

NEWFAST RE516

NEWFAST RE516 WiFi Extender Signal Booster User Manual

Model: RE516

1. INTRODUCTION

The NEWFAST RE516 WiFi Extender is designed to expand the coverage of your existing wireless network, eliminating dead zones and providing a stable internet connection throughout your home or office. This device supports the 802.11bgn wireless communication standard and offers data transfer rates up to 300 Megabits Per Second (Mbps) on a single 2.4 GHz band. It is compatible with a wide range of devices, including mobile phones, tablets, laptops, smart TVs, security cameras, and printers.

The RE516 features a dual-core processor and four high-gain antennas that can be rotated 180 degrees to optimize signal reception and transmission. It supports multiple operating modes, including Repeater, Access Point (AP), and Router mode, offering flexibility for various network setups. Security protocols such as WPA/WPA2/WPA-PSK/WPA2-PSK are supported to help protect your network.

Long Distance & Wide Coverage

Eliminate WiFi Dead Zones



Image 1.1: Illustration of the NEWFAST RE516 WiFi Extender improving signal coverage in a home environment.

2. PACKAGE CONTENTS

Please verify that all items are present in your package:

- 1 x NEWFAST RE516 WiFi Extender
- 1 x User Manual (this document)
- 1 x RJ-45 Ethernet Cable

3. PRODUCT OVERVIEW

The NEWFAST RE516 WiFi Extender features a compact design with external antennas and an indicator light for status monitoring.

3.1 Device Layout



Image 3.1: Front view of the NEWFAST RE516 WiFi Extender.

Powerful High Gain Antenna

WiFi expander is equipped with 4 powerful external antennas, which can rotate 90° and 180°, with higher permeability, will not lose signals through the wall, and will rapidly expand the coverage of the internet wireless network.



Image 3.2: The RE516 is equipped with four high-gain external antennas that can rotate 90 and 180 degrees for optimal signal direction.

Ventilation openings

WiFi repeater is equipped with ventilation openings on both sides, which protect it from overheating and allow a smooth and fast operation.



Image 3.3: The device includes ventilation openings on both sides to prevent overheating and ensure stable operation.

3.2 LED Indicator Status

The intelligent indicator light provides visual feedback on the device's status:

- **Green:** Power on, no setup configured.
- **Red:** Weak signal detected. Consider repositioning the extender closer to your main router.
- **Blue:** Strong signal detected. The extender is operating optimally.

Easy Set-up with WPS

Press the WPS button on your router and NEWFAST Wi-Fi repeater for about 1-2 seconds

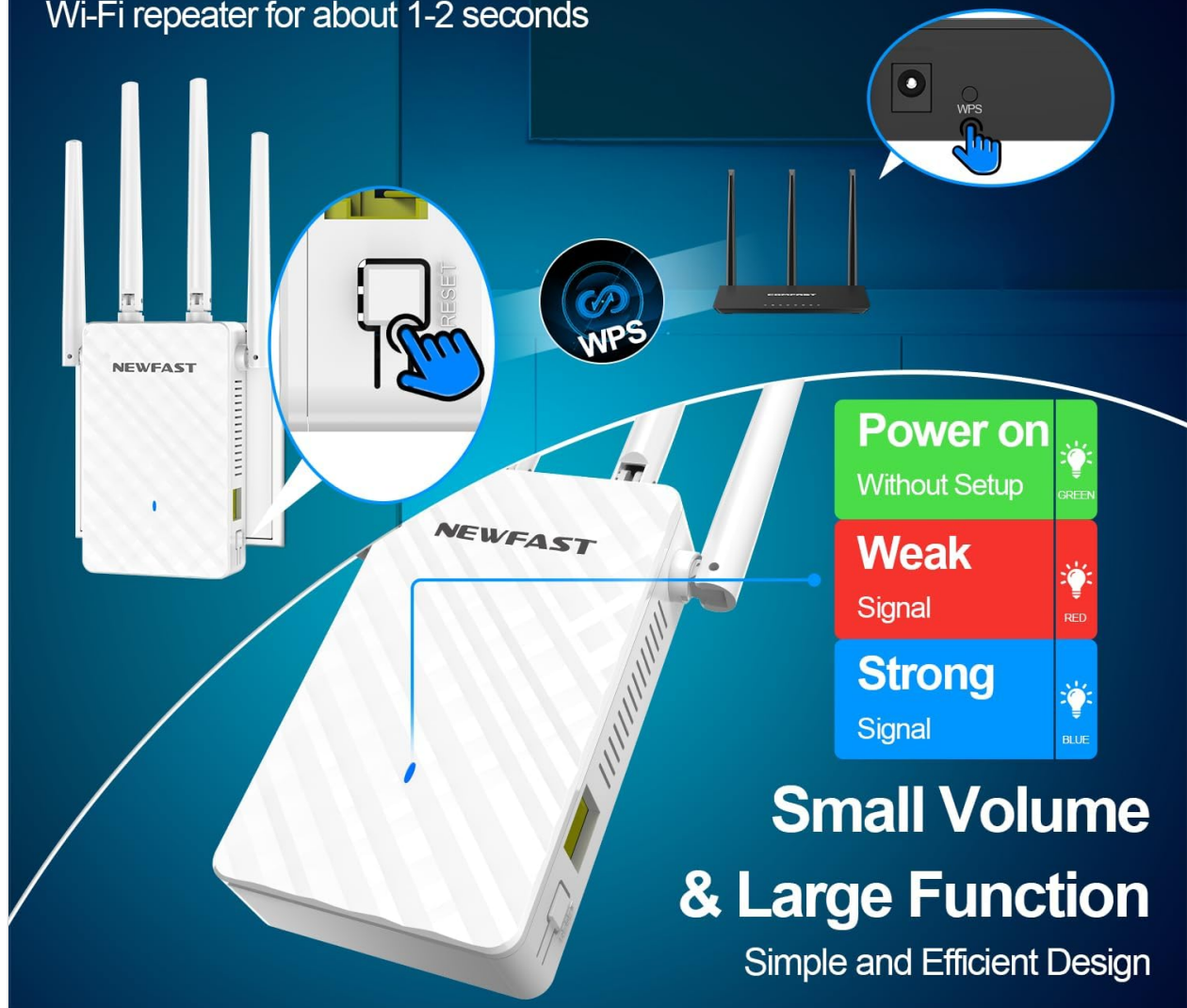


Image 3.4: WPS button and LED indicator status guide.

4. SETUP

The NEWFAST RE516 WiFi Extender offers two primary setup methods: WPS (Wi-Fi Protected Setup) and Web Browser configuration.

4.1 WPS One-Key Setup

This method is recommended for quick setup with WPS-compatible routers.

1. Plug the NEWFAST RE516 extender into an electrical outlet near your main router.
2. Wait for the LED indicator to turn green.
3. Press the WPS button on your main router.
4. Within 2 minutes, press the WPS button on the NEWFAST RE516 extender for 1-2 seconds.
5. The LED indicator on the extender will flash and then turn blue (strong signal) or red (weak signal) once connected.
6. Relocate the extender to a suitable position between your router and the desired coverage area. Ensure the LED indicator remains blue for optimal performance.

4.2 Web Browser Setup

This method provides more detailed configuration options.

1. Plug the NEWFAST RE516 extender into an electrical outlet.
2. On a computer or mobile device, connect to the extender's default Wi-Fi network (e.g., "NEWFAST_Extender"). No password is required initially.
3. Open a web browser and enter the default IP address or domain name (refer to the device label or quick start guide for specific details, commonly 192.168.1.1 or extender.net).
4. Follow the on-screen instructions to select your desired operating mode (Repeater, AP, or Router) and configure network settings, including selecting your main Wi-Fi network and entering its password.
5. Once configured, the extender will restart. Reconnect your devices to the new extended network.

5. OPERATING MODES

The NEWFAST RE516 supports three main operating modes to suit different networking needs.



Image 5.1: Overview of the three operating modes.

5.1 Repeater/Bridge Mode

In this mode, the extender wirelessly connects to your existing router and amplifies its signal to extend coverage. This is the most common mode for eliminating Wi-Fi dead zones.

- Connects wirelessly to your main router.
- Creates a new Wi-Fi network with the same or a different name.
- Ideal for extending Wi-Fi coverage to areas with weak signals.

5.2 Access Point (AP) Mode

In AP mode, the extender converts a wired internet connection into a wireless network. This is useful for adding Wi-Fi capability to a wired-only network or creating a new Wi-Fi hotspot.

- Connects to your router or modem via an Ethernet cable.
- Broadcasts a new Wi-Fi signal.
- Suitable for converting a wired network into a wireless one.

5.3 Router Mode

In Router mode, the device functions as a primary router, connecting directly to a modem and creating a new private network. This mode is typically used when you do not have an existing router.

- Connects directly to a modem via an Ethernet cable.
- Creates a new Wi-Fi network and manages network traffic.
- Acts as the main internet gateway for your home network.

6. MAINTENANCE

To ensure optimal performance and longevity of your NEWFAST RE516 WiFi Extender, follow these maintenance guidelines:

- **Placement:** Position the extender in an open area, away from obstructions like large metal objects, concrete walls, and other electronic devices that may cause interference.
- **Cleaning:** Gently wipe the device with a soft, dry cloth. Do not use liquid cleaners or aerosols. Ensure ventilation openings are clear of dust.
- **Firmware Updates:** Periodically check the manufacturer's website for firmware updates. Updating firmware can improve performance, add new features, and enhance security.
- **Power Cycle:** If you experience network issues, try unplugging the extender from the power outlet for 10 seconds and then plugging it back in. This can resolve minor glitches.
- **Security:** Regularly update your Wi-Fi password and use strong encryption (WPA2/WPA3, if available) to protect your network from unauthorized access.

7. TROUBLESHOOTING

If you encounter issues with your NEWFAST RE516 WiFi Extender, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No internet access after setup.	Incorrect Wi-Fi password for the main router; extender is too far from the router; IP address conflict.	Verify the Wi-Fi password during setup. Reposition the extender closer to the main router (LED should be blue). Restart both the router and the extender.
Weak signal or frequent disconnections.	Extender placement is suboptimal; interference from other devices; outdated firmware.	Adjust antenna orientation. Move the extender to a location where the LED is blue. Avoid placing near microwaves, cordless phones, or large metal objects. Update firmware.
WPS setup fails.	Router does not support WPS or WPS is disabled; timing issue.	Ensure your router supports WPS and it is enabled. Try pressing the WPS buttons simultaneously or within the specified timeframe. Use the web browser setup method as an alternative.
Cannot access the web management page.	Incorrect IP address or domain name; device not connected to the extender's network.	Ensure your device is connected to the extender's Wi-Fi network. Verify the correct IP address or domain name (e.g., extender.net). Try clearing your browser's cache.
Forgot Wi-Fi password for the extended network.	Password not recorded or forgotten.	Access the web management page to view or change the password. If unable to access, perform a factory reset and reconfigure.
Factory Reset.	Persistent issues; forgotten login credentials.	With the extender powered on, use a paperclip to press and hold the Reset button (usually a small pinhole) for about 5-10 seconds until the lights flash. The device will revert to factory default settings.

8. SPECIFICATIONS

Detailed technical specifications for the NEWFAST RE516 WiFi Extender:

- **Model:** RE516
- **Brand:** NEWFAST
- **Wireless Communication Standard:** 802.11bgn
- **Data Transfer Rate:** 300 Megabits Per Second (Mbps)
- **Frequency Band Class:** Single-Band (2.4 GHz)
- **Antennas:** 4 High-Gain, 180° Rotatable
- **Processor:** Dual-core, 2.4 GHz multi-core
- **Security Protocols:** WPA/WPA2/WPA-PSK/WPA2-PSK
- **Ports:** 1 x Fast Ethernet Port
- **Operating Modes:** Repeater, Access Point (AP), Router, Bridge
- **Maximum Device Support:** Up to 35 devices
- **Estimated Coverage:** Up to 9,800 sq.ft (actual coverage may vary based on environment)
- **Product Dimensions:** 3.46 x 1.08 x 7.73 inches

- **Item Weight:** 4.8 ounces

9. SAFETY INFORMATION

Please read and follow these safety guidelines to prevent damage to the device or injury to yourself:

- Do not expose the device to water, fire, high temperatures, or humid environments.
- Do not attempt to disassemble, repair, or modify the device. Contact qualified service personnel if service is required.
- Use only the power adapter provided or recommended by the manufacturer.
- Ensure proper ventilation around the device to prevent overheating.
- Keep the device out of reach of children.
- Unplug the device during lightning storms or when unused for long periods.

10. WARRANTY AND SUPPORT

NEWFAST products are designed for reliability and performance. For warranty information, technical support, or customer service inquiries, please refer to the contact details provided on the product packaging or visit the official NEWFAST website. Please retain your proof of purchase for warranty claims.

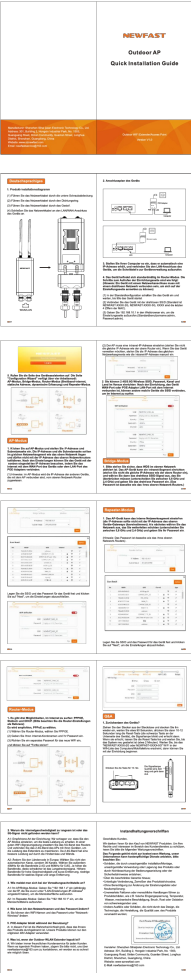
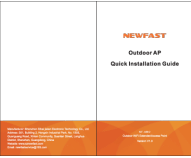

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Related Documents - RE516



[Quick Installation Guide for WiFi Extender/Repeater NF-RE513 V2](#)

A concise guide to installing and setting up the NF-RE513 V2 WiFi Extender/Repeater, including WPS installation and troubleshooting common issues.

	<p>NEWFAST Outdoor AP Quick Installation Guide - Setup and Configuration</p> <p>Comprehensive guide to installing and configuring the NEWFAST Outdoor AP (Access Point) and WiFi Extender, covering setup modes, network settings, and troubleshooting.</p>
	<p>NEWFAST NF-A882 Outdoor AP Quick Installation Guide</p> <p>A quick installation guide for the NEWFAST NF-A882 Outdoor WiFi Extender/Access Point, covering product installation, device connection, configuration modes (AP, Bridge, Router, Repeater), and troubleshooting.</p>
	<p>NEWFAST Wireless Adapter Quick Installation Guide</p> <p>A quick installation guide for the NEWFAST Wireless Adapter, providing step-by-step instructions for setup and maintenance regulations.</p>



[NF-RE523 Installation Manual by NEWFAST](#)

This document provides a comprehensive installation guide for the NEWFAST NF-RE523 device, including setup instructions, operational guidelines, safety precautions, and troubleshooting tips.





[NEWFAST NF-A882 Installation Manual - Step-by-Step Guide](#)

Comprehensive installation manual for the NEWFAST NF-A882. Includes safety instructions, detailed setup steps, troubleshooting tips, and technical specifications.