# Nightblade MI Series Desktop PC

MS-B089/ B090 System

# **Getting Started**

### Important

All information is subject to change without prior notice.

# > How to Use this Service Manual

This Service Manual is targeted for MSI-authorized dealer or service center. It provides in-depth illustration of disassembling the system. Each topic may be related with each other; hence you are highly recommended to read this guide from cover to cover first. After that, you may go directly to any specific topic that most meets your immediate needs.

### > Necessary Tools

A	A Phillips (crosshead) screwdriver and a flathead screwdriver, can be used to do most of the installation. Choose one with a magnetic head would be better.
đ	Pliers, can be used as an auxiliary tool to connect some connectors or cables.
	Forceps, can be used to pick up tiny screws or set up the jumpers.
**	Rubber gloves, can prevent yourself from being incised and suffering the static charge.

# Safety Precautions

The following precautions should be observed while handling the system:

- Place the system on a flat and stable surface.
- Do not place the system in environments subject to mist, smoke, vibration, excessive dust, salty or greasy air, or other corrosive gases and fumes.
- Do not drop or jolt the system.
- Do not bump or knock the LCD screen as it is fragile and could break.
- Do not use another power adapter other than the one enclosed with the system.
- Disconnect the AC/DC adapter before performing any installation procedures on the system.

- Do not perform any maintenance with wet hands.
- Prevent foreign substances, such as water, other liquids or chemicals, from entering the system while performing installation procedures on the system.
- Use a grounded wrist strap before handling system components such as CPU, Memory, HDD, mini PCI-E card, etc.
- Place system components on a grounded antistatic pad or on the bed that came with the components whenever the components are separated from the system.
- If there are any difficulties installing hardware devices, please contact MSI for further information.

# > Other Notice

- The peripheral devices contained herein may vary depending on your actual system configuration.
- Third-party trademarks and names are the properties of their respective owners.
- The information contained herein relevant to software and hardware are for reference only and in accordance with actual system configuration. All information is subject to change without notice.

# > Upgrade and Warranty

Please note that certain components preinstalled in the product users purchased may be upgradable or replaceable by user's request. To learn more about upgrade limitation, please refer to the specification in the User's Manual. For any further information about the product users purchased, please contact the local dealer. Do not attempt to upgrade or replace any component of the product, if you are not an authorized dealer or service center, since it may cause the warranty void. It is strongly recommended that you contact the authorized dealer or service center for any upgrade or replace service.

# > Acquisition of Replaceable Parts

Please be noticed that the acquisition of replaceable parts (or compatible ones) of the product users purchased in certain countries or territories may be fulfilled by the manufacturer within 5 years at most since the product has been discontinued, depending on the official regulations declared at the time. Please contact the manufacturer via http://www.msicomputer.com/msi\_user/msi\_rma/ for the detailed information about the acquisition of spare parts.

#### Important

The system photos are provided for demonstration of system disassembly only. The internal view of your system may vary depending on the model you purchased.

# **System Disassembly**

### > Cover

**Step 1.** Place the system veritically on a flat and steady surface. Unlock the two screws on the rear side.



Step 2. Remove the cover carefully. Keep the screws and the cover for later use.



### Important

Before you remove or install any components, make sure the system is turned off and the AC power is disconnected.

# > Graphics Card

**Step 1.** Locate the graphics card and the fixing metal plate. Remove the two screws.

**Step 2.** Take out the fixing plate of the graphics card bracket module, and keep it for later use.

Step 3. Place the system horizontally.



Step 4. Press the catch at the end of the PCIE slot downward to unlock the graphics card. Uninstall the graphics card and watch out to the power cable attached to the graphics card.





**Step 5.** Unplug the power cable from the graphics card power connector. Put the graphics card at a safe place.

Note: Follow the above procedures in reverse order to install or replace the graphics card if necessary.



# > CPU

Step 1. After removing the graphics card, unscrew the 4 screws fixing the fan & adapter module holder.





**Step 2.** Press the catch at the end of the PCIE slot (if there is) downward to unlock the card adapter.



Step 3. Uninstall the fan & adapter module holder and watch out to the fan power cable attached to the connector on the motherboard.



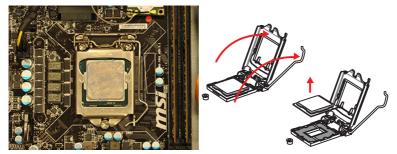
Step 4. Remove the fan power cable and put the fan & adapter module at a save place.



**Step 5.** Unscrew the screws fixing the thermal module. Remove the thermal module carefully and put it at a save place.

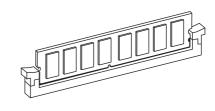


**Step 6.** Open the load lever and lift it up, and open the load plate. Remove the CPU carefully from the socket and set it aside for later use.



Note: Follow the above procedures in reverse order to install or replace the CPU if necessary.

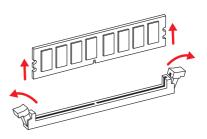
### > Memory



Step 2. Flip the slot clips outwards and the memory will spring upwards instantly. Remove the memory carefully.

Step 1. Locate the memory slots.

Follow the above procedures in reverse order to replace the memory if necessary.



#### Important

To reinstall the memory, you should:

1. Align the notch on the memory with the key on the slot and insert the memory into the slot.

2. Push the memory gently downwards until the slot clips click and lock the memory in place.

# > Wifi Card

**Step 1.** Locate the Wifi card. Disconnect the wifi card cables.

Please remember the connector for each cable.

**Step 2.** Unscrew the screw fixing the Wifi card.





Step 3. Remove the card from the slot.

Follow the above procedures in reverse order to install the Wifi card if necessary.



# > Hard Disk Drive (HDD)

**Step 1.** Locate the HDD holder modules and unscrew the screws.

**Step 2.** Pull the plastic strap of the HDD holder module outwards to release the module from the chassis.

Step 3. Unlock the four screws on both sides of the HDD holder module. Remove the HDD carefully from the tray and set it aside for later use.

Follow the above procedures in reverse order to replace the HDD if necessary.









# Solid State Disk (SSD)

**Step 1.** Locate the SSD module and unscrew the screw.



**Step 2.** Press and slide the SSD module by the direction as the figure shows.

Follow the above procedures in reverse order to replace the CMOS battery if necessary.



Step 3. Unscrew the 4 screws fixing the SSD. Remove the SSD carefully from the tray and set it aside for later use.

Follow the above procedures in reverse order to replace the SSD if necessary.

