

## Sapphire 11330-02-20G

# Sapphire Pulse AMD Radeon RX 7800 XT Graphics Card User Manual

Model: 11330-02-20G

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## 1. OVERVIEW

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This manual provides essential information for the installation, operation, and maintenance of your Sapphire Pulse AMD Radeon RX 7800 XT Gaming Graphics Card. Designed for high-performance gaming and content creation, this graphics card leverages AMD RDNA 3 architecture to deliver exceptional visual fidelity and smooth frame rates. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of your product.



Figure 1.1: Front view of the Sapphire Pulse AMD Radeon RX 7800 XT retail packaging.



Figure 1.2: Rear view of the Sapphire Pulse AMD Radeon RX 7800 XT retail packaging, highlighting product and system specifications.

## 2. SETUP AND INSTALLATION

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Before installing your new graphics card, ensure your system meets the minimum requirements and that your computer is powered off and unplugged. Always handle the graphics card by its edges to avoid touching sensitive components.

### 2.1 System Requirements

- **Compatible Motherboard:** PCI Express® compatible motherboard with one x16 PCIe slot.
- **Power Supply:** Minimum 700W or greater power supply. (Note: Minimum recommended system power supply wattage is based on the specific graphics card and the typical power requirements of other system components. Your system may require more or less power. OEM and other pre-assembled PCs may have different power requirements.)
- **System Memory:** Minimum 8GB of system memory. Recommended 16GB.
- **Operating System:** Supported operating systems include Linux®, Windows 10/11, 64-bit operating system required.

### 2.2 Physical Installation

1. **Prepare your PC:** Power off your computer and unplug all cables. Open the PC case.
2. **Locate PCIe Slot:** Identify an available PCI Express x16 slot on your motherboard.
3. **Remove Old Card (if applicable):** If replacing an existing graphics card, carefully remove it.
4. **Install Graphics Card:** Align the Sapphire Pulse RX 7800 XT with the PCIe slot and press down firmly until it is securely seated. Ensure the PCIe card socket locking mechanism on the motherboard is open before insertion and locks into place after insertion.
5. **Secure the Card:** Use screws to secure the graphics card to the PC case.
6. **Connect Power:** Connect the necessary power cables from your power supply to the graphics card's power

connectors. The Sapphire Pulse RX 7800 XT typically requires two 8-pin PCIe power connectors.

7. **Close PC Case:** Once the card is securely installed and powered, close your PC case.

8. **Connect Display:** Connect your monitor(s) to the graphics card's DisplayPort or HDMI outputs.

#### Important Safety Notes:

- Never twist or bend the graphics card during installation or removal.
- Avoid shaking and excessive movement of the PC system when the graphics card is installed. If a support bracket is bundled, ensure it is used. The support bracket and the graphics card should be removed when the PC system is being moved to prevent damage.



Figure 2.1: Front view of the Sapphire Pulse AMD Radeon RX 7800 XT graphics card, showing the dual fan design.



Figure 2.2: Side view of the graphics card, illustrating the power connector locations.

## 3. OPERATION

The Sapphire Pulse AMD Radeon RX 7800 XT is designed for optimal performance across various applications, from demanding games to creative workloads. Its 16GB GDDR6 memory and AMD RDNA 3 architecture ensure a smooth and responsive experience.

### 3.1 Driver Installation

After physical installation, power on your computer. The operating system may automatically install a basic display

driver. For full functionality and optimal performance, download and install the latest AMD Radeon Software Adrenalin Edition drivers from the official AMD website ([www.amd.com/en/support](http://www.amd.com/en/support)).

### 3.2 Performance Features

- **AMD RDNA 3 Architecture:** Provides advanced gaming performance and power efficiency.
- **High Performance Rendering:** Supports AMD FidelityFX™ & Radeon™ Super Resolution technologies for enhanced visual quality and performance.
- **Crisp and Clear Audio:** Features AMD Noise Suppression for improved audio clarity.
- **Record and Stream:** Utilize AMD Instant Replay for capturing and sharing gameplay.
- **Unified AMD Performance:** Benefits from AMD smart technologies for optimized system performance.
- **Brilliant Color Accuracy:** Powered by the AMD Radiance Display Engine for vibrant and accurate colors.

### 3.3 Dual BIOS Switch

The graphics card features a Dual BIOS switch, allowing you to select between different performance profiles. This can be used to prioritize either higher performance (e.g., for gaming) or quieter operation (e.g., for general use or media consumption). Refer to the Sapphire software utility for detailed configuration options.

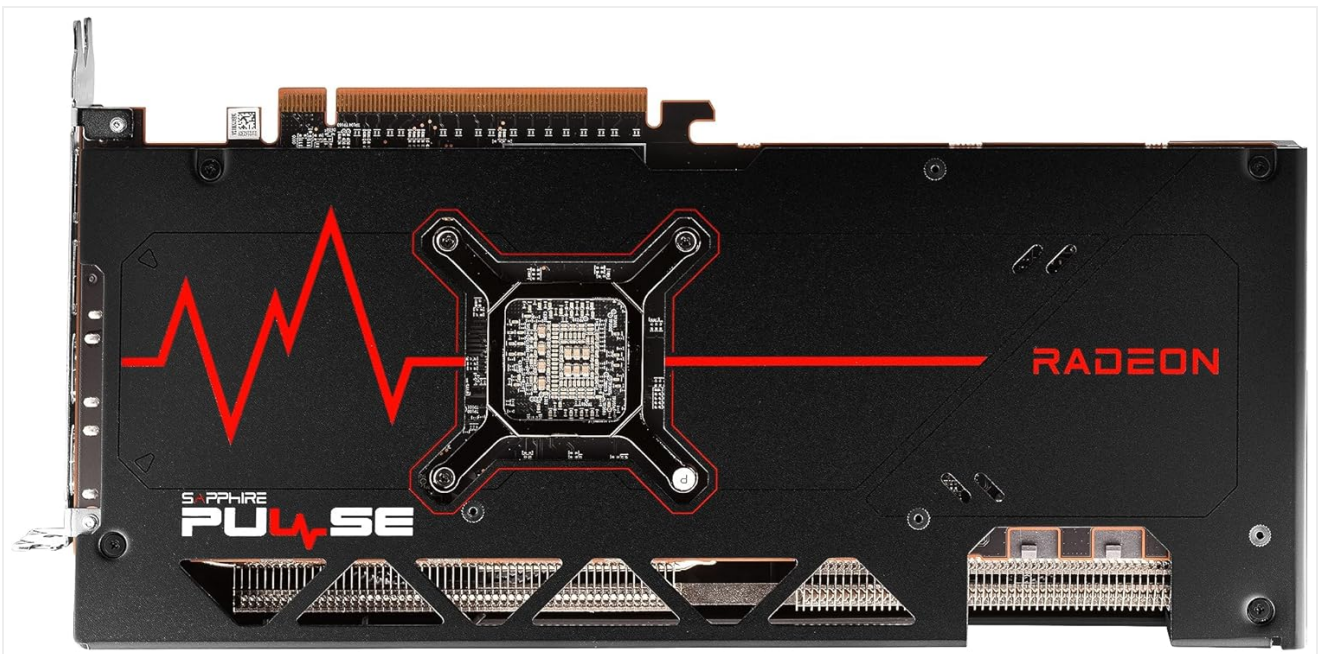


Figure 3.1: Backplate of the graphics card, showing the robust design and cooling elements.

## 4. MAINTENANCE

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Proper maintenance ensures the longevity and optimal performance of your graphics card.

### 4.1 Cleaning

- **Dust Removal:** Regularly clean dust from the graphics card fans and heatsink using compressed air. Ensure the PC is powered off and unplugged before cleaning. Hold the fan blades gently to prevent over-spinning during cleaning.
- **Exterior Cleaning:** Wipe the exterior of the card with a soft, dry, anti-static cloth. Avoid using liquid cleaners directly on the card.

### 4.2 Driver Updates

Keep your graphics drivers updated to the latest version. Driver updates often include performance improvements, bug fixes, and compatibility enhancements for new games and applications. Check the official AMD website

periodically for new driver releases.

## 5. TROUBLESHOOTING

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

### 5.1 No Display Output

- **Check Connections:** Ensure the monitor cables are securely connected to both the graphics card and the monitor.
- **Power Cables:** Verify that all PCIe power connectors are firmly seated in the graphics card.
- **PCIe Slot:** Re-seat the graphics card in its PCIe slot to ensure proper contact.
- **Monitor Input:** Confirm your monitor is set to the correct input source (HDMI/DisplayPort).

### 5.2 Performance Issues (Low FPS, Stuttering)

- **Driver Update:** Ensure you have the latest graphics drivers installed.
- **Game Settings:** Reduce in-game graphics settings to see if performance improves.
- **System Resources:** Close unnecessary background applications that might be consuming CPU or RAM.
- **Cooling:** Check for proper airflow in your PC case and ensure graphics card fans are spinning correctly. Overheating can lead to performance throttling.
- **Power Supply:** Verify your power supply meets the minimum wattage requirement for the graphics card.

### 5.3 System Crashes or Freezes

- **Driver Reinstallation:** Perform a clean installation of your graphics drivers.
- **Overclocking:** If you have overclocked your GPU, revert to default settings.
- **System Stability:** Ensure other system components (CPU, RAM) are stable and not overheating.

## 6. SPECIFICATIONS

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Feature	Detail
Model Name	11330-02-20G
Graphics Coprocessor	AMD Radeon RX 7800
Graphics Processor Manufacturer	AMD
Memory Size	16 GB GDDR6
Memory Bus	256-bit
Memory Clock Speed	19.5 Gbps Effective
Boost Clock	Up to 2430 MHz
Game Clock	Up to 2124 MHz
Video Output Interface	2 x HDMI, 2 x DisplayPort
Display Resolution Maximum	7680x4320 (8K) at 30Hz or 60Hz
Graphics Card Interface	PCI-Express x16

Feature	Detail
Form Factor	2.5 slot, ATX
Dimensions (L x W x H)	280mm (11.02") x 128.75mm (5.06") x 52.57mm (2.07")
Number of Fans	2
Compatible Devices	Desktop

## 7. WARRANTY AND SUPPORT

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### 7.1 Warranty Information

The Sapphire Pulse AMD Radeon RX 7800 XT Graphics Card comes with a **2-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

For detailed warranty terms and conditions, please visit the official Sapphire website or contact their customer support.

### 7.2 Technical Support

For technical assistance, driver downloads, and frequently asked questions, please visit the Sapphire support website:

- **Sapphire Support Website:** [www.sapphiretech.com/support](http://www.sapphiretech.com/support)
- **AMD Support Website (for drivers):** [www.amd.com/en/support](http://www.amd.com/en/support)

When contacting support, please have your product model number (11330-02-20G) and serial number ready.