GIGABYTE GV-R78XTGAMING OC-16GD

GIGABYTE Radeon RX 7800 XT Gaming OC 16GB Graphics Card Instruction Manual

Model: GV-R78XTGAMING OC-16GD

Introduction

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of your GIGABYTE Radeon RX 7800 XT Gaming OC 16GB Graphics Card. Designed with AMD's latest RDNA 3 architecture, this card delivers exceptional performance for gaming and demanding applications.

Package Contents

Before proceeding with installation, please verify that all items are present in your package:

- GIGABYTE Radeon RX 7800 XT Gaming OC 16GB Graphics Card
- Quick Start Guide



Figure 1: GIGABYTE Radeon RX 7800 XT Gaming OC 16GB Graphics Card and its retail packaging.

Setup and Installation

Follow these steps to properly install your graphics card into your system:

1. **Prepare Your System:** Power off your computer and unplug all cables. Open your computer case.
2. **Locate PCIe Slot:** Identify an available PCIe 4.0 x16 slot on your motherboard. Ensure there is sufficient clearance for the card's dimensions (approximately 3.3 pounds in weight).
3. **Remove Slot Covers:** Remove the necessary expansion slot covers from your computer case.
4. **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 motherboard clicks into place.
5. **Secure the Card:** Use screws to secure the graphics card to the computer case.



Figure 2: Graphics card securely installed in a PC case.

6. **Connect Power Cables:** Connect the required 8-pin PCIe power connectors from your power supply to the graphics card. A recommended power supply of 700W is advised.



Figure 3: Power connectors on the graphics card.

7. **Connect Display Cables:** Connect your monitor(s) to the graphics card using DisplayPort 2.1 or HDMI 2.1 cables. The card features 2 x DisplayPort 2.1 and 2 x HDMI 2.1 outputs.

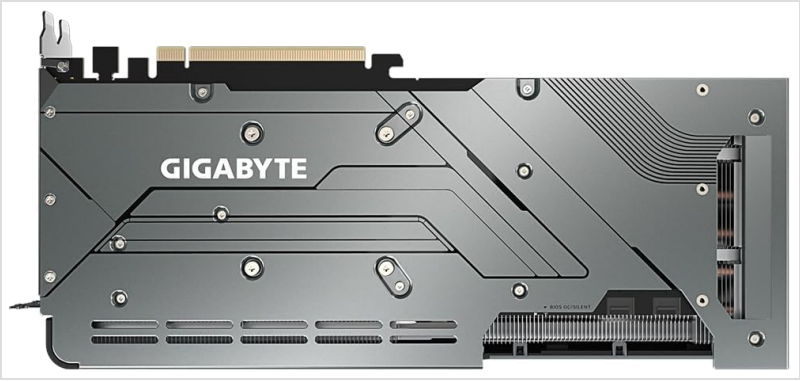


Figure 4: Display output ports (DisplayPort and HDMI).

8. **Close Case and Power On:** Close your computer case, reconnect all cables, and power on your system.
9. **Install Drivers:** Once your operating system loads, install the latest AMD Radeon drivers from the official GIGABYTE or AMD website. This is crucial for optimal performance and access to all features.

Operating Your Graphics Card

Your GIGABYTE Radeon RX 7800 XT Gaming OC is designed for high-performance computing and gaming. Utilize the AMD Radeon Software for managing settings and optimizing your experience.

Key Features and Technologies:

- **AMD RDNA 3 Architecture:** Provides advanced raytracing capabilities and AI accelerators for enhanced visual fidelity and performance.
- **AV1 Encoding:** Supports efficient video encoding for streaming and content creation.
- **AMD Radiance Display Engine:** Delivers stunning visual clarity and color accuracy.
- **Hyper RX:** Reduces latency and provides smoother gameplay.
- **FSR 3 (FidelityFX Super Resolution):** Enhances image quality without compromising frame rates, optimizing performance across various resolutions including 2K, 4K, and even pushing 8K.
- **AMD FreeSync:** Ensures tear-free and stutter-free gaming experiences when paired with a compatible monitor.
- **RGB Fusion:** Customize the RGB lighting on your card to match your system's aesthetic.



Figure 5: Customizable RGB lighting on the graphics card.

Maintenance

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

- **Driver Updates:** Regularly check the GIGABYTE or AMD website for the latest driver updates. Keeping your drivers current can improve performance, stability, and add new features.
- **Cleaning:** Periodically clean the fans and heatsink to prevent dust buildup, which can impede cooling performance. Use compressed air to gently remove dust from the Windforce cooling system.



Figure 6: The Windforce cooling system with three blade fans.

- **Temperature Monitoring:** Use AMD Radeon Software or third-party tools to monitor your GPU temperatures during heavy loads. Ensure temperatures remain within safe operating limits.

Troubleshooting

If you encounter issues with your graphics card, refer to the following common troubleshooting steps:

- **No Display Output:**

- Ensure all power cables are securely connected to the graphics card and power supply.
- Verify that your display cables (HDMI/DisplayPort) are firmly connected to both the graphics card and monitor.
- Try a different display output port on the graphics card or a different cable.
- Check if your monitor is set to the correct input source.

- **Performance Issues (Low FPS, Stuttering):**
  - Ensure you have the latest graphics drivers installed.
  - Check in-game settings and reduce graphics quality if necessary.
  - Monitor GPU temperatures to ensure it's not overheating. Clean the cooling system if needed.
  - Verify your power supply meets the recommended 700W requirement.
- **Driver Installation Problems:**
  - Completely uninstall previous graphics drivers using a utility like Display Driver Uninstaller (DDU) before attempting a fresh installation.
  - Download drivers directly from the official GIGABYTE or AMD website.

Specifications

Feature	Specification
Model Number	GV-R78XTGAMING OC-16GD
Graphics Coprocessor	AMD Radeon RX 7800 XT
Memory Size	16 GB GDDR6
Memory Bus	256-bit
Memory Speed	19500 MHz
Boost Clock	2565 MHz
Max Screen Resolution	7680x4320
I/O & Connectivity	2 x DisplayPort 2.1, 2 x HDMI 2.1, PCIE 4.0
Cooling System	Windforce cooling system (3 x 90mm blade fans, 7 composite copper heat pipes, large copper plate)
Recommended Power Supply	700W
Item Weight	3.3 pounds

Warranty and Support

Your GIGABYTE Radeon RX 7800 XT Gaming OC 16GB Graphics Card comes with a**3-year warranty**. For warranty claims, technical support, or further assistance, please contact GIGABYTE customer service or visit their official website. Refer to the included Quick Start Guide for initial setup information and contact details.

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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.

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