

English version

- ◆ Please read this manual thoroughly before installation.
- ◆ Please visit our website and watch the HD160 Plus installation video to assist you in the installation process.

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■ Introduction

Congratulations on your purchase of Zalman's HD160 Plus Home Theatre PC Enclosure! You are now about to experience Zalman's world of silent computing. The HD160 Plus is designed for ultra quiet home theatre PC operation, utilizing optimized ventilation and anti-vibration reinforcements, making it ideal for environments that require silence such as living rooms, bedrooms, educational facilities, and offices.

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1 Cautionary Notes

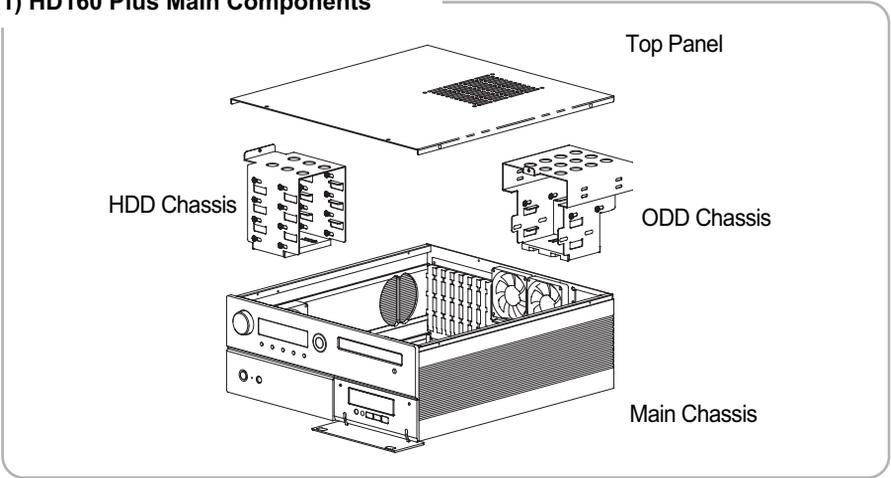
- (1) Check the condition of the product and its components before installation. If there is a problem with the product and/or its components, please contact the retailer for replacement.
- (2) Avoid inserting any objects into the system while the power is ON. Doing so may result in injury and/or damage to the system.
- (3) Check the manual when connecting cables. Incorrect connections may damage the component and system.**
- (4) The air vents must not be blocked.
- (5) Keep this unit away from heat sources, direct sunlight, water, oil, and humidity. Place the unit on a flat, leveled, solid, and well-ventilated area.
- (6) Do not clean the product surface with chemicals or wet cloth.
(chemicals: industrial brightener, wax, benzene, alcohol, paint thinner, mosquito repellent, aromatics, lubricant, detergent etc.)
- (7) If this unit is to be transported long distance, remove all HDDs (Hard Disk Drive) for separate transport. And place the HD160 Plus in its own box.

◆ Disclaimer

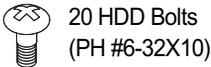
Zalman Tech Co., Ltd. is not responsible for any damages due to external causes, including but not limited to, improper use, problems with electrical power, accident, neglect, alteration, repair, improper installation, or improper testing.

2 Components

(1) HD160 Plus Main Components



(2) Case Parts



20 HDD Bolts
(PH #6-32X10)



20 Dampers



4 Power Supply Bolts
(PH #6-32X6)



1 ODD Aluminum Bezel



18 ODD / Motherboard Bolts
(PWH M3X5)



1 Clamp



2 micro ATX Stand Offs (M3)



1 User's Manual

(3) iMON Parts



1 Remote Control



1 Installation CD



2 Batteries (AAA)

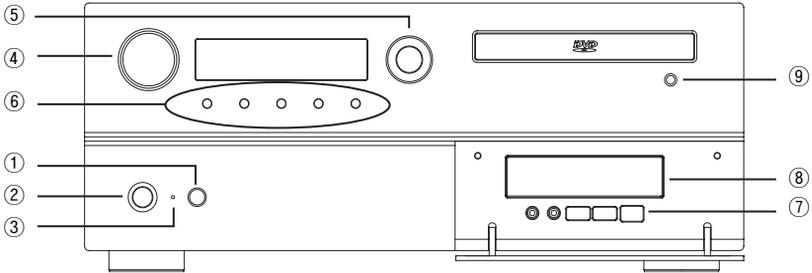


1 User's Manual

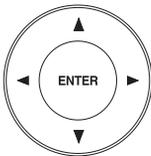
3 Specifications

Enclosure Type	Desktop
Dimensions (DXWXH)	460mm X 435mm X 160mm (18.1" X 17.1" X 6.3")
Weight	6.8kg (14.9lb)
Material	Aluminum
Motherboard Compatibility	Standard ATX / micro ATX
Power Supply Compatibility	Standard ATX / ATX12V
PCI/AGP Card Compatibility	Full Size
Drive Bays	5 X 3.5" Internal Drive Bays 1 X 5.25" External Drive Bay
Cooling Components	Rear Panel : 2 X 80mm Exhaust Fans Bottom Panel : 1 X 80mm Exhaust Fan(Optional) Side Panel : 1 X 92mm Exhaust Fan(Optional)
Expansion Slots	7 Slots
Front I/O Ports	2 X USB Ports 1 X IEEE1394(FireWire) Port 1 X Microphone 1 X Headphones
Available Colors	Silver / Black
LCD	FFSTN NEGATIVE LCD TYPE

4 Front Panel Controls & I/O Ports



- ① Remote Control Receiver
- ② Power Button
- ③ System Power LED
- ④ Volume Control / Mute
- ⑤ Navigation Controls



- ⑥ Media Program Controls

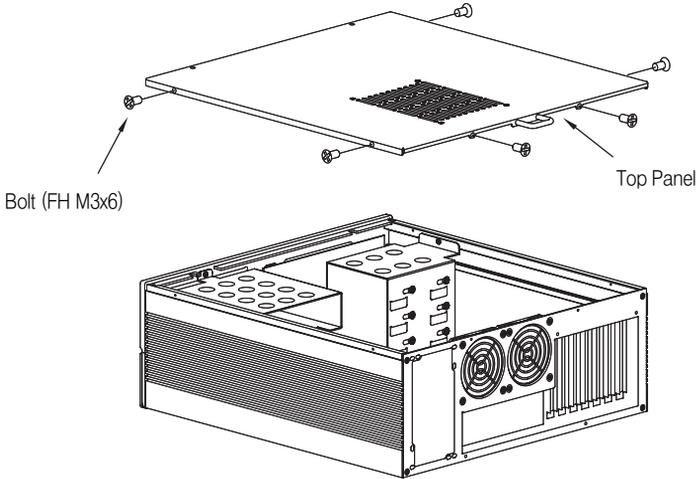
MCE	CLOSE	START	MENU	BACK
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- ⑦ Audio (Headphones, Mic) Port
USB Port
IEEE1394 (FireWire) Port
- ⑧ 3.5" Bay
- ⑨ ODD Tray Open / Close

5 Installation Guide

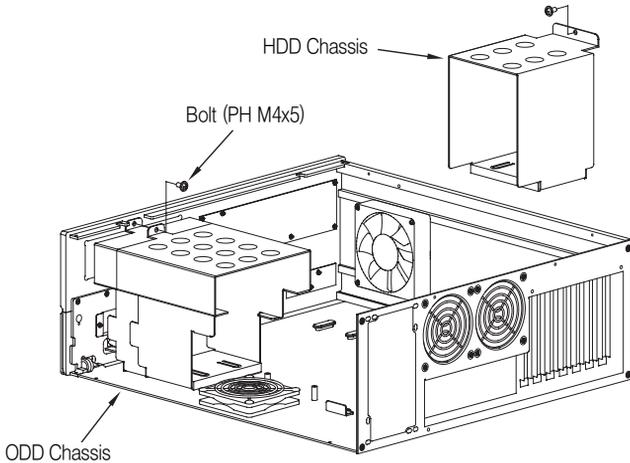
(1) Opening the Enclosure

To remove the Top Panel of the enclosure, unscrew the six Bolts (FH M3x6).



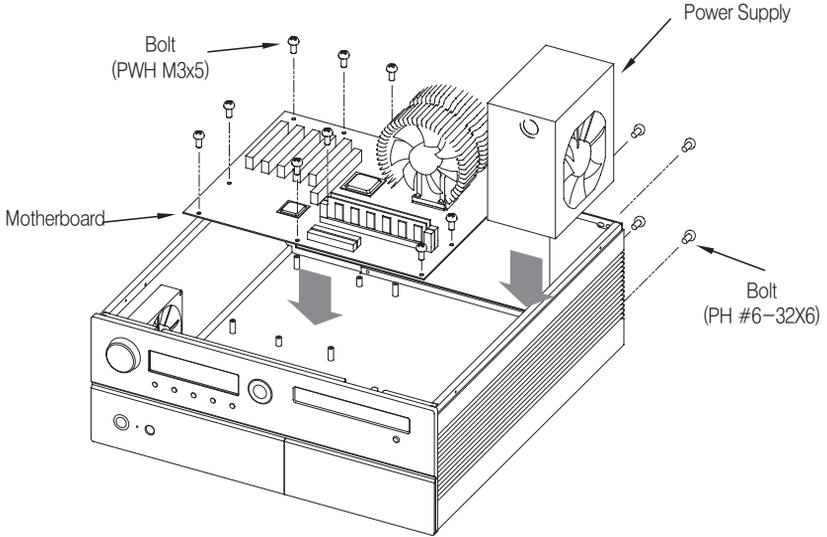
(2) Removing the ODD and HDD Chassis

Remove the Bolts (PWH M4x5), and horizontally pull the ODD and HDD Chassis approximately 15mm (0.6inch) away from the Front and Side Panels, then lift them out of the enclosure.



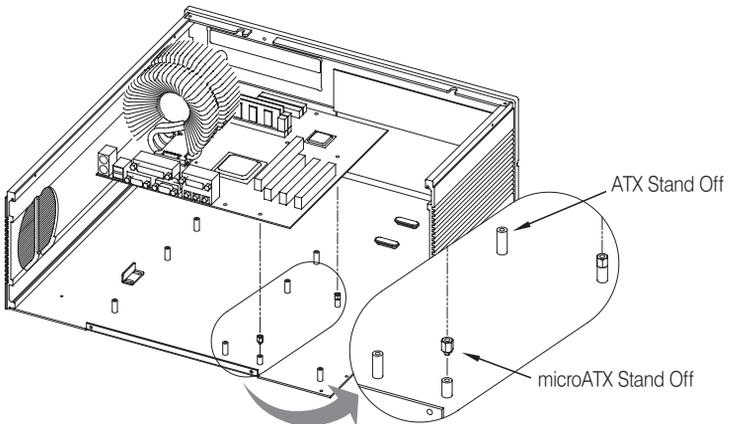
(3) Assembling the Motherboard and Power Supply

Mount the motherboard and power supply by using appropriate bolts. Mount the computer components (CPU, VGA, RAM etc.) onto the motherboard.



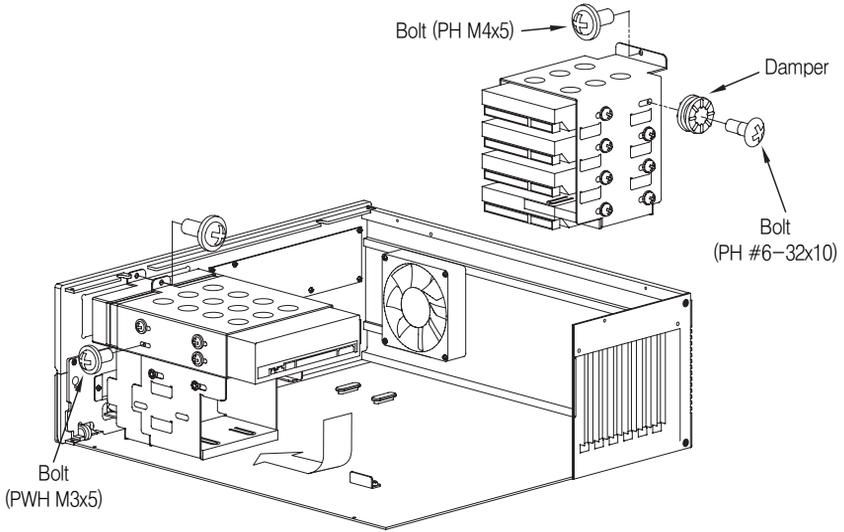
Note)

To mount a microATX motherboard, first install the two enclosed microATX Stand Offs and align their height with the ATX Stand Offs.



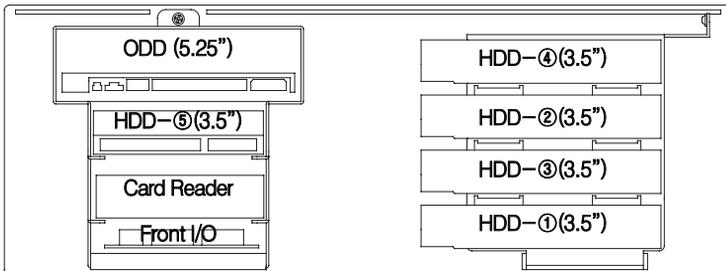
(4) Installing 5.25" and 3.5" Drives

- (1) Install the 5.25" drive (ODD) and 3.5" drive (HDD) onto the ODD and HDD Chassis with the appropriate bolts.
- (2) Slide the ODD and HDD Chassis onto the enclosure's Front Panel and Side Panel, then secure them onto the panels with the Fixing Bolts(PWH M4x5).



Note)

This product is provided with one 5.25" bay and five 3.5" bays.
 For optimal HDD cooling, install in the order mentioned in the diagram below.



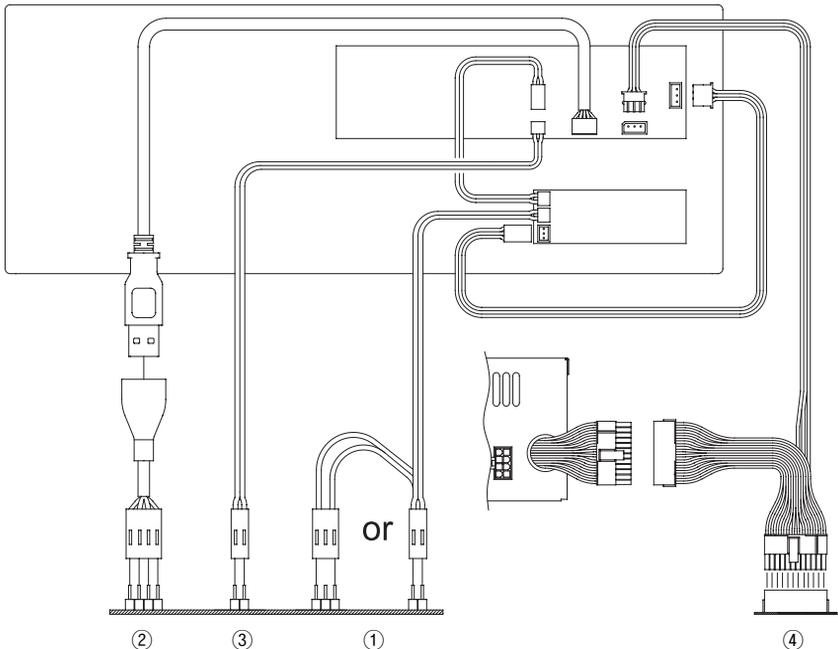
(5) Connecting the Cables

1) Power and Data Transmission Cables

Connect the Power and Data Transmission Cables (IDE or SATA) required for the HDD, ODD, FDD, VGA etc.

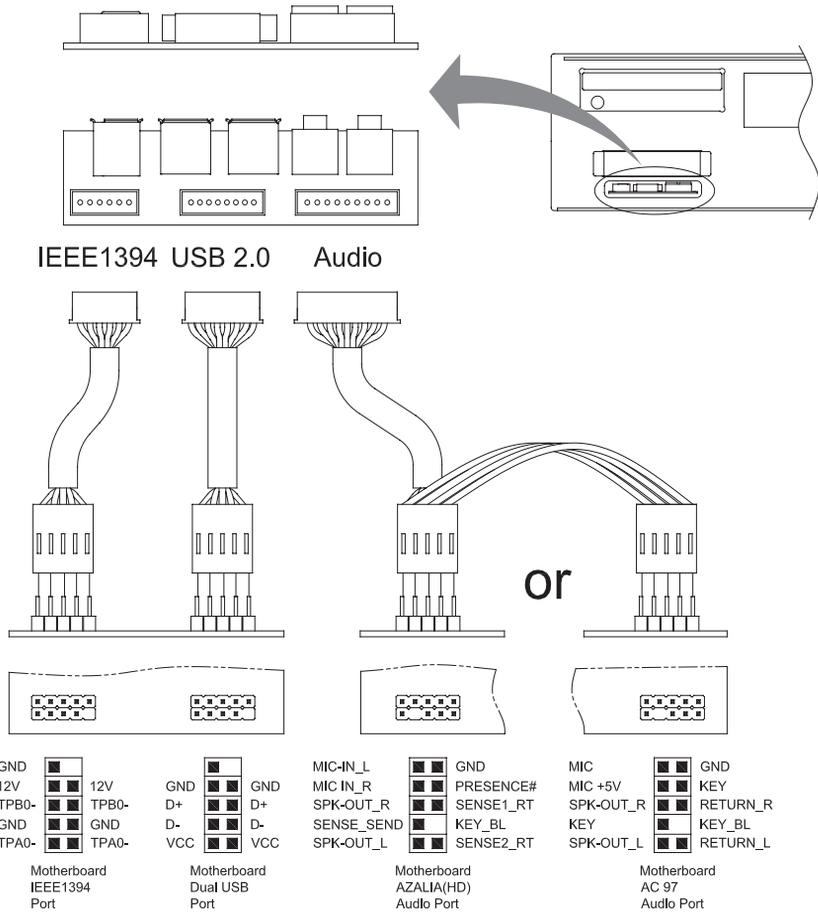
2) LCD PCB Cable

- ① Connect the Power LED Cable (2-Pin or 3-Pin) to the motherboard's Front Panel Port (refer to the motherboard's manual).
- ② Connect the USB Cable that is connected to the USB Cable of the LCD PCB to the motherboard's USB Port.
- ③ Connect the System Power Switch Cable (2-Pin) with the motherboard's Front Panel Port (Refer to the motherboard's manual).
- ④ Connect the Standby Power Cable (20-Pin or 24-Pin) to the motherboard and power supply.



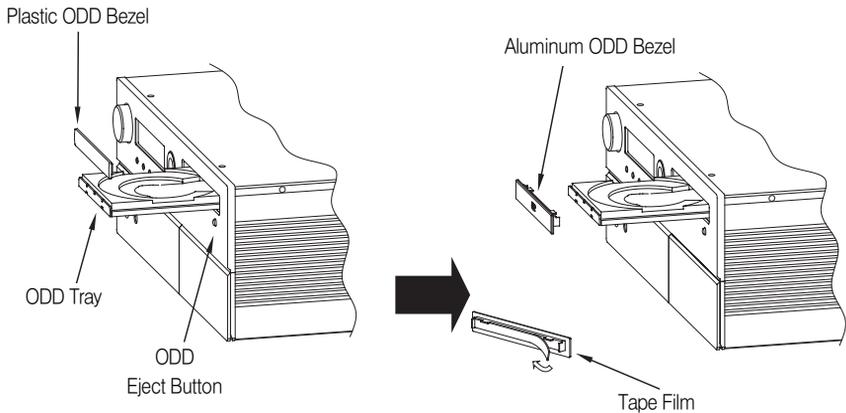
3) Front I/O Cable

Connect the USB Cable, IEEE1394(FireWire) Cable, and Audio Cable to the motherboard (Refer to the motherboard's manual).



(6) Attaching the Aluminum ODD Bezel

- 1) Connect power to the assembled system. Press the ODD Eject Button to eject the ODD Tray.
- 2) Remove the Plastic ODD Bezel.
- 3) Remove the Tape Film on the back side of the Aluminum ODD Bezel, and stick the Aluminum ODD Bezel onto the ODD Tray.



Note)

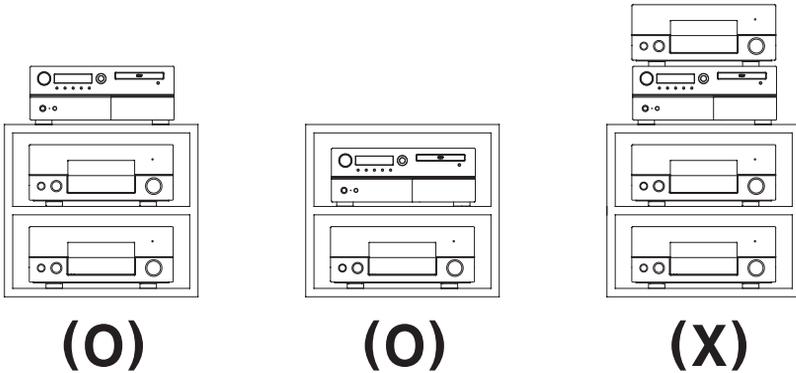
In case of difficulties in removing the plastic ODD Bezel, please contact the place of purchase or the ODD manufacturer.

(7) Installing the Multimedia Software

Refer to the enclosed iMON Quick Guide manual to install the software.

6 Recommended Use

(1) Recommended Placement for the HD160 Plus



Placement of this system on a well-ventilated area (good intake of cold air and release of hot air) allows efficient cooling of computer components even in low RPM mode, for ultra quiet operation. The noise level of the power supply (main factor of noise emission) will also significantly decrease due to better cooling efficiency.

There must be good front to back airflow when placing the HD160 Plus in cabinets.

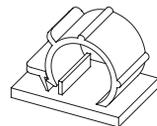
When the Top Panel's vent is opened, placement of other devices above the HD160 Plus can hinder CPU cooling performance.

(2) Management of the System's Internal Cables

The internal airflow of the system has a significant impact on the cooling of the computer components. Even though the design of the enclosure itself is very important, organized management of internal cables is the best method for optimizing internal airflow. Pay special attention to make sure that the air vents and intake/exhaust fans are not blocked by the cables.

Note)

Manage cables with the enclosed Clamps, and fix them onto the Bottom panel.



(3) Recommended Computer Components for an Ultra Quiet Home Theatre PC

- CPU : Any CPU on the market
- CPU Cooler : Ultra Quiet CPU Cooler with great cooling performance
- VGA : VGA card that is either equipped with an Ultra Quiet VGA cooler or is capable of being equipped with an Ultra Quiet VGA cooler
- VGA Cooler : Ultra Quiet VGA Cooler
- Power Supply : Power Supply equipped with a 120mm fan (HD160 Plus has a dedicated Air Vent for power supplies equipped with a 120mm fan)
- Motherboard : Standard Full-ATX motherboard with no fans
- Northbridge Cooler : Fanless Northbridge cooler

Note)

Recommended Zalman products for the HD160 Plus



CNPS 9500



VF1000 LED



VNF100



ZM600-HP



ZM-NBF47