

Empowered PC Mantis V2

Mantis V2 Gaming Desktop PC User Manual

MODEL: MANTIS V2

Brand: Empowered PC

1. Introduction

This manual provides essential information for the setup, operation, maintenance, and troubleshooting of your Empowered PC Mantis V2 Gaming Desktop PC. Please read this manual thoroughly before using your new system to ensure proper functionality and longevity.

The Mantis V2 is a high-performance gaming desktop featuring an AMD Ryzen 7 9800X3D processor, NVIDIA GeForce RTX 5080 graphics card, 64GB DDR5 RAM, and a 2TB NVMe Gen4 SSD, designed for elite gaming and content creation.

Safety Information

- Ensure the PC is placed on a stable, level surface with adequate ventilation.
- Do not block any ventilation openings.
- Use only the power supply unit provided with the system.
- Avoid exposing the PC to extreme temperatures, humidity, or direct sunlight.
- Disconnect the power cable before performing any maintenance or internal component adjustments.

2. Setup Guide

2.1 Unboxing and Initial Inspection

Carefully remove the Mantis V2 PC from its packaging. Inspect the system for any visible damage that may have occurred during transit. Retain all packaging materials for future transport or service needs.



Figure 2.1: The Mantis V2 Gaming Desktop PC, showcasing its sleek design and vibrant blue RGB lighting. This image provides a general overview of the product's appearance.

2.2 Connecting Peripherals

Before powering on your PC, connect all necessary peripherals:

- **Monitor:** Connect your monitor to the graphics card's HDMI or DisplayPort output. Ensure it is connected to the dedicated graphics card (NVIDIA GeForce RTX 5080) and not the motherboard's integrated graphics ports.
- **Keyboard and Mouse:** Connect the included USB keyboard and mouse to any available USB ports on the rear of the PC.
- **Audio:** Connect speakers or headphones to the audio jacks on the rear or front panel.
- **Network:** For wired internet, connect an Ethernet cable to the LAN port. For wireless, ensure the Wi-Fi

antennas are securely attached.

- **Power:** Connect the power cable to the PC's power supply unit and then to a grounded electrical outlet.



Figure 2.2: Detailed view of the Mantis V2's top panel, highlighting the various ports and buttons for easy peripheral connection. This includes 1x 3.5mm Microphone jack, 1x 3.5mm Headphone jack, 1x USB 3.2 Type-C Port, 2x USB 3.0 Type-A Ports, Power Button, and LED Button.

2.3 First Boot and Windows Setup

After connecting all peripherals, press the power button on the top panel of the PC. The system comes pre-installed with Windows 11 Pro 64-bit. Follow the on-screen instructions to complete the initial Windows setup, including region, language, network connection, and user account creation.

3. Operating Instructions

3.1 Powering On/Off

- **Power On:** Press the power button located on the top front panel of the PC.
- **Power Off:** To shut down Windows, go to Start > Power > Shut down. Avoid direct power off unless necessary to prevent data loss.

3.2 RGB Lighting Control

The Mantis V2 features vibrant ARGB lighting on the case and fans. Use the dedicated LED button on the top panel to cycle through various lighting modes and colors. Refer to the system's pre-installed RGB control software (if applicable) for advanced customization options.



Figure 3.1: The Mantis V2 features bright and colorful RGB case lights, which can be customized to suit user preferences. This image shows the front panel illuminated with green RGB.

3.3 Fan Control and Airflow

The system is equipped with six ARGB PWM fans for optimal cooling. PWM (Pulse Width Modulation) fans adjust their speed dynamically based on system temperatures, ensuring efficient cooling and quiet operation. This allows for minimal noise during light use and maximum airflow during intensive tasks like gaming.



INCLUDES SIX MANTIS FANS ARGB + PWM

Six MANTIS fans are installed in the MANTIS ATX Gaming PC case. Each fan has 9 blades and 8 LEDs so your gaming machine will stay cool and lit during gaming marathons.

Figure 3.2: Inside the Mantis V2, six Mantis ARGB + PWM fans are installed to provide superior cooling. Each fan features 9 blades and 8 LEDs, ensuring the system remains cool and visually appealing during extended gaming sessions.

STAY CONNECTED

Plug in all your favorite peripherals to the top panel and rear panel ports. Easy to power on and connect audio devices to your system.



Figure 3.3: The Mantis V2's PWM fans dynamically adjust speeds from 600-2000 RPM based on system temperatures, providing powerful airflow and quiet performance. This ensures optimal cooling while minimizing operational noise.

3.4 Expandability and Upgrades

The Mantis V2 is built in a mid-tower case, offering ample space for future upgrades and expandability. This design ensures seamless compatibility for component enhancements, future-proofing your system's performance.

EXPANDABLE MID-TOWER PC

Built in a Mid-tower case, this system offers expandability and seamless upgrade compatibility, ensuring future-proof performance.



Figure 3.4: The Mantis V2 is an expandable mid-tower PC, with dimensions of approximately 20.6" (L) x 8.6" (W) x 19.5" (H). It features a premium built metal chassis and customizable RGB case lighting, providing a robust and visually appealing platform for upgrades.

4. Maintenance

4.1 Cleaning the PC

Regular cleaning helps maintain optimal performance and extends the lifespan of your PC. Use compressed air to clear dust from fans and vents. The top panel features a magnetic dust filter for easy removal and cleaning.

MAGNETIC AIR FILTER

The top panel has a magnetic dust filter on the case which effectively protects components from debris and because its magnetic it is easy to take off and clean.



Figure 4.1: The Mantis V2 features a magnetic air filter on its top panel. This filter effectively protects internal components from dust and debris and can be easily removed for cleaning, ensuring consistent airflow and system health.

4.2 Software Updates

Keep your operating system, drivers (especially graphics drivers), and applications updated to ensure security, stability, and optimal performance. Windows Update can be accessed via Settings > Windows Update. Graphics drivers can be updated through NVIDIA's official website or GeForce Experience software.

5. Troubleshooting

This section addresses common issues you might encounter with your Mantis V2 PC. For more complex problems, please refer to the Warranty and Support section.

5.1 No Display Output

- **Check Cables:** Ensure the monitor cable is securely connected to both the monitor and the graphics card

(RTX 5080) on the PC.

- **Monitor Input:** Verify your monitor is set to the correct input source (HDMI, DisplayPort).
- **Power Cycle:** Turn off both the PC and monitor, unplug them from the wall, wait 30 seconds, then plug them back in and power on.

5.2 PC Not Powering On

- **Power Cable:** Ensure the power cable is firmly connected to the PC and the wall outlet.
- **Power Supply Switch:** Check if the power supply unit (PSU) switch on the back of the PC is in the 'ON' position.
- **Wall Outlet:** Test the wall outlet with another device to ensure it has power.

5.3 Performance Issues / Lag

- **Updates:** Ensure Windows and graphics drivers are up to date.
- **Ventilation:** Check that all PC vents are clear and fans are spinning properly to prevent overheating.
- **Background Applications:** Close unnecessary applications running in the background that may be consuming system resources.
- **Disk Space:** Ensure your primary drive (SSD) has sufficient free space.

6. Specifications

Below are the detailed technical specifications for the Mantis V2 Gaming Desktop PC:

Component	Specification
Processor	AMD Ryzen 7 9800X3D (8 Cores, 16 Threads, 4.7 GHz Base, up to 5.2 GHz Max Boost)
Graphics Card	NVIDIA GeForce RTX 5080 (16GB GDDR7 dedicated memory)
RAM	64GB DDR5 RAM 5600 MHz
Storage	2TB PCIe NVMe M.2 SSD
Operating System	Windows 11 Pro 64-bit
Fans	6 ARGB PWM Fans
PC Case	Mantis Mid-Tower with Front Panel LEDs, Brushed Aluminum Front Panel Wings, Tempered Glass Side Panel
Connectivity	WiFi 6E + BT 5.3
Video Output	1x HDMI, 1x DisplayPort (additional ports may vary)
Included Peripherals	Rainbow Backlit USB Keyboard, LED USB Mouse
Item Weight	30 pounds
Product Dimensions (LxWxH)	20 x 18.5 x 8.6 inches

7. Warranty and Support

Empowered PC is committed to providing high-quality products and excellent customer service.

7.1 Warranty Information

Your Mantis V2 Gaming Desktop PC comes with a **3-Year Limited Hardware Warranty**. This warranty covers defects in materials and workmanship under normal use during the warranty period.

7.2 Technical Support

Empowered PC provides **Lifetime Technical and Diagnostic Support** for your system. Our support team is available to assist you with any technical questions or issues you may encounter.



High Quality Design & Build



Lifetime Technical and Diagnostic Support



American Built & Supported

Empowered PCs are also **Rigorously Stress-Tested Before Shipping** to ensure optimal performance and reliability. For support, please visit the Empowered PC store on Amazon or their official website for contact details. Ensure you have your product model and serial number ready when contacting support.