

GIGABYTE GV-N308TVISION OC-12GD

GIGABYTE GeForce RTX 3080 Ti Vision OC 12G Graphics Card User Manual

INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, maintenance, and troubleshooting of your GIGABYTE GeForce RTX 3080 Ti Vision OC 12G Graphics Card (Model: GV-N308TVISION OC-12GD). Please read this manual thoroughly before installation and retain it for future reference.

SETUP AND INSTALLATION

1. System Requirements

- PCI Express-compliant motherboard with one dual-width x16 graphics slot.
- Minimum 750W power supply with two 8-pin PCIe power connectors.
- Minimum 12GB system memory (RAM).
- Supported operating system (Windows 10 64-bit or later recommended).
- Internet connection for driver download and updates.

2. Physical Installation

1. **Prepare Your System:** Power off your computer and disconnect all cables. Open the computer case.
2. **Locate PCIe Slot:** Identify an available PCI Express x16 slot on your motherboard. Remove any expansion slot covers that obstruct the installation.
3. **Install the Graphics Card:** Carefully align the graphics card with the PCIe x16 slot. Press down firmly until the card is securely seated and the retention clip engages.
4. **Secure the Card:** Fasten the graphics card to the computer case using the screw(s) from the removed expansion slot covers.
5. **Connect Power Cables:** Connect two 8-pin PCIe power cables from your power supply to the corresponding power connectors on the top edge of the graphics card. Ensure a secure connection.



Figure 1: GIGABYTE GeForce RTX 3080 Ti Vision OC 12G Graphics Card and its retail packaging.

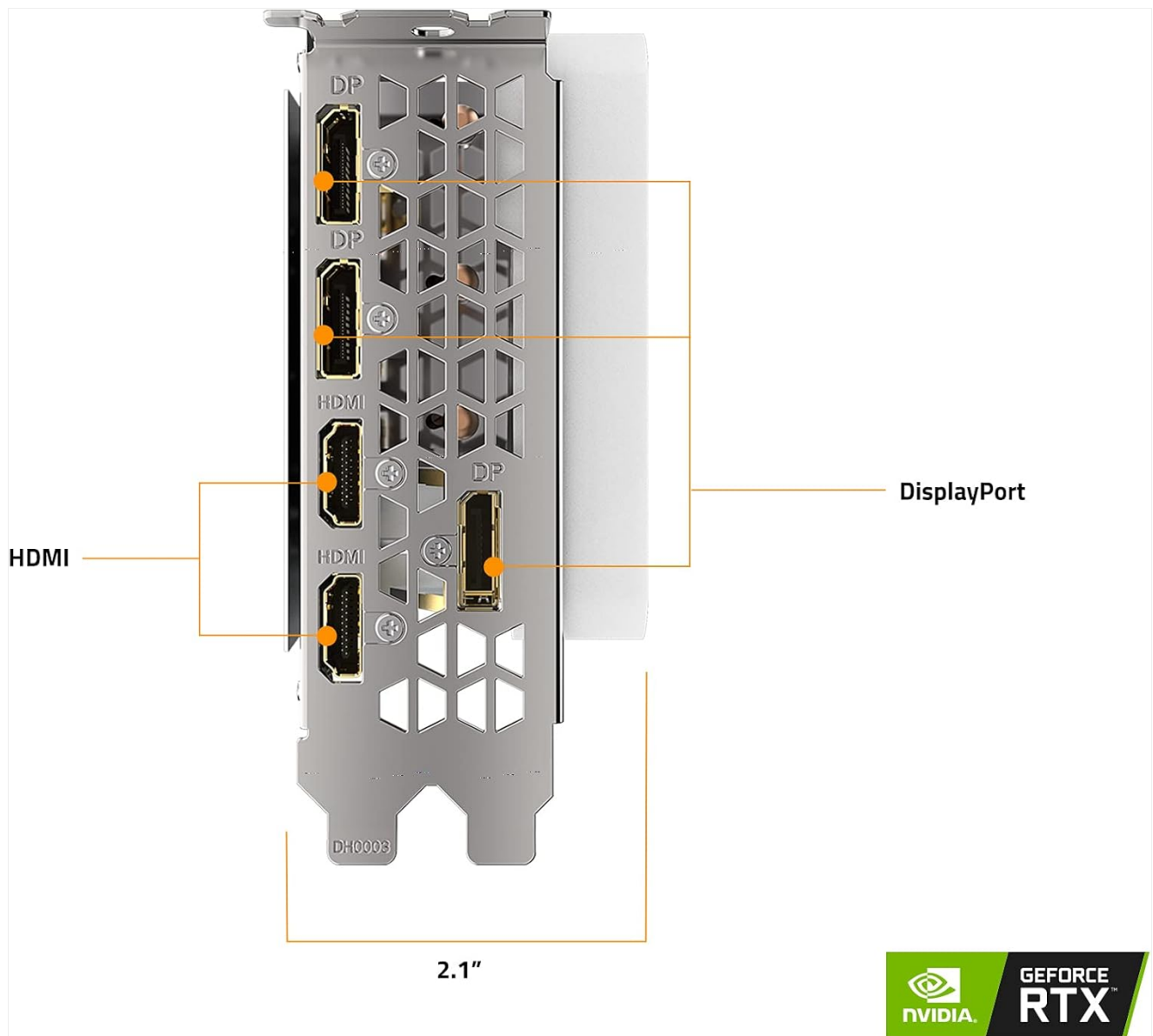


Figure 2: Dimensional diagram of the graphics card, indicating its length and height for case compatibility. The card measures approximately 12.6 inches in length and 5 inches in height.



Figure 3: Side view of the graphics card, illustrating the location of the two 8-pin PCIe power connectors.

3. Driver Installation

1. **Power On:** Close your computer case, reconnect all cables, and power on your system.
2. **Initial Boot:** Your operating system may boot with a basic display driver.
3. **Download Drivers:** Visit the official GIGABYTE website (www.gigabyte.com) or NVIDIA's official website (www.nvidia.com/drivers) to download the latest drivers for your GeForce RTX 3080 Ti.
4. **Install Drivers:** Run the downloaded driver installer and follow the on-screen instructions. A system restart may be required after installation.

OPERATION

1. Connecting Displays

The GIGABYTE GeForce RTX 3080 Ti Vision OC 12G Graphics Card features multiple display outputs. Connect your monitor(s) to the available ports using appropriate cables (HDMI or DisplayPort).

- **HDMI 2.1:** Supports up to 4K at 120Hz or 8K at 60Hz.
- **DisplayPort 1.4a:** Supports up to 4K at 120Hz or 8K at 60Hz.

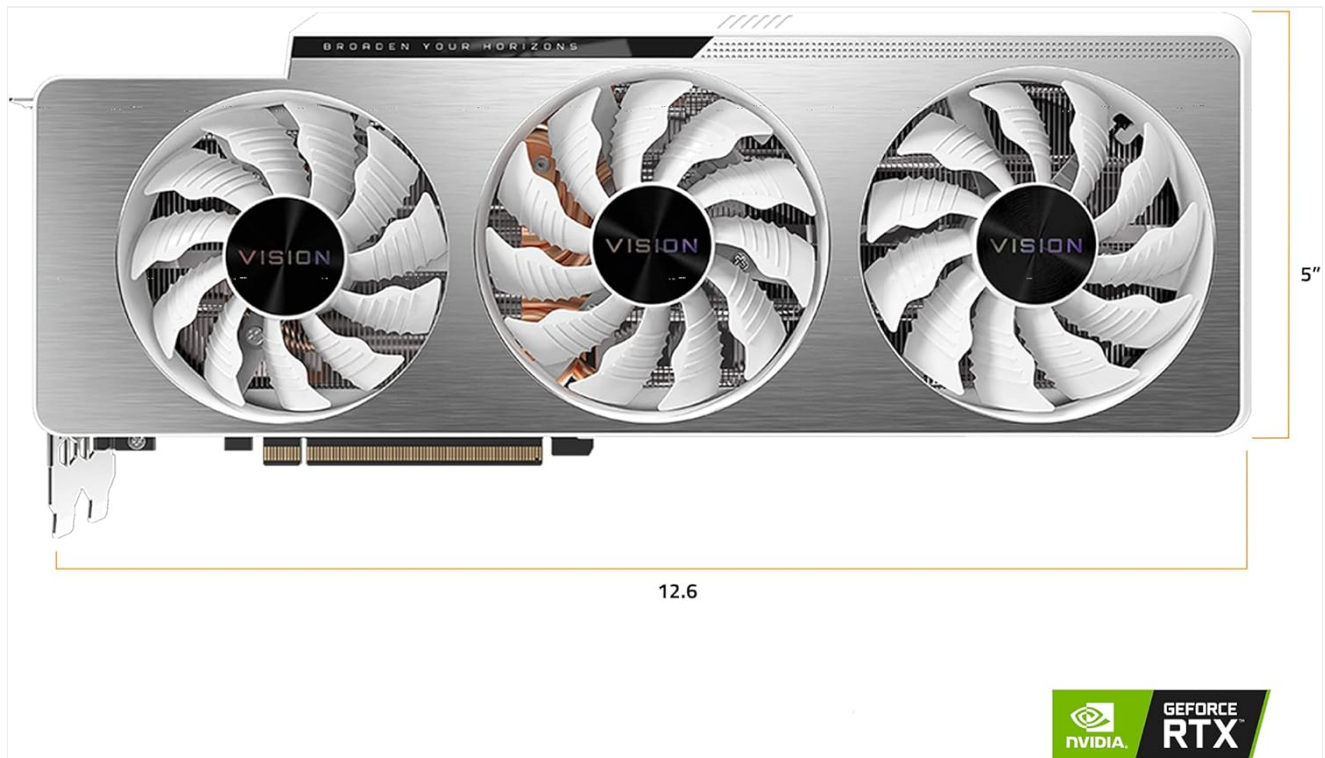


Figure 4: The rear I/O panel of the graphics card, clearly showing the arrangement of DisplayPort and HDMI outputs. There are three DisplayPort outputs and two HDMI outputs.

2. Software and Configuration

After driver installation, you can access the NVIDIA Control Panel for advanced display settings, 3D settings, and other graphics-related configurations. GIGABYTE also provides utilities like AORUS ENGINE for monitoring and adjusting card performance, fan speeds, and RGB lighting.

MAINTENANCE

1. Cleaning Procedures

Regular cleaning helps maintain optimal performance and longevity of your graphics card.

- **Power Off:** Always power off your computer and disconnect it from the power source before cleaning.
- **Dust Removal:** Use compressed air to gently blow dust from the fans, heatsink fins, and other components. Hold the fans to prevent them from spinning rapidly during cleaning.
- **Surface Cleaning:** Use a soft, lint-free cloth lightly dampened with isopropyl alcohol to clean the card's shroud and backplate. Avoid direct contact with electrical components.
- **Frequency:** Clean your graphics card every 3-6 months, or more frequently if your environment is dusty.

TROUBLESHOOTING

1. Common Issues and Solutions

- **No Display Output:**
 - Ensure the graphics card is fully seated in the PCIe slot.
 - Verify that all PCIe power cables are securely connected.
 - Check that your monitor is connected to the graphics card, not the motherboard's integrated graphics.
 - Try a different display cable or monitor.
- **Driver Installation Failure:**
 - Download the latest drivers directly from the GIGABYTE or NVIDIA website.
 - Uninstall any previous graphics drivers using a utility like Display Driver Uninstaller (DDU) before attempting a fresh installation.
- **Poor Performance/Crashes:**
 - Ensure your drivers are up to date.
 - Monitor temperatures using GIGABYTE's AORUS ENGINE or other monitoring software. Overheating can cause performance issues.
 - Verify your power supply meets the minimum wattage requirement.
 - Check for system stability with other components.

TECHNICAL SPECIFICATIONS

Feature	Specification
Graphics Processing Unit	NVIDIA GeForce RTX 3080 Ti
Core Architecture	NVIDIA Ampere Streaming Multiprocessors
Video Memory	12GB GDDR6X
Memory Interface	384-bit
Memory Speed	19000 MHz
Digital Max Resolution	7680x4320
Cooling System	WINDFORCE 3X with alternate spinning fans

Feature	Specification
Output Ports	2x HDMI 2.1, 3x DisplayPort 1.4a
Card Dimensions (LxWxH)	12.6 x 4.96 x 2.17 inches
Item Weight	4.24 pounds
Model Number	GV-N308TVISION OC-12GD

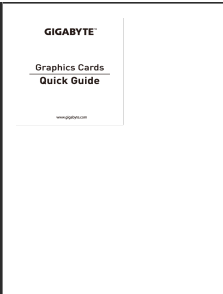

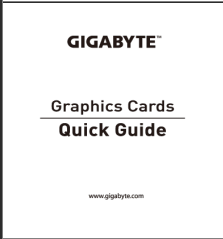
WARRANTY INFORMATION AND TECHNICAL SUPPORT

GIGABYTE products are covered by a limited warranty. For detailed warranty terms, registration, and technical support, please visit the official GIGABYTE website or contact their customer service directly.

- **GIGABYTE Official Website:** www.gigabyte.com
- **Support Page:** Refer to the support section on the GIGABYTE website for drivers, FAQs, and contact information.

Additional protection plans may be available for purchase from retailers. Please consult your retailer for details on such plans.

Related Documents - GV-N308TVISION OC-12GD

	<p>Gigabyte GeForce RTX 4080 Gaming OC 16G Graphics Card User Manual</p> <p>Comprehensive user manual for the Gigabyte GeForce RTX 4080 Gaming OC 16G Graphics Card, detailing installation, features, specifications, and troubleshooting. Includes information on the WINDFORCE cooling system and 16GB GDDR6X memory.</p>
	<p>GIGABYTE Graphics Card Quick Guide: Installation and Setup</p> <p>Concise guide for installing and setting up GIGABYTE graphics cards, covering hardware installation, software setup, connector types, and RoHS compliance.</p>
	<p>Gigabyte Graphics Cards Quick Guide: Hardware and Software Installation</p> <p>This Gigabyte Graphics Cards Quick Guide provides essential steps for hardware installation, including connecting the card to the motherboard and display, and software installation for drivers and utilities. It also details supported ports, restricted substances compliance, and important product notices.</p>

