

Sapphire 21323-01-20G

Sapphire 21323-01-20G AMD Radeon RX 7900 XT Gaming Graphics Card User Manual

Model: 21323-01-20G

1. INTRODUCTION

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of your Sapphire 21323-01-20G AMD Radeon RX 7900 XT Gaming Graphics Card. Please read this document thoroughly before proceeding with installation or use to ensure optimal performance and longevity of your product.

2. KEY FEATURES

- **Memory Size:** 20 GB GDDR6
- **Memory Interface:** 320-bit
- **Form Factor:** 3 slot, ATX
- **Output Ports:** 1 x HDMI, 2 x DisplayPort, 1 x USB-C
- **Interface:** PCI-Express 4.0
- **Graphics Coprocessor:** AMD Radeon RX 7900 XT with AMD RDNA 3 Architecture
- **Max Screen Resolution:** 7680x4320
- **Memory Speed:** 20 GHz

3. SETUP AND INSTALLATION

Proper installation is crucial for the functionality and performance of your graphics card. Ensure your system is powered off and unplugged before beginning the installation process.

1. **Prepare Your System:** Power down your computer and unplug all cables. Open your PC case.
2. **Locate PCIe Slot:** Identify an available PCI-Express 4.0 x16 slot on your motherboard. This graphics card requires a 3-slot form factor.
3. **Remove Slot Covers:** Remove the necessary expansion slot covers from your PC case to

accommodate the graphics card.

4. **Insert Graphics Card:** Carefully align the graphics card with the PCIe slot and press down firmly until it is securely seated. Ensure the locking mechanism on the motherboard engages.
5. **Secure Card:** Fasten the graphics card to the PC case using screws.
6. **Connect Power Cables:** Connect the required power cables from your power supply unit (PSU) to the graphics card's power connectors. This model typically requires two 8-pin PCIe power connectors. Ensure individual power cables are used for each connector for stable power delivery.
7. **Close Case and Connect Peripherals:** Close your PC case, reconnect all peripherals, and power on your system.
8. **Install Drivers:** Once your operating system loads, install the latest AMD Radeon drivers from the official Sapphire or AMD website. This step is essential for optimal performance and access to all features.



Image: Side view of the Sapphire Radeon RX 7900 XT graphics card, highlighting the power input area.

4. OPERATING INSTRUCTIONS

Your Sapphire AMD Radeon RX 7900 XT graphics card is designed to deliver high-performance visuals for gaming, content creation, and other demanding applications.

- **Gaming:** For an optimal gaming experience, ensure your display is connected to one of the card's output ports (HDMI, DisplayPort, or USB-C). Adjust in-game settings to balance visual quality and frame rate according to your preference and monitor capabilities. The card supports resolutions up to 7680x4320.
- **Content Creation:** Leverage the AMD RDNA 3 architecture for accelerated performance in applications like 3D rendering, video editing, and streaming. Ensure your software is updated to utilize the full capabilities of the GPU.
- **Multi-Monitor Setup:** The card supports multiple displays. Connect your monitors to the available

DisplayPort, HDMI, and USB-C outputs. Configure your display settings within your operating system.



Image: Angled view of the Sapphire Radeon RX 7900 XT graphics card, showcasing the HDMI, DisplayPort, and USB-C output ports.

5. MAINTENANCE

Regular maintenance helps ensure the longevity and consistent performance of your graphics card.

- **Driver Updates:** Periodically check the official Sapphire or AMD website for the latest graphics drivers. Keeping your drivers updated can improve performance, stability, and introduce new features.
- **Dust Removal:** Over time, dust can accumulate on the fans and heatsink, impeding cooling efficiency. Gently clean the fans and heatsink with compressed air every few months. Ensure the fans are not spinning during cleaning.
- **Airflow:** Ensure your PC case has adequate airflow to prevent heat buildup. Keep the area around your PC clear of obstructions.
- **Temperature Monitoring:** Use monitoring software to keep an eye on your GPU temperatures, especially during demanding tasks. High temperatures can indicate insufficient cooling or excessive dust buildup.



Image: Top view of the Sapphire Radeon RX 7900 XT graphics card, highlighting the three cooling fans.

6. TROUBLESHOOTING




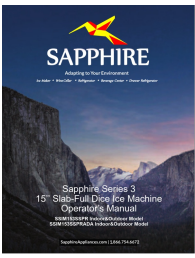
If you encounter issues with your graphics card, consider the following troubleshooting steps:

- **No Display/Black Screen:**
 - Ensure the graphics card is fully seated in the PCIe slot.
 - Verify all power cables are securely connected to the graphics card and PSU.
 - Check that your monitor cable is correctly connected to the graphics card and monitor.
 - Test with a different display cable or monitor if possible.
- **High Temperatures/Loud Fans:**
 - Clean dust from the fans and heatsink (refer to Maintenance section).
 - Ensure adequate airflow within your PC case.
 - Verify that the fans are spinning correctly.
- **Performance Issues/Crashes:**
 - Update your graphics drivers to the latest version.
 - Ensure your operating system is up to date.
 - Check for conflicting software or background processes.
 - Verify your PSU meets the recommended wattage for the graphics card and your system.
- **Coil Whine:** Some high-performance graphics cards may exhibit a faint buzzing or whining sound, known as coil whine, under certain loads. This is generally considered normal and does not indicate a defect or impact performance.

If problems persist after attempting these steps, please contact Sapphire customer support for further assistance.

7. PRODUCT SPECIFICATIONS

Specification	Value
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	<p>Sapphire 6-32kW Fully Modulating Low NOx Liquid Fuel Boiler: External Installation Manual</p> <p>This document provides comprehensive external installation instructions for the EOGB Sapphire 6-32kW fully modulating low NOx liquid fuel boiler. It covers safety warnings, technical specifications, boiler and burner descriptions, installation procedures, electrical connections, fuel supply, condensate disposal, and end-of-life information.</p>
	<p>Sapphire M603 Sediment Filter: Installation and Usage Guide</p> <p>Comprehensive guide for installing and optimizing the Sapphire M603 Sediment Filter. Includes pre-installation checks, positioning requirements, and step-by-step installation instructions for cold water systems.</p>
	<p>Sapphire B650M-E Mainboard Quick Installation Guide</p> <p>This document provides a quick installation guide for the Sapphire B650M-E mainboard, covering safety information, technical specifications, installation steps, and driver installation. Includes multilingual support.</p>
	<p>Sapphire Series 3 15" Slab-Full Dice Ice Machine Operator's Manual</p> <p>This manual provides comprehensive instructions for the installation, operation, care, and maintenance of the Sapphire Series 3 15" Slab-Full Dice Ice Machine, including models SSIM153SSPR and SSIM153SSPRADA. It covers safety precautions, specifications, troubleshooting, and warranty information.</p>