

msi RX 580 ARMOR MK2 8G OC

MSI Radeon RX 580 ARMOR MK2 8G OC Graphics Card User Manual

Model: RX 580 ARMOR MK2 8G OC

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your MSI Radeon RX 580 ARMOR MK2 8G OC Graphics Card. Designed for optimal gaming and multimedia performance, this card features the 4th generation GCN architecture, Asynchronous Shaders, and an enhanced Geometry Engine for smooth gameplay. It supports VR gaming and entertainment with the Polaris architecture, delivering fluid, artifact-free visuals and enhanced contrast and colors.

2. SAFETY INFORMATION

Please read and follow these safety guidelines to prevent damage to the product or injury to yourself:

- 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 before handling the graphics card.
- Handle the graphics card by its edges to avoid touching sensitive components.
- Ensure proper ventilation within your computer case to prevent overheating.
- Do not expose the graphics card to moisture or extreme temperatures.

3. PACKAGE CONTENTS

Verify that all items are present in your product package:

- MSI Radeon RX 580 ARMOR MK2 8G OC Graphics Card
- Cables and connectors (if applicable)
- Quick setup guide

4. PRODUCT OVERVIEW

The MSI Radeon RX 580 ARMOR MK2 8G OC is a high-performance graphics card featuring a dual-fan cooling system and a robust design for enhanced durability and thermal management.



Figure 4.1: Front view of the MSI Radeon RX 580 ARMOR MK2 8G OC Graphics Card, showcasing its dual-fan cooling solution and red/black aesthetic.

The card is equipped with multiple display outputs to support various monitor configurations and a protective backplate for structural integrity.



Figure 4.2: Rear view of the graphics card, highlighting the sturdy backplate which aids in heat dissipation and prevents PCB

bending.

Connectivity options include DisplayPort, HDMI, and DVI-D for versatile display setups.



Figure 4.3: Display output ports, including two DisplayPort, two HDMI, and one DL-DVI-D connector, allowing for multi-monitor setups.

5. SETUP AND INSTALLATION

5.1 System Requirements

- PCI Express-enabled motherboard with one x16 graphics slot.
- Minimum 500W power supply unit (PSU) with one 8-pin PCIe power connector.
- Compatible operating system (Windows 10, Windows 7 64-bit, Linux 64-bit).
- At least 8GB of system memory (RAM) recommended.

5.2 Physical 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.
4. Remove the metal slot cover(s) from the back of your computer case corresponding to the PCI Express slot.
5. Carefully insert the graphics card into the PCI Express x16 slot until it is firmly seated. Ensure the retention clip clicks into place.
6. Secure the graphics card to the case with screws.
7. Connect the 8-pin PCIe power connector from your power supply to the graphics card.
8. Close your computer case and reconnect the power cable.

5.3 Driver Installation

1. Power on your computer.
2. Download the latest graphics drivers from the official MSI website (www.msi.com) or AMD website (www.amd.com).
3. Run the downloaded driver installer and follow the on-screen instructions.
4. Restart your computer after the installation is complete.

6. OPERATING INSTRUCTIONS

6.1 AMD Radeon Software

After driver installation, the AMD Radeon Software will be available. This software allows you to:

- Adjust display settings, resolution, and refresh rates.
- Optimize game settings for performance and visual quality.
- Monitor GPU performance, temperature, and clock speeds.
- Access features like Radeon Chill, FreeSync, and ReLive for recording and streaming.

6.2 MSI Afterburner

MSI Afterburner is an overclocking utility that works with any graphics card. It provides detailed hardware monitoring and allows for custom fan profiles and overclocking adjustments. Download it from the official MSI website.

7. MAINTENANCE

- **Keep Drivers Updated:** Regularly check for and install the latest graphics drivers from MSI or AMD to ensure optimal performance and compatibility.
- **Clean Dust:** Periodically clean dust from the graphics card fans and heatsink using compressed air. Ensure the computer is powered off and unplugged before cleaning.
- **Monitor Temperatures:** Use monitoring software (e.g., AMD Radeon Software, MSI Afterburner) to keep an eye on GPU temperatures, especially during heavy loads.

8. TROUBLESHOOTING

- **No Display Output:**
 - Ensure the graphics card is fully seated in the PCI Express slot.
 - Verify that the 8-pin PCIe power connector is securely attached.
 - Check that your monitor cable is connected to the graphics card, not the motherboard's integrated graphics port.
 - Test with a different display cable or monitor if possible.
- **System Instability or Crashes:**
 - Ensure your power supply meets the recommended 500W requirement. Insufficient power can cause instability.
 - Update your graphics drivers to the latest version.
 - Monitor GPU temperatures. Overheating can lead to crashes. Improve case airflow if temperatures are high.
 - If overclocking, revert to default settings to check for stability.
- **Poor Performance in Games:**
 - Ensure graphics drivers are up to date.
 - Check in-game settings; reduce demanding options like anti-aliasing or shadow quality if performance is unsatisfactory.
 - Verify that your system meets the game's minimum requirements.
 - Close unnecessary background applications.

9. SPECIFICATIONS

Feature	Specification
Graphics Coprocessor	AMD Radeon RX 580
Video Memory	8GB GDDR5
Memory Interface	256-bit
GPU Clock Speed	1380 MHz
Memory Clock Speed	1340 MHz
Output Ports	2x DisplayPort, 2x HDMI, 1x DL-DVI-D
Maximum Display Resolution	7680x4320
Recommended PSU	500W
Graphics Card Interface	PCI Express
Number of Fans	2
Item Dimensions (L x W)	10.63"L x 5.12"W
Item Weight	1.97 Pounds

10. WARRANTY INFORMATION

The MSI Radeon RX 580 ARMOR MK2 8G OC Graphics Card comes with a **3-year warranty** from the date of purchase. This warranty covers manufacturing defects and ensures repair or replacement of the product under normal usage conditions. Please retain your proof of purchase for warranty claims. For detailed terms and conditions, refer to the official MSI warranty policy on their website.

11. SUPPORT

For further assistance, technical support, or to download the latest drivers and utilities, please visit the official MSI website:

www.msi.com

You can also find FAQs and community forums on the MSI support pages.