Sapphire R9 280X 11221-20-20G

Sapphire Radeon VAPOR-X R9 280X Graphics Card User Manual

Model: 11221-20-20G

1. Introduction

This manual provides essential information for the installation, operation, and maintenance of your Sapphire Radeon VAPOR-X R9 280X graphics card. The Sapphire R9 280X Vapor-X model features vapor-chamber cooling for efficient and quiet operation, and is factory overclocked for enhanced performance. Please read this manual thoroughly before installation to ensure proper setup and to maximize your product's lifespan.

2. Safety Information

Observe the following safety precautions during installation and operation:

- Always disconnect the power supply from your computer before installing or removing any components.
- Wear an anti-static wrist strap or frequently touch a grounded metal object to discharge static electricity, which can damage electronic components.
- Handle the graphics card by its edges to avoid touching sensitive components.
- Ensure your computer case has adequate ventilation to prevent overheating.
- Do not expose the graphics card to moisture or extreme temperatures.
- Keep out of reach of children.

3. Package Contents

Verify that your package contains the following items:

- Sapphire Radeon VAPOR-X R9 280X Graphics Card
- Driver CD (or link to download drivers)
- Quick Installation Guide
- Power Adapter Cables (if required for your power supply)

4. System Requirements

Before installation, ensure your system meets the following minimum requirements:

- PCI Express® compliant motherboard with one x16 graphics slot.
- Minimum 750W power supply with two 8-pin PCI Express power connectors (or equivalent).
- Minimum 4GB system memory (8GB recommended).
- Operating System: Windows 7/8/8.1/10 (64-bit recommended) or Linux.
- CD-ROM drive or internet connection for driver installation.
- Display monitor with DVI, HDMI, or DisplayPort input.

5. Setup and Installation

Follow these steps to install your Sapphire Radeon VAPOR-X R9 280X graphics card:

1. **Prepare Your System:** Power off your computer and disconnect all cables. Open the computer case.
2. **Remove Old Graphics Card (if applicable):** If you are replacing an existing graphics card, carefully remove it from the PCI Express slot.
3. **Locate PCI Express x16 Slot:** Identify an available PCI Express x16 slot on your motherboard.
4. **Insert Graphics Card:** Align the graphics card with the PCI Express x16 slot and press down firmly until it is securely seated. Ensure the retention clip locks into place.
5. **Secure the Card:** Use a screw to secure the graphics card to the computer case's expansion slot bracket.
6. **Connect Power Cables:** Connect the required 8-pin PCI Express power connectors from your power supply to the corresponding ports on the graphics card. This model typically requires two 8-pin connectors.
7. **Close Case and Connect Peripherals:** Close your computer case, reconnect all cables (monitor, power, etc.), and power on your computer.

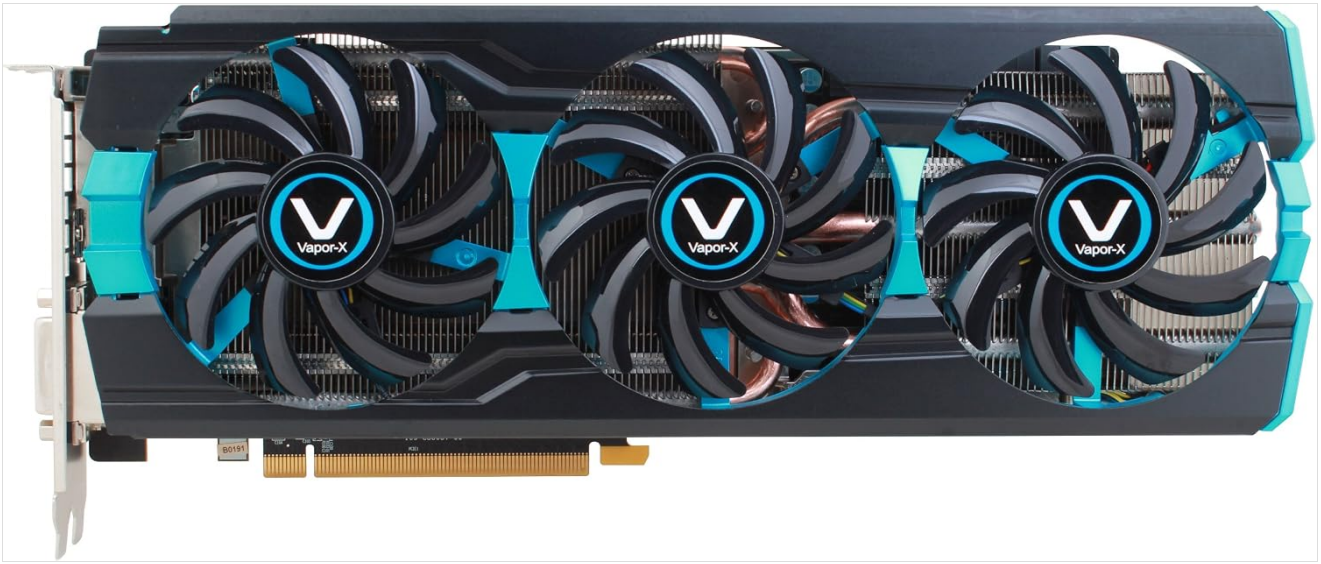


Image 1: Front view of the Sapphire Radeon VAPOR-X R9 280X graphics card, showcasing its triple fan cooling system and Vapor-X branding.

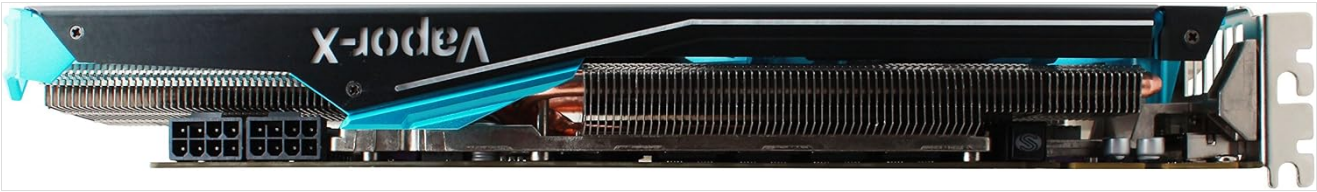


Image 2: Side view of the graphics card, highlighting the heatsink fins and the two 8-pin power connectors required for operation.

6. Operating Instructions

After physical installation, follow these steps to get your graphics card operational:

1. **Driver Installation:**
    - Upon first boot, your operating system may install generic drivers. For optimal performance, install the official AMD Radeon drivers.
    - Insert the provided driver CD or download the latest drivers from the official Sapphire or AMD website.
    - Follow the on-screen instructions to complete the driver installation. A system restart may be required.
2. **Connect Display:** Connect your monitor to one of the available output ports on the graphics card (DVI-I, DVI-D, HDMI, or DisplayPort).
3. **Configure Display Settings:** Once drivers are installed, you can configure display resolution, refresh rate, and multiple monitor setups through your operating system's display settings or the AMD Radeon Software.





Image 3: Close-up view of the graphics card's output panel, showing the DVI-I, DVI-D, HDMI, and DisplayPort connectors.

7. Maintenance

To ensure the longevity and optimal performance of your graphics card, consider the following maintenance tips:

- **Dust Removal:** Periodically clean dust from the fans and heatsink using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- **Driver Updates:** Regularly check for and install the latest graphics drivers from the official AMD or Sapphire website to benefit from performance improvements and bug fixes.
- **Temperature Monitoring:** Use monitoring software to keep an eye on the card's temperature, especially during heavy loads, to ensure it stays within safe operating limits.
- **Adequate Airflow:** Ensure your computer case has good airflow to prevent heat buildup around the graphics card.

8. Troubleshooting

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

- **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 PCI Express slot.
  - Check that all required power connectors are securely attached to the graphics card.
  - Test with a different monitor or cable if possible.
- **Driver Installation Issues:**
  - Uninstall any previous graphics drivers using a driver uninstaller utility (e.g., DDU - Display Driver Uninstaller) before installing new drivers.
  - Download drivers directly from the official AMD website for your specific operating system.
- **System Instability/Crashes:**
  - Ensure your power supply meets the minimum wattage requirement and has sufficient PCI Express power connectors.
  - Check for overheating. Clean dust from the card and ensure good case airflow.
  - Update your motherboard's BIOS to the latest version.
- **Poor Performance:**
  - Ensure the latest drivers are installed.
  - Verify that your system meets the recommended specifications for the applications or games you are running.
  - Check for background applications consuming system resources.

9. Specifications

Key technical specifications for the Sapphire Radeon VAPOR-X R9 280X graphics card:

Feature	Specification
Graphics Processor	AMD Radeon R9 280X
Video Memory	3 GB GDDR5
Memory Clock Speed	6000 MHz (Effective)
Video Output Interface	1 x HDMI (with 3D), 1 x DisplayPort 1.2, 1 x Dual-Link DVI-D, 1 x Dual-Link DVI-I
Display Resolution Maximum	2560x1600
Graphics Card Interface	PCI Express
Cooling System	Vapor-X (Triple Fan)
Compatible Devices	Desktop PC
Item Weight	2.85 Pounds (approx. 1.29 kg)
Model Number	11221-20-20G
UPC	840777069790



Image 4: Angled view of the Sapphire Radeon VAPOR-X R9 280X, showing the overall design, cooling fans, and a glimpse of the output ports.

10. Warranty and Support

For warranty information and technical support, please refer to the documentation included with your product or visit the official Sapphire Technology website. Keep your proof of purchase for warranty claims.

Online Resources:

- For the latest drivers and software, visit AMD Support.
- For product registration and additional support, visit Sapphire Technology Support.

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