

**Metallic Gear MG-NE210\_BK02**

# Metallic Gear Neo Mini V2 Series Mini-ITX Case User Manual

Model: MG-NE210\_BK02

## INTRODUCTION

The Metallic Gear Neo Mini V2 is a compact mini-tower PC case designed for Mini-ITX motherboards. Developed by Phanteks, this case features premium aluminum panels and a tempered glass side panel, offering both durability and a clear view of your internal components. Its space-efficient design supports full-size hardware and includes features for clean cable management. The Neo Mini V2 is also ready for liquid cooling, supporting up to 280mm All-In-One (AIO) liquid coolers, and integrates RGB lighting for customizable aesthetics.

This manual provides detailed instructions for setting up, operating, and maintaining your Metallic Gear Neo Mini V2 case, along with troubleshooting tips and product specifications.

## SETUP

### 1. Unpacking and Inspection

Carefully remove the case from its packaging. Inspect the case for any signs of damage during transit. Ensure all accessories listed in the packing list are present. The accessories typically include screws, cable ties, and a user manual.



Figure 1: Exploded view showing the main chassis, tempered glass panel, and removable panels. This illustrates the modular design for easier assembly.

## 2. Preparing the Case

- Place the case on a stable, flat surface.
- Remove the tempered glass side panel by unscrewing the four thumb screws located at each corner. Carefully set the panel aside on a soft, non-abrasive surface to prevent scratches.
- Remove the opposite solid side panel by unscrewing the two rear thumb screws and sliding the panel backward.

## 3. Motherboard Installation

- Install the I/O shield into the designated opening at the rear of the case.
- Align your Mini-ITX motherboard with the standoffs inside the case. Ensure the screw holes on the motherboard align with the standoffs.
- Secure the motherboard using the provided screws. Do not overtighten.



Figure 2: Internal layout of the Neo Mini V2 case, showing the motherboard tray, cable routing cutouts, and drive mounts. This view highlights the ample space for component installation.

#### 4. Power Supply Unit (PSU) Installation

- The Neo Mini V2 features a top-loaded PSU design for easy accessibility.
- Mount your ATX power supply to the removable PSU bracket.
- Slide the PSU with the bracket into the top compartment of the case and secure it with screws.

#### 5. Storage Drive Installation

- The case supports multiple storage drives. Locate the 2.5" SSD/HDD mounts behind the motherboard tray and the 3.5" HDD cage at the bottom front.
- Secure your drives using the provided screws.

#### 6. Graphics Card and Expansion Card Installation

- Remove the necessary PCIe slot covers at the rear of the case.
- Insert your graphics card or other expansion cards into the motherboard's PCIe slots.
- Secure the cards with screws.

## 7. Cooling System Installation (Fans/AIO)

- The Neo Mini V2 supports up to 280mm AIO liquid cooling radiators at the front.
- Install case fans in designated mounting points (front, rear, bottom) as needed for optimal airflow.



Figure 3: Front interior view of the Neo Mini V2, demonstrating space for cooling solutions like dual fans or a 280mm AIO radiator.

## 8. Cable Management

- Utilize the cable routing cutouts and Velcro straps behind the motherboard tray to organize and secure cables.
- Connect all necessary power cables from the PSU to the motherboard, graphics card, and storage drives.
- Connect front panel I/O cables (USB, audio, power/reset switches, RGB) to their respective headers on the motherboard.



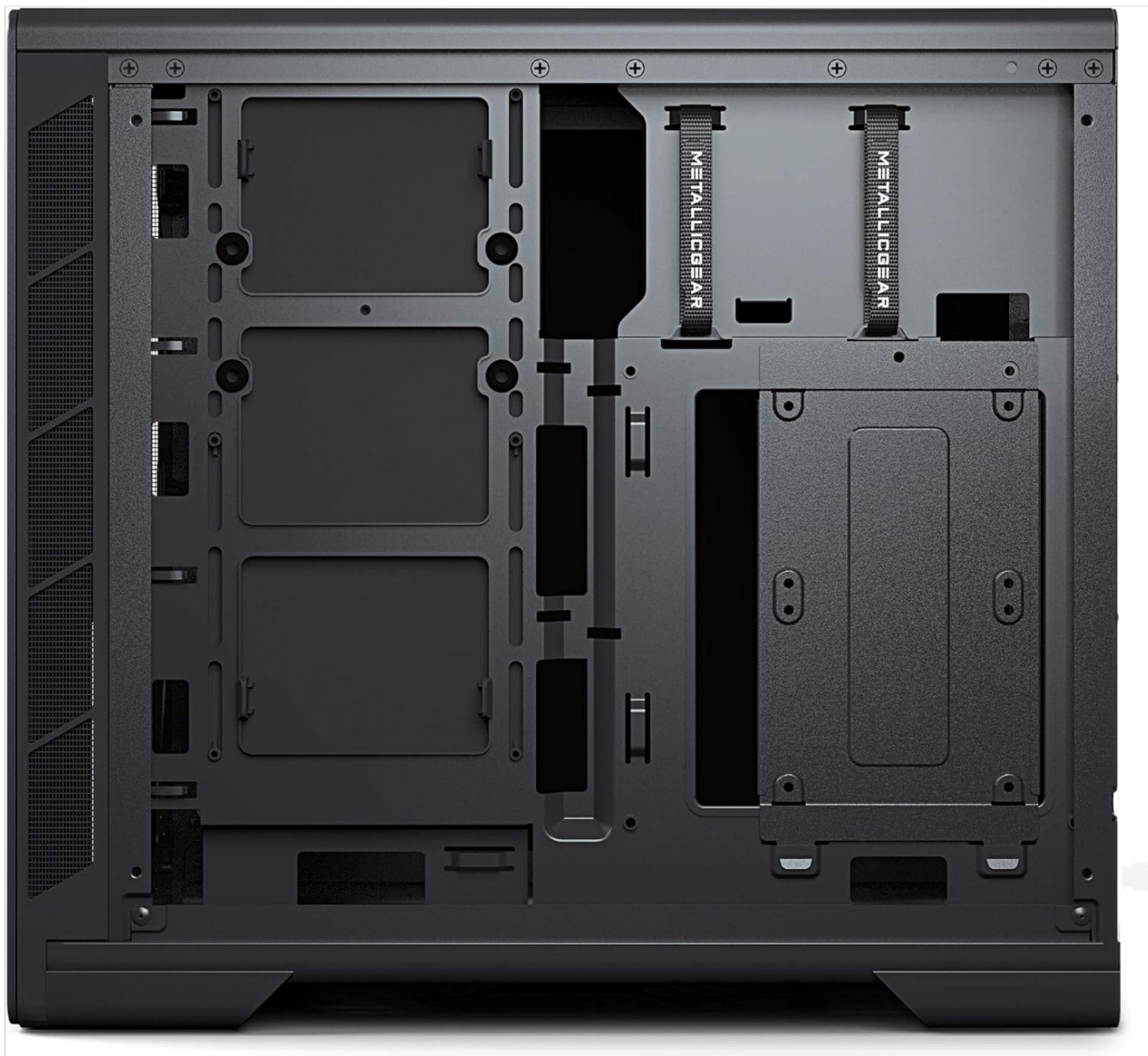


Figure 4: Rear interior view highlighting the cable management channels and Velcro straps, designed to keep wiring tidy and improve airflow.

## 9. Reassembling the Case

- Once all components are installed and cables are managed, reattach the solid side panel and secure it with thumb screws.
- Carefully reattach the tempered glass side panel and secure it with its four thumb screws.

## OPERATING

### Powering On

- Connect your monitor, keyboard, mouse, and other peripherals to the appropriate ports on your motherboard and graphics card.
- Connect the power cable to the PSU and plug it into a wall outlet.
- Flip the power switch on the PSU to the "ON" position.
- Press the power button located on the top front of the case to start your system.



*Figure 5: Detail of the power button, located on the top panel for easy access.*

## Front I/O Ports

The Metallic Gear Neo Mini V2 case provides convenient front I/O ports for easy access to peripherals and audio. These include:

- 2 x USB 3.0 ports
- Headphone jack
- Microphone jack
- RGB control button (if connected to compatible RGB headers)



Figure 6: Front I/O panel showing USB 3.0 ports, audio jacks, and the RGB control button for quick connectivity and lighting adjustments.

## RGB Lighting Control

The integrated RGB lighting can be controlled via the dedicated button on the front I/O panel or synchronized with compatible RGB-enabled motherboards and other Phanteks RGB products. Refer to your motherboard's manual for software-based RGB control options.

## MAINTENANCE

### Dust Filtration

The Neo Mini V2 case is equipped with dust filters to prevent dust buildup inside your system. Regularly clean these filters to maintain optimal airflow and cooling performance.

- **Front Filter:** The front panel can be removed to access the front dust filter. Gently pull the bottom of the front panel to detach it.
- **PSU Filter:** A removable dust filter is located at the bottom of the case, beneath the power supply intake. Slide it out

for cleaning.

To clean the filters, gently brush off accumulated dust or rinse them with water if heavily soiled. Ensure filters are completely dry before reinstallation.

General Cleaning

- Use a soft, dry microfiber cloth to wipe down the exterior aluminum panels and tempered glass.
- For stubborn smudges on the tempered glass, a glass cleaner can be used, applied to the cloth first, not directly to the glass.
- Avoid using abrasive cleaners or solvents, as these can damage the finish.
- Periodically use compressed air to clear dust from internal components and fan blades. Ensure the system is powered off and unplugged before performing internal cleaning.

TROUBLESHOOTING

Problem	Possible Cause	Solution
System does not power on.	PSU switch off, loose power cables, faulty power button connection.	Ensure PSU switch is ON. Check all power connections (24-pin, CPU, GPU, storage). Verify front panel power button cable is correctly connected to motherboard.
RGB lighting not working.	Incorrect RGB header connection, software issue, faulty RGB controller.	Ensure RGB cable from case is connected to the correct motherboard header. Try using the case's RGB control button. Check motherboard RGB software settings.
Front USB ports not functioning.	Loose USB 3.0 header cable.	Verify the USB 3.0 cable from the front panel is securely connected to the motherboard's USB 3.0 header.
Poor airflow or high temperatures.	Dusty filters, incorrect fan orientation, insufficient fans.	Clean dust filters regularly. Ensure fans are oriented correctly (intake/exhaust). Consider adding more fans or upgrading to an AIO liquid cooler if temperatures remain high.

SPECIFICATIONS

Feature	Detail
Model Name	MG NEO Mini V2
Item Model Number	MG-NE210_BK02
Brand	Metallic Gear
Case Type	Mini-Tower
Motherboard Compatibility	Mini ITX
Material	Tempered Glass, Aluminum
Color	Black
Dimensions (LxWxH)	15.1 x 7.5 x 14 inches (38.35 x 19.05 x 35.56 cm)
Item Weight	10.78 pounds (4.89 kg)
Front I/O Ports	2 x USB 3.0, Headphone, Microphone, RGB Control Button



Feature	Detail
Power Supply Mounting Type	Top Mount
Cooling Method	Water, Air
AIO Liquid Cooling Support	Up to 280mm (Front)
Integrated Lighting	RGB (Multi-color)


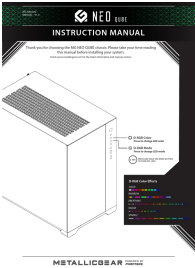
## WARRANTY AND SUPPORT

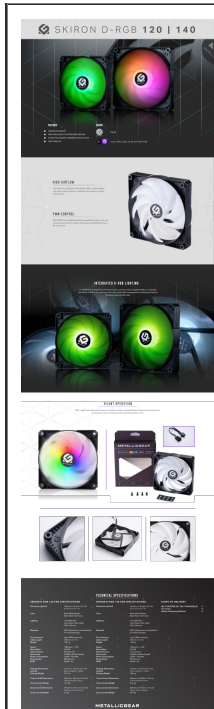
Metallic Gear products are manufactured by Phanteks and typically come with a manufacturer's warranty covering defects in materials and workmanship. For specific warranty terms and duration, please refer to the warranty card included with your product or visit the official Metallic Gear/Phanteks website.

For technical support, troubleshooting assistance, or to inquire about replacement parts, please contact Metallic Gear customer support through their official website or the contact information provided in your product packaging. When contacting support, please have your product model number (MG-NE210\_BK02) and purchase information ready.

*Note:* The RGB fan is not included with the case and must be purchased separately if desired.

## Related Documents

	<p><a href="#">Metallic Gear NEO Series PC Case Installation Manual</a></p> <p>Comprehensive installation manual for the Metallic Gear NEO series PC cases (NEO-G, NEO AIR, NEO SILENT), covering hardware installation, clearances, accessories, and lighting controls.</p>
	<p><a href="#">MG NEO QUBE Chassis Instruction Manual</a></p> <p>Instruction manual for the MG NEO QUBE chassis by Metallic Gear, detailing hardware installation, cooling options, storage, and dual-system setup.</p>



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