

Intel AX210.NGWG

Intel AX210 IEEE 802.11ax Bluetooth 5.3 Tri Band Wi-Fi/Bluetooth Combo Adapter

USER MANUAL

Introduction

This manual provides comprehensive instructions for the installation, operation, and maintenance of your Intel AX210 Wi-Fi/Bluetooth Combo Adapter. The Intel Wi-Fi 6E AX210 (Gig+) adapter is designed to support Wi-Fi 6E technology and related Wi-Fi Alliance certification. The product supports dual-stream Wi-Fi in the 2.4GHz, 5GHz, and 6GHz bands as well as Bluetooth 5.2.

Key features include:

- Dual-Stream connectivity
- Bluetooth 5.2 support
- vPro support
- M.2 2230 form factor
- M.2 PCIe, USB connector interface
- Windows 10, Windows 11 and Linux OS support

Setup and Installation

Follow these steps to properly install your Intel AX210 Wi-Fi/Bluetooth Combo Adapter into a compatible device, such as a laptop or desktop computer.

1. **Prepare your device:** Ensure your device is powered off and disconnected from any power source. For laptops, remove the battery if possible.
2. **Access the M.2 slot:** Carefully open the bottom case of your laptop or desktop computer to access the internal components. Locate the M.2 slot, typically labeled for WLAN or Wi-Fi cards.
3. **Remove existing adapter (if applicable):** If an old Wi-Fi card is present, gently disconnect any attached antenna cables and remove the securing screw before carefully sliding the old card out of the M.2 slot.
4. **Install the Intel AX210:** Align the notches on the Intel AX210 adapter with the M.2 slot. Gently insert the adapter into the slot at an angle, then press it down until it lies flat. Secure it with the small screw.
5. **Connect Antennas:** Carefully connect the antenna cables to the corresponding connectors on the Intel AX210 adapter. Typically, there are two connectors, often labeled MAIN and AUX. Ensure a secure

connection.

6. **Close the device:** Once the adapter is securely installed and antennas are connected, reattach the bottom case of your device.
7. **Install Drivers:** Power on your device. For optimal performance and full functionality, it is recommended to download and install the latest drivers for the Intel AX210 from the official Intel website. While some operating systems may provide basic functionality, dedicated drivers ensure full Wi-Fi 6E and Bluetooth 5.2 capabilities.



Figure 1: Front view of the Intel AX210 Wi-Fi/Bluetooth Combo Adapter, highlighting the model number and connection points.



Figure 2: Back view of the Intel AX210 Wi-Fi/Bluetooth Combo Adapter, showing the circuit board and Intel branding.

Operating Instructions

Once installed and drivers are updated, your Intel AX210 adapter will enable advanced wireless capabilities:

- **Wi-Fi Connectivity:** The adapter supports Wi-Fi 6E (802.11 ax) across three bands: 2.4GHz, 5GHz, and 6GHz. This allows for faster speeds, lower latency, and increased network capacity when connected to a compatible Wi-Fi 6E router.
- **Bluetooth 5.2:** Enjoy seamless connection with Bluetooth-enabled devices such as headphones, speakers, keyboards, and mice. Bluetooth 5.2 offers improved speed, range, and energy efficiency compared to previous versions.
- **Operating System Compatibility:** The adapter is compatible with Windows 10, Windows 11, and Linux operating systems. Ensure your OS is up-to-date for the best performance.

Maintenance

To ensure the longevity and optimal performance of your Intel AX210 adapter:

- **Keep Drivers Updated:** Regularly check the official Intel website for the latest driver updates. Updated drivers often include performance improvements, bug fixes, and security enhancements.
- **Maintain Cleanliness:** If you need to access the adapter, ensure your workspace is clean and free of dust. Avoid touching the gold contacts on the adapter.
- **Proper Handling:** Handle the adapter by its edges to prevent damage to components or static discharge.

Troubleshooting

If you encounter issues with your Intel AX210 adapter, consider the following troubleshooting steps:

- **No Wi-Fi or Bluetooth:**
 - Check Device Manager (Windows) or equivalent (Linux) to ensure the adapter is recognized and drivers are installed correctly. Reinstall drivers if necessary.
 - Verify that the adapter is securely seated in the M.2 slot and antenna cables are properly connected.
 - Ensure Wi-Fi and Bluetooth are enabled in your operating system settings.
- **Poor Signal or Slow Speeds:**
 - Confirm that your router supports Wi-Fi 6E for optimal performance. Older routers may limit speeds.
 - Check antenna connections. Loose or improperly connected antennas can significantly degrade signal strength.
 - Reduce interference from other electronic devices or physical obstructions.
 - Update your router's firmware.
- **Bluetooth Disconnections:**
 - Ensure your Bluetooth device is fully charged and within range.
 - Remove and re-pair the Bluetooth device.
 - Update Bluetooth drivers.
- **System Instability after Installation:**
 - Verify that your device's BIOS/UEFI firmware is up-to-date, as some older systems may require updates for full compatibility with newer hardware.
 - Ensure you have installed the correct drivers for your operating system.

Specifications

Feature	Detail
Brand	Intel
Model Number	AX210.NGWG
Product Dimensions	0.87 x 0.09 x 1.18 inches (1.18"L x 0.87"W x 0.09"H)
Item Weight	0.317 ounces
Hardware Interface	Bluetooth, USB
Data Link Protocol	Bluetooth, USB
Data Transfer Rate	2400 Megabits Per Second
Compatible Devices	Laptop, Desktop
Color	multicolor
Manufacturer	Intel
Date First Available	April 4, 2022
UPC	735858471060

Warranty and Support

For warranty information and technical support, please refer to the official Intel website or contact Intel customer service directly. Keep your purchase receipt as proof of purchase.

Online Resources:

- Intel Support Website: <https://www.intel.com/content/www/us/en/support.html>
- Intel Driver & Software Downloads: <https://www.intel.com/content/www/us/en/download-center.html>