

Galax GeForce RTX 3050 EX

Galax NVIDIA GeForce RTX 3050 EX 6GB GDDR6 Graphics Card User Manual

Model: GeForce RTX 3050 EX

INTRODUCTION

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of your Galax NVIDIA GeForce RTX 3050 EX 6GB GDDR6 Graphics Card. Please read this manual thoroughly before using the product to ensure proper functionality and longevity.

SETUP AND INSTALLATION

1. Physical Installation

Before beginning, ensure your computer is powered off and unplugged from the wall outlet. Open your computer case to access the motherboard's PCI-Express x16 slot.

- 1. Prepare the Motherboard:** Locate an available PCI-Express x16 slot on your motherboard. Remove any expansion slot covers from your computer case that correspond to the slot.
- 2. Insert the Graphics Card:** Carefully align the graphics card with the PCI-Express x16 slot. Apply even pressure to both ends of the card until it is fully seated in the slot. You should hear a click as the retention clip engages.
- 3. Secure the Card:** Use screws to secure the graphics card to the computer case's expansion slot bracket.
- 4. Power Connection:** This model of the GeForce RTX 3050 EX typically draws power directly from the PCI-Express slot and may not require an additional PCIe power connector from your power supply. Verify your specific model's requirements.
- 5. Close the Case:** Once the card is securely installed, close your computer case and reconnect all cables.



Image: The Galax RTX 3050 EX graphics card, illustrating its dual-fan design and PCI-Express interface for installation.

2. Driver Installation

After physical installation, you must install the latest NVIDIA drivers for optimal performance and stability.

1. **Power On:** Connect your monitor to one of the graphics card's display outputs (DisplayPort or HDMI) and power on your computer.
2. **Download Drivers:** Visit the official NVIDIA website (www.nvidia.com/drivers) and download the latest drivers for the GeForce RTX 3050. Ensure you select the correct operating system (Windows 10/11 64-bit).
3. **Install Drivers:** Run the downloaded driver installer and follow the on-screen prompts. A system restart may be required after installation.

3. Software Installation (Optional)

For enhanced control and performance tuning, consider installing the Xtreme Tuner Plus software.

- **Xtreme Tuner Plus:** This software allows for 1-Click OC (Overclocking) and monitoring of your graphics card. Download it from the official Galax website.

OPERATING INSTRUCTIONS

Key Features

- **NVIDIA DLSS:** Deep Learning Super Sampling (DLSS) uses AI to boost frame rates while generating sharp, high-quality images. Enable this feature in compatible games for improved performance.
- **Ray Tracing:** Experience realistic lighting, shadows, and reflections in supported games with dedicated 2nd Generation

Ray Tracing Cores.

- **NVIDIA GeForce Experience:** Optimize game settings, update drivers, and capture gameplay videos and screenshots with this companion application.
- **NVIDIA G-SYNC:** Connect to a G-SYNC compatible monitor for a smooth, tear-free gaming experience.
- **1-Click OC:** Utilize the Xtreme Tuner Plus software to apply a quick overclock profile, boosting the card's performance with a single click. The 1-Click OC Clock can reach 1485 MHz.

Display Output Configuration

The graphics card supports multiple display outputs:

- **DisplayPort 1.4a:** Three ports are available for high-resolution and high-refresh-rate monitors.
- **HDMI 2.1:** One port for connecting to TVs or monitors, supporting up to 8K resolution.

You can connect multiple monitors simultaneously. Refer to your operating system's display settings for configuration options.



Image: Rear view of the graphics card, highlighting the DisplayPort and HDMI output connectors.

MAINTENANCE

Fan Stop Feature

The graphics card features a fan stop function, where all fans will cease operation when the GPU temperature is below a certain threshold (e.g., during idle or light load). This reduces noise and power consumption. The fans will automatically spin up when the temperature rises.

Cleaning

Regular cleaning helps maintain optimal performance and extends the lifespan of your graphics card.

- **Power Off:** Always power off your computer and unplug it before cleaning.
- **Dust Removal:** Use compressed air to gently remove dust from the fans, heatsink fins, and other components of the graphics card. Hold the fans in place while blowing air to prevent over-spinning.
- **Avoid Liquids:** Do not use liquid cleaners directly on the graphics card.



Image: Top view of the graphics card, emphasizing the dual-fan cooling system.

TROUBLESHOOTING

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

- **No Display Output:**
 - Ensure the monitor cable is securely connected to both the graphics card and the monitor.
 - Verify the graphics card is fully seated in the PCI-Express slot.

- Check if your monitor is set to the correct input source.
- Try a different display output port or cable.

• **Driver Issues:**

- Perform a clean installation of the latest NVIDIA drivers. Use Display Driver Uninstaller (DDU) in Safe Mode to remove old drivers before installing new ones.

• **Performance Problems:**

- Ensure your system meets the minimum requirements for the applications or games you are running.
- Monitor GPU temperatures to prevent thermal throttling. Ensure adequate case airflow.
- Disable any overclocking (including 1-Click OC) to see if it resolves stability issues.

• **System Instability/Crashes:**

- Check your power supply unit (PSU) to ensure it provides sufficient and stable power to your system.
- Verify that all components are properly seated and connected.

For further assistance, refer to the official Galax support website or NVIDIA's support resources.

SPECIFICATIONS

Feature	Detail
Model Name	GeForce RTX 3050 EX
Graphics Processor	NVIDIA GeForce RTX 3050
CUDA Cores	2304
Boost Clock	1470 MHz
1-Click OC Clock	1485 MHz (with Xtreme Tuner Plus)
Memory Size	6 GB
Memory Type	GDDR6
Memory Speed	14 Gbps
Memory Interface Width	96-bit
Memory Bandwidth	168 GB/sec
Interface	PCI-Express 4.0 x16
Display Outputs	3x DisplayPort 1.4a, 1x HDMI 2.1
Maximum Digital Resolution	7680 x 4320
Fan Count	2 (92mm)
Dimensions (with bracket)	224 x 133 x 44 mm
Supported OS	Windows 10/11 64-bit
Part Number	35NRLDMD9OEX

Feature	Detail
ASIN	B0CW7D71T3

WARRANTY AND SUPPORT

Warranty Information

This Galax graphics card comes with a **12-month manufacturer's warranty**. Please retain your proof of purchase for warranty claims. The warranty covers defects in materials and workmanship under normal use.

Technical Support

For technical assistance, driver updates, or further product information, please visit the official Galax website or contact their customer support. You can also find extensive resources on the NVIDIA support portal for driver-related issues and feature guides.

- **Galax Official Website:** www.galax.com
- **NVIDIA Support:** www.nvidia.com/support