MINIS FORUM

New Gen AI Workstation Series

1 Disclaimer and Safety Instructions

• Disclaimer

1. Thank you for purchasing MS-S1 MAX product.

2. The contents mentioned in this disclaimer are related to your safety, legal rights and responsibilities. Please pay attention to any warnings, cautions and attention signs on the instructions and product labels, and install according to the instructions in the instructions.

3. The product is relatively complex, and users need to have basic hands-on installation skills and safety knowledge. You should be careful during installation.

4. Before using this product, please read the instructions carefully to ensure that the product can be set up correctly. Failure to follow the instructions, warnings, cautions, and attention signs may damage the product or data, and may result in personal or property injury or loss.

5. Once you use this product, you are deemed to have carefully read the content requirements of the disclaimer, warning, caution, and attention signs, understood and accepted all the contents. You promise to take full responsibility for the consequences of using this product. You promise to use this product only for legitimate purposes and agree to this statement and any policies and guidelines formulated by MINISFORUM.

6. In addition to the warranty terms, MINISFORUM is not legally responsible for damage or injury caused directly or indirectly by using this product, especially those caused by failure to operate in accordance with safety guidelines. Users should follow the instructions mentioned in this statement and all safety guidelines.

7. The final interpretation right of this statement belongs to MINISFORUM.

• Tips for Use

1. Dust, moisture and drastic temperature changes will affect the product life, so please try to avoid placing the product in these places.

2. The suitable temperature for the MINI PC and accessories is 0℃ ~ 35℃.

3. Before you using this product, make sure you leave enough space around the device for ventilation. Please don't block or cover these openings. Never insert objects of any kind into the ventilation openings.

4. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

5. When you use the power extension cords, the total current of all connected products should be within the rated current of cables, ensuring stable operation.

• Safety Precautions

⚠ Warning: The machine supports both vertical and horizontal placement and also supports wall mounting with the VESA bracket (100 mm X 2). Please use the provided wall-mounted screws and spacers for installation. Locking 2 screws is sufficient for installation, but if placed in a cabinet, you can choose to secure it with 4 holes based on your needs. (The screw's specification is M4, with a size of 100 X 178.5 mm)

⚠ Warning: The machine supports integrated quick disassembling. After loosening 2 screws on the IO cover plate, do not hang the machine upside down to avoid internal hardware from slipping out and falling. Please place the machine on a desktop. After loosening the screws, use the accessory tool clip to hook the heat dissipation slot to pull out the internal motherboard tray.

• Maintenance Guideline

1. Do not step on the power cord or put anything on your Mini PC.

2. Do not spill water or any other liquid over this product.

3. There's still some current passing through even when the system is off. To avoid severe damage caused by possible electric shock, plug out all power cables from sockets temporarily before cleaning or moving this product.

4. If you encounter the technical problems with the product unplug the power cord and contact a qualified service technician or your retailer.

• FAQ

1. The start-up speed may be slow in the following situations: unexpected restart, BIOS reset, memory bank replacement, and SSD replacement. Generally speaking, the start-up speed will return to normal after one successful power-on and power-off process.

2. The core graphics card will occupy a part of the memory as GPU-specific memory.

3. Considering the design of AMD CPUs on the Strix Halo platform, the PCIe expansion slots do not support discrete graphics cards, though other types of PCIe expansion cards are supported. Additionally, external GPU docks connected via USB4 or USB4V2 may encounter compatibility issues for the same reason, so their use is not recommended.

4. The machine supports 4-screen presentation, HDMI®, USB4 X 2, and USB4V2 X 2, and at most 4 display signal outputs can be connected to the 5 display signal interfaces.

5. The USB4V2 function chip is Intel JHL9580, which has the Thunderbolt5_Controller function and supports 80Gbps data transfer.

6. "Rack Mode" in BIOS refers to cabinet mode, which focuses on optimizing the balance between performance and heat dissipation based on the usage scenarios of the cabinet, and the noise may slightly increase.

7. If your PCIe expansion card is not compatible, go to the BIOS and select PCIe 4.0, PCIe 3.0, or PCIe 2.0 mode to adapt.

2 Conventions Used in This Manual

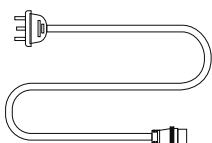Note： --- This message contains additional instructions for this item.

Important！ --- This information contains instructions that must be followed.

Warning！ --- This message contains information about user safety and product safety.
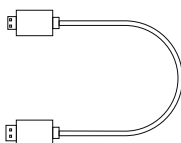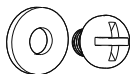
Package Contents

MINI PC

Power Cord */

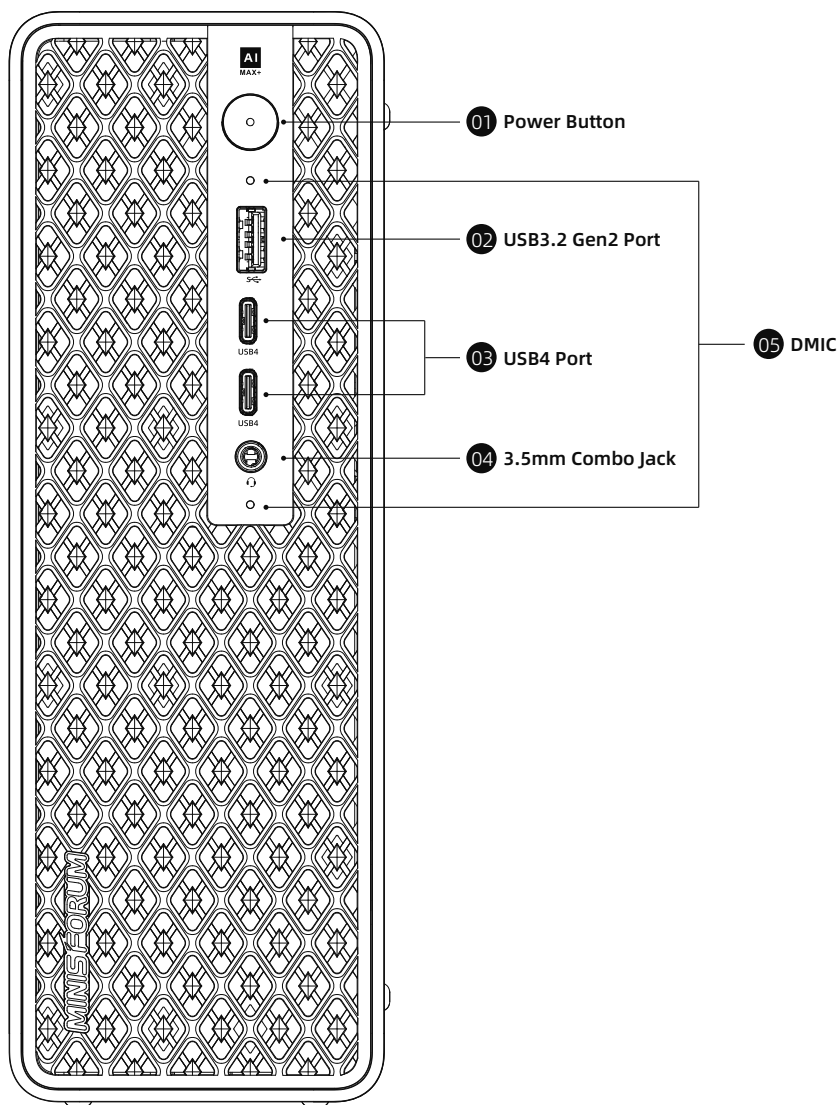HDMI® Cable */

SSD Heatsink */

Clip */

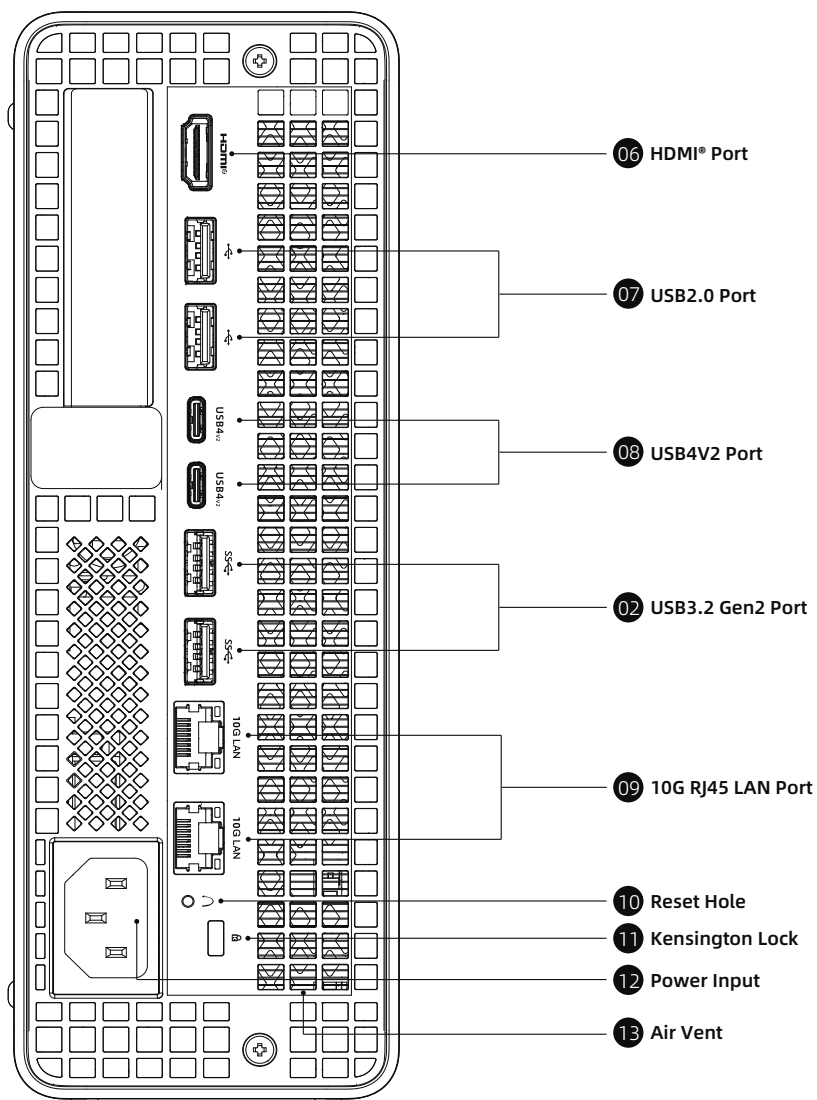
Screw & Washer */

Mylar
(PCIe expansion card area) */

User Manual */

NOTE:
* The power adapter and other accessories included in the box will vary depending on the model parameter or area purchased.

01 Power Button

02 USB3.2 Gen2 Port

03 USB4 Port

04 3.5mm Combo Jack

05 DMIC

06 **HDMI® Port**

07 **USB2.0 Port**

08 **USB4V2 Port**

02 **USB3.2 Gen2 Port**

09 **10G RJ45 LAN Port**

10 **Reset Hole**

11 **Kensington Lock**

12 **Power Input**

13 **Air Vent**

Interface

01 Power Button
The Power button allows you to turn the Mini PC on /off. You can press the Power button to put your Mini PC to Sleep Mode or press it for 10 seconds to force shutdown your Mini PC.

02 USB3.2 Gen2 Port
USB3.2 Gen2 (Universal Serial Bus) port provides a transfer rate of up to 10 Gbps. It can be connected to keyboards, pointing devices, cameras, hard disks, printers and scanners.

03 USB4 Port
This interface supports USB4 transmission protocol, with a maximum data transmission rate of 40Gbps. Support Alt DP audio and video output, only support 5V output, support PCIe data transmission, and support Thunderbolt Ethernet.

04 3.5mm Combo Jack
This connector is used to connect audio output signals to a power amplifier or headphones. You can also use it to connect an external microphone or output signals from audio equipment.

05 DMIC
These two DMICs can support recording function and, in combination with AI large models, can achieve voice interaction function. The two DMICs form an array that can effectively extend the voice pickup distance, and, in combination with software algorithms, can achieve noise reduction and human voice recognition function.

06 HDMI® Port
The HDMI® port (High-Definition Multimedia interface) is uncompressed, fully digital audio/video interface that provides a common data connection channel for compatible devices, It can be used to connect external display devices and televisions.

07 USB2.0 Port
The USB (Universal Serial Bus) port is compatible with USB2.0 or USB1.1 devices such as keyboards, and printers.

08 USB4V2 Port
This interface supports USB4V2 (TBT5) transmission protocol, with a maximum data transfer rate of 80Gbps. It supports ALT DP audio and video output, only supports 5V external power supply, supports PCIe data transmission, and supports Thunderbolt Ethernet.

09 10G RJ45 Port
This RJ45 network port supports standard Ethernet cables and can be connected to a local area network. (Transmission speed 10Gbps)

10 Reset Hole
Please remove the power source and hold the reset hole for ten seconds to restore the BIOS to its factory default settings.
Important! If you encounter certain issues during use, you can first try to resolve them by holding the reset hole.

11 Kensington Lock
The Kensington Lock can be connected to a locker to prevent others from stealing your Mini PC.

12 Power Input
Connect the power cord to the power source.The built-in high conversion rate power supply can convert AC power to DC power, providing power to your Mini PC.
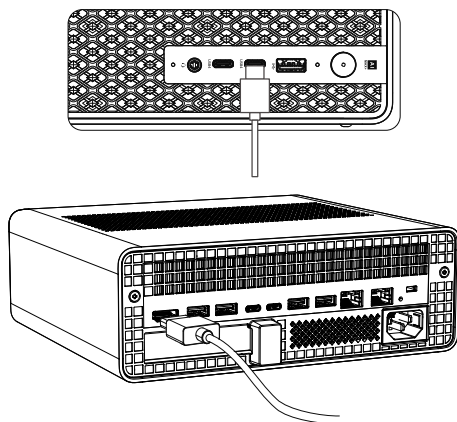**Warning!** To prevent damage to your Mini PC, please do not block the power's cooling vents.

13 Air Vent
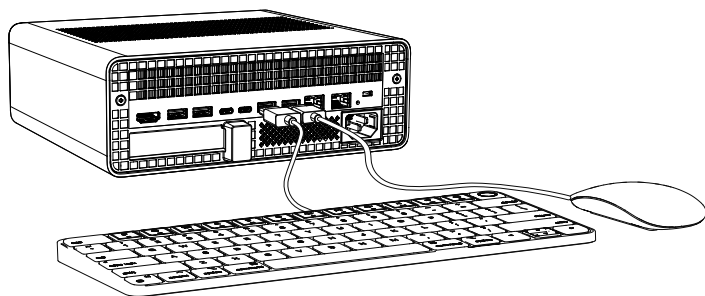The air vents allow your Mini PC chassis to expel hot air out.
Important! For optimum heat dissipation and air ventilation, ensure that the air vents are free from obstructions (such as Paper, books, clothes, transmission lines).

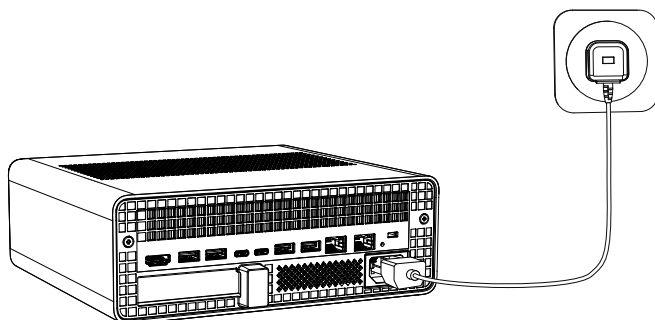**1**

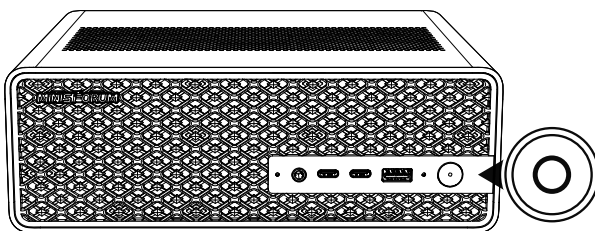Connect the display to the Mini PC's HDMI port/USB4/USB4V2 port.

2

Connect the keyboard and mouse.

3

Connect the provided power cord to your Mini PC.

4

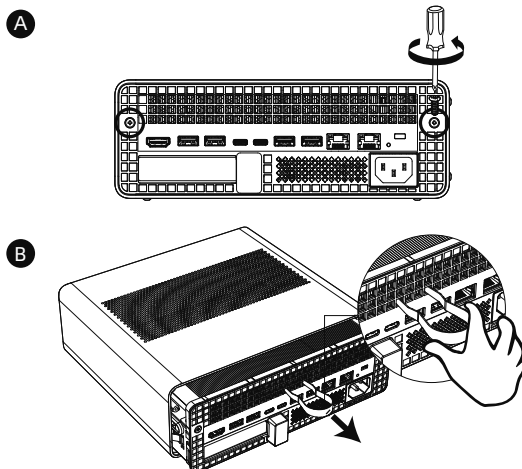Turn on the power and start the Mini PC.

If the Mini PC is frozen or slow to respond, press and hold the Power button at least for 10 seconds to force it shutdown.

To put your Mini PC on Sleep Mode, press the Power button once.
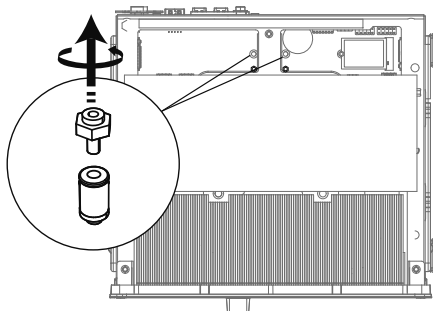
Installation Guide

1. Use a tool to remove the two screws on the back cover, then use the provided tool to pull out the motherboard slot as shown in the picture.
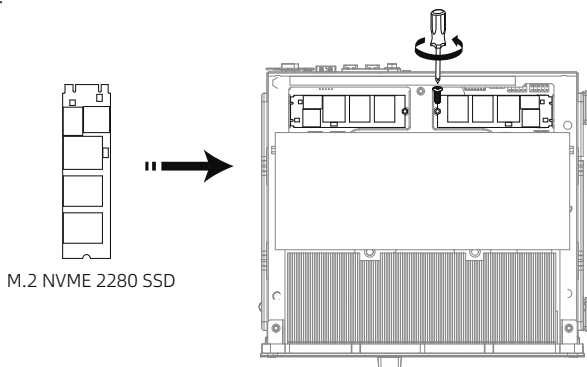**Warning:** Only use the clip at the position shown in the diagram.

A

B

2. Use the clip tool to pull out the integrated motherboard tray of the machine. First unscrew the SSD fixing screws for replacement or installation.

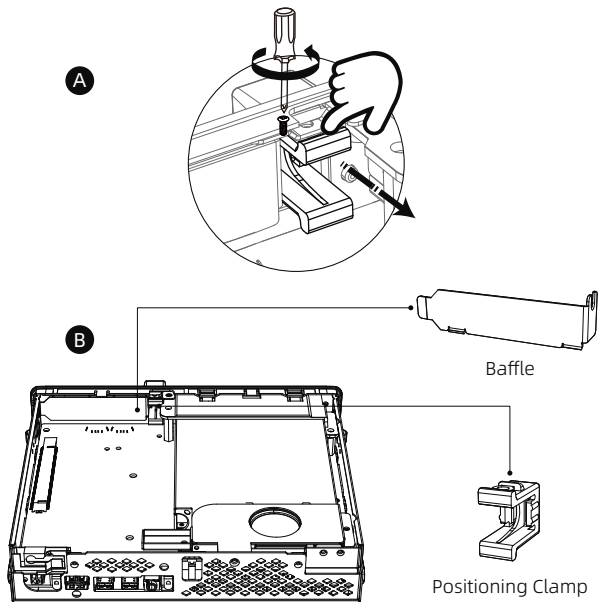3. Align the SSD card with the notch in the card slot and insert it at an angle, then secure it with screws.
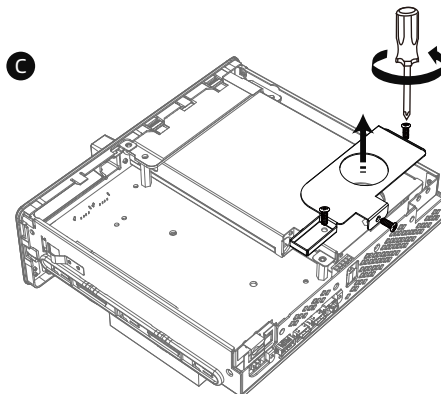
M.2 NVME 2280 SSD

DIY PCIe Expansion Card

> ⚠️ The PCIe expansion slot of the machine does not support a discrete graphics card, but it can accommodate other types of PCIe expansion cards.
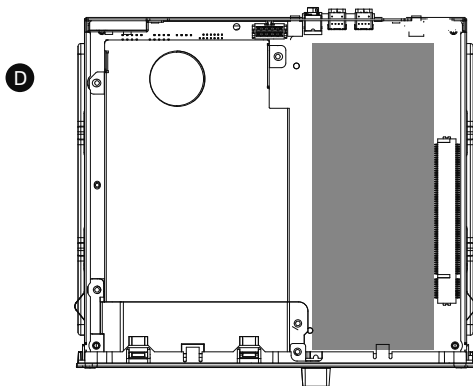
④ First use a tool to unscrew the positioning clamp screw, press the positioning clamp to take it out, and remove the baffle.
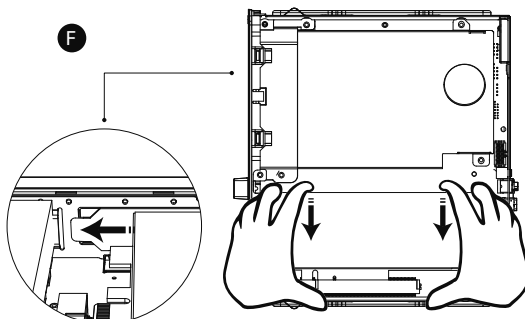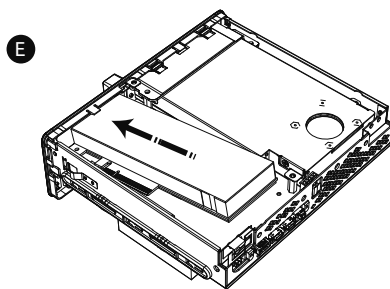
A

B

Baffle

Positioning Clamp

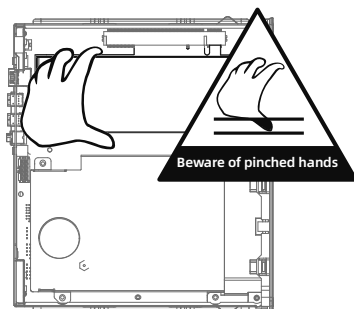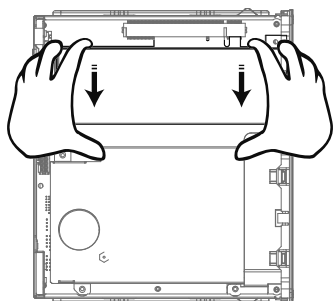⑤ Use a tool to remove the screws of the power bracket.

C

6　First stick the Mylar piece from the accessory bag to the motherboard installation area of the expansion card to protect the back of the expansion card PCB.

D

7　Insert the expansion card into the motherboard slot in an oblique direction, and insert the expansion card parallel into the PCIe slot with both hands.
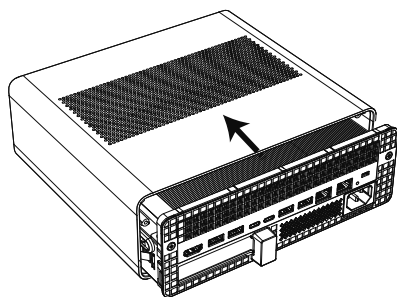**Note:** Only half-height single-slot PCIe expansion cards are supported.

E

F

Warning! The correct way to disassemble the expansion card is as shown in the figure, and be careful not to pinch your hands.
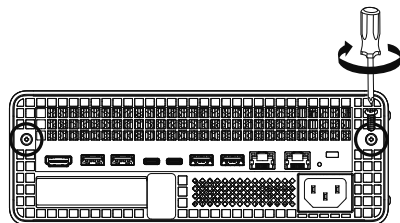
Beware of pinched hands

8 After completing the installation, reinstall the motherboard tray into the case and secure the two back-cover screws using a tool.

A

B

MINISFORUM

联系信息

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TEL :	852-23860910

Online Technical Support

Website :	https://www.minisforum.com/new/support
Email :	support@minisforum.com

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reason-able protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communica-tions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiv-er is connected.

—Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions(1)this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncon-trolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Transmitters in the 5.925-7.125 GHz band are prohibited from operating to control or communicate with unmanned aircraft systems.

FCC regulations restrict the operation of this device to indoor use only. It is prohibited on oil platforms, cars, trains, boats, and aircraft, except it is permitted in large aircraft while flying above 10,000 feet.

This product is only suitable for indoor used onl