USER GUIDE

ATX 450 and ATX 550 Watt Power Supplies

NS-PCW4508/NS-PCW4508-C/NS-PCW5508/NS-PCW5508-C

INSIGNIA

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Introduction

Congratulations on your choice of this Insignia NS-PCW4508/NS-PCW5508 power supply. Please read this manual carefully and follow the instructions before installing the power supply. This is an advanced power supply with excellent acoustic and thermal performance and intelligent thermal fan control technology that makes it virtually silent. The power supply provides perfect protection for your system and comes equipped with two +12V rails that can handle a maximum load of 18A for additional system reliability.

Safety information

Safety regulations

The power supply meets safety guidelines and regulations for UL, cUL, and FCC.



Important safety instructions

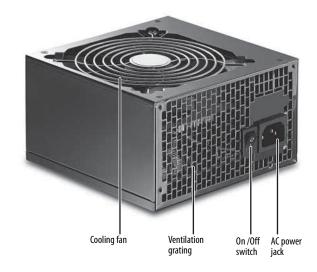
- Do not place your system near a radiator or other heat source.
- Do not place your system close to a source of strong magnetic fields.
- Do not place your system in a moist or dusty environment, or in an area subject to strong vibration.
- Do not place your system in direct sunlight.
- Your computer must operate at a stable AC input voltage.
- Do not open the cover on the power supply case. Dangerous voltages are present inside the cover. Your warranty is void if the cover is removed.
- Never operate the device with wet or moist hands.
- Never place items in the openings or fan of the power supply.
- Make sure that the power cord is plugged into a powered electrical outlet.
- Make sure that the power cord is plugged into the power supply.
- Make sure that you connect your power supply properly. Check your motherboard and graphic card manuals for compatibility before connecting the power supply to any of your devices.

Power supply components and features

Power supply features include:

- The PSU complies with the newest Intel standard ATX 12V
- Supports Intel and AMD dual-core and multi-core processors
- High-performance components designed for better reliability
- Dual +12V outputs for higher power capacity
- One 4+4 pin +12V CPU connector for high-end CPUs
- Two 6+2 pin PCI Express connector for high-end video cards
- 120 mm low-noise cooling fan
- 20+4 pin DC cables are mesh-sleeved and are 21.65 in. (55 cm) long.
- High reliability, including built-in protection circuit OVP, OLP, SCP, and line input fuse protection

Power supply components include:



Package contents

- 450-Watt or 550-Watt ATX Power Supply
- AC power cord
- User Guide

Note: If the power supply does not work correctly, contact our service center immediately at (800) 305-2204.

INSIGNIA⁻ Connector types

Connector	Illustration	Connect to		
20+4-PIN Main Power		The motherboard (can be used with motherboards with either 20 or 24 pin ports)		
8-PIN (4+4) + 12V -		The motherboard (for CPU power) (can be used with motherboards with either 4 or 8 pin ports)		
4-PIN peripheral - Total 2 connectors	6999	Internal IDE drives		
Serial ATA (SATA) - Total 4 connectors		Internal SATA drives		
Floppy drive	ALL STREET	3.25″ floppy drives		
8-PIN (6+2) PCI-E Total 2 connectors		PCI Express cards (such as a graphics card) that requires power (can be used with cards with either 6 or 8 pin ports)		

Installing the power supply

Preparing your power supply:

- 1 Make sure that your motherboard, graphics card, and other components are compatible with this power supply. Refer to the documentation that came with each component.
- 2 Check your local AC voltage (115VAC for USA, Canada, Japan, and others, and 230VAC for Europe, Southeast Asia, and others). The NS-PCW4508/NS-PCW5508 is compatible with 100-240VAC.

Caution: Using the incorrect voltage can damage the power supply and connected equipment and may void your warranty.

Are you replacing a power supply?

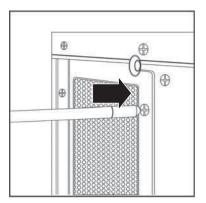
- If yes, start at "Removing your old power supply" below.
- If no, go to "Installing the power supply" on pg 4.

Removing your old power supply:

- 1 Turn off your computer.
- 2 Unplug the power cord from your computer.
- **3** Open your computer case. (See the instructions that came with your computer.)
- 4 Disconnect your old power supply from all computer components.

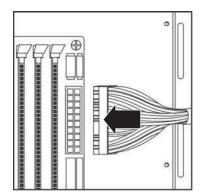
Tip: Make sure to note each component and the connector type for when you need to connect them to your new power supply.

5 Remove the screws that secure your old power supply to your computer case, then remove it from the case.

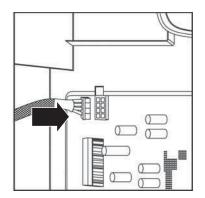


Installing your power supply:

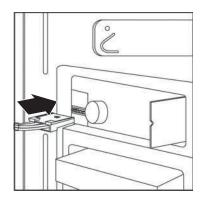
- 1 Position your power supply in the computer case, making sure that the AC power jack and cooling fan are facing out, then secure your power supply using the screws included with your computer case.
- 2 Connect the power supply cables to the motherboard and compatible computer components (see below). Make sure that each connection is secure.
 - **Tip:** If you are replacing an old power supply, reference your notes from when you removed the old power supply to make sure that you are connecting all of your components correctly.
 - **a** Connect the 20+4-pin main power connector to your motherboard (either 20 or 24 pins).



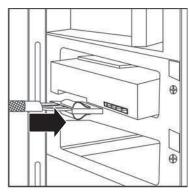
b Connect the 8-pin (4+4) or 4-pin +12V power connector to your motherboard.



- c Connect all of the following that apply to your computer:
 - i The 4-pin peripheral connectors (4) to any computer components with a 4-pin connector, such as an IDE drive or a case fan.



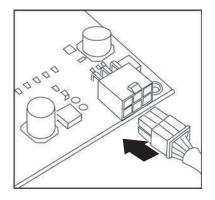
ii The floppy drive power connector to the floppy drive.



iii The Serial ATA connectors (4) to any computer components that have a Serial ATA connector, such as a CD/DVD/Blu-ray or hard drive.



iv The 8-pin PCI-E or 6-pin PCI-E connector to a PCI-E graphic card.



- **Caution**: Make sure that all connectors are securely connected. Incorrect connections could prevent your computer from starting and could damage some components.
- **5** Close your computer case.
- 6 Connect the AC power cord to the power supply, then to a surge protector or wall outlet.
- 7 Turn on your computer by pressing the power button on the front of the case.

Note: For more information, refer to your computer's user guide.

Troubleshooting

If your new power supply is not working correctly, try the following:

- Make sure that the computer power cord is firmly plugged into the power cord connector on your computer.
- If you are using a surge protector, make sure that it is plugged in and turned on.
- Make sure that the wall outlet is supplying power. For example, plug a lamp into the outlet and turn it on.
- Make sure that the system board power supply cable is securely connected to the system board connector (24 pin or 20 pin).
- Make sure that all power supply cables to peripheral devices, such as hard drives, optical drives, and fans, are securely connected. Any loose power cable connections may cause the power supply to operate incorrectly.
- The power supply may be overloaded. Unplug any unnecessary components, such as extra drives, then try again.
- If the power supply is very hot, check the case fans and the power supply fan. Replace any faulty case fans, then try again.

INSIGNIA[®] Specifications

450 Watt Power Supply

AC INPUT	100-240V~50-60Hz, 10A				
DC OUTPUT	+12V	+5V	+3.3V	- 12V	+5VSB
	32A	18A	18A	0.3A	2.5A
MAX POWER	384W	115W		3.6W	12.5W
TOTAL POWER	450W				

550 Watt Power Supply

AC INPUT	100-240V~50-60Hz, 10A				
DC OUTPUT	+12V	+5V	+3.3V	-12V	+5VSB
	45A	18A	18A	0.3A	3.0A
MAX POWER	540W	110W		3.6W	15.0W
TOTAL POWER	550W				

Legal notices

FCC warning

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual.The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

Caution: Any change or modification to the equipment not expressly approved by the manufacturer or its authorized parties could void your authority to operate the equipment.

UL statement

Any information or documentation provided to you involving UL Mark services is provided on behalf of Underwriters Laboratories, Inc.

Products that bear the UL Mark are identical to those that were evaluated by UL and found to be technically compliant with the UL's applicable requirements.

For further information regarding the use of UL marks, please visit the UL Website at www.ul.com.



ONE-YEAR LIMITED WARRANTY

Definitions:

The Distributor* of Insignia branded products warrants to you, the original purchaser of this new Insignia-branded product ("Product"), that the Product shall be free of defects in the original manufacturer of the material or workmanship for a period of one (1) year from the date of your purchase of the Product ("Warranty Period").

For this warranty to apply, your Product must be purchased in the United States or Canada from a Best Buy branded retail store or online at www.bestbuy.com or www.bestbuy.ca and is packaged with this warranty statement.

How long does the coverage last?

The Warranty Period lasts for 1 year (365 days) from the date you purchased the Product. Your purchase date is printed on the receipt you received with the Product.

What does this warranty cover?

During the Warranty Period, if the original manufacture of the material or workmanship of the Product is determined to be defective by an authorized Insignia repair center or store personnel, Insignia will (at its sole option): (1) repair the Product with new or rebuilt parts; or (2) replace the Product at no charge with new or rebuilt comparable products or parts. Products and parts replaced under this warranty become the property of Insignia and are not returned to you. If service of Products or parts are required after the Warranty Period expires, you must pay all labor and parts charges. This warranty lasts as long as you own your Insignia Product during the Warranty Period. Warranty coverage terminates if you sell or otherwise transfer the Product.

How to obtain warranty service?

If you purchased the Product at a Best Buy retail store location or from a Best Buy online website (www.bestbuy.com or www.bestbuy.ca), please take your original receipt and the Product to any Best Buy store. Make sure that you place the Product in its original packaging or packaging that provides the same amount of protection as the original packaging.

To obtain warranty service, in the United States call 1-888-BESTBUY or in Canada call 1-866-BESTBUY. Call agents may diagnose and correct the issue over the phone.

Where is the warranty valid?

This warranty is valid only in the United States and Canada at Best Buy branded retail stores or websites to the original purchaser of the product in the county where the original purchase was made.

What does the warranty not cover?

This warranty does not cover:

- Customer instruction/education
- Installation
- Set up adjustments
- Cosmetic damage
- Damage due to weather, lightning, and other acts of God, such as power surges
- Accidental damage
- Misuse
- Abuse
- Negligence
- Commercial purposes/use, including but not limited to use in a place of business or in communal areas of a multiple dwelling condominium or apartment complex, or otherwise used in a place of other than a private home.
- Modification of any part of the Product, including the antenna
- Display panel damaged by static (non-moving) images applied for lengthy periods (burn-in).
- Damage due to incorrect operation or maintenance
- Connection to an incorrect voltage or power supply

- Attempted repair by any person not authorized by
 Insignia to service the Product
- Products sold "as is" or "with all faults"
- Consumables, including but not limited to batteries (i.e. AA, AAA, C, etc.)
- Products where the factory applied serial number has been altered or removed
- Loss or Theft of this product or any part of the product
 Display panels containing up to three (3) pixel failures (dots that are dark or incorrectly illuminated) grouped in an area smaller than one tenth (1/10) of the display size or up to five (5) pixel failures throughout the display. (Pixel based displays may contain a limited number of pixels that may not function normally.)
- Failures or Damage caused by any contact including but not limited to liquids, gels or pastes.

REPAIR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY FOR BREACH OF WARRANTY. INSIGNIA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, LOST DATA, LOSS OF USE OF YOUR PRODUCT, LOST BUSINESS OR LOST PROFITS. INSIGNIA PRODUCTS MAKES NO OTHER EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE WARRANTY PERIOD. SOME STATES, PROVINCES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE.

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