ASRock RX7600 CL 8GO

ASRock AMD Radeon RX 7600 Challenger 8GB OC GDDR6 Graphics Card User Manual

Model: RX7600 CL 8GO

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your ASRock AMD Radeon RX 7600 Challenger 8GB OC GDDR6 Graphics Card. Please read this manual thoroughly before installing and using the product to ensure proper functionality and to prevent damage. Keep this manual for future reference.

2. SAFETY INFORMATION

- Always disconnect the power supply from your computer before installing or removing any hardware components.
- Wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to the graphics card and other components.
- Handle the graphics card by its edges to avoid touching sensitive components.
- Ensure proper ventilation within your computer case to prevent overheating.
- Do not attempt to repair the graphics card yourself. Refer all servicing to qualified personnel.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- ASRock AMD Radeon RX 7600 Challenger 8GB OC GDDR6 Graphics Card (Model: RX7600 CL 8GO)
- Quick Installation Guide (if included)
- Driver CD/DVD (or instructions for driver download)

If any items are missing or damaged, please contact your retailer or ASRock support.

4. PRODUCT OVERVIEW

The ASRock AMD Radeon RX 7600 Challenger graphics card is designed for optimal gaming performance and visual

fidelity. It features 8GB of GDDR6 memory, DirectX 12 Ultimate support, and a robust cooling solution.

Figure 4.1: ASRock AMD Radeon RX 7600 Challenger Graphics Card and its retail packaging.

Figure 4.2: Front view of the ASRock RX 7600 Challenger graphics card, highlighting the dual fan design.
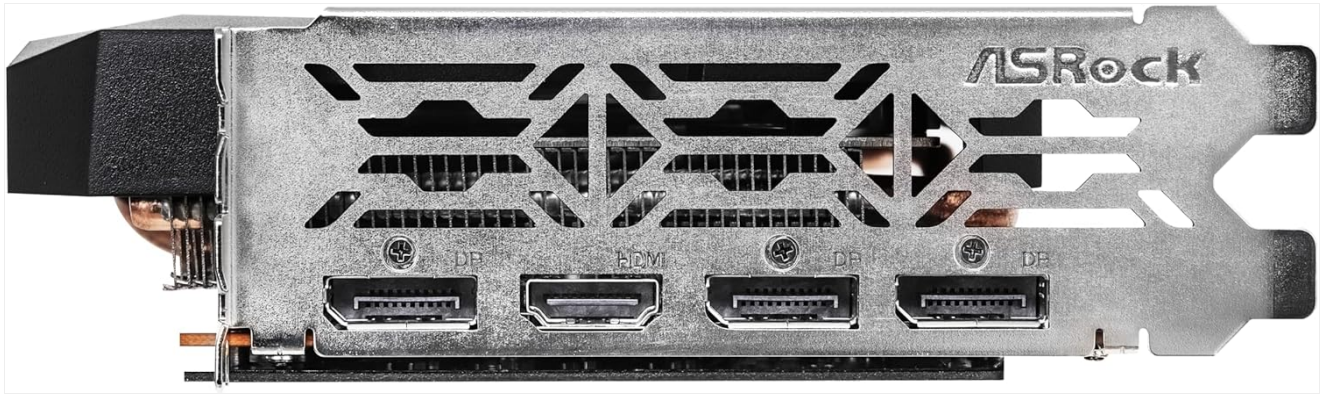
Figure 4.3: Rear view of the ASRock RX 7600 Challenger graphics card, showing DisplayPort and HDMI outputs.
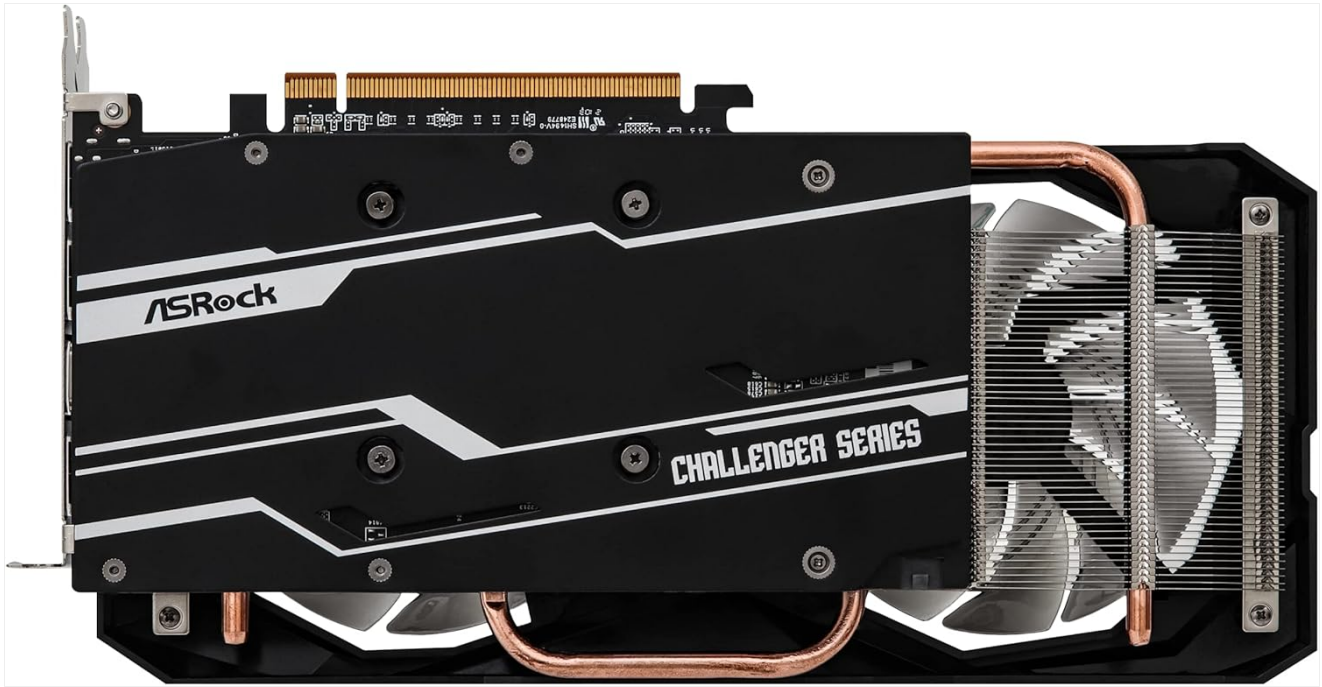

Figure 4.4: Top view of the ASRock RX 7600 Challenger graphics card, featuring the stylish metal backplate and heatpipes.

Figure 4.5: Angled view of the ASRock RX 7600 Challenger graphics card, showcasing its compact design.

Figure 4.6: Side view of the ASRock RX 7600 Challenger graphics card, indicating the 8-pin power connector.

Key Features:

- AMD Radeon RX 7600 GPU
- 8GB GDDR6 Memory
- DirectX 12 Ultimate Support
- PCI Express 4.0 Interface
- Dual Fan Design for efficient cooling
- Stylish Metal Backplate for structural integrity and aesthetics
- 0dB Silent Cooling for quiet operation under light loads
- Multiple Display Outputs: 3 x DisplayPort 1.4 with DSC / 1 x HDMI 2.1 VRR

5. SETUP AND INSTALLATION

5.1 Pre-installation Checklist

- **Power Supply Unit (PSU):** Ensure your PSU has sufficient wattage (minimum recommended 550W) and includes at least one 8-pin PCIe power connector.
- **Motherboard:** Your motherboard must have an available PCI Express x16 slot.

- **Case Clearance:** Verify that your computer case has adequate space for the graphics card dimensions.

- **Drivers:** Download the latest AMD Radeon drivers from the official ASRock or AMD website before installation.

5.2 Hardware Installation

1. Power off your computer and disconnect the power cable from the wall outlet.

2. Open your computer case.

3. Locate an available PCI Express x16 slot on your motherboard. Remove any expansion slot covers that may be blocking it.

4. Carefully align the graphics card with the PCIe slot and press it firmly until it is securely seated. A click may be heard.

5. Secure the graphics card to the case with a screw.

6. Connect the 8-pin PCIe power connector from your power supply to the corresponding port on the graphics card. Ensure a firm connection.

7. Close your computer case.

8. Reconnect the power cable to the wall outlet and turn on your computer.

5.3 Driver Installation

1. Once your computer boots up, if you have an internet connection, Windows may automatically install a basic display driver. For optimal performance, install the latest drivers.

2. Navigate to the official ASRock website (www.asrock.com) or AMD website (www.amd.com).

3. Locate the support section for your specific graphics card model (RX7600 CL 8GO).

4. Download the latest recommended graphics drivers for your operating system.

5. Run the downloaded installer and follow the on-screen instructions. It is recommended to perform a clean installation if prompted.

6. Restart your computer after the driver installation is complete.

6. OPERATING INSTRUCTIONS

6.1 Connecting Displays

- Connect your monitor(s) to the DisplayPort or HDMI outputs on the graphics card using appropriate cables.

- The card supports up to four displays simultaneously.

- After connecting, power on your monitor(s) and select the correct input source.

6.2 AMD Software: Adrenalin Edition

Once drivers are installed, you can access the AMD Software: Adrenalin Edition application. This software allows you to:

- Monitor GPU performance and temperatures.
- Adjust graphics settings for games and applications.
- Enable features like AMD FreeSync, Radeon Anti-Lag, and Radeon Boost.
- Update drivers directly.

7. MAINTENANCE

7.1 Cleaning

- Regularly clean dust from the graphics card fans and heatsink using compressed air. Ensure the computer 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.

- Do not use liquid cleaners directly on the graphics card.

7.2 Driver Updates

Periodically check for updated drivers on the ASRock or AMD website. Keeping your drivers up-to-date ensures optimal performance, stability, and access to the latest features and game optimizations.

8. TROUBLESHOOTING

8.1 No Display Output

- **Check Connections:** Ensure the graphics card is fully seated in the PCIe slot and the 8-pin power connector is securely attached. Verify monitor cables are firmly connected to both the graphics card and the monitor.

- **Monitor Input:** Confirm your monitor is set to the correct input source (e.g., DisplayPort, HDMI).

- **BIOS/UEFI Settings:** Check your motherboard's BIOS/UEFI settings to ensure the primary display output is set to PCIe graphics.

- **Test with Integrated Graphics:** If your CPU has integrated graphics, remove the RX 7600, connect your monitor to the motherboard's video output, and verify the system boots. This helps isolate the issue.

8.2 Driver Issues / Instability

- **Reinstall Drivers:** Perform a clean installation of the latest drivers from the AMD website. Use a tool like Display Driver Uninstaller (DDU) in Safe Mode to completely remove old drivers before installing new ones.

- **Check for Conflicts:** Ensure no other graphics drivers (e.g., from a previous NVIDIA card) are present on the system.

- **System Updates:** Ensure your operating system is fully updated.

8.3 Overheating

- **Case Airflow:** Ensure your computer case has adequate airflow with properly configured intake and exhaust fans.

- **Clean Heatsink/Fans:** Clean any dust buildup from the graphics card's heatsink and fans as described in the Maintenance section.

- **Monitor Temperatures:** Use AMD Software: Adrenalin Edition or third-party tools to monitor GPU temperatures during operation.

9. SPECIFICATIONS

Feature	Specification
Graphics Processor	AMD Radeon RX 7600
Video Memory	8GB GDDR6
Memory Interface	128-bit
Boost Clock	Up to 2695 MHz
Game Clock	2280 MHz

Feature	Specification
Memory Speed	18 Gbps
Max Resolution	7680x4320
Display Outputs	3 x DisplayPort 1.4 with DSC, 1 x HDMI 2.1 VRR
PCI Express	PCI Express 4.0
Power Connector	1 x 8-pin
Recommended PSU	550W or greater
Dimensions (Approx.)	Refer to product page for exact dimensions
Item Model Number	RX7600 CL 8GO

10. WARRANTY AND SUPPORT

ASRock products are covered by a limited warranty. For detailed warranty terms and conditions, please refer to the warranty information included with your product or visit the official ASRock website.

For technical support, driver downloads, and frequently asked questions, please visit the ASRock support page:
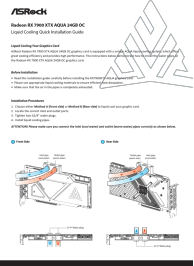
ASRock Official Website: www.asrock.com

Support Page: Refer to the support section on the ASRock website for your specific model.

11. REGULATORY COMPLIANCE

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For specific compliance details, please refer to the documentation provided with the product or the ASRock website.

Related Documents - RX7600 CL 8GO

[ASRock Radeon RX 7900 XTX AQUA 24GB OC Liquid Cooling Quick Installation Guide](#)
Step-by-step instructions for installing the liquid cooling system on the ASRock Radeon RX 7900 XTX AQUA 24GB OC graphics card, covering front and rear side connections for optimal cooling performance.

	[ASRock ARGB Link Graphics Card Quick Installation Guide](#) A concise guide to installing and utilizing ASRock ARGB Link for seamless lighting synchronization on ASRock graphics cards, detailing connection procedures and feature comparisons.
	[ASRock Phantom Gaming Graphics Card Quick Installation Guide](#) This guide provides step-by-step instructions for installing your ASRock Phantom Gaming Graphics Card and its drivers. It covers hardware setup, driver installation, and important compliance information.
	[ASRock Graphics Card Support Bracket Quick Installation Guide](#) A quick installation guide from ASRock for setting up a graphics card support bracket, detailing the step-by-step process for installation.
AMD X670/B650 系列 主機板 軟體／BIOS 設定指南	[AMD X670/B650 /BIOS](#) AMD X670 B650 BIOS Auto Driver Installer ASRock Live Update & APP Shop ASRock Motherboard Utility ASRock Polychrome SYNC Nahimic UEFI
	[ASRock B850M Steel Legend WiFi -](#) ASRock B850M Steel Legend WiFi . , , , .