

Antec
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EARTHWATTS 750-WATT POWER SUPPLY

USER'S MANUAL

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ANTEC EARTH WATTS SERIES

EA-750 POWER SUPPLY

ENVIRONMENTALLY FRIENDLY POWER

The EarthWatts series is Antec's line of high-efficiency power supply units (PSU). Combining cutting-edge technology with an energy-efficient design, the EarthWatts series presents some of the most environmentally friendly power supplies on the planet.

STANDARDS AND FEATURES

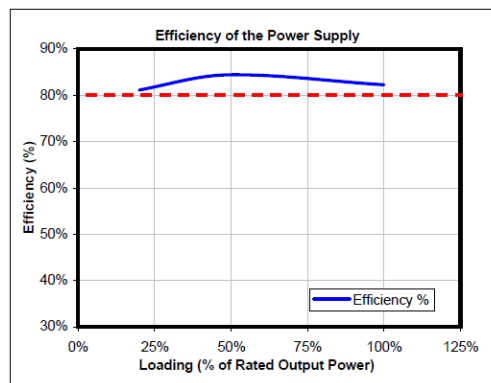
The EA-750 PSU is compatible with ATX12V v2.3 and EPS12V v2.91 specifications. The EA-750 features Universal Input, which automatically senses when you connect to any AC power source between 100~240V without having to worry about setting a voltage switch. This power supply also features Active Power Factor Correction (Active PFC), which improves the power factor value of the power supply by altering the input current wave shape, helping to power transmission across the grid.

SYSTEM PROTECTION

A variety of industrial-grade safety circuitry will help protect your computer: OVP (Over Voltage Protection), SCP (Short Circuit Protection), and OCP (Over Current Protection). Sometimes the PSU will "latch" into a protected state. This means that you will need to turn off the PSU and clear the fault before it will function again. There are no user-replaceable fuses in your EarthWatts PSU.

80 PLUS® CERTIFICATION

The 80 PLUS® certification program sets the highest independent standards in power supply efficiency. This means that the PSU will generate less heat so it stays cooler, runs more quietly, and lasts longer. The EarthWatts series has been certified to be at least 80% efficient at a wide range of operating loads and will lower your operating costs while helping to protect the environment.



Source: [80 PLUS® Verification and Testing Report](#)






NVIDIA™ SLI™-READY CERTIFICATION

Antec's EarthWatts power supplies are NVIDIA™ SLI™-Ready certified for use with pairs of high-end graphics cards for superior parallel graphics processing.

ADVANCED HYBRID CABLE MANAGEMENT SYSTEM

The EA-750 uses Advanced Hybrid Cable Management. Cables that are important or mandatory are connected directly to the PSU. There are also modular connectors on the back of the PSU to add additional cables as needed. Using only the power cables you need reduces clutter and improves airflow inside your case. For the list of connected and optional cables, see Table 1.

TABLE 1

Cable Quantity	Power Connectors	Part Name	Description
N/A		Power supply direct cabling	24-pin (20+4) main connector
			8-pin EPS12V
			4-pin ATX12V
			8-pin (6+2) PCI-E + 6-pin PCI-E connectors
			3 x Molex + 1 x Floppy
			3 x SATA
2	 x 3	Molex connectors w/cable	Includes three Molex connectors
2	 x 3	Serial ATA connectors w/cable	Includes three Serial ATA connectors
1	 x 1	PCI Express connectors w/cable	Includes 8-pin (6+2) PCI-E + 6-pin PCI-E connectors
	 x 1		

POWER OUTPUT

The EA-750 PSU distributes a maximum number of amps on each rail. To see the output capacity and regulation for each different voltage, see Table 2.

TABLE 2

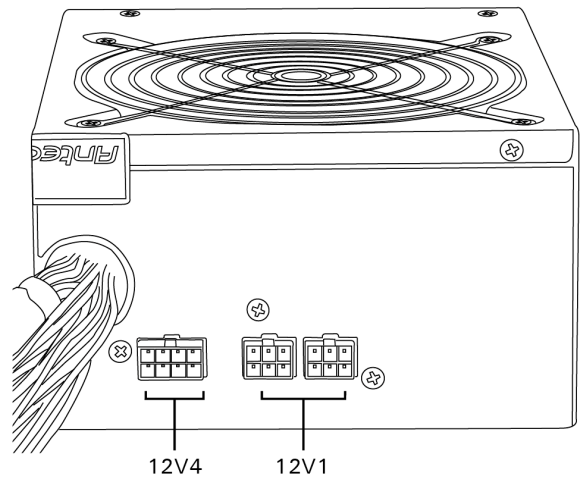
Output Voltage	Load Max.	Regulation	Ripple
+3.3V	25A	±5%	<50 mV
+5V	25A	±5%	<50 mV
+12V	25A	±5%	<120 mV
+12V	25A	±5%	<120 mV
+12V	25A	±5%	<120 mV
+12V	25A	±5%	<120 mV
+12V	25A	±5%	<120 mV
-12V	0.5A	±10%	<120 mV
+5VSB	3A	±5%	<50 mV

+12-VOLT RAIL DISTRIBUTION

The EA-750 PSU uses four separate +12-volt power rails. Different connectors are hooked up to separate circuits to aid in the balanced distribution of power between devices in your computer. The engineers have allocated the rails to different connectors to prevent voltage sags in one device due to sudden demands for power in another device.

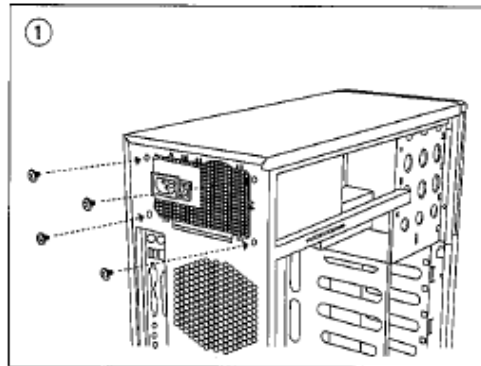
TABLE 3

PSU Direct Cabling Connector	+12V Rail
(20+4) Motherboard	1
4-pin ATX12V	2
8-pin EPS12V	2
PCI-E w/ blue stripe	3
PCI-E w/ green stripe (modular)	4
Molex cable from PSU	1
SATA cable from PSU	1



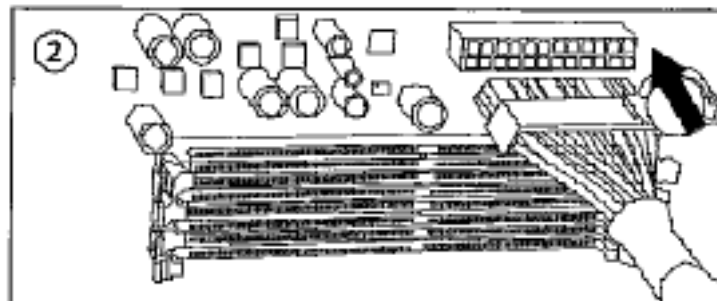
INSTALLATION:

1. Install the EA-750 PSU into your case with the four screws provided.



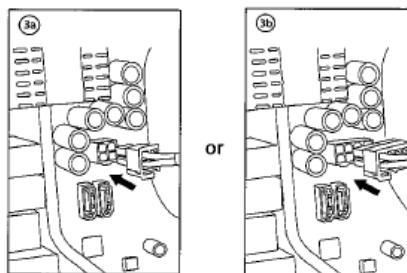
2. Connect the 24-pin main power connector to your motherboard. If your motherboard uses a 20-pin connector, detach the 4-pin attachment on the 24-pin connector.

Note: The detachable 4-pin section cannot be used in place of a 4-pin +12V connector.

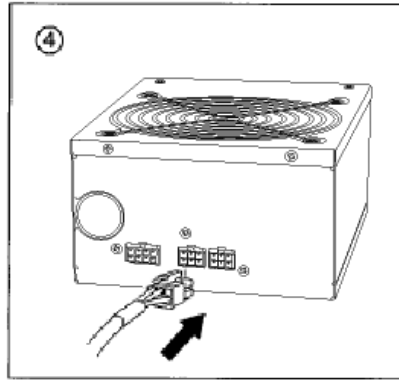


3. Connect the 8-pin or 4-pin connector for the CPU. If your motherboard has an 8-pin socket with a cover on some of the openings, we recommend that you remove the cover and use the 8-pin connector.

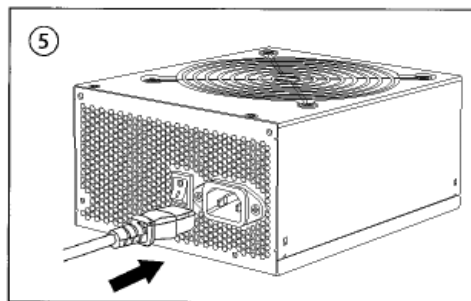
Note: Please also refer to your motherboard user's manual for any special instructions.



4. Connect the cables from the cable pack to the socket on the power supply as needed. If you are going to plug the additional PCI-E cable into the PSU, it should go into the red socket. If the red socket is not being used for PCI-E, then it can be used for another cable from the pack that accompanies the PSU.



5. Connect the AC power cord to the power supply AC inlet. Please be sure to use the heavy-duty cord supplied with your EA-750. Turn the switch to the “|” position after you have connected all the devices, and you are ready to turn on your computer.



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