

Maxtang MTN-6900HX

Maxtang MTN-6900HX Mini PC User Manual

Model: MTN-6900HX

1. INTRODUCTION

This manual provides essential information for setting up, operating, maintaining, and troubleshooting your Maxtang MTN-6900HX Mini PC. Please read this manual thoroughly before using the product to ensure proper and safe operation.

The Maxtang MTN-6900HX is a high-performance mini PC equipped with an AMD Ryzen 9 6900HX processor, designed for a wide range of applications including office work, multimedia, and light gaming. Its compact design and robust features make it a versatile computing solution.

2. PACKAGE CONTENTS

Carefully unpack the box and ensure all items listed below are present and in good condition. If any items are missing or damaged, please contact your retailer.

- 1x Maxtang MTN-6900HX Mini PC
- 1x HDMI Cable
- 1x Power Adapter
- 1x Power Cord
- 1x VESA Mount
- 4x Mounting Screws
- 1x Product Manual (this document)



Figure 2.1: Maxtang MTN-6900HX Mini PC and Included Accessories

3. PRODUCT OVERVIEW

The Maxtang MTN-6900HX Mini PC features a comprehensive set of ports and internal components designed for high performance and connectivity.

3.1 Front and Rear Panels

Familiarize yourself with the input/output ports on your Mini PC:

- **Front Panel:** Power Button, USB 3.2 Gen2 ports, USB 2.0 port, Audio Jack.
- **Rear Panel:** 2x USB-C (USB4) ports, 2x USB 3.2 Gen2 ports, 1x 2.5GbE LAN port, 1x HDMI port, 1x DisplayPort (DP), DC-in power port.

Gaming PC with improved TSMC 6nm FinFET

Support Triple Screen Display



HDMI [4K@60Hz]



DP [8K@60Hz]



USB C4[4K@60Hz]

Figure 3.1: Front and Rear Panel Ports

3.2 Internal Components

The Mini PC supports upgrades for memory and storage:

- **Memory:** Dual channel SO-DIMM DDR5 memory slots, supporting up to 64GB.
- **Storage:** Two PCIe Gen4 2280 M.2 slots for NVMe SSDs, supporting up to 4TB each, for a total of up to

8TB.

- **Wireless:** One M.2 slot for Wi-Fi and Bluetooth modules.

Smoothly process multiple tasks simultaneously

Dual DDR5 & 2 NVMe SSD expansion support

SSD PCIE GEN4
「 up to 2TB 」

Dual channel SO-DIMM DDR5
「 up to 64GB 」



Figure 3.2: Internal Memory and Storage Expansion

4. SETUP

Follow these steps to set up your Maxtang MTN-6900HX Mini PC.

4.1 Initial Connection

1. **Connect Display:** Connect your monitor to the Mini PC using an HDMI, DisplayPort, or USB4 cable. The Mini PC supports up to three displays simultaneously.
2. **Connect Peripherals:** Plug in your keyboard, mouse, and other USB devices into the available USB ports.
3. **Connect Network (Optional):** For a wired connection, connect an Ethernet cable from your router or modem to the 2.5GbE LAN port on the Mini PC. For wireless, ensure the Wi-Fi antenna (if external) is connected or the internal module is installed.
4. **Connect Power:** Connect the power adapter to the DC-in port on the Mini PC, then plug the power cord into an electrical outlet.

4.2 VESA Mount Installation

The included VESA mount allows you to attach the Mini PC to the back of a compatible monitor or to a wall, saving desk space.

1. Attach the VESA bracket to the back of your monitor or desired surface using the provided mounting screws. Ensure it is securely fastened.
2. Slide the Mini PC onto the VESA bracket until it clicks into place.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

- **Power On:** Press the power button located on the front panel. The power indicator light will illuminate.
- **Power Off:** From the Windows 11 Pro operating system, click the Start button, then Power > Shut down. Alternatively, you can press and hold the power button for 4-6 seconds to force a shutdown (use only when necessary).

5.2 Operating System

Your Maxtang MTN-6900HX Mini PC comes pre-installed with Windows 11 Pro (64-bit). Follow the on-screen instructions for initial setup, including language, region, and user account creation.

5.3 Multi-Display Setup

The Mini PC supports up to three independent displays via HDMI, DisplayPort, and USB4. Connect your monitors to the respective ports. Windows 11 Pro will automatically detect the displays. You can configure display settings (resolution, orientation, extension/duplication) through the Display Settings in Windows.



Figure 5.1: Triple Screen Display Setup

5.4 USB4 Functionality

The USB4 ports offer versatile connectivity, supporting:

- **Power Delivery (PD 3.0):** Up to 100W power input.
- **Data Transfer:** Up to 40Gbps, compatible with Thunderbolt 3.

- **Video Output:** Up to 8K resolution via DisplayPort 1.4 Alt Mode.

All-in-One USB 4.0 Connection

USB 4.0 handles up to 100W of power delivery, delivers high-quality audio and video through DisplayPort 1.4, and offers blazing-fast 40Gbps data transfer, all while being compatible with Thunderbolt 3 and various other devices.



Output speed

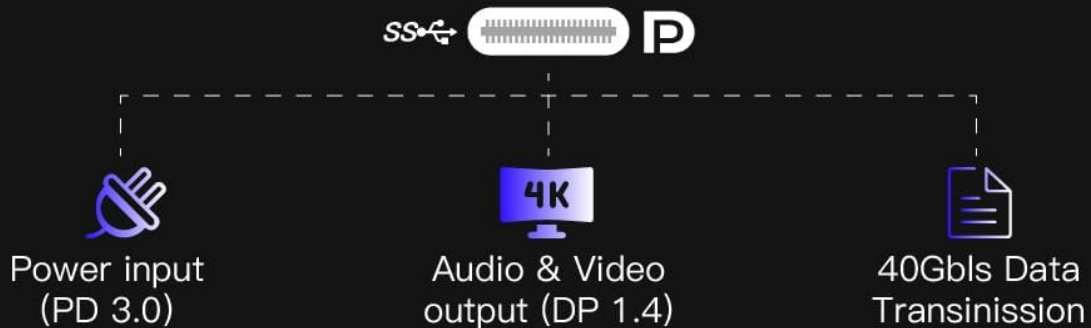
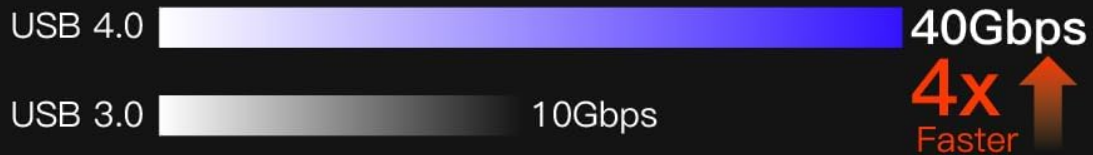


Figure 5.2: USB4 All-in-One Connection

5.5 Network Connectivity

- **Wired LAN:** Connect an Ethernet cable to the 2.5GbE LAN port for high-speed wired internet access.
- **Wi-Fi:** The Mini PC supports Wi-Fi 6 for fast and stable wireless connectivity. Configure Wi-Fi settings through Windows Network & Internet settings.
- **Bluetooth:** Integrated Bluetooth 5.2 allows you to connect wireless peripherals such as keyboards, mice, and headphones.

LAN [2.5GbE] + WIFI 6 + BT 5.2

Significantly improves game
stability and fluency

A stable and fast network environment makes it easy to
achieve high-speed data transfer and fluent gameplay.



Gigabit Ethernet
2500MB/S



WIFI 6E



Bluetooth 5.2

6. MAINTENANCE

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

6.1 Cleaning

- Regularly clean the exterior of the Mini PC with a soft, dry cloth.
- Use compressed air to clear dust from ventilation openings and ports to prevent overheating. Ensure the PC is powered off and unplugged before cleaning.

6.2 Component Upgrades

The Maxtang MTN-6900HX is designed for easy upgrades:

- **Memory:** You can upgrade the DDR5 SO-DIMM memory up to a maximum of 64GB by replacing or adding modules in the two available slots.
- **Storage:** The two M.2 2280 NVMe SSD slots allow for storage expansion up to 8TB (2x 4TB).

Note: Always power off and unplug the Mini PC before opening the chassis for upgrades. Refer to online resources or professional assistance if you are unsure about the upgrade process.

7. TROUBLESHOOTING

If you encounter issues with your Mini PC, refer to the following common troubleshooting steps.

7.1 No Power

- Ensure the power adapter is securely connected to both the Mini PC and a working electrical outlet.
- Verify the power outlet is functional by plugging in another device.
- Check the power adapter for any visible damage.

7.2 No Display Output

- Confirm that the display cable (HDMI, DP, or USB4) is securely connected to both the Mini PC and the monitor.
- Ensure the monitor is powered on and set to the correct input source.
- Try a different display cable or monitor if available.

7.3 Network Connectivity Issues

- **Wired:** Check if the Ethernet cable is properly connected and if the router/modem is working.
- **Wireless:** Ensure Wi-Fi is enabled in Windows settings and you are connected to the correct network with the correct password. Restart your router/modem.

7.4 System Performance Issues

- Close unnecessary applications running in the background.

- Ensure Windows and drivers are up to date.
- Check for sufficient free storage space on your SSD.
- Monitor system temperatures to ensure proper cooling.

8. SPECIFICATIONS

Detailed technical specifications for the Maxtang MTN-6900HX Mini PC:

Component	Specification
Model Number	MTN-6900HX
Processor	AMD Ryzen 9 6900HX (8 Cores/16 Threads, up to 4.9GHz)
Graphics	AMD Radeon 680M (Integrated)
Operating System	Windows 11 Pro (64-bit)
Memory	Dual Channel DDR5 SO-DIMM, up to 64GB (2x slots)
Storage	2x M.2 2280 NVMe PCIe Gen4 SSD slots (up to 4TB each)
I/O Ports	2x USB-C (USB4), 4x USB 3.2 Gen2, 1x USB 2.0, 1x HDMI, 1x DisplayPort, 1x 2.5GbE LAN, Audio Jack
Wireless Connectivity	Wi-Fi 6, Bluetooth 5.2
Power Input	19V/20V DC-in
Cooling Method	Air Cooling
Dimensions	127 mm x 135 mm x 55 mm (approximate)

Gaming PC

AMD Ryzen™ 9 6900HX

AMD Ryzen™ 9
6900HX

8C / 16T

Max. Boost Clock

4.9 GHZ

L3 cache

16 MB



CPU Mark



AMD Ryzen™ 9 6900HX

24817

Ryzen 7 6800U

20538

Intel Core i7-1165G7

10220

Figure 8.1: AMD Ryzen 9 6900HX Processor Details

AMD Radeon 680M

The built-in graphics are 12 units with 768 shaders, the maximum GPU memory is 8GB, and it can run up to three displays.



Graphics Core

2.00 GHz



GPU (turbo)

2.40 GHz



3DMark [Time Spy Score]

Radeon 680M

2497

Radeon Graphics (Ryzen 7000)

845

196% ↑

Figure 8.2: AMD Radeon 680M Graphics Details

9. WARRANTY AND SUPPORT

9.1 Product Warranty

The Maxtang MTN-6900HX Mini PC comes with a **12-month product warranty** from the date of purchase. This warranty covers manufacturing defects and ensures the product meets its specified performance. Please retain your proof of purchase for warranty claims.

9.2 Customer Service

For technical support, warranty inquiries, or any questions regarding your Maxtang Mini PC, please contact our customer service team. Refer to the contact information provided with your purchase or visit the official Maxtang website for support resources.

Manufacturer Contact Information: 6/F, Bldg 3, Honghui Industrial Park, Liuxian 2nd Road, Bao'an Dist, Shenzhen, China 518101