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› **ASUS ROG Strix GeForce RTX 5070 Ti OC Edition 16GB GDDR7 Graphics Card (PCIe 5.0, HDMI/DP 2.1, 3.2-slot, Axial-tech fans, MaxContact design with vapor chamber, phase-change GPU thermal pad, aura sync) ROG Strix RTX5070Ti|OC|16GB**

ASUS ROG-STRIX-RTX5070TI-O16G-GAMING

ASUS ROG Strix GeForce RTX 5070 Ti OC Edition Graphics Card User Manual

Model: ROG-STRIX-RTX5070TI-O16G-GAMING

INTRODUCTION

Welcome to the user manual for your ASUS ROG Strix GeForce RTX 5070 Ti OC Edition Graphics Card. This manual provides essential information for installation, operation, maintenance, and troubleshooting to ensure optimal performance and longevity of your graphics card.

The ASUS ROG Strix GeForce RTX 5070 Ti offers premium performance with an advanced cooling system, including axial-tech fans, a vapor chamber, a phase-change GPU thermal pad, and MaxContact design. These features work together to lower GPU temperatures and achieve higher performance. Additionally, Aura Sync allows for extensive personalization of lighting effects.

WHAT'S IN THE BOX

- ROG-STRIX-RTX5070TI-O16G-GAMING graphics card
- Speedset up Manual
- ROG Graphics card holder
- ROG Velcro Hook & Loop
- ROG Magnet
- ROG PCB Ruler
- Thank you card
- Adapter Cable (1 to 3)

This image displays the ASUS ROG Strix GeForce RTX 5070 Ti OC Edition Graphics Card alongside its product box. The card features three large axial-tech fans and RGB lighting elements. The box highlights key features such as "ROG Strix Gaming Graphics Card," "OC 16GB GDDR7," and "GeForce RTX 5070 Ti."

SETUP

System Requirements

- PCIe 5.0 compatible motherboard slot.
- Sufficient power supply (refer to "Power Supply Compatibility" section).
- Compatible operating system (Windows 10/11 recommended).
- Minimum of 16GB system RAM.
- Display with HDMI 2.1 or DisplayPort 2.1 input.

Installation Steps

1. Power off your computer and disconnect all cables.
2. Open your computer case.
3. Locate an available PCIe 5.0 x16 slot on your motherboard.

4. Remove any expansion slot covers from your case that correspond to the graphics card's size (3.2-slot design).

5. Carefully insert the graphics card into the PCIe slot until it clicks into place. Ensure it is fully seated.

6. Secure the graphics card to the case with screws.

7. Connect the necessary power cables from your power supply to the graphics card. This model requires a 12VHPWR connector (or equivalent adapter).

8. Close your computer case.

9. Connect your display cable (HDMI or DisplayPort) from the graphics card to your monitor.

10. Power on your computer and install the latest NVIDIA drivers from the official NVIDIA or ASUS website.

KEY FEATURES

Axial-tech Fans

Axial-tech fans are scaled up to propel more air through the card, operating on dual-ball bearings for increased durability and efficiency. This design contributes to lower temperatures and reduced noise.

This image highlights the Axial-tech fan design of the graphics card. Three large fans are visible, designed to optimize airflow for superior cooling performance. The text overlay indicates "Axial-tech Upgrades" and explains that these fans spin on dual-ball bearings and are scaled up for lower temperatures, less noise, and higher performance.

Advanced Cooling System

The card incorporates a comprehensive cooling solution for optimal thermal management.

Phase-Change GPU Thermal Pad

This specialized thermal pad melts to effectively fill gaps between the GPU and the thermal module, providing superior thermal conductivity and enhanced heat dissipation.

MaxContact Design with Vapor Chamber

The MaxContact design, a special ASUS manufacturing process, expands the surface area of the heat spreader by 5%, improving heat transfer. A vapor chamber works in conjunction to soak up heat from the GPU, ensuring premium performance even under heavy loads.

This image details the advanced cooling features. It shows a diagram comparing traditional thermal paste to a phase-change GPU thermal pad, highlighting its effectiveness. Below, illustrations demonstrate the MaxContact design, which increases contact surface by 5%, and a vapor chamber, explaining how it efficiently transfers heat away from the GPU.

Enhanced Reliability

Built for durability and stable operation.

Premium Power Delivery

Digital power control and 15K capacitors ensure stable and high-performance power delivery.

ASUS GPU Guard & Bracket

A robust GPU guard and bracket secure the card, reducing the risk of cracks and providing uniform mounting pressure for extra stability.

Protective PCB Coating

A conformal coating envelops the circuit board, protecting it against short-circuits caused by moisture, dust, or debris.

This image focuses on the reliability features of the graphics card. It illustrates the premium power delivery system with digital power control and 15K capacitors. It also shows the ASUS GPU Guard & Bracket, designed to handle larger processors and provide stability, and the Protective PCB Coating, which safeguards the circuit board from environmental factors.

Aura Sync

Customize your gaming setup with Aura Sync. The ARGB lighting components on the shroud and perimeter offer limitless options for personalizing colors and effects. Synchronize with other Aura-compatible system parts for a cohesive lighting experience.

Aura Sync

25°07′37.0″N 121°28′13.6″E

The ARGB lighting components compatible with Aura on the card's shroud and right edge offer limitless options for customizing colors and effects. Combine these with a variety of compatible system parts to synchronize the illumination and create a truly unique build.

This image showcases the Aura Sync lighting capabilities of the graphics card. The card's shroud and side are illuminated with customizable ARGB lighting, demonstrating the potential for personalized color schemes and effects. The accompanying text explains that these lighting components are compatible with Aura Sync for limitless customization.

Power Supply Compatibility

For optimal performance, it is crucial to pair your ROG Strix graphics card with a compatible power supply. Use a wattage calculator to determine the appropriate power for your system. ROG Strix 1000W/1200W Platinum power supplies are recommended for ultimate performance.

Perfect PSU Combination
ROG Strix 1000W/1200W Platinum

Use the wattage calculator to estimate how much power you'll need to fuel your rig, and then pick a compatible ROG, TUF Gaming or Prime power supply for ultimate performance.

This image illustrates the recommended power supply combination for the ROG Strix graphics card. The graphics card is shown alongside a ROG Strix 1000W Platinum power supply, emphasizing the importance of selecting a compatible PSU for optimal system performance.

Software Integration

Enhance your graphics card experience with dedicated software tools.

GPU Tweak III

GPU Tweak III is the ultimate tuning tool for overclocking, advanced thermal control, and system monitoring, making it easier to manage your graphics card's performance.

MuseTree

MuseTree is an AI-powered image-generation application designed to spark creativity, allowing users to effortlessly create and manage images and visual ideas.

Software

Hardware and software come together to let you full customize your experience and get the most out of your graphics card.

GPU TWEAK III

Ultimate GPU tuning tool to make overclocking, cooling control and monitoring your graphics card even easier.

MuseTree

MuseTree is an AI-powered image-generation app designed to spark your creativity. Effortlessly create and manage images and visual ideas, unlocking endless new inspirations.

This image highlights the software ecosystem supporting the graphics card. It features visuals for "GPU Tweak III," described as an ultimate GPU tuning tool for overclocking, cooling control, and system monitoring. Also shown is "MuseTree," an AI-powered image-generation app for creative visual ideas.

OPERATING YOUR GRAPHICS CARD

Once installed and drivers are updated, your ASUS ROG Strix GeForce RTX 5070 Ti OC Edition Graphics Card is ready for use.

Driver Updates

Regularly check for and install the latest NVIDIA graphics drivers. These updates often include performance optimizations, bug fixes, and support for new games and applications. Visit the official NVIDIA website or use NVIDIA GeForce Experience software to manage driver updates.

Performance Monitoring

Utilize GPU Tweak III software to monitor your graphics card's performance metrics such as GPU temperature, clock speeds, fan speeds, and power consumption. This allows you to ensure the card is operating within optimal parameters.

Gaming and Applications

This graphics card is designed for high-performance gaming at resolutions up to 7680x4320 pixels and demanding creative applications. Adjust in-game settings and application preferences to balance visual quality and frame rates according to your preference.

MAINTENANCE

Cleaning

- Periodically clean dust from the graphics card fans and heatsink fins 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.
- Do not use liquid cleaners directly on the card.

Thermal Management

- Ensure good airflow within your PC case to prevent heat buildup.
- Monitor GPU temperatures using software like GPU Tweak III, especially during heavy loads, to ensure they remain within safe operating limits (typically below 85°C).

TROUBLESHOOTING

No Display Output

- Ensure the display cable is securely connected to both the graphics card and the monitor.
- Verify that the graphics card is fully seated in the PCIe slot.
- Check that all necessary power cables are connected to the graphics card.
- Try a different display output port on the graphics card or a different cable.

System Instability or Crashes

- Ensure your power supply meets the recommended wattage for the graphics card and your system.
- Update your graphics drivers to the latest version.
- Check GPU temperatures. Overheating can cause instability.
- If overclocked, revert to default settings to rule out instability caused by excessive clock speeds.

Fan Noise or Malfunction

- Check for any obstructions preventing the fans from spinning freely.
- Clean dust from the fan blades and heatsink.
- If a fan is making unusual noises or not spinning, contact ASUS support.

SPECIFICATIONS

Feature	Detail
Max Screen Resolution	7680x4320 Pixels
Memory Speed	2602 MHz

Feature	Detail
Graphics Coprocessor	NVIDIA GeForce RTX 5070 Ti
Chipset Brand	NVIDIA
Graphics Card Ram Size	15.99 GB
Brand	ASUS
Series	ROG-STRIX-RTX5070TI-O16G-GAMING
Item model number	ROG-STRIX-RTX5070TI-O16G-GAMING
Item Weight	3.6 pounds
Product Dimensions	13.07 x 5.79 x 0.04 inches
Item Dimensions LxWxH	13.07 x 5.79 x 0.04 inches
Color	BLACK
Manufacturer	ASUS
ASIN	B0F8LGTHJD
Date First Available	May 16, 2025
Video Output Interface	Native DisplayPort 2.1b x3, Native HDMI 2.1b x 2

WARRANTY AND SUPPORT

For warranty information, please refer to the warranty card included with your product or visit the official ASUS support website.

If you encounter issues not covered in this manual, or require further assistance, please contact ASUS customer support. You can find contact details on the ASUS support website: www.asus.com/support/

Please have your product model number (ROG-STRIX-RTX5070TI-O16G-GAMING) and serial number ready when contacting support.