

TR2-430W

power Supply



Thermaltake
COOL YOUR LIFE

User's Manual >>

Thermaltake TR2-430W Power Supply

1. Introduction

We live up to the promise of Thermaltake logo in our unending quest for excellence.

Shall you have any suggestion or comments, please access our web site :

<http://www.thermaltake.com>

<http://www.tr2tt.com>

or e-mail to :

thermaltake@thermaltake.com

sales.tr@tr2tt.com

we appreciate your kindly feedback and you will receive the prompt response from our customer service team.

Thank you for choosing a quality Thermaltake **TR2-430W** PC Power Supply. We trust that you will find it providing you with many years of service.

You can always find a Thermaltake **TR2-430W** PC Power Supply that is suitable for all of your modern PC power needs.

Please take the time in familiarize yourself with the power supply, its connectors and the contents of this manual before proceeding with the installation of the power unit. You will need a Phillips crosshead screwdriver, perhaps your PC case manual and most certainly your motherboard manual.

Should you have any questions regarding the aforementioned steps, please contact Thermaltake directly. Failure to follow the proper procedures may cause severe bodily harm or PC component damage.

For Support or General Inquiries, please contact us at:

- 1 Thermaltake Technology USA
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Email: **support-usa@thermaltake.com**
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- 4 Thermaltake Australia and New Zealand Pty Ltd
Tel: +613-9763-1622
Email: **sales@thermaltake.com.au**
- 5 Thermaltake Japan Inc.
Email: **sales-jp@thermaltake.co.jp**

4. Trouble shooting

Condition 1: No DC output. The fan or fans are motionless

Check:

- 1-1 Is the AC inlet plug firmly plugged into the PSU inlet socket?
- 1-2 Is the wall socket, extension power cord, power strip or surge protector in use, fully functional and wall power switch turned 'ON'?
- 1-3 Is the Main Board socket (24pin) plug fully and firmly inserted?

Condition 2: The fan or fans began rotating and then stopped.

The system hangs without proceeding any further.

Check:

- 2-1 Are the peripheral connectors firmly plugged into accessory devices, such as the main hard drive, CD ROM , etc?
- 2-2 If a plug has been inadvertently connected in an off-set or reversed position, unplug the AC power source, reconnect the offending connectors and then wait for 30 seconds before replug in the AC power source and try again.

Note:

If the power supply still cannot or is still unable to power up after following the above instruction, please send the unit back to your dealer or retailer for after sales service.

2 Installation

2.1 Usage illustration

- 2.1.1 Do not pull the AC power cord when the power supply is in use or else damage to components will result.
- 2.1.2 Do not store the Power Supply in a high humidity and high temperature environment.
- 2.1.3 When using an ATX type Power Supply under testing conditions where the power supply is not installed in a PC and to components, a "load" such as a hard drive for example, must be connected to the power supply before being switched on. When the power supply is turned on, the fans will start to rotate and DC power will be available.
- 2.1.4 High voltages exist in the power supply. Do not open the power supply case unless you are an authorized service technician or electrician.
- 2.1.5 All warranties and guarantees shall be voided should there be a failure to comply with any of the warnings and cautions covered in this manual.

2.2 Installation steps

To prevent electrical shocks, please disconnect the power cord from your existing power supply unit. TR2-430W Power Supply has Voltage Selector which will change to 115V / 230V.

Installation Steps

- 2.2.1 Disconnect the power cord from your old power supply.
 - 2.2.2 Follow your computer case manual and disassemble the case.
 - 2.2.3 Disconnect all the power connectors from the motherboard and from the peripheral devices such as case fans, hard drives, floppy drives. etc.
 - 2.2.4 Remove the existing power supply from your computer case and replace it with your new Thermaltake TR2-430W Power Supply
 - 2.2.5 Connect the power connectors to the motherboard and peripheral devices (refer to the rest of this manual to match the various one-way key-locked connectors to the motherboard and accessories).
 - 2.2.6 Connect the 6-pin PCI Express connector to PCI Express graphic card if you need.
- Note: Please read the user manual supplied with your graphic card for detail usage instructions.
- 2.2.7 Close the computer case.
 - 2.2.8 Make sure your power supply switch is on "OFF" position, and Connect the supplied power cord to your Thermaltake TR2-430W Power Supply PSU.

> Technology Features



Dual Fan - FrontFan



Dual Fan - BackFan

Dual Fan Design-
Optimum Air flow6-pin PCI Express
Connector

> Cable Application

Intelligent Cable Management:
>> Black cable sleeving / Optimum air-flowNew 24(20) pin
Main connector Design

> Total Output Connector

X1
24-pin
Main ConnectorX1
4-pin
+12V Power
ConnectorX9
4-pin
Peripheral Power
ConnectorX2
4-pin
Floppy Drive
ConnectorX2
5-pin
SATA ConnectorX1
6-pin
PCI Express
Connector

	OUTPUT					
	+5 V	+3.3 V	+12 V	-5 V	-12 V	+5 VSB
Max. Load	30 A	28 A	18 A	0.5 A	0.8 A	2 A
Min. Load	1.0 A	0.5 A	1.0 A	0 A	0 A	0 A
Load Reg.	+5% ~ -5%	+5% ~ -5%	+5% ~ -5%	+10% ~ -10%	+10% ~ -10%	+5% ~ -5%
Ripple V(p-p)	50 mV	50 mV	120 mV	100 mV	150 mV	50 mV

3.2 TR2-430W Power Supply Specification

Features:

- Supports 6-pin PCI-Express connector.
- PFC function, improved energy efficiency and reduced current load on AC delivery systems.
- Dual 8cm fan, provide best air-flow to cool your PC system.
- Intelligent Black Cable Sleeving, provide optimum air flow inside the case.
- Protections against Over Power, Over Voltage, Short-Circuit, and Protection Reset.
- Safety / EMI Approvals: FCC, UL, CUL, CSA, and CE certification.



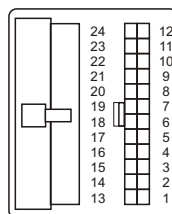
Dual Fan Design-Optimum Air flow:
80 x80 x 25 mm, One fan outlet, the other fan for intake (one faces back, other faces front)

SPECIFICATION		
PIN	W0069	W0070
Maximum Power	430 Watts	
Color	Black	
Switches	ATX Logic on off additional power (rocker switch)(115/230 V selector switch)	
PFC (Power Factor Correction)	PFC	N/A
Cooling System	Dual 8 cm Fan: SPEED : 2400 RPM(+/-10%) DIMENSION : 80 x 80 x20 mm TEMP. AUTO CONTROL 3010 RPM at 25°C-3070 RPM at 45°C	
Noise	19dB at 2000 RPM	
P. G. Signal	100-500 ms	
Over Voltage Protection Recycle AC to Reset	+5V trip point < +7.0V +3.3V trip point < +4.5V +12V trip point < +15.6V	
DIMENSIONS		
Unit Size	16cm(L)x15cm(W)x8.6cm(H)	
Net Weight	2.6 kg	2.6 kg
INPUT		
Input Voltage	115 VAC / 230 VAC	
Input Frequency Range	47 ~ 63Hz	
Input Current	9.0A/5.0A	
Hold-up Time	16ms	
Efficiency	> 65%	

3. Product Specification

3.1 Output specification

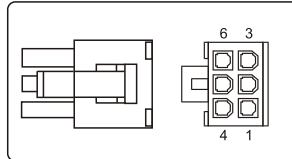
Main Power Connector



Voltage	Color			Color	Voltage
+3.3 V	Orange	1	13	Orange	+3.3 V
+3.3 V	Orange	2	14	Blue	-12 V
COM	Black	3	15	Black	COM
+5 V	Red	4	16	Green	PS_ON#
COM	Black	5	17	Black	COM
+5 V	Red	6	18	Black	COM
COM	Black	7	19	Black	COM
PWR_ON	Gray	8	20	N/C	N/C
+5 Vsb	Purple	9	21	Red	+5 V
+12 V	Yellow	10	22	Red	+5 V
+12 V	Yellow	11	23	Red	+5 V
+3.3 V	Orange	12	24	Black	COM

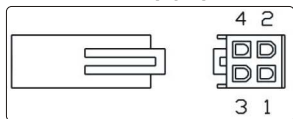


PCI Express connector (6 pin)



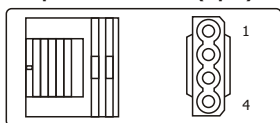
Color	Signal	PIN
Yellow	12V:DC	1
Yellow	12V:DC	2
Yellow	12V:DC	3
Black	COM	4
Black	COM	5
Black	COM	6

+12V connector (4 pin)



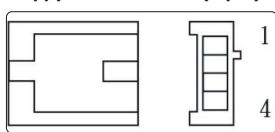
Color	Signal	Pin
Black	COM	1
Black	COM	2
Yellow	+12V:DC	3
Yellow	+12V:DC	4

Peripheral connector (4 pin)



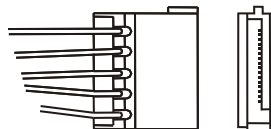
Color	Signal	Pin
Yellow	+12V:DC	1
Black	COM	2
Black	COM	3
Red	+5VDC	4

Floppy disk connector (4 pin)



Color	Signal	Pin
Red	+5VDC	1
Black	COM	2
Black	COM	3
Yellow	+12V:DC	4

Serial ATA Power Connector



Color	Signal	Pin
Yellow	+12V:DC	1
Black	COM	2
Red	+5VDC	3
Black	COM	4
Orange	+3.3 VDC	5