

## PNY ZXC-VCQM4000-PB

# PNY NVIDIA Quadro M4000 Graphics Card User Manual

Model: Quadro M4000 (ZXC-VCQM4000-PB)

## 1. INTRODUCTION

The PNY NVIDIA Quadro M4000 is a professional graphics card designed for demanding visual computing workloads. Featuring 8 GB of GDDR5 memory and a PCIe 3.0 x16 interface, it offers robust performance for applications requiring high-resolution displays and advanced graphics capabilities. This manual provides essential information for the proper installation, operation, and maintenance of your Quadro M4000 graphics card.

## 2. KEY FEATURES

- **NVIDIA Quadro M4000 GPU:** Powered by the NVIDIA Maxwell architecture for professional graphics performance.
- **8 GB GDDR5 Memory:** Provides ample memory for complex models and large datasets.
- **PCIe 3.0 x16 Interface:** Ensures high-speed data transfer with the host system.
- **4x DisplayPort Outputs:** Supports multiple high-resolution displays, up to 4096x2160 per output.
- **Advanced Cooling:** Designed for efficient thermal management to maintain optimal performance.
- **Professional Application Support:** Optimized and certified for a wide range of professional applications.

## 3. SETUP AND INSTALLATION

### 3.1 System Requirements

- Available PCI Express 3.0 x16 slot.
- Minimum 250W power supply with one 6-pin auxiliary power connector.
- Compatible operating system (Windows 7/8/10/11, Linux).
- Internet connection for driver installation.

### 3.2 Hardware Installation

1. **Power Off System:** Ensure your computer is completely powered off and unplugged from the wall outlet.
2. **Open Chassis:** Remove the side panel of your computer case to access the motherboard.

3. **Locate PCIe Slot:** Identify an available PCI Express 3.0 x16 slot on your motherboard. Remove any slot covers if necessary.
4. **Insert Graphics Card:** Carefully align the Quadro M4000 with the PCIe slot and press down firmly until it is securely seated. Ensure the retention clip (if present) locks into place.
5. **Secure Card:** Fasten the graphics card to the chassis using the screw or retention mechanism provided by your case.
6. **Connect Power:** Connect the 6-pin auxiliary power connector from your power supply to the corresponding port on the graphics card.
7. **Close Chassis:** Replace the side panel of your computer case.
8. **Connect Displays:** Connect your DisplayPort monitors to the DisplayPort outputs on the Quadro M4000.



Image: The PNY NVIDIA Quadro M4000 graphics card, showing its sleek black design with green accents and a single fan cooler.



Image: The PNY NVIDIA Quadro M4000 graphics card alongside various accessories, including power adapters and display adapters, illustrating a complete package.



Image: A close-up view of the four DisplayPort outputs on the PNY NVIDIA Quadro M4000 graphics card, highlighting the connectivity options.

### 3.3 Driver Installation

1. **Power On System:** Reconnect your computer to the power outlet and power it on.
2. **Download Drivers:** Visit the official NVIDIA website ([nvidia.com/drivers](https://www.nvidia.com/drivers)) and download the latest drivers for your Quadro M4000 graphics card and operating system.
3. **Install Drivers:** Follow the on-screen instructions to install the drivers. A system restart may be required.
4. **Verify Installation:** After restarting, open NVIDIA Control Panel (or equivalent system settings) to verify that the graphics card is recognized and functioning correctly.

## 4. OPERATING THE GRAPHICS CARD

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### 4.1 Multi-Monitor Setup

The Quadro M4000 supports up to four DisplayPort monitors. You can configure your display setup through the NVIDIA Control Panel. Options typically include:

- **Extended Desktop:** Each monitor acts as a separate workspace, expanding your desktop area.
- **Duplicate Displays:** All monitors display the same content, useful for presentations or mirroring.
- **Mosaic/Surround:** Combine multiple displays into a single, large virtual display for immersive experiences or specialized applications.

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Video: Demonstration of multi-monitor setup features and uses, including extended desktop and collage modes, showcasing the versatility of the graphics card for various applications.

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Video: An overview of multi-monitor video card features, explaining how to utilize multiple displays for enhanced productivity and visual experiences.

### 4.2 Performance Optimization

For optimal performance, ensure your system drivers are up-to-date. The NVIDIA Control Panel allows for fine-tuning of 3D settings, resolution, and refresh rates to match your specific application needs. For professional applications, consult the software vendor's recommendations for graphics card settings.

## 5. MAINTENANCE

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- **Keep Drivers Updated:** Regularly check the NVIDIA website for the latest graphics drivers to ensure compatibility and performance improvements.
- **Clean Dust:** Periodically clean dust from the graphics card's fan and heatsink using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **Ensure Proper Airflow:** Maintain good airflow within your computer case to prevent overheating. Ensure no cables or other components obstruct the graphics card's fan.

## 6. TROUBLESHOOTING

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### 6.1 Common Issues and Solutions

- **No Display Output:**
  - Ensure the monitor cables are securely connected to the graphics card and the monitor.
  - Verify the graphics card is properly seated in the PCIe slot.
  - Check that the auxiliary power connector is firmly attached.
  - Test with a different monitor or cable if possible.
- **Driver Installation Failure:**
  - Download the latest drivers directly from the NVIDIA website.
  - Uninstall any previous graphics drivers using a driver uninstaller utility before attempting a fresh installation.
- **System Instability/Crashes:**

- Ensure your power supply meets the minimum wattage requirement.
- Monitor GPU temperatures to ensure it's not overheating. Improve case airflow if necessary.
- Verify system memory (RAM) is stable.

## 7. SPECIFICATIONS

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Feature	Detail
Graphics Coprocessor	NVIDIA Quadro M4000
Brand	PNY
Graphics RAM Size	8 GB GDDR5
Video Output Interface	DisplayPort (4x)
Graphics Processor Manufacturer	NVIDIA
Max Screen Resolution	4096x2160
Memory Speed	1291 MHz
Item Model Number	ZXC-VCQM4000-PB
Item Weight	1.48 pounds
Product Dimensions (LxWxH)	12 x 6 x 2 inches
Date First Available	May 30, 2016

## 8. WARRANTY AND SUPPORT

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### 8.1 Legal Disclaimer

Must be at least 18 & over to purchase this product.

### 8.2 Protection Plans

Optional protection plans are available for extended coverage:

- **3-Year Protection Plan:** Provides coverage for 36 months.
- **4-Year Protection Plan:** Provides coverage for 48 months.
- **Complete Protect:** A monthly plan covering all eligible past and future purchases.

### 8.3 Return Policy

This product is eligible for a 30-day refund/replacement return policy.

### 8.4 Manufacturer Support

For further assistance, please visit the PNY support website or contact their customer service. Ensure you have your product model number (ZXC-VCQM4000-PB) and purchase details available.



