

Vemfay AX900

Vemfay AX900 WiFi 6 USB Adapter Instruction Manual

Model: AX900

1. INTRODUCTION

The Vemfay AX900 WiFi 6 USB Adapter provides high-speed wireless connectivity for your computer. Utilizing advanced WiFi 6 technology, it offers significantly improved speeds compared to previous WiFi standards. This adapter supports dual-band operation (5GHz and 2.4GHz) and features MU-MIMO technology for enhanced network efficiency. It is designed for ease of use with plug-and-play functionality on compatible Windows operating systems.





Figure 1.1: The VenmAY AX900 WiFi 6 USB Adapter. This image shows the compact design of the adapter with its USB connector and "Wi-Fi 6 AX900" branding.

2. FEATURES

- **High-Speed Dual Band:** Supports WiFi 6 (802.11ax) with a maximum speed of 900 Mbps. The 5GHz band offers up to 600 Mbps, and the 2.4GHz band offers up to 286 Mbps.

High-Speed Dual Band



600Mbps on 5GHz



286Mbps on 2.4GHz



Figure 2.1: Illustration of the Vemfay AX900's dual-band speeds. This image highlights the 600 Mbps on 5GHz and 286 Mbps on 2.4GHz, suitable for gaming, 4K streaming, and general internet use.

- **Receive and AP Mode:** Functions as a WiFi receiver for your computer, freeing it from wired connections. It can also operate in Access Point (AP) mode, transmitting WiFi signals from a connected computer to other devices.

Receive/Transmit WIFI



Figure 2.2: Diagram showing the Vemfay AX900 in both WiFi Receive Mode (connecting a PC to a router) and WiFi Transmit Mode (sharing PC's internet connection with a mobile device).

- **MU-MIMO Technology:** Enhances network efficiency by allowing the router to communicate with multiple devices simultaneously, ensuring smoother and more efficient internet access for all connected devices.

MU-MIMO Technology

Exclusive Broadband/Higher Efficiency/Faster Speeds

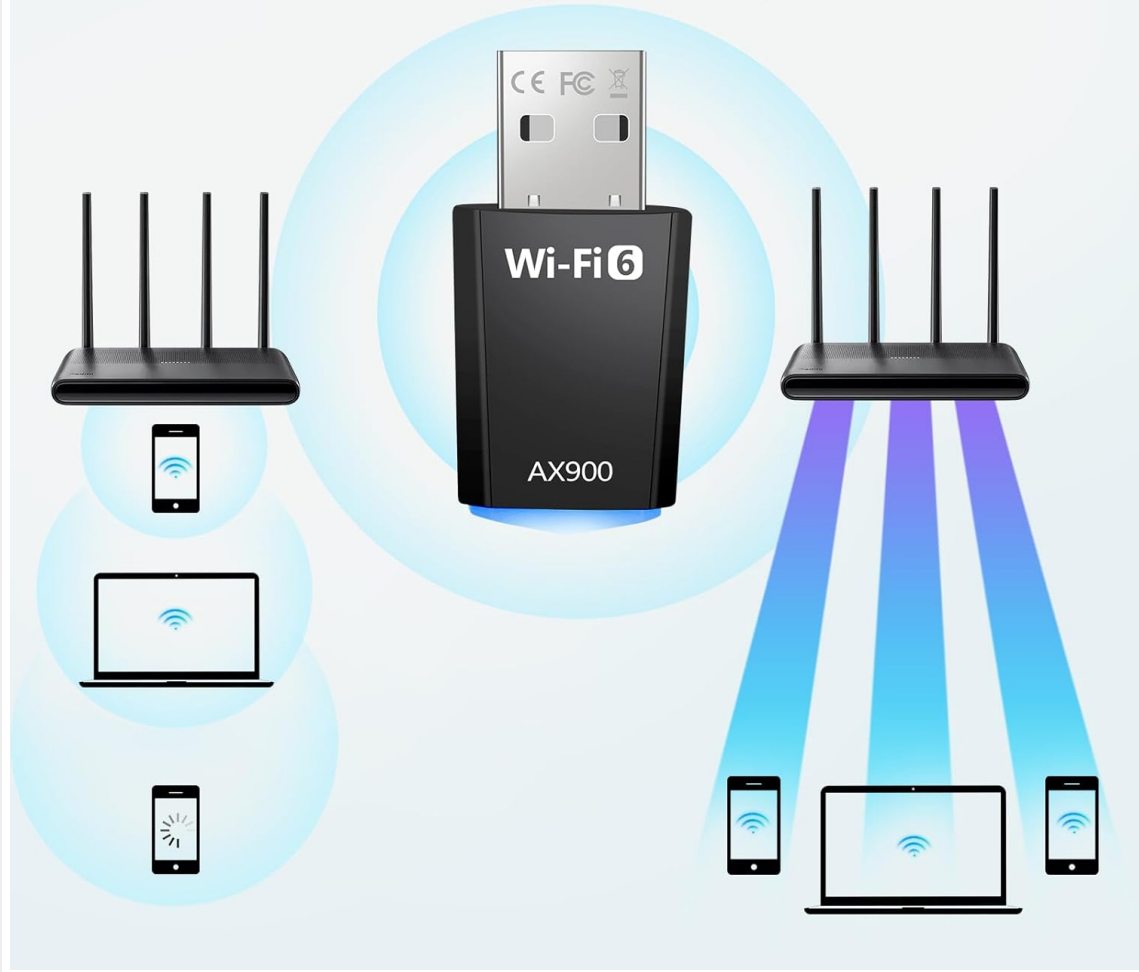


Figure 2.3: Visual representation of MU-MIMO technology. This image illustrates how the AX900 adapter, combined with a MU-MIMO router, can serve multiple devices concurrently, improving overall network performance.

- **Multiple Encryption Modes:** Supports WPA3-SAE/WPA3/WPA2/WPA/WEP64/128 WEP data encryption modes to protect user internet data security.

Network Security

Support WPA3-SAE/WPA3/WPA2/WPA/WEP64/128
WEP multiple data encryption modes



Figure 2.4: A user interacting with a laptop, symbolizing secure network connectivity provided by the Vemfay AX900 adapter's encryption features.

- **Compact and Portable Design:** The adapter features a small, unobtrusive design, making it easy to carry and use with various devices.

Compact and Portable



Figure 2.5: The Vemfay AX900 adapter plugged into a laptop, demonstrating its compact size and portability. Dimensions are shown as 1.57 inches (4cm) length, 0.78 inches (2cm) width, and 0.39 inches (1cm) thickness.

3. SETUP INSTRUCTIONS

The Vemfay AX900 WiFi 6 USB Adapter is designed for plug-and-play installation on compatible Windows operating systems.

1. **System Requirements:** Ensure your computer is running one of the following operating systems:
 - Windows 11
 - Windows 10
 - Windows 7

Note: Windows 8 and Mac OS are not supported.



Figure 3.1: The Vemfay AX900 adapter plugged into a laptop, with icons indicating compatibility with Windows 7, 10, and 11. A note explicitly states that Windows 8 and Mac OS are not supported.

2. **Insert the Adapter:** Plug the Vemfay AX900 USB adapter into an available USB port on your computer.
3. **Automatic Driver Installation:** For Windows 11, 10, and 7, the adapter comes with built-in drivers. Your operating system should automatically detect the device and install the necessary drivers. This process may take a few moments.
4. **Verify Installation:** Once the drivers are installed, a notification may appear, or you can check the network adapters in your computer's Device Manager to confirm the Vemfay AX900 is recognized and functioning correctly.
5. **Connect to WiFi:** After successful installation, you can connect to your desired WiFi network through the standard network settings in your Windows operating system.

4. OPERATING INSTRUCTIONS

4.1. WiFi Receive Mode

In WiFi Receive Mode, the Vemfay AX900 adapter allows your computer to connect to a wireless network provided by a router.

1. Ensure the adapter is securely plugged into a USB port.

2. Click on the network icon (usually a WiFi symbol) in the system tray (bottom-right corner of your screen on Windows).
3. A list of available wireless networks will appear. Select your desired network.
4. Enter the network security key (password) if prompted.
5. Click "Connect". Your computer should now be connected to the internet wirelessly.

4.2. Access Point (AP) Mode

In AP Mode, the Vemfay AX900 adapter can transform your wired internet connection (or an existing WiFi connection) into a portable WiFi hotspot, allowing other devices to connect to your computer's internet.

1. Ensure your computer has an active internet connection (either wired or via another WiFi adapter).
2. Plug the Vemfay AX900 adapter into a USB port.
3. **For Windows 10/11:**
 - Go to **Settings > Network & Internet > Mobile hotspot**.
 - Toggle "Share my Internet connection with other devices" to **On**.
 - You can customize the network name (SSID) and password under "Edit".
4. Other devices can now search for and connect to the WiFi network broadcast by your computer.

5. MAINTENANCE

To ensure optimal performance and longevity of your Vemfay AX900 WiFi 6 USB Adapter, consider the following maintenance tips:

- **Keep it Clean:** Periodically clean the adapter's exterior with a soft, dry cloth. Avoid using liquid cleaners or solvents.
- **Proper Storage:** When not in use, store the adapter in a cool, dry place away from direct sunlight and extreme temperatures.
- **Avoid Physical Damage:** Handle the adapter carefully. Avoid dropping it or exposing it to excessive force, which can damage internal components or the USB connector.
- **Firmware/Driver Updates:** While the adapter is plug-and-play, occasionally check the manufacturer's website (if available) for updated drivers or firmware that might improve performance or address compatibility issues.
- **Secure Connection:** Ensure the adapter is always fully inserted into the USB port to maintain a stable connection and prevent wear on the port.

6. TROUBLESHOOTING

- **Adapter Not Detected:**
 - Try plugging the adapter into a different USB port on your computer.
 - Restart your computer.
 - Ensure your operating system is Windows 11, 10, or 7. Mac OS and Windows 8 are not supported.
 - Check Device Manager for any unknown devices or network adapter issues. You may need to manually update drivers if automatic installation failed (though this is rare for this model).

- **Cannot Connect to WiFi Network:**

- Verify that your WiFi network is active and broadcasting.
- Double-check the WiFi password (security key).
- Ensure your router is within range and functioning correctly.
- Try restarting your router and modem.
- Confirm that other devices can connect to the same WiFi network.

- **Slow Connection Speed:**

- Ensure your router supports WiFi 6 for optimal performance.
- Check if you are connected to the 5GHz band (if available) for faster speeds, especially for demanding tasks like streaming or gaming.
- Reduce interference by moving the adapter or computer closer to the router, or away from other electronic devices.
- Update your router's firmware.
- Verify your internet service provider's speed.

- **Frequent Disconnections:**

- Ensure the adapter is firmly seated in the USB port.
- Check for strong interference sources.
- Update your computer's operating system and network drivers.
- Consider adjusting power management settings for the USB port to prevent the computer from turning off the adapter to save power.

7. SPECIFICATIONS

Brand	Vemfay
Model	AX900
Interface Hardware	USB 3.0 Type-C
Compatible Devices	Computer, Laptop
Data Link Protocol	IEEE 802.11ax (WiFi 6), IEEE 802.11n
Data Transfer Rate	900 Megabits per second (Mbps)
Frequency Bands	2.4GHz, 5GHz
Supported OS	Windows 11, Windows 10, Windows 7
Encryption Modes	WPA3-SAE/WPA3/WPA2/WPA/WEP64/128 WEP

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation included with your purchase or visit the official Vemfay website. Keep your proof of purchase for any warranty claims. For further assistance, you may contact Vemfay customer support through their official channels.

