MS04-01 MINI SERVER
USER MANUAL

- The actual product is subject to change without prior notice. In Win Development Inc. reserves the right to make modifications.
- Please read the following steps for assembly.

Safety Information

- Place the MS04-01 server on a stable surface and avoid placing in dusty, humid, and extreme temperature areas.
- Avoid short circuit by keeping paper clips, screws and staples away from connectors, slots, sockets and circuitry.
- If the power supply is broken, please contact In Win. DO NOT attempt to service the power supply: server.support@in-win.com.tw

⚠️ **Warning**

To avoid personal injury when unpacking the server, please use a mechanical assist unit to lift this product from the shipping pallet.
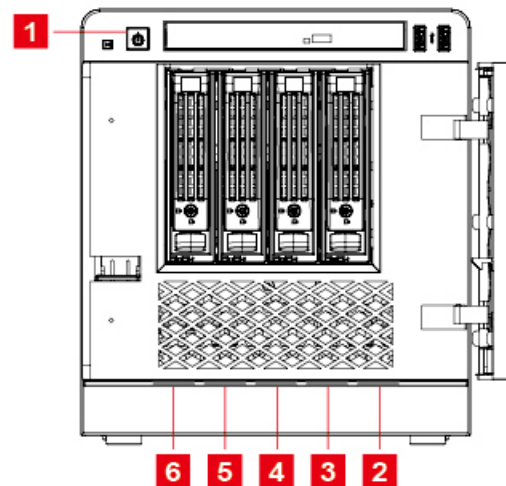
■ Front Panel Components

1. System Reset Button
2. Power Switch Button
3. Slim ODD Bay
4. USB Connector x 2
5. 3.5" / 2.5" Hot Swap HDD Tray x 4
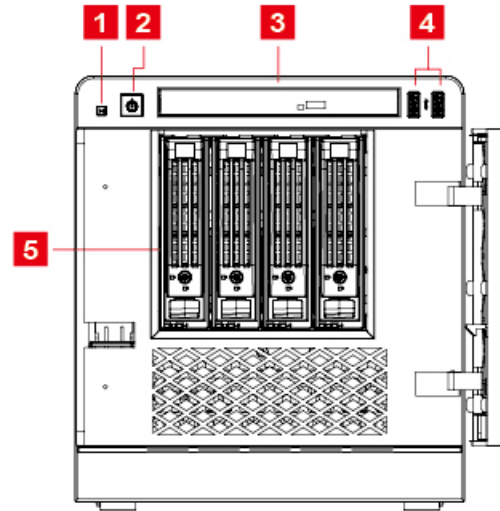
■ Front Panel LEDs

| Item	Description	LED color	Status
1	Power LED	Blue	Active
2	FAIL LED	Red	Fail
3	ID LED	Blue	Active
4	HDD LED	Green	Active
5	LAN 1 LED	Amber	Active
6	LAN 2 LED	Amber	Active

■ Inside and Rear Components

1. 120mm Rear Fan x 1
2. Flex ATX Power Supply Mounting Area
3. 2.5" HDD Bay x 1
4. Front Panel Security Lock
5. Low Profile Slot x 1
6. Mini ITX M/B Mounting Area
7. Intrusion Switch
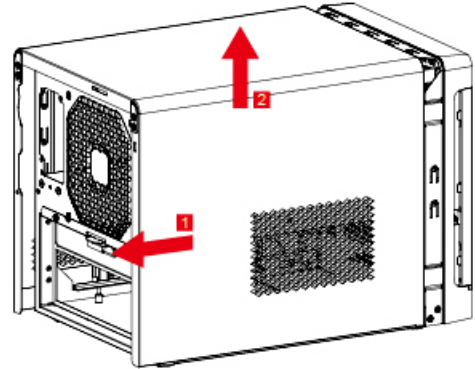8. Padlock Loop
9. Kensington Slot

LOCK
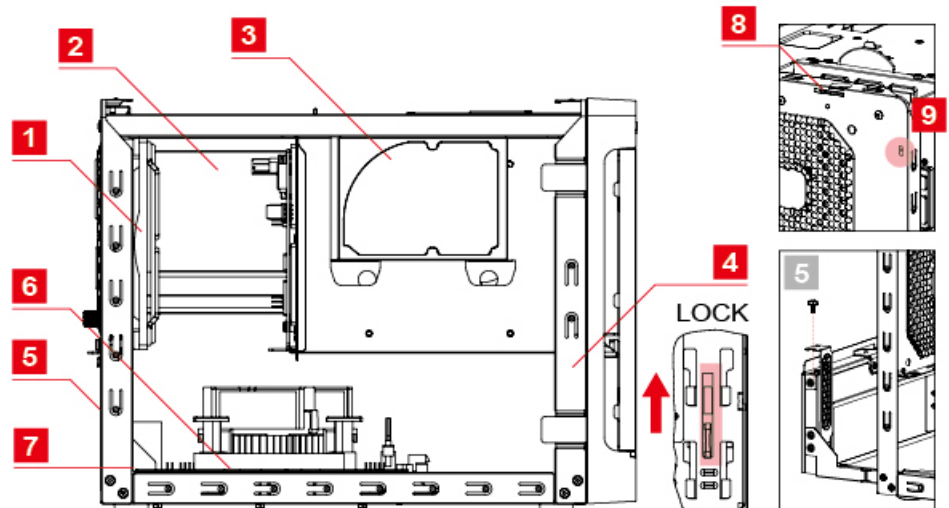
Opening the Chassis Cover

1 Remove two screws on the rear panel to release the top cover from the chassis.
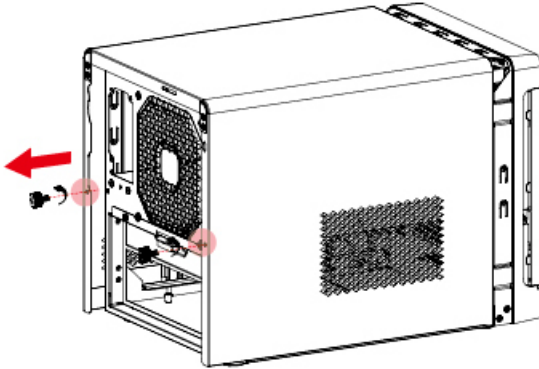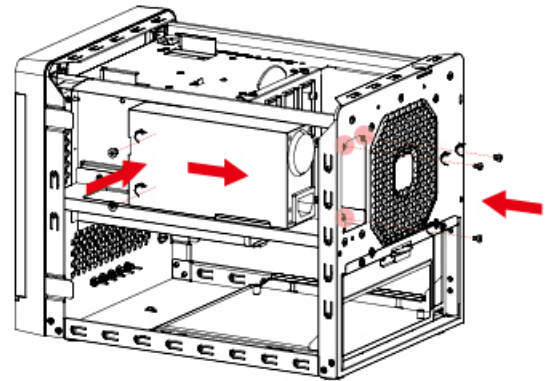
2
- Slide the cover back.
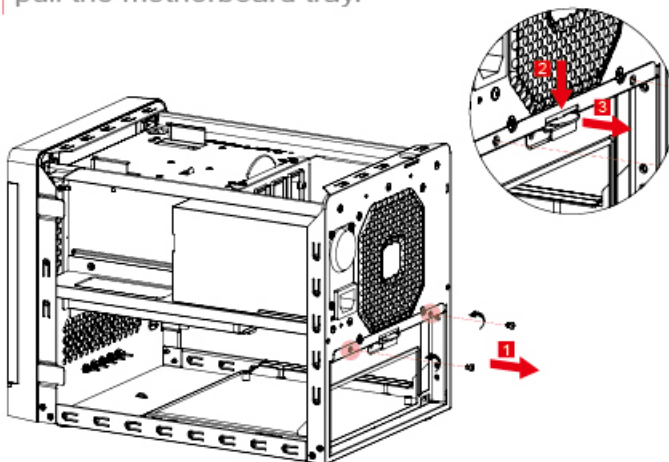- Lift up the cover from the chassis.

Installing Power Supply

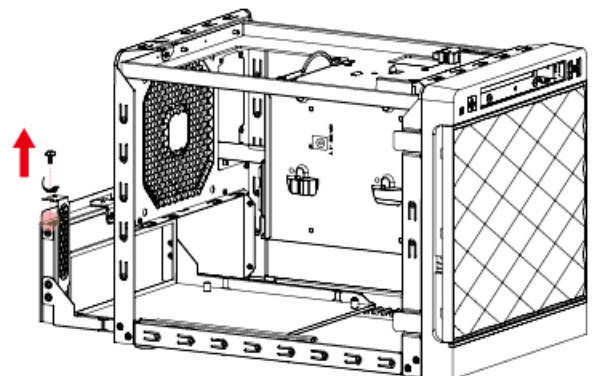Insert the power supply, then use five screws to secure the position.

Installing Motherboard and Low Profile Expansion Card

1 Release two screws, then press the clip and pull the motherboard tray.
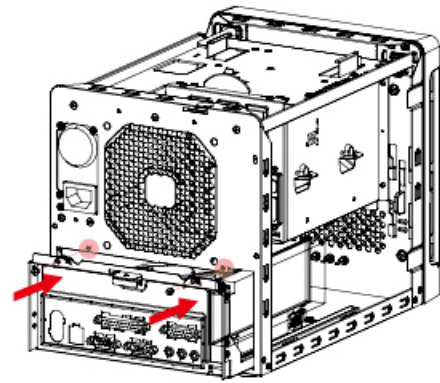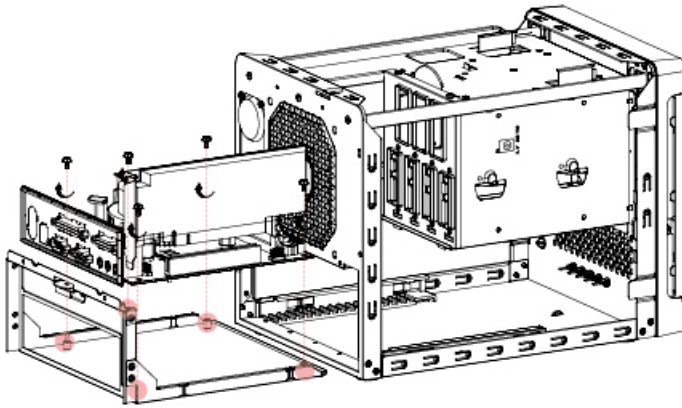
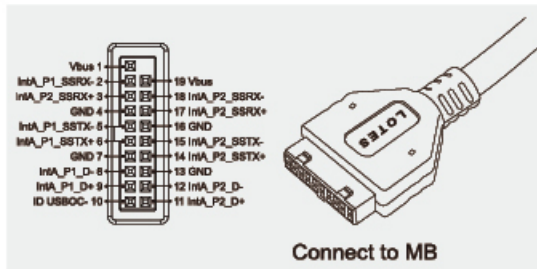**2** Release one screw and remove the expansion card cover.

3

Installing Motherboard and Low Profile Expansion Card

3
- Install the motherboard on the motherboard tray.
- Install the add-on card and secure with the screw.
  * Please follow the motherboard installing guide to connect power cables and I/O wires to the motherboard.
  * Motherboard cooler height maximum 65mm.

4
- Push back the tray.
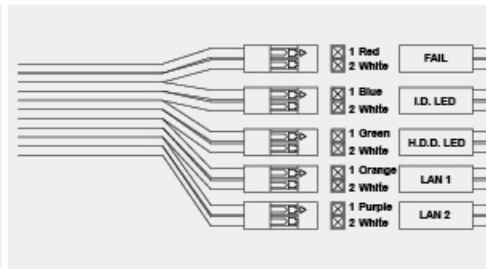- Use the two screws to secure the tray.
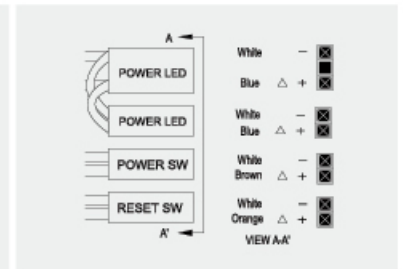
Installing Front I/O Wires
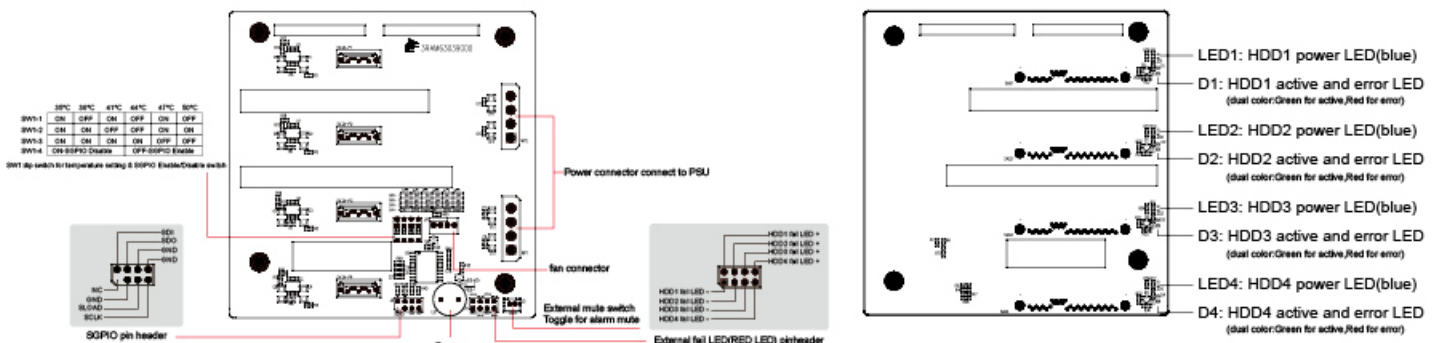
- USB 3.0 Header
- LED Connector
- Switch / LED Connector

USB 3.0 Header

Vbus 1		19 Vbus
IntA_P1_SSRX- 2		18 IntA_P2_SSRX-
IntA_P2_SSRX+ 3		17 IntA_P2_SSRX+
GND 4		16 GND
IntA_P1_SSTX- 5		15 IntA_P2_SSTX-
IntA_P1_SSTX+ 6		14 IntA_P2_SSTX+
GND 7		13 GND
IntA_P1_D- 8		12 IntA_P2_D-
IntA_P1_D+ 9		11 IntA_P2_D+
ID USBOC- 10		11 IntA_P2_D+

Connect to MB

LED Connector

1 Red / 2 White	FAIL
1 Blue / 2 White	I.D. LED
1 Green / 2 White	H.D.D. LED
1 Orange / 2 White	LAN 1
1 Purple / 2 White	LAN 2

Switch / LED Connector

	White	—
POWER LED	Blue	△ +
POWER LED	White	—
	Blue	△ +
POWER SW	White	—
	Brown	△ +
RESET SW	White	—
	Orange	△ +

VIEW A-A'

HDD Backplane Cable Connections

- Backplane Setting / Configuration

	35°C	38°C	41°C	44°C	47°C	50°C
SW1-1	ON	OFF	ON	OFF	ON	OFF
SW1-2	ON	ON	OFF	OFF	ON	ON
SW1-3	ON	ON	ON	ON	OFF	OFF
SW1-4	ON-SGPIO Disable		OFF-SGPIO Enable			

SW1 dip switch for temperature setting & SGPIO Enable/Disable switch

Power connector connect to PSU

fan connector

External mute switch
Toggle for alarm mute

External fail LED(RED LED) pinheader

SGPIO pin header

Buzzer

LED1: HDD1 power LED(blue)
D1: HDD1 active and error LED (dual color:Green for active,Red for error)
LED2: HDD2 power LED(blue)
D2: HDD2 active and error LED (dual color:Green for active,Red for error)
LED3: HDD3 power LED(blue)
D3: HDD3 active and error LED (dual color:Green for active,Red for error)
LED4: HDD4 power LED(blue)
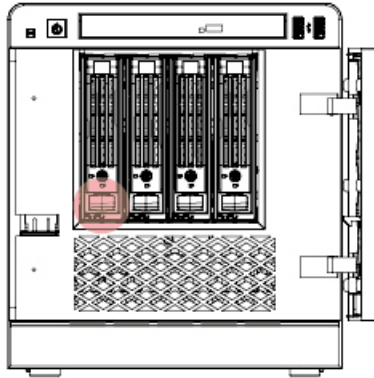D4: HDD4 active and error LED (dual color:Green for active,Red for error)

4

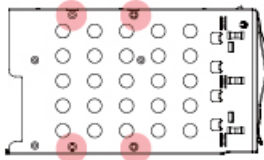## Installing 3.5" / 2.5" HDD

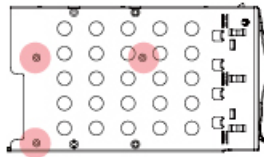**1** Release the drive tray by pushing the spring lock, then hold the tray bar and pull the drive tray outward.
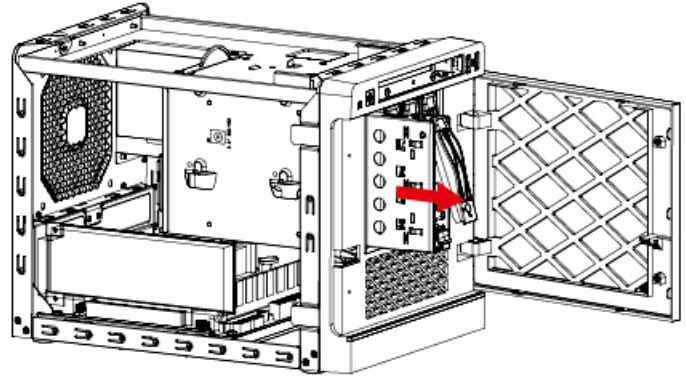
Installing 3.5" / 2.5" HDD

2 Place the SATA hard disk drive on the tray, and secure it with three or four screws.

3.5"

2.5"

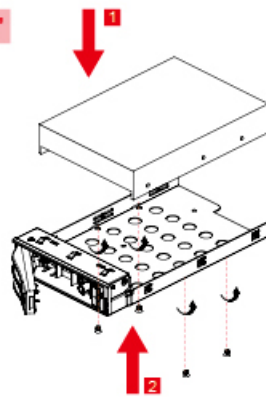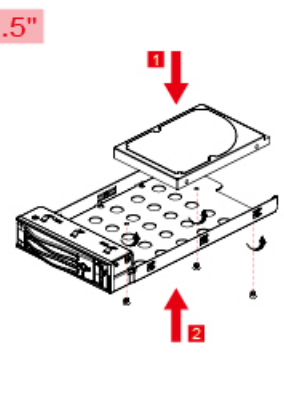**3** Insert the drive tray into the chassis and push the tray bar until it clicks.
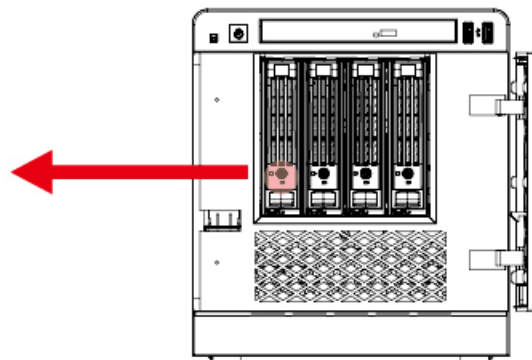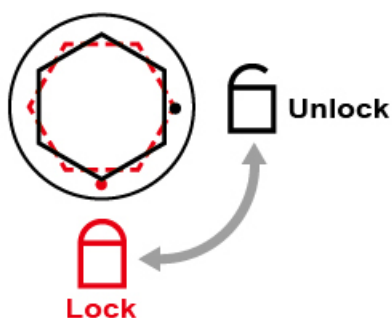
3.5"   2.5"



4 Repeat step 1-3 to install another SATA drive.

Hard Disk Drive Security Lock
The HDD bays incorporate a security screw to prevent accident HDD release. To engage the lock, turn the security screw clock-wise toward the lock symbol. To disengage the lock, turn the security screw counter clock-wise toward the unlock symbol as shown.
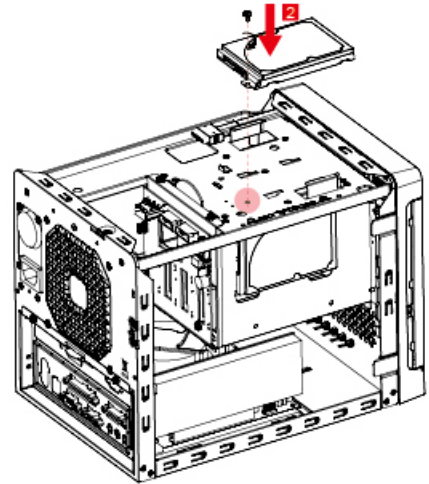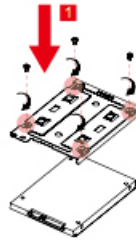

Unlock

Lock

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Installing 2.5" HDD

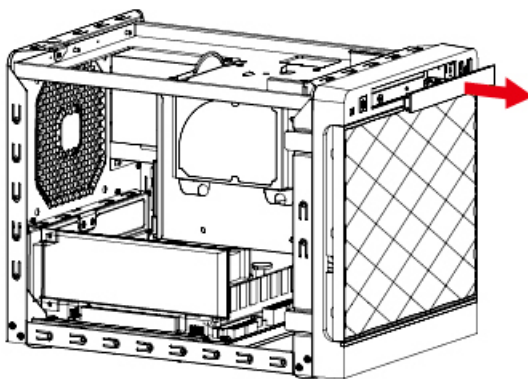Insert the 2.5" HDD/SSD and secure into position with two screws.
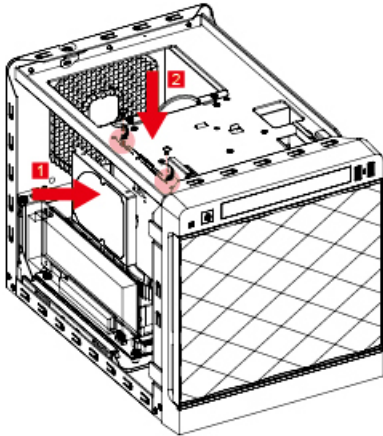
Installing the Top 2.5" HDD (Optional)

▪ Use four screws to secure the 2.5" HDD on the bracket.
▪ Insert the 2.5" HDD & bracket, thenuse one screw to secure the position.* If the slim ODD is installed, the top 2.5" HDD option cannot be installed.
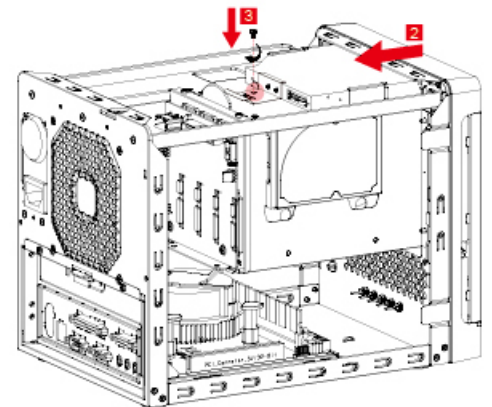

Installing Slim ODD

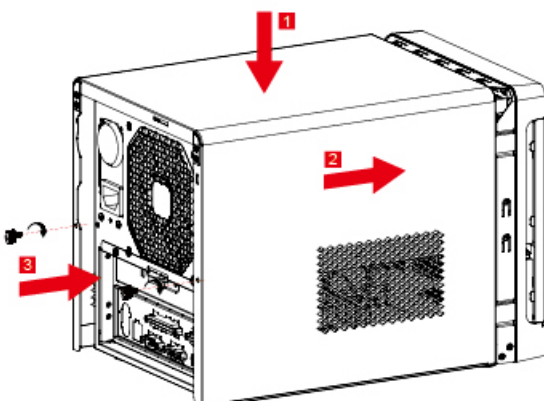**1** | Disassemble the ODD panel.

2 | ▪ Use two screws to secure the L bracket to the slim ODD.
▪ Insert the slim ODD.
▪ Use the screw to secure the position.

Installing the Chassis Cover

▪ Lower the cover onto the chassis.
▪ Slide the cover into the chassis.
▪ Use two screws to secure the cover.

Completing Installation

Installation steps is now complete.

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