

GMKtec M3 Ultra

GMKtec M3 Ultra Mini PC User Manual

Model: M3 Ultra

INTRODUCTION

This user manual provides comprehensive instructions for the setup, operation, maintenance, and troubleshooting of your GMKtec M3 Ultra Mini PC. Please read this manual carefully before using the device to ensure optimal performance and longevity. The GMKtec M3 Ultra is a high-performance mini desktop computer designed for various applications, from everyday computing to demanding professional tasks, featuring an Intel Core i9 12900HK processor, Intel Iris Xe Graphics, and extensive connectivity options.

WHAT'S IN THE BOX

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

- GMKtec Nucbox M3 Plus Intel Core i9 12900HK Mini PC Computer
- Power Supply & Cable
- HDMI Cable
- VESA Mount and Screws
- User Manual (this document)

SETUP GUIDE

Follow these steps to set up your GMKtec M3 Ultra Mini PC:

1. **Connect Peripherals:** Connect your monitor(s) to the HDMI ports or the USB-C (DP1.4) port. Connect your keyboard and mouse to the available USB ports.
2. **Connect to Power:** Plug the power supply cable into the DC-in port on the Mini PC, then plug the power adapter into a wall outlet.
3. **Power On:** Press the power button located on the front of the Mini PC. The power indicator light will illuminate.
4. **Initial Operating System Setup:** The Mini PC comes with OS Pro pre-installed. Follow the on-screen instructions to complete the initial setup, including language selection, network connection, and user account creation.
5. **Network Connection:** For wired connection, connect an Ethernet cable to the 2.5GbE LAN port. For wireless connection, select your Wi-Fi network during the OS setup or via the operating system's network settings.



This image displays the GMKtec M3 Ultra Mini PC from a slightly elevated front-right angle. The device is a compact, rectangular black unit with a glossy top surface featuring the 'GMKtec' logo. The front panel shows two blue USB 3.0 ports and a circular green power button. The left side of the unit has ventilation grilles.

OPERATING INSTRUCTIONS

Basic Operation

- **Power On/Off:** Press the power button to turn the PC on. To turn off, use the operating system's shutdown function or press and hold the power button for 5 seconds for a forced shutdown (not recommended for regular use).
- **Restart:** Use the operating system's restart function.
- **Sleep Mode:** Use the operating system's sleep function to put the PC into a low-power state.

Connectivity

- **Wi-Fi 6:** Connect to high-speed wireless networks for fast internet access and low latency.
- **Bluetooth 5.2:** Pair with Bluetooth-enabled devices such as headphones, speakers, and input devices.
- **2.5GbE LAN:** Utilize the 2.5 Gigabit Ethernet port for ultra-fast wired network connections, ideal for large data transfers and online gaming.
- **USB Ports:** The Mini PC features multiple USB 3.0 ports and a USB 2.0 port for connecting various peripherals and external storage devices.
- **USB-C (DP1.4/DATA):** This versatile port supports DisplayPort 1.4 for video output and data transfer.

Display Configuration

The GMKtec M3 Ultra supports up to three 4K displays simultaneously. Connect your monitors using the dual HDMI ports and the USB-C (DP1.4) port. Configure display settings through your operating system's display preferences to extend or duplicate your desktop.

Storage Expansion

The Mini PC comes with a 1TB M.2 PCIe 2280 SSD. For additional storage, it supports expansion up to 4TB. Furthermore, there is support for a second M.2 SATA/PCIEX4 2242 drive, also expandable up to 4TB. Refer to the detailed hardware upgrade guide

(if provided separately) for instructions on installing additional storage.

MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your Mini PC:

- **Cleaning:** Regularly clean the exterior of the Mini PC with a soft, dry cloth. Use compressed air to clear dust from the ventilation grilles to prevent overheating. Ensure the device is powered off and unplugged before cleaning.
- **Ventilation:** Ensure the Mini PC is placed in a well-ventilated area. Do not block the air vents.
- **Software Updates:** Keep your operating system and drivers updated to the latest versions to ensure security, stability, and performance.
- **Environmental Conditions:** Avoid exposing the Mini PC to extreme temperatures, humidity, or direct sunlight.

TROUBLESHOOTING

This section addresses common issues you might encounter:

- **No Power:**
 - Ensure the power adapter is securely connected to both the Mini PC and a working power outlet.
 - Verify the power outlet is functional by plugging in another device.
 - Check if the power button is fully pressed.
- **No Display Output:**
 - Confirm that the HDMI or USB-C cable is securely connected to both the Mini PC and the monitor.
 - Ensure the monitor is powered on and set to the correct input source (HDMI 1, HDMI 2, USB-C, etc.).
 - Try connecting to a different monitor or using a different cable to rule out faulty equipment.
- **No Network Connection (Wired/Wireless):**
 - For wired connection, check the Ethernet cable and router/modem status.
 - For wireless connection, ensure Wi-Fi is enabled in the operating system and you are connected to the correct network with the correct password.
 - Restart your router/modem and the Mini PC.
- **Slow Performance:**
 - Close unnecessary applications running in the background.
 - Check for sufficient free storage space on your SSD.
 - Ensure the Mini PC is well-ventilated and not overheating.
 - Update drivers and operating system.

If you encounter issues not covered here, please refer to the Warranty and Support section for further assistance.

SPECIFICATIONS

Feature	Detail
Processor	Intel Core i9 12900HK (14 Cores/20 Threads, up to 5.0 GHz)
Graphics	Intel Iris Xe Graphics (up to 1.45GHz)

Feature	Detail
RAM	32GB DDR4 (Dual Channel, expandable up to 64GB)
Storage	1TB M.2 PCIe 2280 SSD (expandable up to 4TB)
Additional Storage Slot	M.2 SATA/PCIEX4 2242 (expandable up to 4TB)
Display Output	Triple 4K Display (2x HDMI, 1x USB-C DP1.4)
LAN	2.5GbE (Intel Ethernet Controller I226-V)
Wireless Connectivity	Wi-Fi 6, Bluetooth 5.2
USB Ports	3x USB 3.0, 1x USB 2.0, 1x USB Type-C (Power & Data Transfer)
Operating System	OS Pro
Dimensions (LxWxH)	4.5 x 4.2 x 1.7 inches
Weight	3.2 pounds

WARRANTY AND SUPPORT

GMKtec offers a **1-year limited warranty** for each Mini PC, effective from the date of purchase. This warranty covers all defects due to design and workmanship. For any queries, concerns, or technical support, please contact GMKtec's professional after-sales team. You can typically find contact information on the official GMKtec website or through your purchase platform. For the most up-to-date support information, please visit the official GMKtec website: [GMKtec Official Store](#)

