PELADN WO4

PELADN Gaming Mini PC 7640HS WO4 Instruction Manual

Model: WO4 (PL2US-WO4-7640HS-16-512-BK)

Overview Setup Operating

Introduction Package Contents Hardware

Maintenance Troubleshooting Specifications Warranty & Support

1. INTRODUCTION

This manual provides detailed instructions for setting up, operating, maintaining, and troubleshooting your PELADN Gaming Mini PC 7640HS WO4. Please read this manual thoroughly before using your device to ensure optimal performance and longevity.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- WO-4 7640HS Mini PC
- VESA Mount with Screws
- Power Adapter
- HDMI cable
- User Manual

Image: Contents of the PELADN WO4 Mini PC retail box, including the mini PC, VESA mount, power adapter, HDMI cable, and user manual.

3. HARDWARE OVERVIEW

3.1. Processor

The PELADN WO4 Mini PC is equipped with an Ultra-Compact AMD Ryzen 5 7640HS processor. This processor features ZEN 4 architecture and TSMC's 4nm FinFET technology, designed for efficient performance and reduced power consumption.

Image: A detailed diagram illustrating the AMD Ryzen 5 7640HS processor, highlighting its 4nm architecture, ZEN 4 design, 5GHz burst speed, and 6 cores/12 threads.

3.2. Graphics

Integrated AMD Radeon™ 760M graphics with RDNA3 architecture provide robust visual performance. The BIOS allows for adjusting graphics memory capacity up to 4GB, supporting tasks such as 4K video editing and 3D modeling.

3.3. Memory

The mini PC comes with 16GB (16*1) of 5600MHz DDR5 RAM, pre-installed in a dual-channel DDR5 RAM slot. It supports expansion up to 64GB (32*2).

Image: An internal view diagram of the mini PC showcasing the dual-channel DDR5 5600MHz SO-DIMM slots and the PCIe 4.0x4 M.2 and PCIe 3.0x4 M.2 SSD slots.

3.4. Storage

A 512GB PCIe 3.0 M.2 2280 NVMe SSD is pre-installed. The device includes a total of one M.2 2280 PCIe4.0 slot and one M.2 2280 PCIe3.0 SSD slot, expandable up to 8TB.

3.5. Connectivity

The WO4 offers extensive connectivity options:

- **USB Ports:** 2x USB 3.2 (up to 10Gbps/S), 2x USB 2.0
- **Display Outputs:** HDMI (4K@60Hz), Type-C (USB4.0), Type-C (USB3.2 with DP1.2 output), DP1.4
- **Network:** Dual RJ45 LAN (1000Mbps and 2.5Gbps), WiFi6 (802.11ax/ac dual-band 5GHz/2.4GHz)
- **Wireless:** Bluetooth 5.2
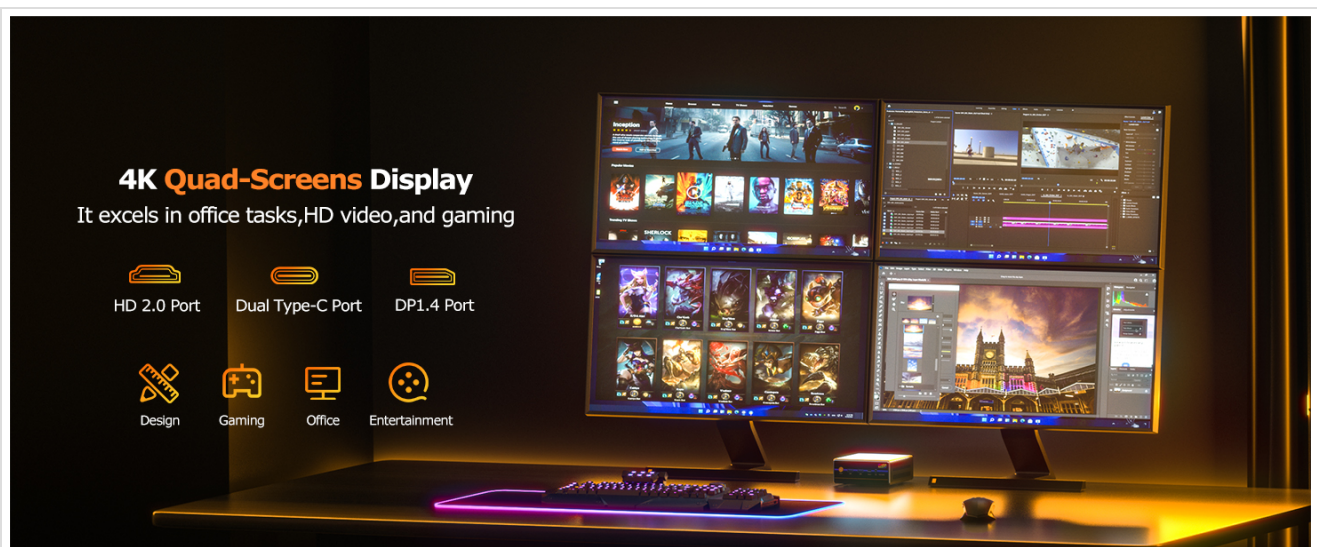- **Audio:** 3.5mm Audio Jack

Image: A visual representation of the PELADN WO4 Mini PC's various interfaces, including USB, HDMI, Type-C, DP, RJ45 LAN, and 3.5mm Audio Jack.

3.6. Cooling System

The PELADN WO4 features an upgraded smart cooling fan with a dual-turbo copper tube design to effectively reduce CPU heat and noise, ensuring optimal performance.

3.7. VESA Mount

A VESA mount is included, allowing you to attach the mini PC to the back of a monitor or other compatible surfaces for a clutter-free workspace.
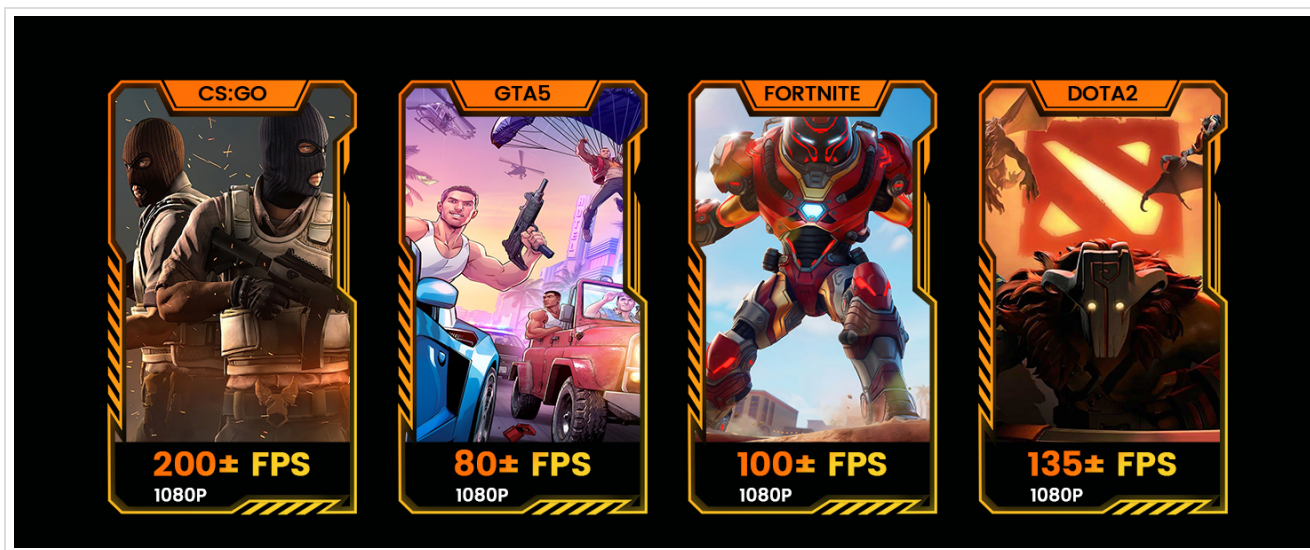

Image: The PELADN WO4 Mini PC is shown mounted on the rear of a computer monitor using the included VESA bracket, demonstrating its space-saving capability.

4. SETUP

4.1. Connecting Peripherals

1. Connect your monitor(s) to the HDMI, DisplayPort, or USB-C video output ports.
2. Connect your keyboard and mouse to the available USB ports.
3. Connect the power adapter to the DC-IN port on the mini PC and then to a power outlet.

4.2. Initial Power On and Operating System Setup

Upon first power-on, the mini PC will guide you through the Windows 11 Pro setup process. Follow the on-screen instructions to configure your language, region, keyboard layout, and network settings.

Video: This video demonstrates the online activation steps for the PELADN Mini PC, guiding users through the initial Windows 11 setup process, including language selection, network connection, and user account creation.

4.3. Network Connection

During the OS setup, you will be prompted to connect to a network. You can connect via:

- **WiFi:** Select your desired WiFi network and enter the password.
- **Ethernet:** Connect an Ethernet cable to one of the two RJ45 LAN ports for a wired connection.

5. OPERATING INSTRUCTIONS

5.1. Basic Operation

- **Power On:** Press the power button on the front panel.
- **Power Off:** Use the operating system's shutdown function. Alternatively, press and hold the power button for 5 seconds to force shutdown (not recommended for regular use).

5.2. Multi-Display Setup

The PELADN WO4 supports up to four screens simultaneously via HDMI 2.0, DisplayPort 1.4, and two Type-C ports (USB4.0 and USB3.2 with DP1.2 output). Connect your monitors to the available ports, and the operating system should automatically detect and configure them. You can adjust display settings in your OS.
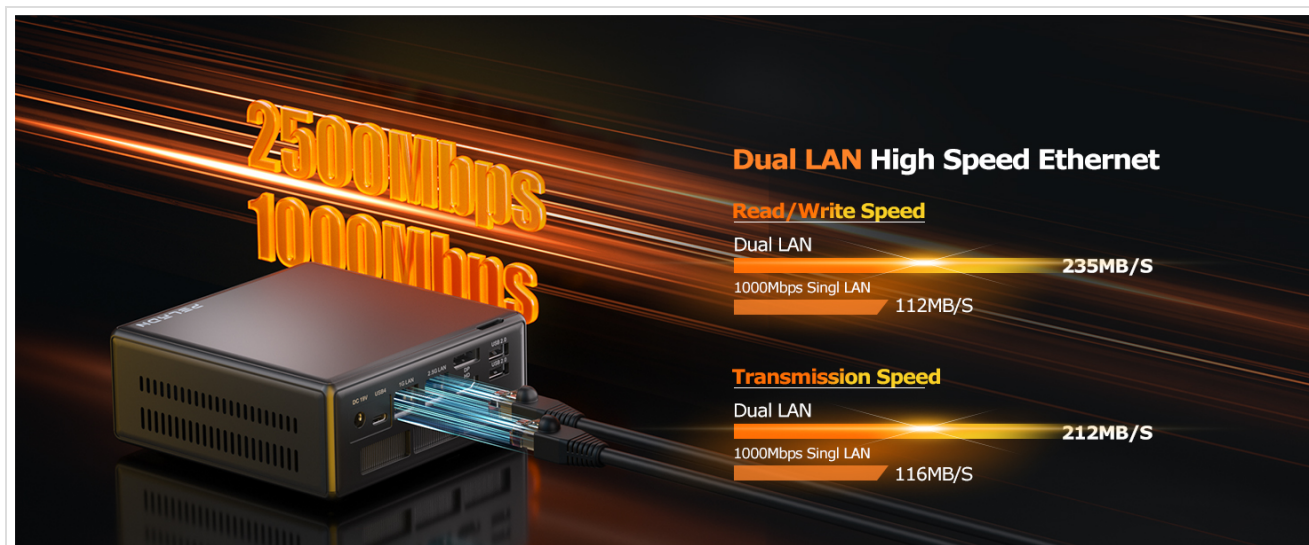

Image: A desktop setup featuring four monitors connected to the PELADN WO4 Mini PC, demonstrating its quad-screen display capability for various tasks like design, gaming, office work, and entertainment.

5.3. BIOS Settings

To access the BIOS, press the 'Del' or 'F2' key repeatedly during startup. Within the BIOS, you can adjust various system settings, including graphics memory capacity (up to 4GB for integrated graphics).

5.4. OS Compatibility

The mini PC is compatible with Windows (11 Pro, 11, 10 Pro, 10), Ubuntu, Linux, and Firewall Server operating systems.

5.5. Special Features

- **LAN Wake-up:** Allows you to power on the mini PC remotely via the network.
- **PXE Boot:** Enables booting from a network server.
- **RTC Wake-up:** Allows scheduling the mini PC to power on at a specific time.
- **Auto Power-on:** Configures the mini PC to automatically power on after a power outage.

6. MAINTENANCE

6.1. Cleaning

Regularly clean the exterior of the mini PC with a soft, dry cloth. Ensure the ventilation grilles are free from dust and debris to maintain optimal airflow for the smart cooling fan.

6.2. Storage Expansion

The mini PC supports storage expansion:

- **M.2 SSD:** It has one M.2 2280 PCIe4.0 slot and one M.2 2280 PCIe3.0 SSD slot, allowing for additional NVMe SSDs up to 8TB total.
- **2.5-inch SSD/HDD:** The bottom cover can accommodate a 2.5-inch SATA SSD or HDD.

6.3. Memory Upgrade

The dual-channel DDR5 RAM slots support memory upgrades up to 64GB (32GB x 2). Ensure compatible DDR5 SO-DIMM modules are used for upgrades.

Video: This video provides a visual overview of the PELADN Gaming Mini PC 7640HS, showcasing its internal components including the DDR5 RAM and SSD, and highlighting its upgrade capabilities.

7. TROUBLESHOOTING

7.1. No Display Output

- Ensure all display cables (HDMI, DP, USB-C) are securely connected to both the mini PC and the monitor.
- Verify that the monitor is powered on and set to the correct input source.
- Try connecting to a different display port or using a different cable.

7.2. Network Connectivity Issues

- For wired connections, ensure the Ethernet cable is properly connected to the LAN port and your router/modem. Check the LAN indicator lights on the mini PC.
- For WiFi, ensure the WiFi adapter is enabled in the operating system and you are connected to the correct network with the right password.
- Restart your router/modem and the mini PC.

7.3. System Not Powering On

- Check that the power adapter is securely connected to the mini PC and the power outlet.
- Ensure the power outlet is functional.
- If the system is unresponsive, try using the CLR CMOS button on the front panel to reset BIOS settings.

8. SPECIFICATIONS

Feature	Specification
Processor	AMD Ryzen 5 7640HS (4.3 GHz, 12 cores)
RAM	16 GB DDR5 (5600 MHz), expandable up to 64 GB
Hard Drive	512 GB SSD (PCIe x 16 interface)
Graphics Coprocessor	AMD Radeon™ 760M (Integrated, 4 GB RAM)
Max Screen Resolution	4096x2160 Pixels
Wireless Type	WiFi6 (802.11ax/ac), Bluetooth 5.2
USB 2.0 Ports	2
USB 3.0 Ports	2
Operating System	OS (Windows 11 Pro pre-installed)
Item Weight	2.2 pounds

Package Dimensions	6.22 x 6.18 x 4.43 inches
Color	Black

9. WARRANTY AND SUPPORT

9.1. Warranty Information

PELADN provides a 12-month limited warranty for each mini PC, starting from the purchase date. This warranty covers defects in design and workmanship.

9.2. Customer Support

For any questions, technical assistance, or warranty claims, please contact PELADN's dedicated after-sales team. Refer to the contact information provided in the included user manual or visit the official PELADN website for support resources.