Ninkear L12Pro

Ninkear L12Pro Gaming Mini PC User Manual

Model: L12Pro | Brand: Ninkear

1. INTRODUCTION AND OVERVIEW

Thank you for choosing the Ninkear L12Pro Gaming Mini PC. This compact yet powerful desktop computer is designed to deliver exceptional performance for a wide range of applications, from demanding gaming and 4K video editing to business productivity and multi-display setups. Featuring an Intel Core i9-12900HK processor, 32GB of RAM, and a 1TB NVMe SSD, the L12Pro offers a seamless and responsive computing experience. This manual provides essential information for setting up, operating, maintaining, and troubleshooting your new Mini PC.

Figure 1.1: Ninkear L12Pro Mini PC - Front and Side View with Ports.

2. PRODUCT FEATURES

- **Lightning-Fast Performance:** Powered by Intel's 12th Gen i9-12900HK processor (14 cores, 20 threads, up to 5.0GHz), capable of handling 4K video editing, coding, and intensive multitasking.

- **High-Speed Memory & Storage:** Equipped with 32GB DDR4 RAM and an ultra-fast 1TB NVMe SSD for instant file access, smooth application performance, and rapid boot times.

- **Triple 8K UHD Display Support:** Create an immersive multi-screen setup with HDMI 2.0 (up to 4K@60Hz), DisplayPort 1.4 (up to 8K@60Hz), and USB4/Thunderbolt 4 (up to 8K@60Hz) outputs.

- **Compact and Flexible Design:** Small form factor allows for versatile placement behind monitors, under desks, or in backpacks, offering powerful desktop capabilities in a portable size.

- **Advanced Connectivity:** Features USB4.0, USB-C, WiFi 6, Bluetooth 5.2, dual 2.5G LAN ports, and multiple USB 3.2 Gen 2 and USB 2.0 ports for comprehensive peripheral support and high-speed data transfer.

- **Efficient Cooling System:** Designed with an all-metal cooling system for quiet and efficient operation, ensuring stable performance even under heavy loads.

- **Expandable Storage:** Supports additional M.2 NVMe PCIe SSD (up to 4TB) and an optional 2.5-inch HDD for expanded storage capacity.

Figure 2.1: Key Features and Specifications Overview.

Figure 2.2: Triple 8K Display Setup for Enhanced Productivity.

Figure 2.3: Comprehensive Connectivity Options.

3. WHAT'S IN THE BOX

Upon opening the package, please ensure all the following items are present:

- Ninkear L12Pro Mini PC
- HDMI Cable
- Power Adapter
- User Manual (this document)

4. SETUP GUIDE

Follow these steps to set up your Ninkear L12Pro Mini PC:

1. **Unpack the Mini PC:** Carefully remove the Mini PC and all accessories from the packaging.

2. **Connect to a Display:**

   - Connect one end of the HDMI cable (included) to the HDMI port on the Mini PC and the other end to an available HDMI input on your monitor or TV.
   - For DisplayPort or USB4/Thunderbolt 4 connections, use appropriate cables (not included) to connect to compatible displays.
   - For triple display setup, connect additional monitors using the available DisplayPort, USB4/Thunderbolt 4, or a USB-C to HDMI/DP adapter (not included).

3. **Connect Peripherals:**

   - Plug your USB keyboard and mouse into any available USB ports on the Mini PC.
   - If using wireless peripherals, ensure their receivers are plugged into a USB port.

4. **Connect to Power:** Plug the power adapter into the DC-in port on the Mini PC, then plug the other end into a power outlet.

5. **Network Connection (Optional):**

   - For a wired connection, connect an Ethernet cable from your router or modem to one of the 2.5G LAN ports on the Mini PC.
   - For a wireless connection, the Mini PC supports WiFi 6. You will configure this after the initial boot.

6. **Initial Boot:** Press the power button on the front of the Mini PC. The system will power on and begin the initial setup

process for Windows 11 Pro. Follow the on-screen instructions to complete the operating system setup.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off

- **Power On:** Press the power button once.
- **Shut Down:** Click the Start button in Windows, then select Power > Shut down.
- **Restart:** Click the Start button in Windows, then select Power > Restart.
- **Force Shut Down:** If the system is unresponsive, press and hold the power button for approximately 5-7 seconds until the unit powers off. Use this only as a last resort.

5.2 Display Configuration

The Ninkear L12Pro supports up to three independent displays simultaneously. After connecting your monitors, Windows will typically detect them automatically. If not, or to configure display settings:

- Right-click on an empty area of your desktop.
- Select "Display settings".
- From here, you can detect displays, arrange them, change resolution, and set display modes (Extend, Duplicate, Second screen only).

5.3 Network Connectivity

- **Wired (Ethernet):** Ensure an Ethernet cable is connected to one of the 2.5G LAN ports. Windows will automatically establish a connection.
- **Wireless (Wi-Fi):**

  - Click the Wi-Fi icon in the system tray (bottom right of the taskbar).
  - Select your desired Wi-Fi network from the list.
  - Enter the network password if prompted and click "Connect".

5.4 Connecting External Devices

The Mini PC offers a variety of ports for connecting external devices:

- **USB Ports:** Use USB 3.2 Gen 2 ports for high-speed devices like external hard drives or SSDs, and USB 2.0 for standard peripherals like keyboards, mice, or printers.
- **USB4/Thunderbolt 4:** This versatile port supports high-speed data transfer (40Gbps), video output, and power delivery (with compatible devices).
- **Audio Jack:** Connect headphones or external speakers to the 3.5mm audio jack.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your Ninkear L12Pro Mini PC:

- **Keep Vents Clear:** Ensure the ventilation openings on the Mini PC are not obstructed. Blocked vents can lead to overheating and reduced performance.
- **Regular Cleaning:** Use a soft, dry cloth to clean the exterior of the Mini PC. For dust in vents, use compressed air. Do not use liquid cleaners directly on the device.
- **Software Updates:** Regularly update your Windows operating system, drivers, and applications to ensure security, stability, and performance.
- **Safe Shutdown:** Always shut down the Mini PC properly through the operating system to prevent data corruption.

- **Environmental Conditions:** Operate the Mini PC in a clean, dry environment, away from direct sunlight, excessive heat, and humidity.
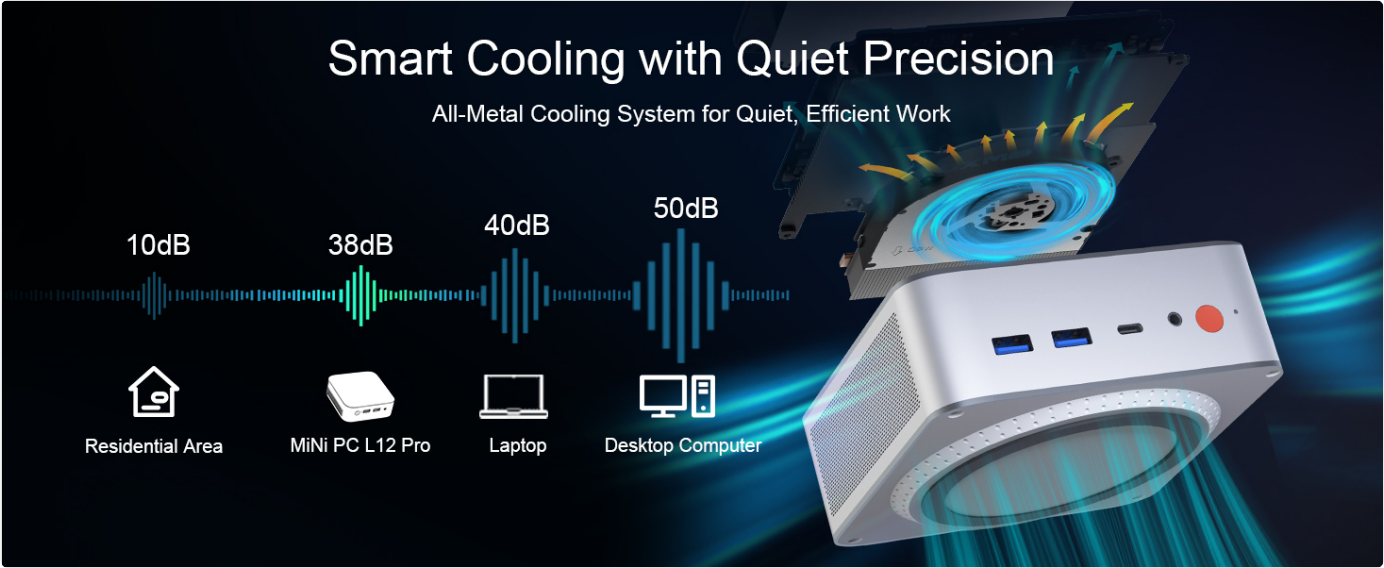

Figure 6.1: Smart Cooling System for Quiet Operation.

7. TROUBLESHOOTING

If you encounter issues with your Ninkear L12Pro Mini PC, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No Power	Power adapter not connected; Power outlet issue; Faulty power adapter.	Ensure power adapter is securely connected to the Mini PC and a working power outlet. Try a different outlet.
No Display	Monitor not connected; Incorrect input selected on monitor; Faulty cable; Display driver issue.	Check display cable connections. Ensure monitor is on and set to the correct input source (HDMI, DP, USB-C). Try a different cable or monitor. Update display drivers in Windows.
No Internet Connection (Wired)	Ethernet cable disconnected; Router/modem issue; Network driver issue.	Check Ethernet cable connection. Restart your router/modem. Check network adapter settings in Windows Device Manager.
No Internet Connection (Wi-Fi)	Wi-Fi disabled; Incorrect password; Router too far; Driver issue.	Ensure Wi-Fi is enabled in Windows. Re-enter Wi-Fi password. Move closer to the router. Update Wi-Fi drivers.
Slow Performance	Too many applications running; Overheating; Low disk space; Malware.	Close unnecessary applications. Ensure vents are clear. Free up disk space. Run a malware scan.

8. SPECIFICATIONS

Detailed technical specifications for the Ninkear L12Pro Mini PC:

Feature	Detail
Brand	Ninkear

Feature	Detail
Model Number	L12Pro
Processor	Intel Core i9-12900HK (14 Cores, 20 Threads, up to 5.0GHz)
RAM	32GB DDR4 (Expandable up to 64GB)
Storage	1TB NVMe SSD (M.2 PCIe 3.0, Expandable up to 4TB)
Graphics Coprocessor	Intel Iris Xe Graphics (96EU)
Max Screen Resolution	8K (7680x4320) via DisplayPort/USB4, 4K (4096x2160) via HDMI
Video Outputs	1x HDMI 2.0, 1x DisplayPort 1.4, 1x USB4/Thunderbolt 4
USB Ports	3x USB 3.2 Gen 2, 1x USB 2.0, 1x USB4/Thunderbolt 4 (Type-C)
Network	Dual 2.5G LAN (RJ45), WiFi 6 (802.11ax)
Bluetooth	Bluetooth 5.2
Operating System	Windows 11 Pro
Item Weight	2.51 pounds (approx. 1.14 kg)
Dimensions	10.44 x 6.73 x 2.79 inches (Package Dimensions)
Color	Premium Brushed Silver

9. WARRANTY AND SUPPORT

The Ninkear L12Pro Mini PC comes with a standard manufacturer's warranty. For specific warranty terms and conditions, please refer to the documentation included with your purchase or visit the official Ninkear website.

For technical support, troubleshooting assistance, or any inquiries regarding your product, please contact Ninkear customer service through their official channels.

Online Support: Visit the Ninkear Store on Amazon for FAQs and contact options.

Related Documents

Ninkear **User Manual** MiNi PC	[Ninkear MiNi PC User Manual: Setup, Safety, and Usage Guide](#) Comprehensive user manual for the Ninkear MiNi PC, covering connection, quick start, safety precautions, environmental guidelines, and disposal information.
Ninkear **Quick Start Guide** Laptop	[Ninkear Laptop Quick Start Guide](#) A comprehensive quick start guide for Ninkear laptops, covering setup, power management, battery care, and troubleshooting.