BrosTrend AC5L-Linux-Upgraded

BrosTrend 650Mbps Linux Compatible WiFi Adapter User Manual

Model: AC5L-Linux-Upgraded

INTRODUCTION

The BrosTrend AC5L-Linux-Upgraded WiFi Adapter is designed to provide enhanced wireless connectivity for a wide range of devices, particularly those running Linux operating systems, as well as Windows. This dual-band USB adapter offers speeds up to 433Mbps on the 5GHz band and 200Mbps on the 2.4GHz band, making it suitable for various online activities including 4K video streaming and gaming. Its long-range antenna is engineered to extend WiFi coverage and improve signal stability.

Image: The BrosTrend 650Mbps Linux Compatible WiFi Adapter with its long-range antenna.

KEY FEATURES

- **Multi-OS Support:** Compatible with Linux Kernels up to 6.2, including Ubuntu (22.10 ~ 16.04), Debian (11/10/9/8), Linux Mint (21/20/19/18), LMDE (4/3/2/1), Kali Linux, Pop!_OS, Raspberry Pi OS (Raspbian) (11/10/9/8), and various other Debian-based distributions. Also supports Windows 11/10/8.1/8/7.

- **Ultimate Wi-Fi Speed:** Achieves 433Mbps wireless speed on the 5GHz WiFi band and 200Mbps speed on the 2.4GHz band, optimized for online 4K video streaming and gaming.

- **Boosted Wireless Range:** Equipped with a 5dBi long-range WiFi antenna, providing extended WiFi connection and superior stability for desktop PCs and laptops. The antenna can be rotated and adjusted 180 degrees for optimal signal reception.

- **Dual Band Compatibility:** Works seamlessly with the latest dual-band AC WiFi routers and is backward compatible with previous Wireless N/G/B/A routers.

- **Advanced WPA3 Security:** Secures devices and network privacy by supporting the latest wireless encryption standards: WPA3-SAE, WPA2/WPA/WEP, AES/PSK/TKIP, and 802.1x.

Multi Operating Systems Supported

Tested to work with the below OSes:

1. Ubuntu 24.04 ~ 16.04 (all flavors: Kubuntu, Lubuntu, Xubuntu, MATE, GNOME, Budgie, Kylin, Studio, Unity, Cinnamon)

2. Raspberry Pi OS 12 ~ 8

3. Debian 12 ~ 8

4. Linux Mint 21 ~ 18

5. LMDE 6 ~ 1

6. Zorin 16 ~ 11

7. elementary OS 6.1 ~ 0.4.1

8. Windows 11, 10, 8.1, 8, 7

...

1. This Linux Wi-Fi adapter should work with most Linux distributions that are derived from Debian.

2. Supported architectures: x86_64/x86_32 (PCs, VirtualBox...), aarch64/armhf (Raspberry Pi 2+, Odroid...)

3. While our installer will also work in some other Linux distributions, such as ArchLinux and Fedora, we can only support Debian-based distributions currently.

Please contact BrosTrend Support Team for more details:
support@brostrend.com

The above information is subject to change without prior notice.

Image: A visual representation of the multiple operating systems supported by the adapter.

5GHz Wi-Fi Is Better

Less Lagging and Faster Speed
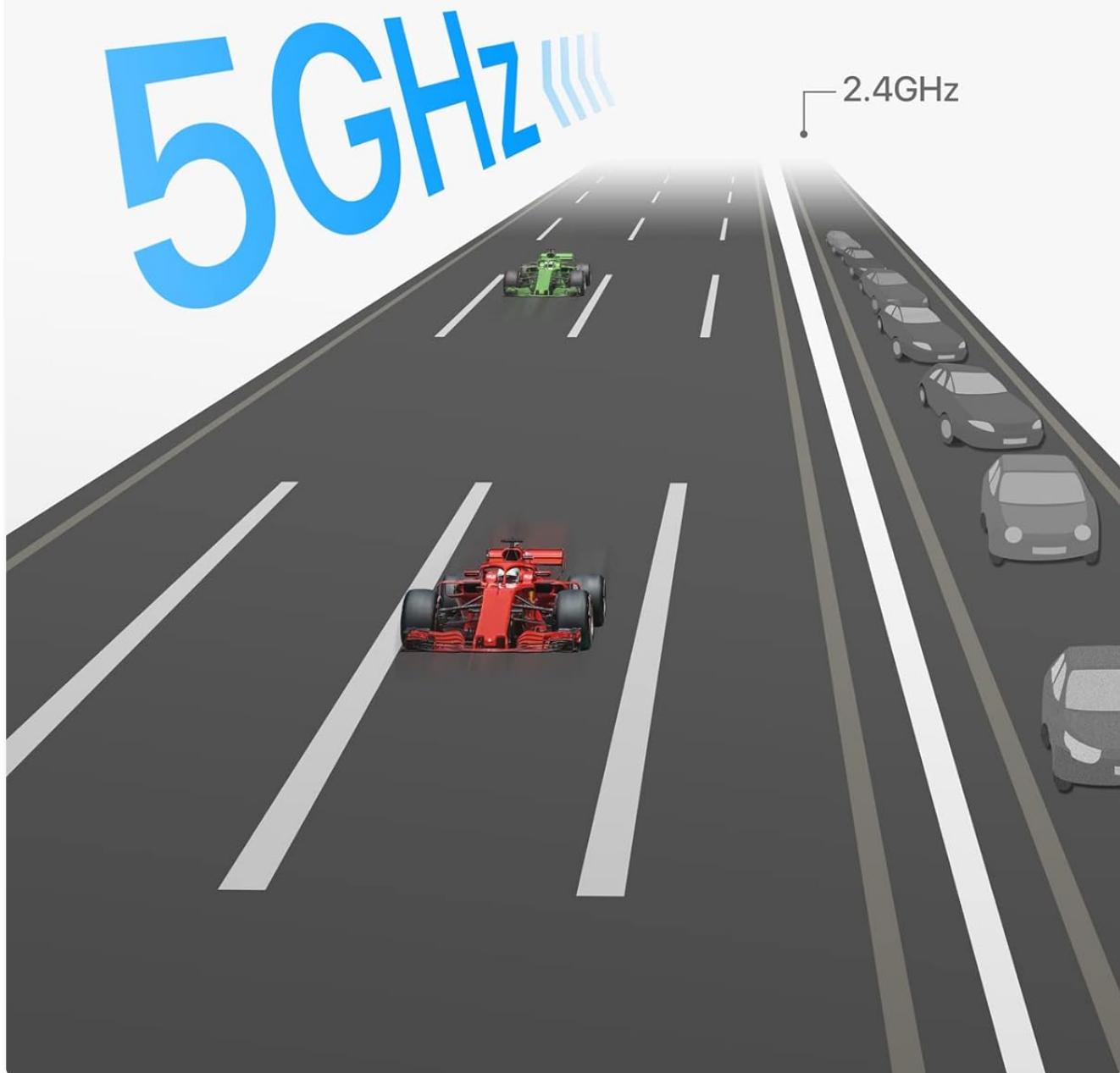
Image: Illustration showing the speed advantage of 5GHz Wi-Fi over 2.4GHz.
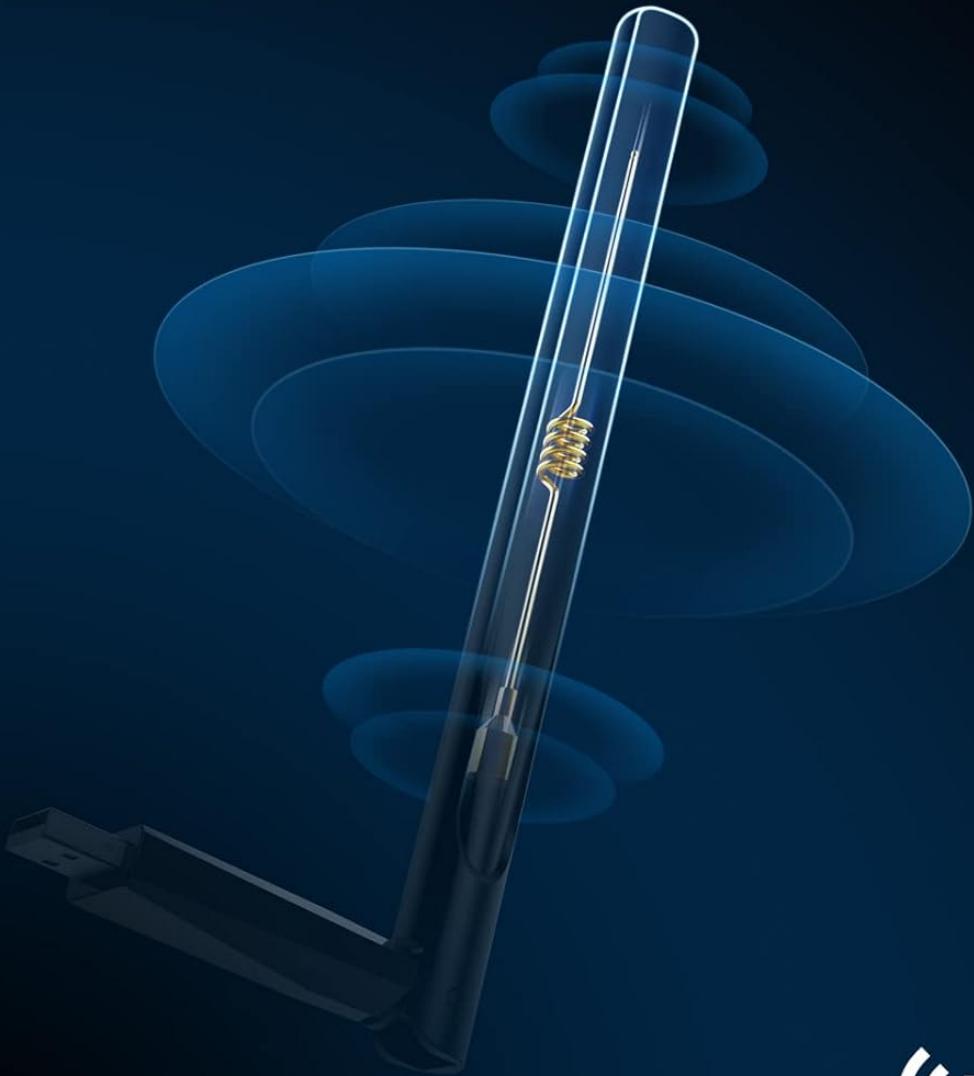
Image: Diagram illustrating the enhanced range provided by the 5dBi antenna.

Setup Instructions

1. Unboxing and Initial Inspection

Carefully remove the BrosTrend WiFi Adapter from its packaging. Verify that all components are present: the AC650 Linux Compatible USB WiFi Adapter and the User Manual. Inspect the adapter for any visible damage.

Image: The BrosTrend WiFi Adapter shown with its retail packaging.

2. Driver Installation (Linux)

For Linux operating systems, driver installation is typically required. The adapter comes with an installation CD, but it is recommended to download the latest drivers from the official BrosTrend website for the most up-to-date and stable version. Follow the specific instructions provided on the website for your Linux distribution (e.g., Ubuntu, Debian, Linux Mint, Raspberry Pi OS).

Generally, the process involves opening a terminal and executing a command provided by BrosTrend. This process usually takes a few minutes. After installation, a system reboot may be required.

3. Driver Installation (Windows)

For Windows operating systems (11/10/8.1/8/7), drivers are often automatically installed upon connecting the adapter. If not, use the provided installation CD or download the latest drivers from the BrosTrend website and follow the on-screen prompts.

4. Connecting the Adapter

Plug the BrosTrend WiFi Adapter directly into an available USB port on your desktop, laptop, or PC. The adapter is designed to be compact and can be adjusted for optimal signal reception.

Image: The BrosTrend WiFi Adapter plugged into a laptop's USB port.

Image: Demonstrating the 180-degree rotation capability of the antenna for optimal positioning.

OPERATING INSTRUCTIONS

1. Connecting to a Wi-Fi Network

Once the adapter is installed and recognized by your operating system, navigate to your system's network settings. The adapter will detect available Wi-Fi networks. Select your desired network and enter the Wi-Fi password if prompted. The adapter supports both 2.4GHz and 5GHz bands, allowing you to choose the optimal band for your network environment.

2. Optimizing Signal Reception

Adjust the antenna's position to achieve the best signal strength. The 180-degree rotatable antenna allows for flexible positioning to minimize interference and maximize range. Experiment with different angles to find the most stable and strongest connection.

Your browser does not support the video tag.

Video: An official BrosTrend video demonstrating the features and usage of the 650Mbps Linux USB WiFi Adapter.

MAINTENANCE

To ensure the longevity and optimal performance of your BrosTrend WiFi Adapter, consider the following maintenance tips:

- **Keep Drivers Updated:** Regularly check the BrosTrend official website for the latest driver updates. Updated drivers can improve performance, stability, and security.

- **Clean Gently:** Periodically clean the adapter with a soft, dry cloth to remove dust and debris. Avoid using liquid cleaners or abrasive materials.

- **Proper Storage:** When not in use, store the adapter in a cool, dry place away from direct sunlight and extreme temperatures.

- **Handle with Care:** Avoid bending or applying excessive force to the antenna or the USB connector to prevent damage.

Troubleshooting

Adapter Not Recognized

- Ensure the adapter is fully inserted into the USB port.
- Try a different USB port on your device.
- Verify that the correct drivers are installed for your operating system. Reinstall drivers if necessary, preferably from the official BrosTrend website.
- Restart your computer.

Poor Signal or Slow Speed

- Adjust the antenna's angle and direction.
- Ensure there are no physical obstructions (walls, large furniture) between the adapter and your Wi-Fi router.
- Move closer to your Wi-Fi router.
- Check for interference from other electronic devices (e.g., microwaves, cordless phones).
- Verify that your router is operating on an optimal channel and that both 2.4GHz and 5GHz bands are configured correctly.

Frequent Disconnections

- Update your router's firmware.
- Ensure the adapter drivers are up to date.
- Check for power management settings on your computer that might be turning off the USB port to save power. Disable such settings for the USB port connected to the adapter.
- If using a USB hub, try connecting the adapter directly to the computer.

Specifications

Attribute	Value
Brand	BrosTrend
Model Number	AC5L-Linux-Upgraded
Product Dimensions	1.97 x 0.75 x 0.28 inches
Item Weight	0.16 ounces (0.01 Pounds)
Hardware Interface	USB 2.0
Color	Black
Compatible Devices	Desktop, Laptop, Computer, PC, Notebook

Attribute	Value
Data Link Protocol	IEEE 802.11ac, IEEE 802.11g, IEEE 802.11n
Data Transfer Rate	650 Megabits Per Second (433Mbps on 5GHz, 200Mbps on 2.4GHz)
Compatible Operating System Family	Linux (Kernels up to 6.2, various Debian-based distros), Windows (11/10/8.1/8/7)
UPC	701017579830
Manufacturer	BrosTrend
Country of Origin	China

WARRANTY AND SUPPORT

BrosTrend products are designed for reliability and performance. For any technical assistance or warranty inquiries, please contact BrosTrend Customer Service. Many users have reported excellent support from the BrosTrend team. You can often find support resources, including updated drivers and FAQs, on the official BrosTrend website. The product typically includes a user manual with detailed contact information.

For additional information and resources, you may visit the BrosTrend Store on Amazon or their official website.

Image: The official BrosTrend company logo.

Image: Information regarding Transparency verification for product authenticity.