

## PowerColor AXRX 6750XT 12GBD6-3DHE/OC

# PowerColor Red Devil AMD Radeon RX 6750 XT Graphics Card User Manual

Model: AXRX 6750XT 12GBD6-3DHE/OC

## INTRODUCTION

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This manual provides detailed instructions for the installation, operation, and maintenance of your PowerColor Red Devil AMD Radeon RX 6750 XT Graphics Card. Please read this manual thoroughly before installation and use to ensure proper functionality and longevity of your product.

The PowerColor Red Devil AMD Radeon RX 6750 XT Graphics Card features 12GB GDDR6 memory and is designed for high-performance computing and gaming. Key features include:

- Video Memory: 12GB GDDR6
- Stream Processors: 2560
- Game Clock: Up to 2633 MHz (OC Mode) / 2593 MHz (Silent Mode)
- Boost Clock: Up to 2713 MHz (OC Mode) / 2689 MHz (Silent Mode)
- Memory Clock: 18.0 Gbps
- Minimum System Power Requirement: 700W

## SETUP AND INSTALLATION

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Before installing the graphics card, ensure your computer system is powered off and unplugged from the wall outlet. It is recommended to wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to components.

1. **Prepare Your System:** Open your computer case. Locate an available PCI Express x16 slot on your motherboard.
2. **Remove Old Graphics Card (if applicable):** If you are replacing an existing graphics card, carefully remove it by unscrewing any retaining screws and releasing the PCI Express slot latch. Disconnect any power cables.

3. **Insert the Graphics Card:** Align the PowerColor Red Devil RX 6750 XT with the PCI Express x16 slot. Press down firmly and evenly until the card is fully seated and the slot latch clicks into place.
4. **Secure the Card:** Use screws to secure the graphics card to the computer case's expansion slot bracket.
5. **Connect Power Cables:** This graphics card requires external power. Connect the appropriate PCI Express power connectors from your power supply unit (PSU) to the power sockets on the graphics card. Ensure all connections are secure. The minimum recommended system power is 700W.
6. **Close Case and Connect Display:** Close your computer case. Connect your display monitor to one of the graphics card's output ports (HDMI or DisplayPort).
7. **Power On:** Plug in your computer and power it on.



Image: Front view of the PowerColor Red Devil AMD Radeon RX 6750 XT Graphics Card, showcasing its triple-fan cooling system and Red Devil branding.



Image: Rear view of the graphics card, highlighting the display output interfaces: one HDMI 2.1 port and three DisplayPort 1.4 ports.

## OPERATING INSTRUCTIONS

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1. **Driver Installation:** After initial boot-up, install the latest graphics drivers from the official AMD website ([www.amd.com/en/support](http://www.amd.com/en/support)) or the PowerColor website ([www.powercolor.com/support](http://www.powercolor.com/support)). Follow the on-screen instructions for a complete installation.
2. **Software Configuration:** Utilize the AMD Radeon Software Adrenalin Edition for optimal performance,

game settings, and system monitoring. Avoid using unofficial software for driver updates or card management, as this may lead to instability or damage.

3. **Dual BIOS Switch:** The graphics card features a Dual BIOS switch, typically located on the side of the card. This allows you to switch between two BIOS modes: a performance-oriented (OC) mode and a quieter (Silent) mode. Ensure the system is powered off before changing the BIOS switch position.

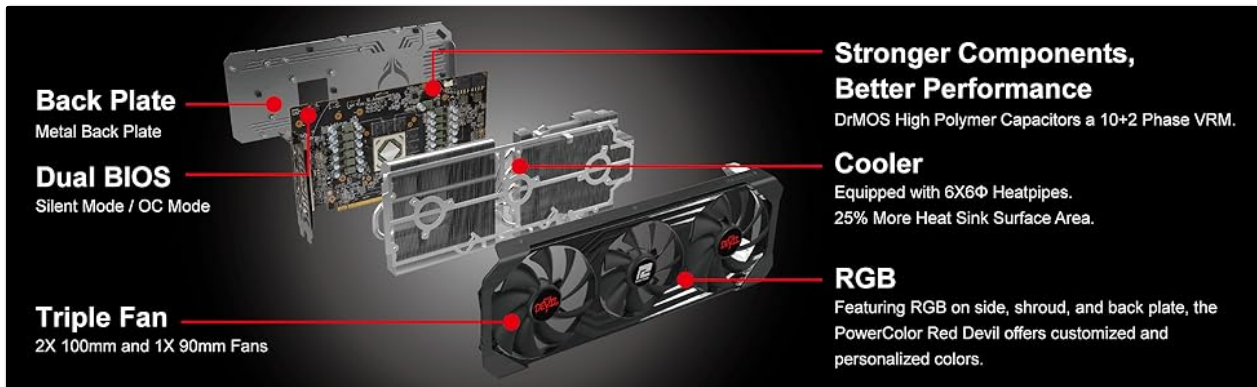


Image: An exploded diagram illustrating the internal components of the graphics card, including the backplate, dual BIOS switch, triple-fan assembly, advanced cooler with heatpipes, and RGB lighting elements.

## MAINTENANCE

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Regular maintenance helps ensure optimal performance and extends the lifespan of your graphics card.

- **Dust Removal:** Periodically clean dust from the fans and heatsink using compressed air. Ensure the system is powered off and unplugged before cleaning. Hold the fan blades gently to prevent them from spinning rapidly during cleaning, which can damage the bearings.
- **Environmental Conditions:** Operate the graphics card in a well-ventilated environment. Avoid extreme temperatures and high humidity.
- **Driver Updates:** Keep your graphics drivers updated to the latest stable version provided by AMD or PowerColor to benefit from performance improvements and bug fixes.



Image: Close-up view of one of the graphics card's cooling fans, featuring the Red Devil logo at its center.

## TROUBLESHOOTING

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If you encounter issues with your graphics card, refer to the following 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 cables are connected from the PSU to the graphics card.
- Test with a different display cable or monitor if possible.

- **System Instability or Crashes:**

- Ensure your graphics drivers are up to date. Consider performing a clean installation of drivers.
- Check your power supply unit (PSU) to ensure it meets the minimum 700W requirement and is providing stable power.
- Monitor the graphics card's temperature using monitoring software. Overheating can cause

instability.

- **Poor Performance in Games/Applications:**

- Verify that your system is using the dedicated graphics card and not integrated graphics.
- Ensure graphics drivers are updated.
- Check in-game settings; reduce graphics quality if necessary.
- Monitor CPU and GPU usage to identify potential bottlenecks.

- **Fan Noise:**

- Ensure fans are free of dust and obstructions.
- If using OC BIOS, consider switching to Silent BIOS mode for reduced fan noise.
- Adjust fan curves using AMD Radeon Software if available.

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## SPECIFICATIONS

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Feature	Value
Graphics Coprocessor	AMD Radeon RX 6750 XT
Brand	PowerColor
Graphics RAM Size	12 GB
Video Output Interface	1 x HDMI 2.1, 3 x DisplayPort 1.4
Graphics Processor Manufacturer	AMD
Graphics RAM Type	GDDR6
Compatible Devices	Desktop
Graphics Card Interface	PCI Express
Memory Clock Speed	18.0 Gbps (effective)
Number of Fans	3
Display Maximum Resolution	7680x4320
Item Dimensions L x W	13.19"L x 5.75"W
Model Name	RX 6750
Manufacturer Part Number	AXRX 6750XT 12GBD6-3DHE/OC

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## WARRANTY INFORMATION

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The PowerColor Red Devil AMD Radeon RX 6750 XT Graphics Card comes with **a2-year limited warranty**. This warranty covers defects in materials and workmanship under normal use. For specific terms, conditions, and registration details, please refer to the warranty card included with your product or visit the official

PowerColor website.

Keep your proof of purchase for warranty claims.

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## **SUPPORT**

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For further assistance, technical support, or driver downloads, please visit the official PowerColor support website:

[www.powercolor.com/support](http://www.powercolor.com/support)

You may also refer to the Quick Installation Manual included in the product packaging for additional guidance.