

ASUS G512LV-ES74

ASUS ROG Strix G15 (2020) Gaming Laptop User Manual

MODEL: G512LV-ES74

Brand: ASUS

Introduction

This manual provides essential information for setting up, operating, maintaining, and troubleshooting your ASUS ROG Strix G15 (2020) Gaming Laptop, model G512LV-ES74. Designed for high-performance gaming and multitasking, this laptop features a 10th Gen Intel Core i7-10750H CPU, NVIDIA GeForce RTX 2060 GPU, and a 15.6-inch 144Hz Full HD IPS-Type display. Please read this manual thoroughly to ensure optimal performance and longevity of your device.

Package Contents

Verify that all items are present in your product packaging:

- ASUS ROG Strix G15 Gaming Laptop
- Power Adapter
- Battery
- User Manual (this document)
- Windows 10 Home Operating System (pre-installed)

Product Overview

The ASUS ROG Strix G15 G512LV-ES74 is engineered for a powerful computing experience. Key features include:

- **Graphics:** NVIDIA GeForce RTX 2060 6GB GDDR6 with ROG Boost for exceptional visual performance.
- **Processor:** Latest 10th Gen Intel Core i7-10750H Processor for robust multitasking and gaming.
- **Display:** 15.6-inch 144Hz Full HD (1920x1080) IPS-Type Display for smooth, vibrant visuals.
- **Memory & Storage:** 16GB DDR4 2933MHz RAM and a 512GB PCIe SSD for fast loading and ample storage.
- **Cooling:** ROG Intelligent Cooling thermal system featuring Thermal Grizzly Liquid Metal Thermal Compound for efficient heat dissipation.
- **Connectivity:** Ultrafast Wi-Fi 6 (802.11ax) for reliable and high-speed wireless connections.

- **Keyboard:** RGB Keyboard with customizable lighting.



Figure 1: Front view of the ASUS ROG Strix G15 laptop, open with the screen displaying a vibrant ROG wallpaper and the RGB keyboard illuminated.



Figure 2: Close-up view of the laptop's keyboard and trackpad, showcasing the customizable RGB backlighting and textured palm rest.



Figure 3: Rear view of the ASUS ROG Strix G15, highlighting the robust hinge design and exhaust vents for the cooling system.



Figure 4: Left side profile of the laptop, displaying multiple USB 3.0 ports and an audio jack.



Figure 5: Top-down view of the closed laptop, featuring the distinctive ROG logo on the lid.

Setup

1. **Unpacking:** Carefully remove the laptop and all accessories from the packaging. Retain packaging for future transport or service needs.
2. **Connect Power:** Connect the power adapter to the laptop's power input port and then to a wall outlet. Ensure the battery is fully charged before initial use or extended gaming sessions.
3. **Initial Boot:** Open the laptop lid and press the power button (located above the keyboard on the right side). The laptop will power on and guide you through the Windows 10 Home initial setup process. Follow the on-screen instructions to configure your region, language, network, and user account.
4. **Software Updates:** After initial setup, connect to the internet and allow Windows to download and install any pending updates. It is also recommended to install and run the MyASUS application to check for driver and firmware updates specific to your laptop model.

Operating Instructions

- **Power On/Off:** Press the power button to turn on the laptop. To shut down, click the Start button, then Power > Shut down.
- **Keyboard Functions:** The RGB keyboard features customizable backlighting. Use the dedicated function keys (Fn + Fx keys) to control volume, screen brightness, keyboard backlighting, and other system functions. Refer to the keyboard legends for specific functions.
- **Display Settings:** The 144Hz display provides a smooth visual experience. You can adjust display settings, including refresh rate, resolution, and color profiles, through Windows Display Settings or NVIDIA Control Panel.
- **Audio:** Connect headphones or external speakers to the audio jack for enhanced sound. Adjust volume using the keyboard function keys or Windows sound settings.
- **MyASUS Application:** The MyASUS application provides a centralized hub for system diagnostics, software updates, customer support, and customization options such as battery health management and fan profiles.

Maintenance

- **Cooling System:** Regularly inspect and clean the laptop's air vents to prevent dust buildup, which can impede airflow and lead to overheating. Ensure the laptop is placed on a hard, flat surface during operation to allow proper ventilation.
- **Battery Care:** To prolong battery lifespan, utilize the "Battery Health Balance" feature within the MyASUS application. This allows you to set charging limits (e.g., 60% or 80%) to reduce battery degradation over time.
- **Software Updates:** Keep your operating system, drivers, and applications updated. Regular updates improve system stability, security, and performance.
- **Cleaning:** Use a soft, lint-free cloth to clean the screen and chassis. For stubborn smudges, a slightly dampened cloth with water or a specialized screen cleaner can be used. Avoid harsh chemicals.

Troubleshooting

If you encounter issues with your laptop, consider the following steps:

- **No Power:** Ensure the power adapter is securely connected to both the laptop and the wall outlet. Check if the power outlet is functional.

- **Display Issues:** If the screen is blank or flickering, try connecting an external monitor to determine if the issue is with the laptop's display or graphics card. Update graphics drivers.
- **Performance Slowdown:** Close unnecessary applications, check for background processes, and ensure the cooling vents are clear. Run system diagnostics via MyASUS.
- **Connectivity Problems:** For Wi-Fi issues, restart your router and the laptop. Ensure Wi-Fi drivers are updated. For peripheral issues, try reconnecting the device or using a different USB port.
- **System Diagnostics:** Use the "One-click diagnosis" feature in the MyASUS application to identify and resolve common hardware and software problems.

Specifications

Detailed technical specifications for the ASUS ROG Strix G15 (2020) Gaming Laptop (Model G512LV-ES74):

Feature	Specification
Standing Screen Display Size	15.6 Inches
Screen Resolution	1920 x 1080 pixels (Full HD)
Max Screen Resolution	1920x1080 Pixels
Processor	Intel Core i7-10750H (5 GHz)
RAM	16 GB DDR4
Memory Speed	2933 MHz
Hard Drive	512 GB SSD (PCIe NVMe)
Graphics Coprocessor	NVIDIA GeForce RTX 2060
Graphics Card Ram Size	6 GB GDDR6
Wireless Type	802.11ax (Wi-Fi 6)
Number of USB 3.0 Ports	4
Operating System	Windows 10 Home
Item Weight	5.28 pounds
Product Dimensions (LxWxH)	14.2 x 10.8 x 1 inches
Color	Black
Special Feature	Backlit Keyboard

Warranty and Support

For warranty information, please refer to the documentation included with your product or visit the official ASUS support website. The MyASUS application provides direct access to customer support, including online repair requests and diagnostics, ensuring seamless access to service.

You can also find additional resources and FAQs on the ASUS support portal.

Official Product Videos

ROG Strix G15/G17 Product Video

Your browser does not support the video tag.

This video provides an overview of the ASUS ROG Strix G15/G17 series, highlighting its design, performance features, and cooling technology.

MyASUS Product Video

Your browser does not support the video tag.

This video demonstrates the features and benefits of the MyASUS application, including system updates, diagnostics, and customization options for your ASUS laptop.