refer to the Quick Installation Guide for instructions) and reconfigure it.

6.4 Forgot Router Admin Password

- If you have forgotten your router's login password, you will need to perform a factory reset. Locate the WPS/RESET button on the back of the router.
- With the router powered on, press and hold the WPS/RESET button for approximately 8-10 seconds until the indicators flash.
- Release the button. The router will restart with factory default settings, and you can then set up a new admin password.

7. Specifications

Feature	Description

Model Name	RE6L Pro
Wi-Fi Standard	Wi-Fi 7 (802.11be)
Frequency Bands	Dual-Band (2.4 GHz, 5 GHz)
Combined Speed	Up to 5011 Mbps (2.4GHz: 688Mbps, 5GHz: 4323Mbps)
Ethernet Ports	1 x 2.5Gbps WAN/LAN, 3 x 1Gbps LAN
Antennas	5 high-gain antennas
Special Features	Beamforming, Guest Mode, Access Point Mode, Internet Security (WPA3), Parental Control, NFC, MLO, 4K QAM
Dimensions (L x W x H)	2.36 x 10.12 x 8.5 inches
Item Weight	1.32 pounds
Compatible Devices	Gaming Console, Security Camera, Personal Computer, Smart Television, Smartphone
Manufacturer	Tenda

8. WARRANTY AND SUPPORT

Tenda products come with a standard manufacturer's warranty. Please refer to the warranty card included in your package or visit the official Tenda website for detailed warranty terms and conditions specific to your region.

For technical support, troubleshooting assistance, or any product-related inquiries, please contact Tenda's professional support team:

- **Email Support:** support.us@tenda.cn
- **Online Resources:** Visit the official Tenda website for FAQs, firmware downloads, and additional support documentation.