BOSGAME AG40

BOSGAME Fanless Mini PC AG40 N4020 User Manual

Model: AG40

1. INTRODUCTION

This manual provides detailed instructions for setting up, operating, and maintaining your BOSGAME Fanless Mini PC AG40 N4020. Please read this manual thoroughly before using the product to ensure proper function and longevity. The BOSGAME AG40 N4020 is a compact, fanless mini PC designed for various applications, including office work, web browsing, home entertainment, and light computing tasks.

Image: The BOSGAME Fanless Mini PC AG40 N4020, showcasing its compact design and various ports.

2. WHAT'S IN THE BOX

Carefully unpack your BOSGAME Mini PC and ensure all items are present:

- Fanless Mini PC AG40 N4020 x1
- User Manual x1
- 12V 2A, 24W, Power Adapter x1

Image: A visual representation of the items included in the BOSGAME Mini PC package, including the mini PC, user manual, power adapter, HDMI cable, and VESA mount with screws.

3. PRODUCT OVERVIEW

3.1 Key Features

- **Processor:** Equipped with an Intel Celeron N4020 Processor, offering a base operating frequency of 1.1 GHz and a burst frequency up to 2.8 GHz.
- **Memory & Storage:** Features 4GB LPDDR4 RAM and 64GB eMMC internal storage. Supports expansion via an M.2 2242 SATA SSD (up to 1TB) and external mobile hard disk via USB 3.0.
- **Graphics & Display:** Integrated Intel UHD Graphics 600. Supports dual display output via HDMI and VGA ports, capable of 4K (3840 x 2160) resolution at 60Hz via HDMI and 4K at 30Hz via VGA.
- **Connectivity:** Includes 802.11ac Dual-Band Wi-Fi 5, Bluetooth 5.0, and a 1000Mbps LAN port.
- **Fanless Design:** Utilizes a fanless cooling system for silent operation and energy efficiency, consuming under 6 watts of power.
- **Operating System:** Pre-installed with Windows 10 Pro, also supports Linux and Ubuntu operating systems.

3.2 Ports and Connectors

Familiarize yourself with the available ports on your Mini PC:

Rich interfaces for more possibilities

Image: Detailed view of the BOSGAME Mini PC's ports, including DC power input, USB 3.0, HDMI, RJ45 LAN, Audio Connector, VGA, and Power Button.

- **DC Power Input:** Connects the power adapter.
- **USB 3.0 Ports:** For connecting peripherals such as keyboards, mice, and external storage devices.
- **HDMI Port:** Connects to a monitor or TV for video and audio output (supports 4K@60Hz).
- **VGA Port:** Connects to a monitor for video output (supports 4K@30Hz).
- **RJ45 LAN Port:** For wired network connection (1000Mbps).
- **Audio Connector:** For headphones or speakers.
- **Power Button:** To turn the device on or off.
- **CLR CMOS Button:** Used to clear CMOS settings if needed.

Fanless and Silent Design

High efficiency fin cooling

Intel UHD Graphics 600
Max Graphics Frequency: 650 MHz

DDR4/eMMC
DDR4 2133MHz 4GB / eMMC 64GB

Wi-Fi 5

Support Dual Screen Display
HDMI2.0 (4K@60Hz)+VGA (4K@30Hz)

Bluetooth 5.0

RJ45 LAN

Image: Illustrates the fanless design, Intel UHD Graphics 600, DDR4/eMMC, Wi-Fi 5, Bluetooth 5.0, and RJ45 LAN features, along with dual screen display support (HDMI 2.0 and VGA).

4. SETUP INSTRUCTIONS

4.1 Initial Connection

1. **Connect Display:** Connect your monitor or TV to the Mini PC using an HDMI or VGA cable.
2. **Connect Peripherals:** Plug in your USB keyboard and mouse into the available USB ports.
3. **Connect Network (Optional):** For a wired internet connection, connect an Ethernet cable to the RJ45 LAN port. For wireless, Wi-Fi will be configured during initial setup.
4. **Connect Power:** Plug the power adapter into the DC power input port on the Mini PC, then plug the adapter into a power outlet.
5. **Power On:** Press the power button on the Mini PC. The device will boot up.

4.2 Operating System Setup

Upon first boot, the pre-installed Windows 10 Pro will guide you through the initial setup process. Follow the on-screen instructions to configure language, region, network, and user accounts.

4.3 Storage Expansion (M.2 2242 SATA SSD)

The Mini PC supports additional storage expansion with an M.2 2242 SATA SSD (up to 1TB). To install:

1. Ensure the Mini PC is powered off and disconnected from the power source.
2. Carefully open the Mini PC casing. Refer to the product structure diagram for guidance.
3. Locate the M.2 slot on the motherboard.
4. Insert the M.2 2242 SATA SSD into the slot and secure it with the provided screw (if applicable).
5. Close the casing and reconnect the power.
6. After booting, you may need to initialize and format the new SSD through Disk Management in Windows before it can be used.
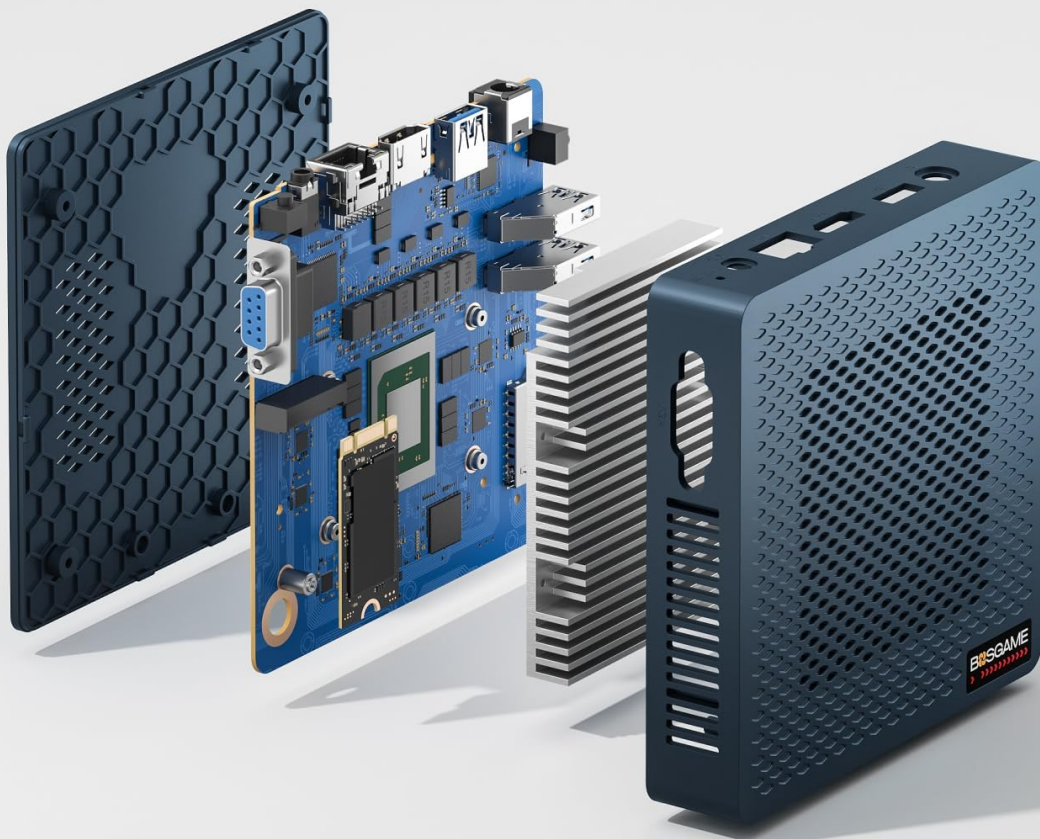

Image: An exploded view of the BOSGAME Mini PC, showing the internal components including the motherboard, heatsink, and casing, which helps in understanding how to access the M.2 slot for storage expansion.

5. OPERATING INSTRUCTIONS

5.1 Basic Operation

- **Power On/Off:** Press the power button once to turn on. To turn off, use the operating system's shutdown function or press and hold the power button for a few seconds for a forced shutdown (not recommended for regular use).
- **Restart:** Use the operating system's restart function.
- **Sleep Mode:** Use the operating system's sleep function.

5.2 Dual Display Setup

The Mini PC supports connecting two monitors simultaneously using the HDMI and VGA ports. This allows for extended desktop or mirrored display modes.

1. Connect the first monitor to the HDMI port.
2. Connect the second monitor to the VGA port.
3. Power on the Mini PC and both monitors.
4. In Windows, right-click on the desktop and select "Display settings" to configure your preferred display mode (e.g., Extend these displays, Duplicate these displays).

4K@60Hz UHD Quality

Supports 4K HD output with four times the resolution of 1080P

Image: The BOSGAME Mini PC connected to a television displaying 4K content, highlighting its 4K@60Hz UHD output capability.

6. MAINTENANCE

6.1 Cleaning

- Ensure the Mini PC is powered off and unplugged before cleaning.
- Use a soft, dry cloth to wipe the exterior of the device.
- For stubborn dirt, slightly dampen the cloth with water or a mild, non-abrasive cleaner.
- Do not use harsh chemicals or solvents.
- Keep ventilation holes clear of dust and debris.

6.2 Software Updates

Regularly update your operating system and drivers to ensure optimal performance and security. Windows Update can be accessed through the Settings menu.

7. TROUBLESHOOTING

If you encounter issues with your BOSGAME Mini PC, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power	Power adapter not connected; Power outlet issue	Ensure power adapter is securely connected to the Mini PC and a working power outlet. Try a different outlet.
No display	Monitor not connected; Incorrect input source on monitor; Faulty cable	Check display cable connections. Ensure monitor is set to the correct input source (HDMI/VGA). Try a different cable or monitor.
Slow performance	Too many applications running; Low storage space; Outdated drivers	Close unnecessary applications. Free up storage space. Update Windows and drivers. Consider adding an M.2 SATA SSD for more storage.
Wi-Fi/Bluetooth issues	Drivers not installed/updated; Interference; Incorrect settings	Check device manager for Wi-Fi/Bluetooth drivers. Ensure Wi-Fi/Bluetooth is enabled in settings. Move closer to the router or reduce interference.
Cannot expand storage with M.2 SSD	Incorrect SSD type/size; SSD not initialized/formatted	Ensure you are using an M.2 2242 SATA SSD. Check Disk Management in Windows to initialize and format the new drive.

8. SPECIFICATIONS

Detailed technical specifications for the BOSGAME Fanless Mini PC AG40 N4020:

Image: A table summarizing the product specifications including dimensions, CPU, GPU, network, adapter, internal slot, and interfaces.

Feature	Detail
Model	AG40
Processor	Intel Celeron N4020 (2 Cores, 2 Threads, up to 2.8 GHz)
Graphics	Intel UHD Graphics 600
RAM	4GB LPDDR4
Internal Storage	64GB eMMC
Storage Expansion	M.2 2242 SATA SSD slot (up to 1TB)
Operating System	Windows 10 Pro (pre-installed), supports Linux/Ubuntu
Wi-Fi	802.11ac Dual-Band Wi-Fi 5
Bluetooth	Bluetooth 5.0
LAN	1000Mbps RJ45 Ethernet
Video Output	1x HDMI 2.0 (4K@60Hz), 1x VGA (4K@30Hz)
USB Ports	3x USB 3.0, 2x USB 2.0
Audio	1x Audio Jack
Power Input	12V 2A DC (24W)
Dimensions	4.72 x 4.72 x 0.98 inches (120 x 120 x 25 mm)
Weight	Approx. 1.19 pounds

9. WARRANTY AND SUPPORT

BOSGAME provides reliable after-sales service for your Mini PC.

- **Warranty:** The product comes with 3 years of professional factory support.
- **Certifications:** All products have FCC, ROHS, and CE certifications.
- **Customer Service:** 24/7 online customer service is available for assistance.

For technical support or warranty claims, please contact BOSGAME customer service through the official channels provided at the time of purchase or on the BOSGAME website.