## ALFA Network AWUS036AXM

# ALFA AWUS036AXM WiFi 6E USB Adapter User Manual

Model: AWUS036AXM

## 1. INTRODUCTION

The ALFA AWUS036AXM is a high-performance WiFi 6E USB 3.0 adapter designed to provide lightning-fast wireless connectivity for your desktop or laptop. Featuring AXE3000 tri-band support (2.4GHz, 5GHz, and 6GHz), this adapter ensures seamless streaming, gaming, and browsing with speeds up to 3Gbps. It is engineered for enhanced connectivity with wider bandwidth and reduced interference, offering a stable and reliable connection for all your online activities.



Figure 1: ALFA AWUS036AXM WiFi 6E USB Adapter. This image shows the compact USB adapter with two detachable antennas, ready for connection to a computer.

## 2. WHAT'S IN THE BOX

Upon opening the package, verify that all the following components are included:

- AWUS036AXM Wireless Adapter
- 2x 5dBi Antennas
- USB L connector
- Quick-Start Guide



Figure 2: Components of the AWUS036AXM. This diagram highlights key parts of the adapter: 1. Main adapter body, 2. USB 3.0 connector, 3. Antenna ports, 4. Detachable antennas, 5. LED indicator, 6. ALFA Network branding.

## 3. PRODUCT FEATURES

- **Lightning-fast AXE3000 Speed:** Experience blazing-fast internet speeds ensuring seamless streaming, gaming, and browsing without any lag or buffering. Fast speed from ISP and strong connection required.

- **Enhanced Connectivity:** Upgrade your compatible device to the latest WiFi 6E standard and enjoy a wider bandwidth with less interference, thanks to the 6 GHz frequency band, ensuring a stable and reliable connection for all your online activities.

- **Easy Setup and Installation:** Get up and running in no time with our quick online driver download link printed in included quickstart guide. Requires Microsoft Windows 10, 11 (32/64-bit) or Linux (newer kernels). For connecting to 6GHz WiFi band Windows 11 is required. Windows 10 only supports 2.4/5GHz. Eco-friendly packaging does not include CD disc as most modern computers do not have CD drive. Enclosed Quickstart guide contains driver download link.

- **Detachable Antennas:** Includes 2x detachable 5 dbi gain antennas for powerful reception. Compatible with optional directional or higher gain antennas for upgrade.

- **Flexible USB Connection:** Plugs directly into a USB port or can be used with the included L connector to avoid blocking nearby USB ports.

- **Router Compatibility:** Compatible with any router or mesh WiFi system; works best with WiFi 6E routers. Requires WiFi 6E router and Windows 11 or Linux to access 6GHz (works with Windows 10 for 2.4 & 5 Ghz only). This is a client/receiver device, not a WiFi router, and is not compatible with cell phones or televisions.

- **Operating System Support:** No driver to support Mac OS version beyond 10.15, nor support M1/M2 chipset.

- **Advanced Security:** Supports WPA3, the latest WiFi security standard.

- **USB 3.0 Performance:** Best performance with USB 3.0; backward compatible with USB 2.0.

Figure 3: Technical Specifications Overview. This image details the WiFi Speed (Up to 3Gbps, 1200 on 6GHz, 600 on 2.4GHz, 1200 on 5GHz), WiFi Standard (WiFi 6E, 802.11axe, backward compatible), Connection Type (USB 3.0 Type A with L connector), Security (WEP, WPA, WPA2, WPA3), and Operating Systems (Microsoft Windows 10, 11 32/64-bit, Linux).



Figure 4: USB L Connector. This image illustrates how the included USB L connector can be used to prevent the adapter from blocking adjacent USB ports on a laptop or desktop computer.

## 4. SETUP GUIDE

### 4.1 Driver Installation

The ALFA AWUS036AXM requires specific drivers for proper functionality. A quick-start guide with a driver download link is included in the packaging. As modern computers often lack CD drives, drivers are provided online.

1. **Locate Driver Download Link:** Refer to the included Quick-Start Guide for the official driver download URL.

2. **Download Drivers:** Visit the provided URL and download the appropriate drivers for your operating system (Windows 10/11 or Linux).

3. **Install Drivers:** Follow the on-screen instructions to install the drivers. For Windows, this typically involves running an executable file. For Linux, consult the specific instructions provided with the driver package, which may involve command-line operations.

4. **Restart System:** After installation, it is recommended to restart your computer to ensure all drivers are properly loaded.

**Important Notes:**

- For 6GHz WiFi band connectivity, **Windows 11** is required. Windows 10 only supports 2.4GHz and 5GHz bands.
- There is no official driver support for Mac OS versions beyond 10.15, nor for Apple M1/M2 chipsets.
- Some users have reported issues with Bluetooth functionality or conflicts when both WiFi and Bluetooth drivers are installed. If you experience issues, try disabling the Bluetooth service or device and rebooting.

## 4.2 Hardware Connection

1. **Attach Antennas:** Carefully screw the two 5dBi antennas onto the connectors on the ALFA AWUS036AXM adapter. Ensure they are securely fastened but do not overtighten.

2. **Connect to USB Port:**

   - **Direct Connection:** Plug the adapter directly into an available USB 3.0 port on your desktop or laptop for optimal performance. The adapter is backward compatible with USB 2.0 ports, but performance may be limited.
   - **Using USB L Connector:** If nearby USB ports are blocked, attach the included USB L connector to the adapter first, then plug the L connector into your computer's USB port.

3. **Verify Connection:** Once connected, the adapter's LED indicator should illuminate, signifying power and activity.

## 5. OPERATING INSTRUCTIONS

### 5.1 Connecting to a Wireless Network (Windows)

1. Ensure the ALFA AWUS036AXM adapter is properly installed and its drivers are loaded.

2. Click on the WiFi icon in the system tray (usually in the bottom right corner of your screen).

3. A list of available wireless networks will appear. Select your desired network (SSID).

4. Click "Connect". If prompted, enter the network security key (password).

5. Once connected, the WiFi icon will change to indicate an active connection.

### 5.2 Connecting to a Wireless Network (Linux)

Connection methods may vary slightly depending on your Linux distribution and desktop environment (e.g., GNOME, KDE, XFCE). Generally, the process involves:

1. Ensure the ALFA AWUS036AXM adapter is recognized and its drivers are active. You can often verify this using commands like `lsusb` and `iwconfig` or `ip a`.

2. Access your network manager (e.g., NetworkManager applet in the system tray).

3. Select your desired wireless network from the list of available SSIDs.

4. Enter the network password if required.

5. Confirm the connection.

For specific Linux distributions or advanced configurations (e.g., monitor mode, packet injection for security testing), consult your distribution's documentation or online communities. Some users have noted that the adapter works well with Kali Linux for specific use cases.

Figure 5: WiFi 6E Home Network Setup. This diagram illustrates how the ALFA AWUS036AXM adapter integrates into a home network, connecting a desktop and laptop to a WiFi 6E router, utilizing the 6 GHz band for higher data throughput and showing backward compatibility with previous WiFi standards.

## 6. MAINTENANCE

To ensure the longevity and optimal performance of your ALFA AWUS036AXM adapter, follow these simple maintenance guidelines:

- **Keep Clean:** Regularly wipe the adapter with a soft, dry cloth to remove dust and debris. Avoid using liquid cleaners or solvents.
- **Proper Handling:** Avoid dropping the adapter or subjecting it to strong impacts. When disconnecting, pull from the USB plug, not the adapter body or antennas.
- **Antenna Care:** Ensure antennas are not bent or damaged. If replacing, use compatible antennas to maintain performance.
- **Storage:** When not in use for extended periods, store the adapter in a cool, dry place away from direct sunlight and extreme temperatures.
- **Software Updates:** Periodically check the ALFA Network website for updated drivers to ensure compatibility and optimal performance with the latest operating system versions and WiFi standards.

## 7. TROUBLESHOOTING

If you encounter issues with your ALFA AWUS036AXM adapter, refer to the following common problems and solutions:

| Problem | Possible Cause | Solution |
|---|---|---|
| Adapter not detected or not working after installation. | Incorrect or missing drivers; USB port issue; driver conflict. | <ul><li>Ensure drivers are correctly installed from the official ALFA Network website.</li><li>Try a different USB port (preferably a USB 3.0 port).</li><li>Restart your computer after driver installation.</li><li>Check Device Manager (Windows) or `lsusb` (Linux) to see if the device is recognized.</li></ul> |
| Cannot connect to 6GHz WiFi band. | Operating system limitation; router not WiFi 6E. | <ul><li>Ensure you are running **Windows 11** or a compatible Linux kernel. Windows 10 does not support 6GHz.</li><li>Verify your router is a WiFi 6E compatible model and has the 6GHz band enabled.</li></ul> |
| Slow speeds or intermittent connection. | Interference; distance from router; USB 2.0 port usage; outdated drivers. | <ul><li>Move closer to your wireless router.</li><li>Ensure the adapter is plugged into a USB 3.0 port.</li><li>Check for sources of interference (e.g., other electronic devices).</li><li>Update drivers to the latest version.</li><li>Ensure antennas are securely attached and oriented correctly.</li></ul> |
| Bluetooth functionality issues (if applicable). | Driver conflict; Windows Bluetooth service issues. | <ul><li>Some users report conflicts between WiFi and Bluetooth drivers. Try disabling the Bluetooth service or device in Device Manager (Windows) and rebooting.</li><li>If you have another Bluetooth adapter, disable it as Windows may prefer a single Bluetooth adapter.</li></ul> |

| Problem | Possible Cause | Solution |
|---|---|---|
| No Mac OS support. | Hardware/software incompatibility. | The ALFA AWUS036AXM does not support Mac OS versions beyond 10.15 or M1/M2 chipsets. This is a known limitation. |

## 8. SPECIFICATIONS

| Feature | Detail |
|---|---|
| Model Number | AWUS036AXM |
| Product Dimensions | 3.44 x 1.13 x 0.47 inches |
| Item Weight | 2.2 ounces |
| Brand | ALFA Network |
| Hardware Interface | USB 3.0 (backward compatible with USB 2.0) |
| Compatible Devices | Desktop, Laptop |
| Data Link Protocol | USB, Wi-Fi (802.11a/b/g/n/ac/ax/axe) |
| Data Transfer Rate | Up to 3 Gigabits Per Second (AXE3000) |
| WiFi Standard | WiFi 6E (802.11axe), backward compatible with 802.11a/b/g/n/ac |
| Frequency Bands | 2.4GHz, 5GHz, 6GHz |
| Antennas | 2x detachable 5dBi gain antennas |
| Security Protocols | WEP, WPA, WPA2, WPA3 |
| Compatible Operating System Family | Microsoft Windows 10, 11 (32/64-bit), Linux (newer kernels) |
| Manufacturer | ALFA Network |
| Date First Available | June 13, 2023 |

## 9. WARRANTY AND SUPPORT

### 9.1 Warranty Information

ALFA Network products typically come with a standard manufacturer's warranty. Please refer to the warranty card included with your product or visit the official ALFA Network website for detailed warranty terms and conditions specific to the AWUS036AXM model. Keep your proof of purchase for warranty claims.

### 9.2 Technical Support

For technical assistance, driver updates, or further troubleshooting not covered in this manual, please visit the official ALFA Network support website. The Quick-Start Guide included in your product packaging should provide direct links to support resources.

When contacting support, please have your product model (AWUS036AXM) and a detailed description of your issue ready.