

ASUS G13CHR-PS766

# ASUS ROG G13CH (2024) Gaming Desktop PC User Manual

Model: G13CHR-PS766

## 1. PRODUCT OVERVIEW

The ASUS ROG G13CH is a high-performance gaming desktop PC designed to deliver an exceptional gaming experience. It features a 14th Gen Intel® Core™ i7 processor, an NVIDIA® GeForce RTX™ 4060 DUAL GPU, and runs on Windows 11. With 16GB of 4800MHz DDR5 RAM and fast NVMe™ PCIe® Gen4 SSD storage, this system ensures quick loading times and smooth multitasking.

The G13CH boasts a futuristic chassis with customizable interior RGB lighting and a front panel light bar. Its design is optimized for sustained performance, incorporating additional venting and distinct cooling zones for the CPU and GPU to maintain optimal temperatures and quiet operation.



Figure 1.1: ASUS ROG G13CH Gaming Desktop PC, showcasing its sleek design and integrated lighting.

## Key Features:

- **Powerful Performance:** Equipped with a 14th Gen Intel Core i7-14700F processor and NVIDIA GeForce RTX 4060 DUAL GPU for superior gaming and computing.
- **Efficient Cooling:** Airflow-optimized chassis with dedicated CPU and GPU zones and additional venting

to keep components cool and noise levels low.

- **Customizable Aesthetics:** Features interior RGB lighting and a front panel light bar, with options for a transparent or sleek metal side panel.
- **High-Speed Connectivity:** Supports Wi-Fi 6E for low-latency, high-speed wireless connections and a robust array of I/O ports for peripherals.
- **Immersive Audio:** Dolby Atmos audio support and Two-Way AI Noise-Cancellation Technology for clear communication and rich soundscapes.
- **Aura Sync Integration:** Allows synchronization of lighting effects across compatible devices for a unified gaming setup.



Figure 1.2: Overview of the G13CH's core components: Windows 11, 14th Gen Intel Core i7-14700F, NVIDIA GeForce RTX 4060 DUAL, 16GB DDR5 RAM, and 1TB NVMe SSD.

## 2. WHAT'S IN THE BOX

Upon unboxing your ASUS ROG G13CH, please verify that all the following components are included:

- ASUS ROG G13CH Desktop PC (Model: G13CHR-PS766)
- Wired Keyboard
- Wired Mouse
- Power Cord & Adapter
- User Guide (this document)

### 3. SETUP GUIDE

Follow these steps to set up your ASUS ROG G13CH gaming desktop:

1. **Unpack the PC:** Carefully remove the desktop PC and all accessories from the packaging.
2. **Connect Peripherals:**
  - Connect your monitor(s) to the graphics card (GPU) ports on the back of the PC. These are typically located towards the bottom of the rear panel. **Important:** Ensure your monitor is connected to the dedicated graphics card (NVIDIA GeForce RTX 4060 DUAL) outputs, not the motherboard's integrated graphics ports, to utilize the full performance of your GPU.
  - Connect the wired keyboard and mouse to the available USB ports.
  - Connect any other peripherals such as speakers, headphones, or external drives.
3. **Connect to Power:** Plug the power cord into the PC's power input, then plug the other end into a grounded electrical outlet.
4. **Power On:** Press the power button located on the top front of the PC. The system will begin to boot up.
5. **Initial Windows Setup:** Follow the on-screen instructions to complete the Windows 11 setup process. This includes selecting your region, language, connecting to a network, and creating a user account.



Figure 3.1: Rear and top panel I/O ports, illustrating connectivity options for monitors, USB devices, and audio.

### 4. OPERATING YOUR PC

Once set up, your ASUS ROG G13CH is ready for use. Here are some key operational aspects:

## Windows 11 Operating System

Your PC comes pre-installed with Windows 11 Home. Familiarize yourself with the Windows 11 interface, including the Start Menu, Taskbar, and File Explorer. Regular Windows updates are crucial for security and performance.

## Armoury Crate and Aura Sync

Armoury Crate is ASUS's unified software suite that allows you to monitor system performance, customize RGB lighting (Aura Sync), manage game profiles, and update drivers. Launch Armoury Crate from your desktop or Start Menu to personalize your gaming experience.



Figure 4.1: Aura Sync interface for customizing RGB lighting on your PC and compatible peripherals.

## Audio Experience

The G13CH supports Dolby Atmos audio, providing an immersive sound experience. Additionally, the Two-Way AI Noise-Cancellation Technology helps ensure clear voice communication during gaming or online meetings by filtering out background noise.

# ROBUST I/O



Figure 4.2: Visual representation of Dolby Atmos and AI Noise Cancellation features for enhanced audio.

## 5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your ASUS ROG G13CH.

### Cleaning

- **Exterior:** Use a soft, lint-free cloth slightly dampened with water or a mild cleaning solution to wipe down the exterior surfaces. Avoid harsh chemicals.
- **Dust Removal:** Regularly use compressed air to clear dust from the vents and fan grilles. This is crucial for maintaining optimal airflow and preventing overheating.

## AIRFLOW OPTIMIZED

The G13CH features an aerodynamic exterior that has additional venting on the front and top panels to increase system airflow. With distinct zones for the CPU and GPU, this airflow-optimized chassis lets the powerful components breathe easily while keeping noise levels under 40db for quieter gameplay.



Figure 5.1: Illustration of the G13CH's airflow-optimized chassis with distinct cooling zones for CPU and GPU.

### Software Updates

Keep your operating system, drivers (especially graphics drivers), and Armoury Crate software updated. This ensures compatibility, security, and performance improvements. You can typically check for updates through Windows Update and Armoury Crate.

## 6. TROUBLESHOOTING

This section addresses common issues you might encounter with your ASUS ROG G13CH.

### No Display Output

- **Check Cable Connections:** Ensure your monitor cable is securely connected to the graphics card (GPU) ports on the back of the PC, not the motherboard's integrated graphics ports.
- **Monitor Power:** Verify your monitor is powered on and set to the correct input source.
- **Restart:** Try restarting the PC.

### Performance Issues / Lag

- **Driver Updates:** Ensure your graphics drivers and other system drivers are up to date.
- **Background Applications:** Close unnecessary applications running in the background.
- **Dust Buildup:** Check for dust accumulation in the PC's vents and clean them as described in the Maintenance section. Overheating can lead to performance throttling.
- **RAM Capacity:** Note that while the system has four RAM slots, the maximum supported memory is 64GB. Attempting to install 128GB may prevent the system from booting. Ensure any RAM upgrades

adhere to the 64GB maximum.

## No Internet Connection

- **Wi-Fi:** Check if Wi-Fi is enabled in Windows settings and ensure you are connected to the correct network.
- **Ethernet:** If using a wired connection, ensure the Ethernet cable is securely plugged into both the PC and your router/modem.
- **Router/Modem:** Restart your router and modem.

If issues persist, please refer to the Warranty and Support section for further assistance.

## 7. SPECIFICATIONS

Detailed technical specifications for the ASUS ROG G13CH (G13CHR-PS766):

Feature	Specification
Model Name	G13CHR-PS766
Processor	Intel® Core™ i7-14700F (5.2 GHz)
Operating System	Windows 11 Home
Graphics Card	NVIDIA® GeForce RTX™ 4060 DUAL (8 GB GDDR6)
RAM	16GB DDR5 (4800 MHz) - Max 64GB
Storage	1TB NVMe™ PCIe® Gen4 SSD (expandable up to 2TB SSD and 1TB HDD)
Connectivity	Wi-Fi 6E, LAN (RJ45)
USB Ports	4 x USB 2.0, 2 x USB 3.0, 2 x USB 3.2 Gen 2 Type-A, 1 x USB 3.2 Gen 1 Type-A (front)
Audio Ports	3 x Audio Jacks (rear), Headset audio port (front)
Video Output	DisplayPort, HDMI port (on GPU)
Dimensions (LxWxH)	7.09 x 16.93 x 16.85 inches
Item Weight	26.2 pounds
Color	Extreme Dark Gray

## 8. WARRANTY AND SUPPORT

ASUS is committed to providing reliable products and support for your ROG G13CH desktop PC.

## Warranty Information

Every ROG Desktop comes with a minimum **12-month warranty**, offering expert support, thorough diagnostics, and genuine parts if a repair is needed. Additionally, ASUS provides a **90-day warranty** on all warranty replacement parts, ensuring hassle-free repairs.

## Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact ASUS customer support. You can find contact information and additional resources on the official ASUS support website:

- **ASUS Support Website:** [www.asus.com/support/](http://www.asus.com/support/)
- **Product Registration:** Register your product through MyASUS to receive important updates and access full support features.



Figure 8.1: Information regarding ROG Desktop benefits and warranty details.