# 3D AURORA

GZ-FSCA1-AN
GZ-FSCA1-SN

## User's Manual

**3D AURORA Introduction**

Gigabyte Technology has been dedicated to the integration of casing and water/air cooling technology to provide users with the most optimal solution for thermal dissipation. The five features of the 3D AURORA series casing include state-of-art design, cooling technology, liquid cooling support, system security, and easy installation etc. For further information and specifications of the 3D AURORA series, please download them from Gigabyte's website.



The following are not covered by the warranty:
1. Use the product incorrectly or in a manner other than the designed purpose.
2. Nonobservance of the proper operation provided. (e.g. over-clocking)
3. Malfunction due to interference from other devices.
4. Unapproved modification of the product.
5. Consequential damage to other objects due to the product's fault.
6. Malfunction arising from casualties (earthquake, thunder, fire, and flood).
7. The product's warranty label has been removed or damaged.
8. The devices inside, including power supply, hard disk, CD-ROM drive, motherboard, ventilator, etc, are not detached from the casing prior to the transportation of the computer product, resulting in damage to the casing or computer-related devices.
9. Any lose due caused by failure to follow the installation process contained in the user.
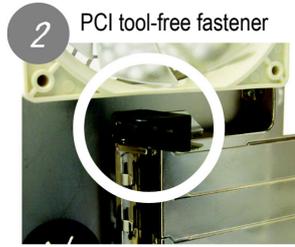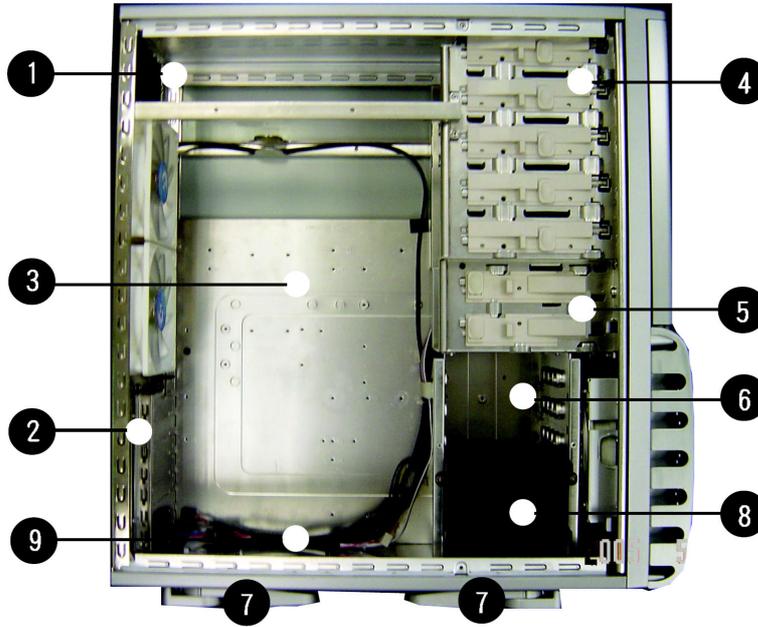
⚠️ **Caution**

Failure to wear gloves during installation of computer products may cause damage to personnel and devices. Incorrect connector installation may possibly burn out the motherboard and other components. Be sure to observe the instructions on installation in the manual.
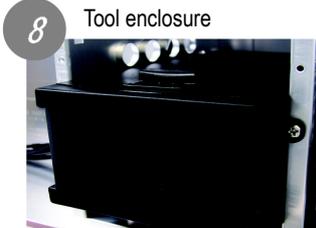Please refer to the English version for all pictures.

# Content

# 1 Components Introduction

## 1-1 Casing's Internal Structure



| 1 | Power supply | 2 | PCI tool-free fastener |
| --- | --- | --- | --- |



| 3 | Motherboard/panel card | 4 | 5.25" Front device bay |

**5** 3.5" Floppy

**6** Built-in hard disk

**7** Foot support

**8** Tool enclosure

(Refer to the right figures for the attachments in the tool enclosure)

a. Standoff x 9

b. Power extension cable x 2

c. Securing runner x 10

d. Key x 2

e. Wire clamp x 2

f. Motherboard securing screw x 9

g. Power supply securing screw x 4

h. DIY transparent projector panel x 1 (Equipped with 3D AURORA at shipment)

**9** Front cable kit
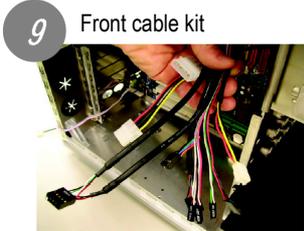
(Refer to the right figures for the cable connectors)

a. USB 2.0

b. AUDIO

c. IEEE 1394

d. Front fan power supply

e. Rear fan power supply

f. Basic casing power switch control cable kit

## 1-2 Front, Rear, and Left Side Panel Structure

Left side panel (A-1)

Latch (A-2)

Side panel security lock (A-3)
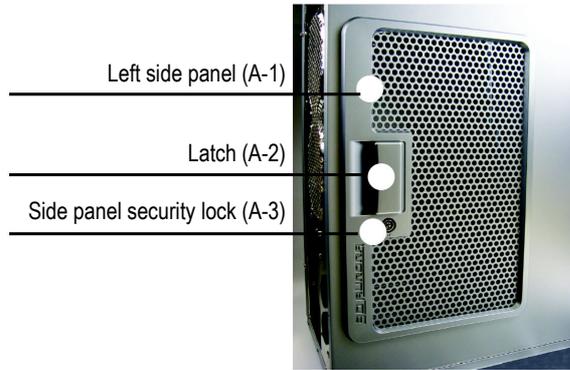
Left side panel (A)

Front panel (B-1)

Rear dual fan (C-1)

Front panel security lock (B-2)

Front fan (B-3)

Drainage outlet (C-2)

Front projector light (B-4)
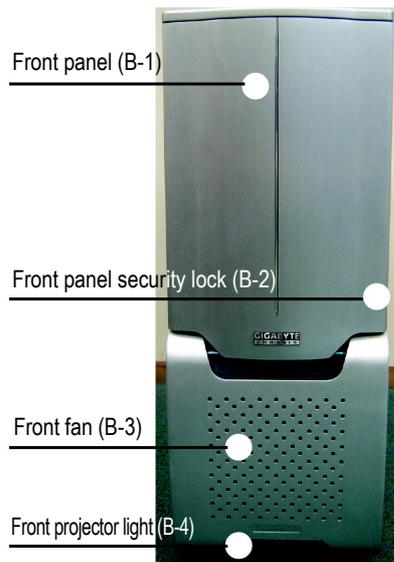
Front panel (B)
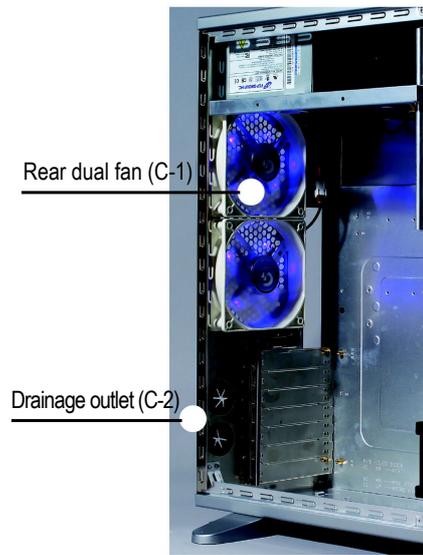
Rear Panel (C)

# 2 Features

- **High quality design -**
  Gigabyte top-class full tower cooling casing.
  Lightweight aluminum casing (GZ-FSCA1-AN only)
  Full-open aluminum panel design, top-class hairline finish
  Personalized 'Gigabyte LOGO projector display (patent pending)

- **Complete support -**
  Complete front multimedia support, including 2 USB 2.0 ports / 1 IEEE 1394 /1 audio line-out and mic-in jacks.
  Liquid cooling system full support:
  including large-sized drainage inlet/outlet, pump securing hole, and cooling kit securing hole
  Supporting ATX/Micro AT/Mini AT/Flex ATX motherboard.

- **Integration of cooling technology -**
  Full aluminum casing (GZ-FSCA1-AN only) for accelerating system-cooling performance.
  A set of front 12 cm blue LCD cooling fans with multi-way intake panel that allows air coming in from three directions (front, let and right).
  Industry leading two sets of rear 12 cm blue LCD silent cooling fans, large air volume but low noise.
  Unique intake side panel design.
  Dust-proof design of front/side panel air intake.

- **System security -**
  Double security lock design, front/side panel, providing optimism system security.
  Reinforced nickel-plated rear panel.
  1.0mm reinforced aluminum / zinc plated steel panel design.

- **Convenience of assembly -**
  Scratch-resistant processing that ensures safety during assembly.
  Tool-free installation design.
  Detachable tool enclosure where tools, screws and cables can be stored.
  Single-hand side panel open device, easy for disassembly.

# 3 Specification Features

| | |
|---|---|
| Model | : GZ-FSCA1-AN / GZ-FSCA1-SN |
| Case Type | : Full Tower |
| Dimensions | : 205 x 522 x 510 (W x H x D) |
| Front bezel Material | : Aluminum |
| Colour | : Silver / Black |
| Side Panel | : Elegant design |
| Body Material | : Aluminum (1.0mm) GZ-FSCA1-AN / SECC (1.0mm) GZ-FSCA1-SN |
| Net Weight | : 7.1 kg /11.7 kg |
| 5.25" drive bay (External) | : 5 |
| 3.5" drive bay (External) | : 2 |
| 3.5" drive bay (Internal) | : 5 |
| PCI port | : 7 |
| Compatible Motherboard | : ATX / Micro ATX / Mini ATX / Flex ATX |
| System Fan (front) | : One 12 cm silent fan equipped with blue LEDs (1000 rpm) |
| System Fan (rear) | : Two 12 cm silent fans equipped with blue LEDs (1000 rpm) |
| I / O Ports (front) | : 2 USB2.0 / One IEEE 1394 / 1 audio line-out and mic-in jacks |
| Optional Thermal Solutions | : |
| GIGABYTE Liquid Cooling | - 3D Galaxy Series |
| GIGABYTE Air Cooling | - G-Power Series |
| | - 3D Rocket Series |

# 4 Installation Instruction

NOTE  Please follow the reference sections in order for installation.

## 4-1 Installation of Power Supply

To facilitate the installation, it is recommended to place the 3D AURORA casing upright on the table.
Required tools: power supply securing screws x 4.



4-1-1  Remove the side panel.
Unscrew the thumbscrews of the side panel and detach the panel by pressing the latch.



4-1-2  Place the power supply into the casing.



4-1-3  Use screws to secure the power supply from the rear side.



4-1-4  For a larger power supply, please loosen the cross bar screws first, disassemble the bar, and then install the power supply; fasten the screws to secure the cross bar after installation.

## 4-2 Installation of Motherboard

The 3D AURORA is compatible with the ATX/Micro ATX/Mini ATX/Flex ATX motherboard. Please confirm the dimension and specifications of the motherboard before installation.
Required tool: motherboard standoffs x 9 and securing screws x 9

4-2-1    According to motherboard specifications, select proper screw holes, engage the standoffs into the corresponding holes of the casing.
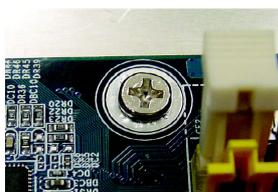
4-2-2    Secure the motherboard with securing screws.

| Motherboard | Code | Securing screw | Standoffs |
|---|---|---|---|
| ATX | A1-A9 | 9 | 9 |
| MINI ATX | M1-M9 | 9 | 9 |
| MICRO ATX | U1-U9 | 9 | 9 |
| FLEX ATX | F1-F6 | 6 | 6 |

NOTE    Select proper "rear I/O panel" of the motherboard (typically supplied by motherboard manufactures).
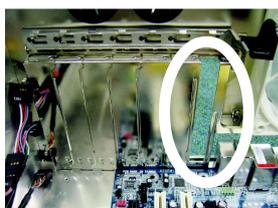
## 4-3    Installation of Interface Card

The 3D AURORA supports tool-free installation of interface cards, e.g. Graphic card and Network Card, etc.
Required tool: None

4-3-1    Open the PCI slot retention lock.

4-3-2    Remove the internally attached dust-proof PCI cover.

4-3-3    Insert the interface card into the expansion slot with care.

NOTE    Make sure all interface cards are fully seated in the corresponding slots.

## 4-4 Installation of Front I/O Panel

⚠ **CAUTION** Incorrect connector installation may possibly burn out the motherboard and other components. Be sure to observe the instructions on installation in the manual. Any loss arising from nonobservance of the proper operation provided is not covered by the warranty.
Different motherboards may have different installation positions. For detailed instructions, please refer to the instructions supplied by the motherboard manufacturer.

The front panel consists of (1) 2 USB 2.0 / 1 IEEE 1394 / 1 audio line-out jack; and
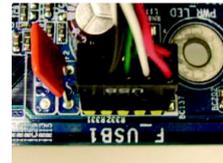(2) a basic casing power switch control cable kit

Required tool: None

(1) 2 USB 2.0 / 1 IEEE 1394 / 1 Audio line-out jack

4-4-1    Insert the USB 2.0 connectors into the corresponding sockets on the motherboard.
USB 2.0 Connector

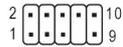| Pin | Definition | Pin | Definition |
|-----|-----------|-----|-----------|
| 1 | Power | 6 | USB Dy+ |
| 2 | Power | 7 | GND |
| 3 | USB Dx- | 8 | GND |
| 4 | USB Dy- | 9 | |
| 5 | USB Dx+ | 10 | USB Over Current |

4-4-2    Insert the IEEE 1394 connector into the corresponding socket on the motherboard.
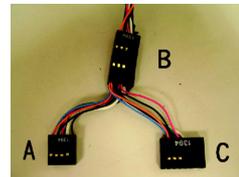📝 **NOTE** Please refer to the instructions supplied by the motherboard manufacturer and make sure the correct type of connector prior to installation.
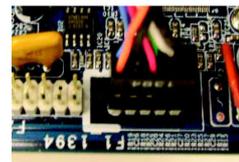
a. IEEE1394 Connector A

| Pin | Definition | Pin | Definition |
|-----|-----------|-----|-----------|
| 1 | TPA+ | 6 | TPB- |
| 2 | TPA- | 7 | |
| 3 | GND | 8 | +12V |
| 4 | GND | 9 | +12V |
| 5 | TPB+ | 10 | GND |

b. IEEE1394 Connector B

| Pin | Definition | Pin | Definition |
|-----|-----------|-----|-----------|
| 1 | TPA+ | 6 | TPB- |
| 2 | TPA- | 7 | +12V |
| 3 | GND | 8 | +12V |
| 4 | GND | 9 | |
| 5 | TPB+ | 10 | GND |

c. IEEE1394 Connector C

| Pin | Definition | Pin | Definition |
|-----|-----------|-----|-----------|
| 1 | +12V | 9 | +12V |
| 2 | +12V | 10 | +12V |
| 3 | TPA+ | 11 | TPA1+ |
| 4 | TPA- | 12 | TPA1- |
| 5 | GND | 13 | GND |
| 6 | GND | 14 | |
| 7 | TPB+ | 15 | TPB1+ |
| 8 | TPB- | 16 | TPB1- |

4-4-3    Insert the Audio connector into the corresponding socket on the motherboard.

| Pin | Definition | Pin | Definition |
|-----|-----------|-----|-----------|
| 1 | MIC | 6 | Rear Audio (R) |
| 2 | GND | 7 | Reserved |
| 3 | REF | 8 | |
| 4 | POWER | 9 | Front Audio (L) |
| 5 | Front Audio (R) | 10 | Rear Audio (L) |

(2) Basic casing power switch control cable kit.

Follow the connectors listed below for installation (see the figure below).
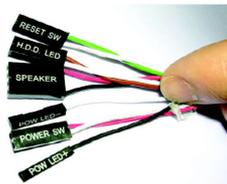
| Connector | Color |
|-----------|-------|
| Speaker | Red(+) / Black(-) |
| Reset SW | Green(+) / White(-) |
| Power SW | Red(+) / White(-) |
| POW LED+ | Black |
| POW LED- | White |
| H.D.D. LED | Brown(+) / White(-) |

> ⚠ **CAUTION** Be sure to remember that different motherboards may have different installation positions. For detailed instructions, please refer to the instructions supplied by the motherboard manufacturer.

## 4-5  Casing's Internal Structure

The 3D AURORA is equipped with one 12cm silent LED cooling fan at front / two at rear.
Required tool: None
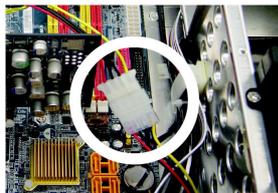
4-5-1    Plug the front fan 4-pin power cable into the 4-pin connector on the motherboard.
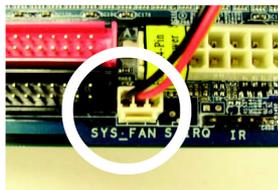
4-5-2    Plug the rear fan 3-pin power connector into the fan power connector of the motherboard system.

## 4-6   Installation of 5.25" Front Device Bay

The installation of 5.25" CD-ROM is also intended for installation of general 5.25" front device bay.
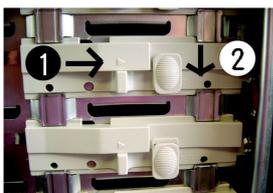Required tool: None



4-6-1   Open the front panel, remove the 5.25" plastic drive rail and internal metal panel.



4-6-2   Slide the 5.25" CD-ROM into the drive.



4-6-3   Refer to the installation order illustrated in the left figure and secure the 5.25" CD-ROM by controlling the latch (reverse steps for disassembly).



4-6-4   Installation completed.

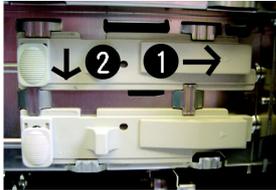## 4-7   Installation of 3.5" Front Device Bay

The installation of 3.5" floppy disc drive intended for installation of general 3.5" front device bay
Required tool: None



4-7-1   Same as Step 4-6-1.
4-7-2   Slide the 3.5" floppy disc drive into the drive bay.

4-7-3    Refer to the installation order illustrated in the left figure and secure the 3.5" floppy disc drive by controlling the latch. (reverse steps for disassembly)



4-7-4    Installation completed.

## 4-8   Installation of Built-in HDD (Hard Disc Drive)

The 3D AURORA provides built-in bays to accommodate up to 5 hard disc drives (after removal of the tool enclosure). The built-in HDD requires securing runners, which can be found in the black tool enclosure.

Required tool: Securing runners x 10 in the tool enclosure and power extension cables x 2.



4-8-1    Use the runners installed on both sides of the HDD evenly and slide the HDD into the hard disk drive bay.



4-8-2    For installation of the fourth and fifth HDDs, loosen the tool enclosure, and then install the HDD in accordance with Step 4-8-1.



4-8-3    In case the length of power cable is not sufficient for installation of the bottom HDD, it is possible to use the power extension cable inside the tool enclosure, depending on the HDD with 4-pin or SATA power cable.

## 4-9 DIY Front Bracket of Projector Light

The 3D AURORA is provided with another transparent projector panel, which can be DIY designed and replaced with the projector bracket under front panel.

Required tool: transparent projector panel (slides and laser printer or copy machine should be provided by the user)

4-9-1 Visit Gigabyte's website,
(http://tw.giga-byte.com/Peripherals/Support/
Manual/Manual_List.htm)
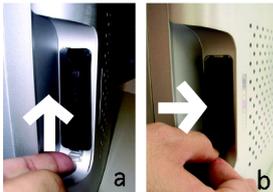and search for the 3D AURORA series; the file name:
DIYbracket.doc

**NOTE** Print out the slides by 1:1 (please use the laser printer or copy machine).

4-9-2 Trim the slide along the edge lines.

4-9-3 Post the trimmed slide onto the transparent projector panel.

4-9-4 Lay the casing on the table, disassemble the original projector panel, as shown in Figure a; install the newly made projector panel onto the casing, as shown in Figure b.

4-9-5 Installation completed.

## 4-10  Application of Security Lock

The 3D AURORA is supplied with two security locks, including a panel lock and a side panel lock.
Required tool: key x 2
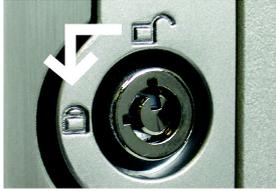


4-10-1   Insert and turn the key by 90° as shown in the figure, and lock it.
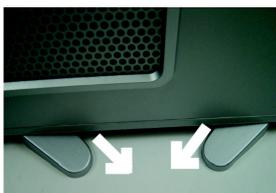


4-10-2   Insert and turn the key by 90° as shown in the figure, and unlock it.

## 4-11  Application of Foot Supports

The 3D AURORA is supplied with four foot supports for ensuring the casing is firmly seated on the holding surface.



4-11-1   Swivel these four feet by 90° as shown in the figure to loosen the feet.



4-11-2   Swivel these four feet by 90° as shown in the figure to fasten the feet.

## 4-12   Liquid cooling System Support

The 3D AURORA series casing can fully support the Gigabyte 3D Galaxy liquid cooling kit (also support most of the liquid cooling systems commercially available). While installing the liquid cooling system, please consult its manual first.



NOTE   The liquid cooling system is optional.

## 4-13   Recommended Air Cooling/ Liquid Cooling

The 3D AURORA is recommended to be used with the Gigabyte Air Cooling series.



GH-WIU01



GH-PDU21-MF



GH-PCU32-VH