Thermaltake CA-1D5-00S1WN-00

Thermaltake Core V21 Micro ATX/Mini ITX Cube Chassis User Manual

Model: CA-1D5-00S1WN-00

1. INTRODUCTION

The Thermaltake Core V21 is a versatile cube chassis designed to support both Micro ATX and Mini ITX motherboards. Its modular design allows for various configurations, catering to both air and liquid cooling setups. This manual provides essential information for the proper assembly, operation, and maintenance of your Core V21 chassis.

2. PRODUCT FEATURES

- **Motherboard Compatibility:** Supports Micro ATX (9.6" x 9.6") and Mini ITX (6.7" x 6.7") form factor motherboards.
- **Flexible Orientation:** Designed for use in either a vertical or horizontal orientation.
- **Chamber Concept Design:** Optimized cable management space for small form factor builds.
- **Modular and Stackable:** Offers flexible thermal solutions and allows for externally-modular upgrades, including stacking multiple chassis.
- **Advanced Ventilation:** Includes one pre-installed 200mm front fan. Supports extensive fan and radiator configurations for superior cooling.
- **Tool-Free Drive Bays:** Features 3 x 3.5" or 2.5" hidden drive bays for easy installation.
- **Front I/O Ports:** Equipped with 2x USB 3.0, 1x Headphone, and 1x Microphone ports for convenient access.

3. PACKAGE CONTENTS

Please verify that all components are present before beginning assembly:

- Thermaltake Core V21 Chassis
- 1 x 200mm Front Fan (Pre-installed)
- Accessory Box (Screws, standoffs, cable ties, speaker)
- User Manual (This document)

4. SETUP AND INSTALLATION

4.1. Chassis Overview

Figure 4.1: Exterior views of the Core V21 chassis, showing the left side with a transparent window and the right side with a mesh panel.

Figure 4.2: Front view displaying the Thermaltake logo and mesh design, and the rear view showing I/O cutouts and expansion slots.

Figure 4.3: Detail of the front I/O panel, including USB 3.0 ports, headphone, and microphone jacks.

4.2. Disassembly and Panel Removal

The Core V21 features a modular design where the top, bottom, and side panels are interchangeable. All panels are secured with thumb screws for easy removal.

1. Unscrew the thumb screws on the desired panel (top, bottom, or sides).
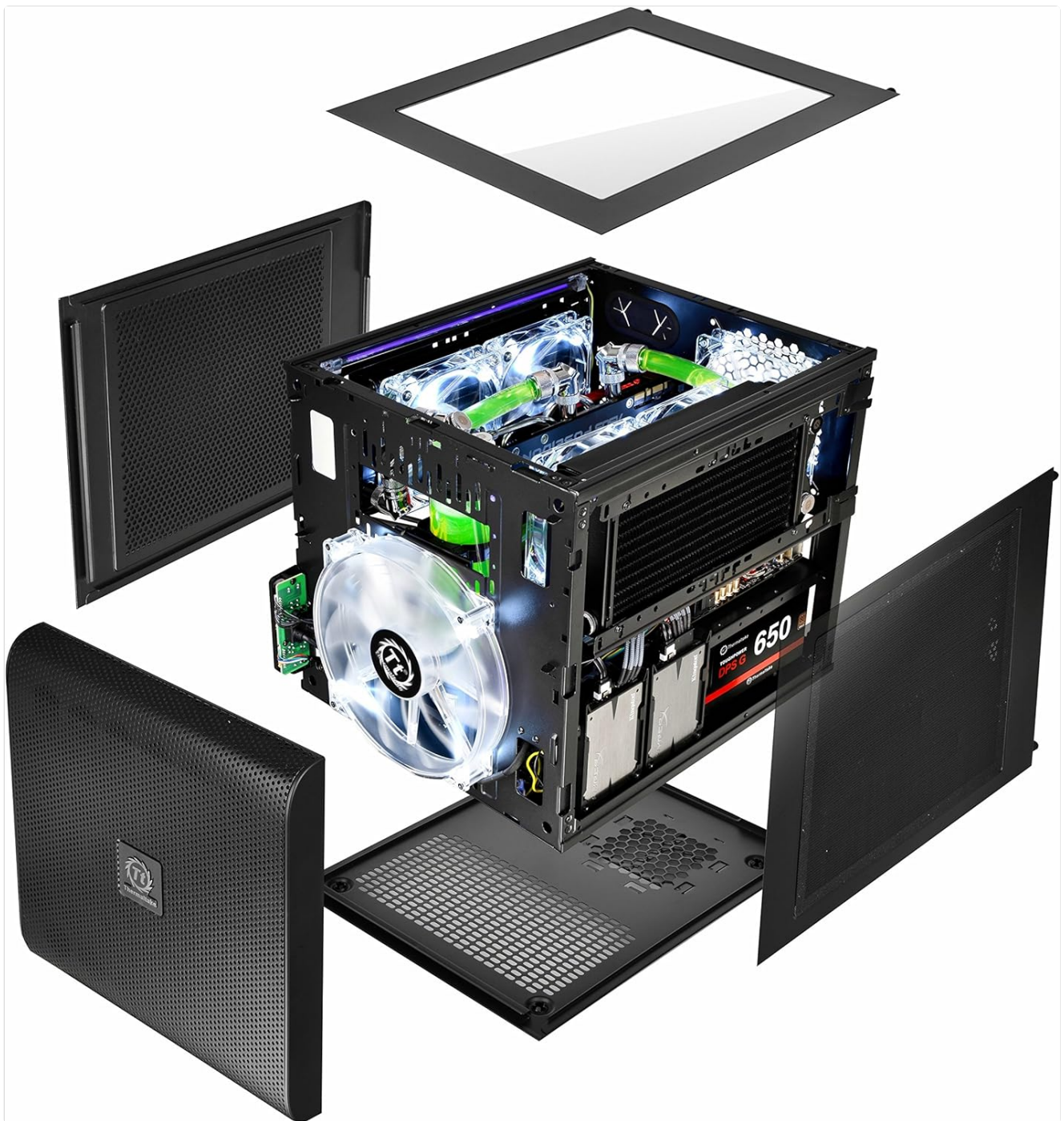2. Gently slide the panel off the chassis.

Figure 4.4: Exploded view illustrating the removable top, bottom, and side panels, and the internal structure.

4.3. Motherboard Installation

The chassis supports Micro ATX and Mini ITX motherboards. Ensure the correct standoffs are installed for your motherboard size.

1. Install the necessary standoffs onto the motherboard tray.
2. Place the motherboard onto the standoffs, aligning the screw holes.
3. Secure the motherboard with screws.

4.4. Drive Installation

The Core V21 includes tool-free drive bays for 3.5-inch or 2.5-inch drives.

Figure 4.5: Internal view showing the tool-free drive bay mechanisms for hard drives and SSDs.

1. Locate the drive bays within the chassis.

2. For 3.5-inch drives, simply slide the drive into the bay until it clicks into place.

3. For 2.5-inch drives, use the provided screws to secure the drive to the drive tray before sliding it into the bay.

4.5. Power Supply Unit (PSU) Installation

The chassis supports standard PS2 PSUs.

1. Position the PSU in its designated compartment, typically at the bottom rear of the chassis.

2. Secure the PSU to the chassis with screws from the rear.

4.6. Cooling System Installation

The Core V21 comes with a pre-installed 200mm front intake fan. Additional fans and radiators can be installed for enhanced cooling.

- **Fan Support:**

    - Front: 1 x 120mm or 2 x 120mm, 1 x 140mm or 2 x 140mm, 1 x 200mm (pre-installed)
    - Top: 1 x 120mm or 2 x 120mm or 3 x 120mm or 4 x 120mm, 1 x 140mm or 2 x 140mm
    - Rear: 1 x 120mm, 1 x 140mm
    - Bottom: 1 x 120mm or 2 x 120mm
    - Left / Right Side: 1 x 120mm or 2 x 120mm, 1 x 140mm or 2 x 140mm

- **Radiator Support:**

- Front: 1 x 120mm or 1 x 240mm, 1 x 140mm
- Top: 2 x 120mm or 2 x 240mm, 1 x 140mm or 1 x 280mm
- Rear: 1 x 120mm
- Left / Right Side: 1 x 120mm or 1 x 240mm, 1 x 140mm or 1 x 280mm

Figure 4.6: Example of a liquid cooling system installed within the Core V21 chassis, demonstrating radiator and tubing placement.

4.7. Cable Management

Utilize the ample space behind the motherboard tray and the various cable routing cutouts to manage cables effectively. This improves airflow and aesthetics.

4.8. Stacking Multiple Chassis

The Core V21 is designed to be stackable, allowing for multi-system builds or expanded cooling solutions.

Figure 4.7: Two Core V21 chassis stacked, showcasing the modular and expandable design.

5. OPERATING INSTRUCTIONS

Once all components are installed and connected, ensure all panels are securely reattached.

1. Connect your monitor, keyboard, mouse, and other peripherals to the appropriate ports on your motherboard and graphics card.

2. Connect the power cable to the PSU and a wall outlet.

3. Press the power button on the front I/O panel to start your system.

4. Utilize the front USB 3.0 ports for high-speed data transfer and the audio jacks for headphones and microphones.

6. MAINTENANCE

6.1. Dust Filter Cleaning

The Core V21 includes magnetic dust filters to prevent dust buildup. Regular cleaning is recommended to maintain optimal airflow and cooling performance.

Figure 6.1: Magnetic dust filter being lifted from the top panel for cleaning.

1. Gently lift the magnetic dust filters from the top, front, or bottom panels.

2. Clean the filters using compressed air or by rinsing them with water. Ensure they are completely dry before reattaching.

3. Reattach the magnetic filters to their respective positions.

6.2. General Cleaning

Use a soft, damp cloth to wipe down the exterior of the chassis. Avoid abrasive cleaners or solvents that could damage the finish.

7. TROUBLESHOOTING

- **System not powering on:**

  - Check all power connections, including the PSU to the wall, motherboard, and components.
  - Ensure the front panel power switch cable is correctly connected to the motherboard.
  - Verify the PSU switch is in the 'ON' position.

- **Poor airflow or overheating:**

    - Clean all dust filters and fans.

    - Ensure fans are oriented correctly for optimal intake and exhaust.

    - Check for any obstructions to airflow inside the chassis.

    - Verify that CPU cooler and GPU fans are functioning properly.

- **Front I/O ports not working:**

    - Ensure the front panel cables (USB 3.0, HD Audio) are securely connected to the correct headers on your motherboard.

8. SPECIFICATIONS

Feature	Specification
Model Name	CA-1D5-00S1WN-00
Case Type	Micro Case
Dimensions (H x W x D)	336 x 320 x 424 mm (13.2 x 12.6 x 16.7 inches)
Net Weight	6.5 kg / 14.3 lb
Side Panel	Transparent Window
Color	Black (Exterior & Interior)
Material	SPCC (Steel Plate Cold Rolled)
Cooling System (Front)	1 x 200 x 200 x 30 mm fan (800rpm, 13dBA) - Intake
Drive Bays (Hidden)	3 x 3.5" or 2.5", 3 x 2.5"
Expansion Slots	5
Motherboard Support	Mini ITX (6.7" x 6.7"), Micro ATX (9.6" x 9.6")
I/O Ports	2 x USB 3.0, 1 x HD Audio
PSU Support	Standard PS2 PSU (optional)
CPU Cooler Height Limitation	185mm
VGA Length Limitation	350mm
PSU Length Limitation	200mm (With Bottom Fan)

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official Thermaltake website or contact their customer service department. Keep your proof of purchase for warranty claims.

Thermaltake Official Website: www.thermaltake.com