EVGA 06G-P4-4990-KR

EVGA GeForce GTX 980 Ti Graphics Card User Manual

Model: 06G-P4-4990-KR

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your EVGA GeForce GTX 980 Ti graphics card. The EVGA GeForce GTX 980 Ti is designed to deliver high-performance graphics, accelerated by the NVIDIA Maxwell architecture. It features 2816 NVIDIA CUDA Cores and 6GB of GDDR5 memory, optimized for 4K and virtual reality experiences.

Figure 1: EVGA GeForce GTX 980 Ti Graphics Card (Front View)

The EVGA GeForce GTX 980 Ti graphics card is engineered for demanding gaming and professional applications, offering advanced features such as Virtual Reality Ready, 4K support, DirectX12 compatibility, and Gamestream to NVIDIA SHIELD.

2. PACKAGE CONTENTS

Verify that your package contains the following items:

- EVGA GeForce GTX 980 Ti Graphics Card
- Driver CD (or link to latest drivers)
- Quick Installation Guide
- Power Adapter Cables (if required for your power supply)
- DVI to VGA Adapter (may be included)

Figure 2: Included Accessories (DVI adapter and power cables)

The accessories shown include a DVI to VGA adapter and power adapter cables, which may be necessary for connecting older monitors or for power supplies without native 6-pin or 8-pin PCIe power connectors.

3. SYSTEM REQUIREMENTS

- PCI Express-compliant motherboard with one dual-width x16 graphics slot.
- Minimum 600W or greater power supply with two 8-pin or 6+2-pin PCI Express supplementary power connectors.
- Minimum 4GB system memory (8GB recommended).
- Microsoft Windows 10, Windows 8.1, Windows 8, Windows 7, Windows Vista.
- Internet connection for driver installation and updates.

4. INSTALLATION

4.1 Hardware Installation

1. **Power Off System:** Turn off your computer and disconnect the power cable from the wall outlet.
2. **Open Computer Case:** Remove the side panel of your computer case to access the motherboard.
3. **Locate PCIe Slot:** Find an available PCI Express x16 slot on your motherboard. If replacing an existing

graphics card, carefully remove it.

4. **Insert Graphics Card:** Align the EVGA GeForce GTX 980 Ti with the PCIe x16 slot and press down firmly until it is securely seated. Ensure the retention clip locks into place.

5. **Secure Card:** Use screws to secure the graphics card to the computer case's expansion slot bracket.

6. **Connect Power Cables:** Connect the required 8-pin or 6+2-pin PCIe power connectors from your power supply to the corresponding ports on the graphics card. The card typically requires two such connectors.

Figure 3: Graphics Card Top View, showing power connector locations

This image illustrates cables top view of the graphics card, highlighting the location where the PCIe power connectors from your power supply should be attached. Ensure both connectors are securely fastened.

7. **Close Case:** Replace the computer case side panel.
8. **Connect Display:** Connect your monitor(s) to the graphics card's display outputs (DisplayPort, HDMI, DVI).

Figure 4: Graphics Card Rear I/O Ports

The rear I/O panel features multiple display outputs, typically including DisplayPort, HDMI, and DVI. Connect your monitor cables to these ports.

9. **Power On:** Reconnect the power cable and turn on your computer.

4.2 Driver Installation

1. **Boot to Operating System:** Allow your computer to boot into your operating system.
2. **Install Drivers:**

    - Insert the included driver CD and follow the on-screen instructions.
    - Alternatively, for the latest drivers, visit the official NVIDIA website (www.nvidia.com/drivers) and download the appropriate drivers for your GeForce GTX 980 Ti and operating system.

3. **Restart Computer:** After driver installation is complete, restart your computer for the changes to take effect.

5. OPERATING YOUR GRAPHICS CARD

5.1 Display Configuration

Once drivers are installed, you can configure your display settings through the NVIDIA Control Panel. This allows you to adjust resolution, refresh rate, and set up multiple monitors. The EVGA GeForce GTX 980 Ti supports high resolutions up to 4096x2160.

5.2 Gaming and Applications

Your graphics card is designed for optimal performance in demanding games and applications. It is Virtual Reality Ready and supports DirectX12, providing an enhanced visual experience. Ensure your games and applications are updated to leverage the full capabilities of the card.

6. Maintenance

To ensure the longevity and optimal performance of your EVGA GeForce GTX 980 Ti, consider the following maintenance tips:

- **Keep Clean:** Periodically clean dust from the graphics card's heatsink and fans using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- **Ensure Airflow:** Maintain good airflow within your computer case. Ensure case fans are functioning correctly and cables are managed to prevent obstruction.
- **Driver Updates:** Regularly check for and install the latest graphics drivers from NVIDIA to benefit from performance improvements and bug fixes.

7. Troubleshooting

- **No Display Output:**

  - Ensure the monitor cable is securely connected to both the graphics card and the monitor.
  - Verify that the graphics card is fully seated in the PCIe slot and secured.
  - Check that all required PCIe power cables are connected to the graphics card.
  - Test with a different monitor or cable if possible.

- **Driver Installation Issues:**

  - Ensure you have downloaded the correct drivers for your operating system and graphics card model from the NVIDIA website.
  - Uninstall any previous graphics drivers before attempting a new installation.

- **Overheating:**

  - Ensure adequate airflow within your computer case.
  - Clean dust from the graphics card's fans and heatsink.
  - Monitor temperatures using third-party software. If temperatures consistently exceed safe operating limits (e.g., above 85°C under load), consider improving case ventilation.

- **HDMI Port Issues with VR Headsets:**

  - Some users have reported issues with the HDMI port not functioning correctly with certain VR headsets (e.g., Oculus Rift, HTC Vive), resulting in a blank display.
  - If experiencing this, try connecting the VR headset to one of the DisplayPort outputs using an appropriate adapter if necessary.
  - Ensure your graphics card drivers are up to date.

8. Specifications

Feature	Specification
Model Number	06G-P4-4990-KR
Graphics Coprocessor	NVIDIA GeForce GTX 980 Ti
Memory Detail	6144MB GDDR5

CUDA Cores	2816
Base Clock	1000 MHz
Boost Clock	1076 MHz
Memory Clock	7010 MHz Effective
Max Screen Resolution	4096x2160
Video Output Interface	HDMI, DisplayPort, DVI
Recommended PSU	600W or greater
Item Weight	3 pounds
Product Dimensions (LxWxH)	10.5 x 1.5 x 4.4 inches

9. WARRANTY AND SUPPORT

EVGA provides technical support for its products. For assistance, please contact EVGA's 24/7 Technical Support. Refer to the official EVGA website for detailed warranty information and support resources.
EVGA Support Website