Thermaltake AC-069-OO1NAN-A1

Thermaltake Dr. Power III ATX Power Supply Tester User Manual

Model: AC-069-OO1NAN-A1 | Brand: Thermaltake

1. Introduction

The Thermaltake Dr. Power III is a universal ATX power supply tester designed to verify the functionality and voltage output of various power supply units (PSUs). It supports modern ATX power supplies, including ATX12V v3.1, and features a PCIe 12+4pin connector for compatibility with newer graphics cards. The integrated LCD provides real-time monitoring of +12V, +5V, +3.3V, and +5Vsb voltage outputs, enabling quick and accurate assessment of PSU performance.

Image: Thermaltake Dr. Power III Universal ATX Power Supply Tester.

2. Safety Information

- Always ensure the power supply unit is disconnected from the main power outlet before connecting or disconnecting the tester.
- Do not attempt to open or modify the Dr. Power III tester. Doing so may void the warranty and pose a safety risk.
- Handle all connectors carefully to avoid bending pins or damaging cables.

- Use the tester in a dry environment, away from liquids and excessive humidity.
- If any fault is detected (red backlight, beeping), immediately disconnect the power supply and investigate the issue.

3. Package Contents

- Thermaltake Dr. Power III ATX Power Supply Tester
- User Manual
- Carrying Pouch

4. Product Overview

The Dr. Power III features a compact design with multiple ports for various PSU connectors and an LCD for clear voltage readings.

Image: Front view of the Dr. Power III tester, showing the LCD display and power button.


thermaltake
12V
5V
3.3V
12.0
5.00
3.30
5VSB
12+4P
PG
5.00
600W
150
24P
CPU
PCI-E
SATA
MOX
Dr.Power III

Image: Dr. Power III tester with various PSU cables connected, demonstrating its comprehensive testing capabilities.

Connector Introduction

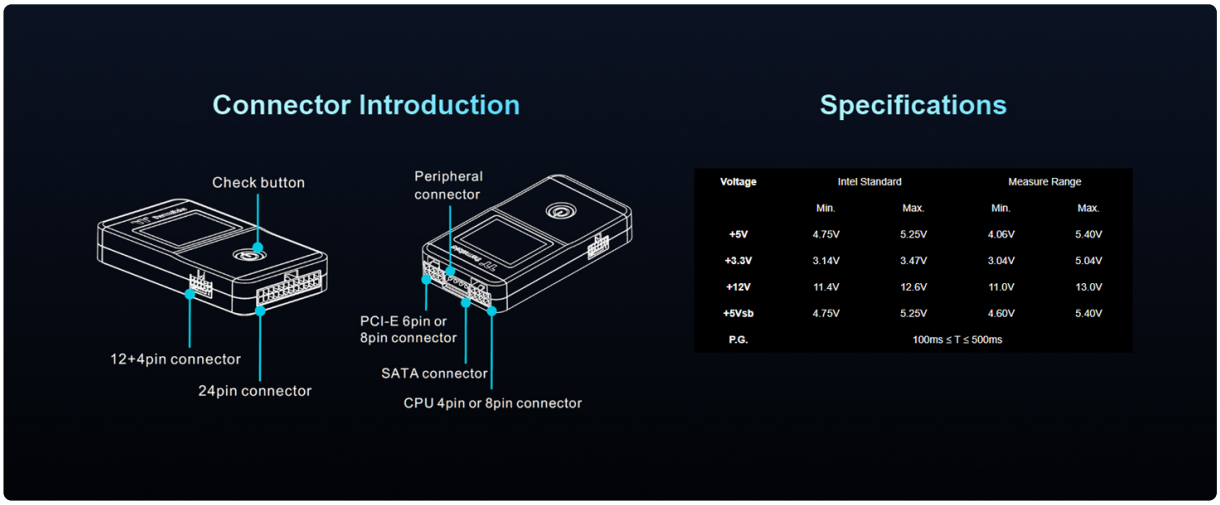

Image: Diagram illustrating the location of the 12+4pin connector, 24pin connector, Peripheral connector, PCI-E 6pin or 8pin connector, SATA connector, and CPU 4pin or 8pin connector.

The tester includes dedicated ports for:

- **24-pin ATX Connector:** Main power for motherboard.
- **PCIe 12+4pin Connector:** For modern high-power graphics cards (ATX12V v3.1 compatible).
- **PCI-E 6-pin or 8-pin Connector:** For graphics cards.
- **CPU 4-pin or 8-pin Connector:** For CPU power.
- **SATA Connector:** For SATA devices.
- **Molex (Peripheral) Connector:** For older peripherals.

The LCD display shows real-time voltage readings for +12V, +5V, +3.3V, and +5Vsb. A check button allows toggling between manual tests or initiating an automatic test.

Video: Demonstrates the Dr. Power III's LCD display and basic connection process for a power supply unit.

5. Setup

Connecting the Power Supply

1. Ensure the power supply unit is completely powered off and unplugged from the wall outlet.
2. Connect the **24-pin ATX connector** from your PSU to the corresponding port on the Dr. Power III tester. This is the primary connection and must be made first to activate the tester.
3. Connect other desired cables (e.g., CPU 4/8-pin, PCIe 6/8-pin, PCIe 12+4pin, SATA, Molex) to their respective ports on the tester. The order of these secondary connections is not critical after the 24-pin ATX is connected.
4. Once all desired cables are securely connected, plug the power supply unit into the main power outlet and turn it on. The Dr. Power III LCD will illuminate.

Note: If a PCIe 12+4pin cable is connected, the standard PCIe 6/8-pin ports will be disabled to prevent conflicting readings or potential damage.

Video: Illustrates the connection of various power supply cables to the tester and the display of voltage readings.

6. Operating Instructions

The Dr. Power III offers both automatic and manual testing modes.

Automatic Test Mode

1. Ensure all desired PSU cables are connected to the tester and the PSU is powered on.
2. Press and hold the 'Check' button (power button) on the tester for approximately 5 seconds until you hear a beep.
3. The tester will automatically cycle through all connected power lines, displaying their voltage outputs sequentially.
4. Observe the LCD display for any anomalies. If a fault is detected, the backlight will turn red and an alarm will sound.

Manual Test Mode

1. Ensure all desired PSU cables are connected to the tester and the PSU is powered on.
2. Press the 'Check' button briefly (less than 5 seconds).
3. Each short press will advance to the next connected power line, displaying its voltage output.
4. Manually check each reading against the standard voltage ranges (refer to Specifications section).

Image: The Dr. Power III's diagnostic system, showing a white backlight for normal operation and a red backlight with an alarm for detected faults.

7. Maintenance

- Keep the tester clean and free from dust. Use a soft, dry cloth for cleaning.
- Store the tester in its carrying pouch when not in use to protect it from scratches and impacts.
- Avoid exposing the tester to extreme temperatures or direct sunlight.

8. Troubleshooting

Issue	Possible Cause	Solution

Issue	Possible Cause	Solution
Tester does not power on.	24-pin ATX connector not properly connected or PSU is off/faulty.	Ensure 24-pin ATX is securely connected. Verify PSU is powered on and functioning.
Red backlight and beeping alarm.	Voltage outside acceptable range (low-voltage, high-voltage, no voltage) or Power Good (PG) signal issue.	Immediately disconnect the PSU. Check all connections. Test with a known good PSU if possible. If the issue persists, the PSU may be faulty.
No reading for a specific connector (e.g., PCIe 6/8-pin).	Cable not connected, faulty cable, or PCIe 12+4pin is connected (disabling other PCIe ports).	Ensure the cable is correctly and firmly connected. Disconnect the PCIe 12+4pin if testing other PCIe ports. Try a different cable if available.
Inaccurate voltage readings.	Poor connection, faulty tester, or extreme environmental conditions.	Reconnect all cables. Ensure the tester is used within recommended operating conditions. If suspected faulty, contact support.

9. Specifications

Feature	Detail
Model Number	AC-069-OO1NAN-A1
Dimensions (W x L x H)	74.8mm x 135.8mm x 24.4mm (approx. 2.92 x 5.3 x 0.95 inches)
Supported ATX Standard	Up to ATX12V v3.1
Connectors Supported	24-pin ATX, PCIe 12+4pin, PCIe 6/8-pin, CPU 4/8-pin, SATA, Molex
Display Type	LCD (Liquid Crystal Display)
Monitored Voltages	+12V, +5V, +3.3V, +5Vsb
Power Good (PG) Range	100ms ≤ T ≤ 500ms
Safety Certifications	CE, FCC, RoHS, UL

Intel Standard Voltage Ranges

Voltage	Min. (V)	Max. (V)
+5V	4.70V	5.25V
+3.3V	3.14V	3.47V
+12V	11.4V	12.6V
+5Vsb	4.70V	5.25V

10. Warranty and Support

The Thermaltake Dr. Power III comes with a**3-year warranty**, ensuring reliability and enduring

performance. For technical support, troubleshooting assistance, or warranty claims, please visit the official Thermaltake website or contact their customer service department. Keep your proof of purchase for warranty validation.

Image: Dr. Power III with a '3 Year Warranty' badge, highlighting product assurance.