MSI GeForce RTX 2080 SEA HAWK X

MSI GeForce RTX 2080 SEA HAWK X Graphics Card User Manual

1. INTRODUCTION

This manual provides essential information and instructions for the installation, operation, and maintenance of your MSI GeForce RTX 2080 SEA HAWK X graphics card. Designed with NVIDIA Turing architecture, this card delivers advanced graphics performance with real-time ray tracing and AI-enhanced features. Please read this manual thoroughly before proceeding with installation and use to ensure optimal performance and longevity of your product.

2. PRODUCT OVERVIEW

The MSI GeForce RTX 2080 SEA HAWK X is a high-performance graphics card featuring NVIDIA's Turing architecture. It is equipped with 8GB of GDDR6 memory and a 256-bit memory interface, providing exceptional speed and efficiency for demanding applications and games. The card supports multiple display outputs including DisplayPort (v1.4), HDMI (2.0b), and USB Type-C.

A key feature of the SEA HAWK X model is its integrated liquid cooling system, designed to maintain optimal temperatures during intensive use, ensuring stable performance and quieter operation. The card also incorporates a robust backplate for structural integrity and additional cooling.

Image 1: Front view of the MSI GeForce RTX 2080 SEA HAWK X graphics card, showcasing its integrated liquid cooling solution.

Image 2: Angled view of the graphics card, highlighting the cooling block and tubing.

3. WHAT'S IN THE BOX

Upon unboxing your MSI GeForce RTX 2080 SEA HAWK X graphics card, you should find the following items:

- MSI GeForce RTX 2080 SEA HAWK X Graphics Card
- Necessary cables and connectors

- Quick setup guide

4. SETUP AND INSTALLATION

Before beginning installation, ensure your computer is powered off and unplugged from the wall outlet. It is recommended to wear an anti-static wrist strap to prevent damage from static discharge.

4.1 System Requirements

- PCI Express-compliant motherboard with one dual-width x16 graphics slot
- Minimum 650W power supply (with two 8-pin PCIe power connectors)
- Minimum 8GB system memory (16GB recommended)
- Microsoft Windows 10, Windows 7 (64-bit), or Linux (64-bit) operating system
- Internet connection for driver installation

4.2 Physical Installation

1. Open your computer case.
2. Locate an available PCI Express x16 slot on your motherboard.
3. Remove any expansion slot covers that obstruct the installation area. Note that this is a large card; ensure sufficient clearance within your case.
4. Carefully align the graphics card with the PCIe slot and press down firmly until it is securely seated.
5. Secure the graphics card to the case with screws.
6. Connect the required 8-pin PCIe power connectors from your power supply to the graphics card. This model typically requires two 8-pin connectors for stable power delivery.
7. Connect the liquid cooling radiator to an appropriate mounting point in your case, ensuring proper airflow.
8. Close your computer case.

Image 3: Rear view of the graphics card showing DisplayPort, HDMI, and USB Type-C output ports.

4.3 Driver Installation

After physical installation, connect your display to the graphics card and power on your computer. Install the latest NVIDIA drivers from the official NVIDIA website or through the GeForce Experience application for optimal performance and feature access.

5. OPERATING INSTRUCTIONS

The MSI GeForce RTX 2080 SEA HAWK X is designed for high-performance gaming and professional applications. Its advanced features enhance visual fidelity and system stability.

5.1 NVIDIA Turing Architecture

This graphics card leverages NVIDIA's Turing architecture, which integrates real-time ray tracing cores for realistic lighting, reflections, and shadows, and Tensor Cores for AI-enhanced graphics. This combination provides a new level of visual realism in supported games and applications.

5.2 MSI Afterburner

MSI Afterburner is a widely recognized utility for graphics card overclocking, monitoring, and fan control. It allows users to fine-tune their card's performance, adjust clock speeds, memory speeds, and fan curves to achieve desired performance and thermal characteristics. The OC Scanner feature can automatically find stable overclock settings.

5.3 RGB Mystic Light

The card features integrated RGB Mystic Light LEDs, allowing for customization of lighting effects and colors. This can be controlled via MSI's Mystic Light software, enabling synchronization with other compatible third-party RGB components in your system for a unified aesthetic.

Video 1: Official MSI video highlighting the key features and cooling technology of the MSI RTX 20 Series Gaming graphics cards, including Twin Frozr thermal design, Torx Fan 3.0, Zero Frozr, RGB Mystic Light, and custom PCB.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your graphics card.

6.1 Cleaning

Regularly clean dust from the radiator and fan blades of the liquid cooling system. Use compressed air to gently remove dust from the fins and fans. Ensure the system is powered off and unplugged before cleaning. Avoid using liquid cleaners directly on the card's components.

6.2 Driver Updates

Keep your graphics drivers updated to the latest version. NVIDIA frequently releases driver updates that improve performance, add new features, and fix bugs. You can manage driver updates through the NVIDIA GeForce Experience application.
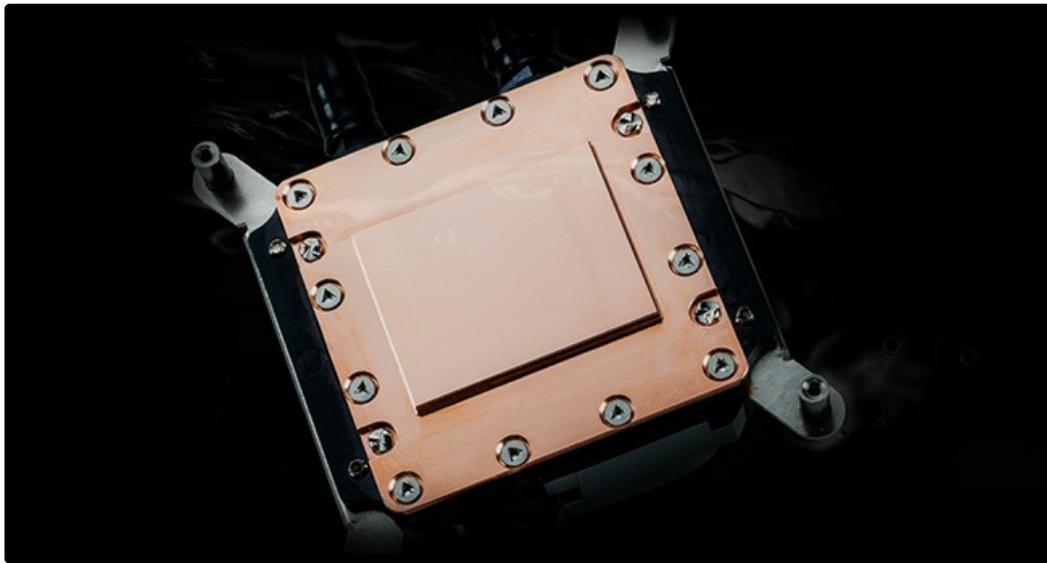
Image 4: An internal view illustrating the cooling components of the MSI RTX 2080 graphics card, including heat pipes and fins.

Image 5: The backplate of the MSI RTX 2080 graphics card, showing the thermal pads that aid in heat dissipation from the PCB.

7. TROUBLESHOOTING

If you encounter issues with your graphics card, consider the following troubleshooting steps:

- **No Display Output:** Ensure the display cable is securely connected to both the graphics card and the monitor. Verify that the monitor is powered on and set to the correct input source.
- **System Instability/Crashes:** Check that all power connectors are firmly seated on the graphics card. Ensure your power supply meets the minimum wattage requirement. Update your graphics drivers to the latest version.
- **Overheating:** Verify that the liquid cooling system's fans and radiator are free of dust and obstructions. Ensure proper airflow within your computer case. Monitor temperatures using MSI Afterburner.
- **Performance Issues:** Ensure you have the latest graphics drivers installed. Check in-game settings to ensure they are appropriate for your system configuration.
- **RGB Lighting Issues:** Ensure MSI Mystic Light software is installed and updated. Check

connections for any RGB headers if applicable.

If problems persist after attempting these steps, consult MSI's official support resources or contact their customer service.

8. SPECIFICATIONS

Feature	Specification
Chipset	NVIDIA GeForce RTX 2080
Core Clocks	1860 MHz / 1515 MHz
Video Memory	8GB GDDR6
Memory Interface	256-bit
Output Ports	DisplayPort x 3 (v1.4), HDMI 2.0b x 1, USB Type-C x1
Max Screen Resolution	7680x4320
Item Weight	3.02 pounds
Product Dimensions (LxWxH)	10.55 x 4.41 x 1.61 inches
Manufacturer	MSI Computer
Date First Available	September 28, 2018

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official MSI website or contact MSI customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.
You can visit the official MSI store for more information:MSI Store