

Palit NE75090019R5-GB2020G

Palit GeForce RTX 5090 GameRock Graphics Card User Manual

Model: NE75090019R5-GB2020G

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your Palit GeForce RTX 5090 GameRock graphics card. The GameRock series is engineered for high performance and features advanced cooling solutions and customizable aesthetics.

Key features include a Chameleon Panel for dynamic lighting with ARGB Sync Evo support, TurboFan 4.0, Air Deflector, Composite Heat Pipes, and a Vapor Chamber for optimal thermal management.



Figure 1.1: The Palit GeForce RTX 5090 GameRock graphics card and its packaging. The card features a triple-fan design and an illuminated edge.

2. PACKAGE CONTENTS

Verify that all items are present in the package:

- Palit GeForce RTX 5090 GameRock Graphics Card
- Quick Setup Guide
- Warranty Card

3. SETUP AND INSTALLATION

3.1 Pre-Installation Checklist

- **Power Supply:** Ensure your power supply unit (PSU) meets the minimum wattage requirement for the RTX 5090. A 1000W PSU is generally recommended.
- **Case Clearance:** Verify that your computer case has sufficient space for the graphics card (dimensions: 7.87 x 5.91 x 3.94 inches).
- **PCI Express Slot:** Your motherboard must have an available PCI Express 5.0 x16 slot.
- **Tools:** A Phillips head screwdriver may be required.
- **Safety:** Disconnect power from your computer before beginning installation. Ground yourself to prevent electrostatic

discharge (ESD).

3.2 Hardware Installation

1. **Open Computer Case:** Remove the side panel of your computer case.
2. **Locate PCIe Slot:** Identify an available PCI Express 5.0 x16 slot on your motherboard. Remove any expansion slot covers from the back of the case that correspond to the chosen slot.
3. **Insert Graphics Card:** Carefully align the graphics card with the PCIe slot and press down firmly until it is securely seated. Ensure the retention clip on the slot engages.
4. **Secure Card:** Fasten the graphics card to the computer case using the screws from the removed expansion slot covers.
5. **Connect Power Cables:** Connect the required PCIe power cables from your power supply to the graphics card. The RTX 5090 typically requires multiple 8-pin or 12VHPWR connectors. Refer to your PSU and graphics card documentation for specific power requirements.
6. **Close Case:** Replace the side panel of your computer case.



Figure 3.1: Front view of the Palit GeForce RTX 5090 GameRock, showing the triple-fan cooling system. This side faces the inside of your computer case.



Figure 3.2: The rear I/O panel of the graphics card, featuring DisplayPort and HDMI outputs for connecting to monitors.

3.3 Software Installation

1. **Connect Monitor:** Connect your monitor to one of the DisplayPort or HDMI outputs on the graphics card.
2. **Power On:** Power on your computer. The system may boot using a basic display driver.
3. **Install Drivers:** Download the latest graphics drivers for the NVIDIA GeForce RTX 5090 from the official NVIDIA website (www.nvidia.com/drivers). Follow the on-screen instructions to complete the driver installation.
4. **Install Utility Software:** For advanced features like ARGB Sync Evo and performance monitoring, download and install the Palit ThunderMaster utility from the official Palit website (www.palit.com/palit/thundermaster.php).

4. OPERATING THE GRAPHICS CARD

4.1 Basic Operation

Once drivers are installed, your Palit GeForce RTX 5090 GameRock graphics card will automatically handle graphics processing for your system. For optimal performance in games and applications, ensure your operating system and game settings are configured to utilize the dedicated graphics card.

4.2 Customizing RGB Lighting (Chameleon Panel)

The Chameleon Panel on your GameRock card offers dynamic, customizable ARGB lighting. Use the Palit ThunderMaster utility to adjust lighting effects, colors, and synchronization with other ARGB components in your system via ARGB Sync Evo.



Figure 4.1: The Palit GeForce RTX 5090 GameRock with its ARGB lighting active, showcasing the customizable Chameleon Panel.

5. MAINTENANCE

5.1 Cleaning

- Regularly clean dust from the graphics card fans and heatsink using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- Hold the fan blades gently to prevent them from spinning rapidly during cleaning, which can damage the fan bearings.

5.2 Driver Updates

Periodically check the official NVIDIA website for updated graphics drivers. Keeping your drivers current ensures optimal performance, stability, and access to the latest features and game optimizations.

6. TROUBLESHOOTING

6.1 No Display Output

- **Check Cables:** Ensure the monitor cable is securely connected to both the graphics card and the monitor.
- **Power Connections:** Verify that all PCIe power connectors are firmly seated in the graphics card.
- **Reseat Card:** Power off the computer, unplug it, and reseat the graphics card in its PCIe slot.
- **Monitor Input:** Confirm your monitor is set to the correct input source (e.g., DisplayPort, HDMI).

6.2 Performance Issues or Instability

- **Driver Updates:** Ensure you have the latest graphics drivers installed.
- **Temperature Monitoring:** Use monitoring software (e.g., Palit ThunderMaster, MSI Afterburner) to check GPU temperatures. High temperatures can lead to throttling. Ensure adequate case airflow.
- **Power Supply:** Confirm your PSU provides sufficient and stable power to the graphics card.
- **System Resources:** Close unnecessary background applications that may consume system resources.

6.3 RGB Lighting Not Working

- **ThunderMaster Software:** Ensure the Palit ThunderMaster utility is installed and running. Check its settings for RGB control.
- **ARGB Sync:** If using ARGB Sync Evo, verify that the synchronization settings are correctly configured in ThunderMaster and any motherboard RGB software.

7. SPECIFICATIONS

Feature	Detail
Model Number	NE75090019R5-GB2020G
Graphics Coprocessor	NVIDIA GeForce RTX 5090
Memory	32 GB GDDR7
Memory Speed	28000 MHz (Effective)
Boost Clock	2407 MHz
Interface	PCI Express 5.0
Video Output	DisplayPort, HDMI
Max Screen Resolution	3840x2160
Product Dimensions (LxWxH)	7.87 x 5.91 x 3.94 inches
Item Weight	2.2 pounds

Feature	Detail
Cooling System	Triple Fan (TurboFan 4.0), Air Deflector, Composite Heat Pipes, Vapor Chamber
RGB Lighting	Chameleon Panel with ARGB Sync Evo

8. WARRANTY AND SUPPORT

Your Palit GeForce RTX 5090 GameRock graphics card comes with a limited warranty. Please refer to the included warranty card for detailed terms and conditions, including warranty period and coverage.

For technical support, driver downloads, and further product information, please visit the official Palit website:

www.palit.com

When contacting support, please have your product model number (NE75090019R5-GB2020G) and serial number ready.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

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Email

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question