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EVGA 24G-P5-3998-KR

EVGA GeForce RTX 3090 K|NGP|N Hybrid Gaming Graphics Card User Manual

Model: 24G-P5-3998-KR

1. Introduction

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of your EVGA GeForce RTX 3090 K|NGP|N Hybrid Gaming Graphics Card. Please read this manual thoroughly before installation to ensure proper setup and optimal performance.



Image 1.1: The EVGA GeForce RTX 3090 K|NGP|N Hybrid Graphics Card shown with its retail packaging, highlighting the card's design and the included 360mm radiator.

2. SAFETY INFORMATION

Observe the following safety precautions during installation and operation:

- Always disconnect power from your computer before installing or removing any components.
- Wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage to 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 modify the graphics card or its cooling system. Unauthorized modifications may void your warranty.

3. PACKAGE CONTENTS

Verify that your package contains the following items:

- EVGA GeForce RTX 3090 K|NGP|N Hybrid Gaming Graphics Card
- 360mm All-In-One (AIO) Liquid Cooler (pre-attached)
- Documentation (Quick Start Guide, etc.)

Accessory cables (if applicable, e.g., power adapters)

4. System Requirements

Before installation, ensure your system meets the following minimum requirements:

- Motherboard: PCI Express, PCI Express 2.0, or PCI Express 3.0 compliant motherboard with one graphics slot.
- Power Supply: 750 Watt or greater power supply with a minimum of 42A on the +12V rail.
- Power Connectors: Three available 8-pin or 6+2pin PCle power dongles.
- Operating System: Windows 11, Windows 10, or Windows 7.
- Case Clearance: Sufficient space for the graphics card (Length: 11.37 in / 288.9 mm, Height: 5.43 in / 137.8 mm, Width: 2 Slots) and the 360mm radiator.

5. SETUP AND INSTALLATION

Follow these steps to install your EVGA GeForce RTX 3090 K|NGP|N Hybrid Graphics Card:

5.1. Preparation

- 1. Power down your computer completely and unplug the power cord from the wall outlet.
- 2. Open your computer case.
- 3. If replacing an existing graphics card, carefully remove it.
- 4. Wear an anti-static wrist strap to ground yourself and prevent ESD.

5.2. Graphics Card Installation

- 1. Locate an available PCI Express x16 slot on your motherboard.
- 2. Remove the necessary expansion slot covers from your computer case. The card occupies 2 slots.
- 3. Align the graphics card with the PCIe slot and press down firmly until it is securely seated.
- 4. Secure the graphics card to the case with screws.



Image 5.1: The EVGA GeForce RTX 3090 K|NGP|N Hybrid Graphics Card, showcasing the card unit connected to its 360mm radiator via tubing.

5.3. Power Connection

1. Connect three 8-pin (or 6+2pin) PCIe power cables from your power supply to the corresponding power connectors on the graphics card. Ensure all connectors are fully seated.



Image 5.2: A side view of the graphics card, clearly showing the three 8-pin PCIe power input connectors required for operation.

5.4. Radiator Installation

- 1. Mount the 360mm radiator to an available fan mounting location in your computer case (e.g., front, top, or rear). Ensure the fans are oriented for optimal airflow (intake or exhaust, depending on your case's cooling strategy).
- 2. Secure the radiator and fans using the provided screws.

5.5. Display Connection

1. Connect your display cable (DisplayPort or HDMI) from your monitor to one of the output ports on the graphics card.





Image 5.3: The rear I/O panel of the graphics card, displaying multiple DisplayPort 1.4a and HDMI 2.1 output connectors.

5.6. Software Installation

- 1. Close your computer case and reconnect the power cord.
- 2. Power on your computer.
- 3. Download the latest NVIDIA drivers for your GeForce RTX 3090 from the official NVIDIA website.

- 4. Install the drivers following the on-screen instructions.
- 5. For advanced monitoring and control, download and install EVGA Precision X1 from the EVGA website.

6. OPERATING THE GRAPHICS CARD

Once installed and drivers are updated, your EVGA GeForce RTX 3090 K|NGP|N is ready for use. Here are some key operational aspects:

6.1. Key Features

- **Built-in Color OLED Display:** Monitor real-time statistics such as GPU temperature, clock speeds, and fan RPM directly on the card.
- EVGA iCX3 Technology: Advanced thermal sensors and asynchronous fans provide intelligent cooling.
- **EVGA Precision X1:** Software for fine-tuning your graphics card, including overclocking, fan control, and RGB lighting customization.
- **NVIDIA Technologies:** Leverage 2nd Gen Ray Tracing Cores, 3rd Gen Tensor Cores, NVIDIA DLSS, NVIDIA G-SYNC, and NVIDIA GPU Boost for enhanced gaming and creative performance.
- 3 Switchable Onboard BIOS: Allows for easy switching between different BIOS profiles, useful for overclocking or testing.
- **Probe-IT & EVBot Header:** Advanced features for extreme overclockers to monitor voltages and control the card with an external EVBot device.



Image 6.1: A detailed view of the graphics card's cooling fan and the K|NGP|N branded shroud, highlighting the aesthetic and design.

7. MAINTENANCE

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

• Cleaning: Periodically clean dust from the radiator fins and fans using compressed air. Ensure the

system is powered off and unplugged before cleaning. Do not use liquid cleaners directly on the card.

- **Driver Updates:** Regularly check the NVIDIA website for the latest graphics drivers. Keeping your drivers updated can improve performance and stability.
- Software Updates: Keep EVGA Precision X1 updated to access the latest features and optimizations.

8. TROUBLESHOOTING

If you encounter issues with your graphics card, consider the following 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 PCIe slot.
- Check that all three 8-pin PCIe power connectors are securely attached.
- Test with a different display cable or monitor if possible.

• Performance Issues / Instability:

- Ensure you have the latest graphics drivers installed.
- Monitor GPU temperatures using EVGA Precision X1 or similar software. Excessive heat can cause throttling.
- Verify your power supply meets the minimum wattage requirement and has sufficient PCle power connectors.
- Check for conflicting software or background processes.

• System Not Recognizing Card:

- Reseat the graphics card in its PCle slot.
- Ensure your motherboard BIOS is updated to the latest version.
- Check your motherboard's BIOS settings to ensure the correct primary display adapter is selected (if applicable).

For further assistance, refer to the EVGA support website or contact EVGA technical support.

9. SPECIFICATIONS

Detailed technical specifications for the EVGA GeForce RTX 3090 K|NGP|N Hybrid Gaming Graphics Card:



Image 9.1: The backplate of the graphics card, featuring the K|NGP|N logo and EVGA branding, providing structural support and heat dissipation.

Feature	Specification
Model Number	24G-P5-3998-KR
Graphics Coprocessor	NVIDIA GeForce RTX 3090
Boost Clock	1920 MHz
Memory Clock	19500 MHz Effective
CUDA Cores	10496
Memory Detail	24576MB GDDR6X
Memory Bit Width	384 Bit
Memory Bandwidth	936 GB/s
Bus Type	PCIe 4.0
Power Phases	23
PCB Layers	12-Layer PCB
Cooling	HYBRID AIO w/ 360mm Radiator
Display Outputs	DisplayPort 1.4a, HDMI 2.1 (Supports 4K 120Hz HDR, 8K 60Hz HDR)
Max Digital Resolution	7680x4320
HDCP Support	HDCP 2.3
VR Ready	Yes

Feature	Specification
Dimensions (Length)	11.37 in (288.9 mm)
Dimensions (Height)	5.43 in (137.8 mm)
Dimensions (Width)	2 Slots
Item Weight	5.33 pounds
UPC	843368067199

10. WARRANTY AND SUPPORT

EVGA products are backed by a limited warranty. For detailed warranty information, product registration, and technical support, please visit the official EVGA website. You can find drivers, FAQs, and contact information for customer service there.

EVGA Website: www.evga.com

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Related Documents - 24G-P5-3998-KR



EVGA GeForce RTX 2080 Ti KINGPIN Edition OC Guide: Overclocking, Performance, and Features

Detailed overclocking guide for the EVGA GeForce RTX 2080 Ti KINGPIN Edition graphics card. Covers advanced power design, 12-layer PCB benefits, watercooling, performance benchmarks, EVGA Precision X1 software, and probe points for extreme overclocking.



EVGA GeForce RTX 3080 Ti FTW3 Ultra Gaming Quick Start Guide and Warranty

Quick start guide for the EVGA GeForce RTX 3080 Ti FTW3 Ultra Gaming (12G-P5-3967-KR), covering minimum system requirements, operating system compatibility, included equipment, and EVGA's limited warranty for Australia and New Zealand. Includes HDMI information and RoHS compliance details.



EVGA GeForce GTX 1080 Ti SC HYBRID Installation Guide

This guide provides step-by-step instructions for installing the EVGA GeForce GTX 1080 Ti SC

SEFFORCE OF

HYBRID Cooling Kit. It covers component identification, disassembly of the original graphics card cooler, and assembly of the new HYBRID module, including radiator mounting and cable connections. Important information regarding warranty and compatibility is also provided.



EVGA X58 SLI3 Motherboard Visual Installation Guide

A comprehensive visual guide for installing the EVGA X58 SLI3 motherboard, covering CPU, RAM, graphics card, storage, and power connections, along with system startup procedures and component identification.



EVGA Graphics Card User Guide - Installation, Setup, and Support

Comprehensive user guide for EVGA graphics cards, covering installation, software setup, SLI configuration, troubleshooting, and support resources. Includes details on hardware installation, driver installation, multiple display setups, and compliance information.



EVGA X17 Gaming Mouse Quick Guide

A quick guide to setting up and using the EVGA X17 gaming mouse, including button layout, DPI settings, weight system, and compliance information.