

### Owner's Reference

### Stellar<sup>™</sup> Power Plant<sup>™</sup>3





# Table of Contents

ntroduction	
Thank You	
Contact Information	
Welcome	
Symbols Found on the P3	
Getting Started	4·
Included With Your P3	
The Remote	
Front Panel View	
Rear Panel View	
Installation Considerations	
Plugging In The Power Cable	
Plugging In Your Equipment	
Powering On Your P3	
Dperation Guide	
Idle Mode	
Output	1
MultiWave Function	1
CleanWave Function	1
roubleshooting	1
Specifications	13-7
Varranty	15-1
Registering Your Product	1
What This Warranty Covers	1
Shipping	1
What This Warranty Does Not Cover	1
Limitations Under This Warranty	1
Warranty Transfer	1
Service Information	1
Warranty Service Within North America	1
International Warranty Service	1
Changes To Our Products	



# Safety Information

### Stellar Power Plant 3

Important Safety Instructions



READ AND FOLLOW ALL INSTRUCTIONS HEED ALL WARNINGS



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THE APPARATUS. THIS APPARATUS MUST BE CONNECTED TO A MAINS SOCKET OUTLET WITH A PROTECTIVE EARTH CONNECTION.

Clean only with a dry cloth. Do not place flammable material on top of or beneath the unit.

The PS Audio<sup>®</sup> Stellar Power Plant 3 is a passively cooled component that requires adequate ventilation at all times during operation.

Do not remove or bypass the ground pin on the end of the AC cord. All PS Audio<sup>®</sup> products ship with a grounding-type plug. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Unplug this apparatus during lightning storms.

When making connections to this or any other component, make sure all components are powered off. Turn off all systems' power before connecting the PS Audio<sup>®</sup> component to any other component. Make sure all cable terminations are of the highest quality.

THERE ARE NO USER-SERVICEABLE PARTS INSIDE THIS PS AUDIO PRODUCT. REFER ALL SERVICE NEEDS TO QUALIFIED SERVICE PERSONNEL.

Please contact your authorized dealer, distributor, or PS Audio<sup>®</sup> directly if you have any questions or concerns that are not addressed in this reference manual.

PS Audio<sup>®</sup>, the sine wave logo, and PerfectWave<sup>®</sup> are registered trademarks of PS Audio, Inc., and are restricted for use by PS Audio, Inc., its subsidiaries, and authorized agents. Stellar<sup>™</sup>, Power Plant<sup>™</sup>, MultiWave<sup>™</sup>, and CleanWave<sup>™</sup> are trademarks of PS Audio, Inc.

This product was designed and assembled in Boulder, Colorado with globally sourced components.

© 2021 PS Audio, Inc. All rights reserved. Rev C.



## Introduction

Thank You	Thank you for purchasing PS Audio's Stellar Power Plant 3 AC Regenerator. This is your comprehensive Operator's Guide. This guide is intended to provide a full overview of the Stellar Power Plant 3's functions and capabilities. It is our intention to provide you with full details about the Stellar Power Plant 3 and to answer any and all questions you may have. If you have additional questions or concerns, please contact us and we will be happy to assist you.	
Contact Information	PS Audio, Inc. 4865 Sterling Drive Boulder, CO 80301 1 (800) PSAUDIO service@psaudio.com www.psaudio.com	
Welcome	The Stellar Power Plant 3, also known as the P3, will provide regulated AC power regard- less of the condition of your home's power. Clean, regulated AC is essential to optimize the performance of your connected equipment. The P3 removes the miles of power cables between your home and the power station. Integrating the P3 into your system is the equivalent of moving your home to within 50 feet of the city power station.	
Symbols Found On The P3	<ul> <li>✔ Indicates compliance with European Union Legislation for relevant safety (Low Voltage Directive 2014/35/EU) and EMC (EMC Directive 2014/30/EU) requirements.</li> <li>✔ Is intended to tell the user that parts inside the product are a risk of electric shock to persons.</li> <li>✔ Is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.</li> <li>✔ Signifies that the instrument complies with European Union Waste Electrical and Electronic Equipment Directive.</li> <li>✔ Indicates that the unit is in compliance with the European Union Reduction of Bazardous Substances Directive.</li> </ul>	



### Stellar Power Plant 3

Included With Your P3

- 6-foot Power Cable
- Owner's Reference Manual
- Remote Control

The Remote



- 1 The Dim button turns the front panel LEDs off.
- 2 The MW button turns the MultiWave<sup>™</sup> function on and off.
- 3 The power button puts the unit into idle mode.
- 4 The On button takes the unit out of idle mode, and turns the front panel LEDs on.
- 5 The home button and arrows are only applicable to DirectStream Power Plants.
- 6 The Clean button engages the CleanWave<sup>™</sup> feature.
- 7 MW Strength +/- are only applicable to DirectStream Power Plants.



- Front Panel View 1 PS Audio Logo LED Idle Button
  - 2 Output LED Indicator
  - 3 MultiWave LED Indicator
  - 4 CleanWave LED Indicator
  - 5 Infrared Remote Sensor



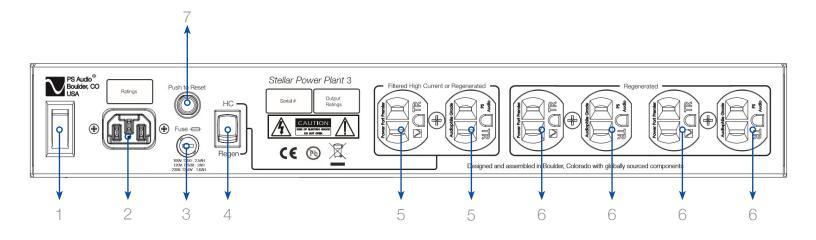


### Stellar Power Plant 3

Rear Panel View 1 Master Power Switch

7

- 2 IEC AC Power Inlet
- 3 Fuse Socket
- 4 Regenerated/Bypass Switch For Filtered High Current
- 5 Regenerated or Filtered High Current Outlet
- 6 Rengenerated Outlet
  - Circuit Breaker Reset Button





### Stellar Power Plant3

Installation Considerations

#### Location

Once your new Stellar Power Plant 3 is unpacked, you will need to find a convenient place to set it. If you wish to stack this unit with other Stellar products, or any other equipment, the P3 must be the top component in the stack to ensure proper ventilation.

#### Mounting

The Stellar Power Plant 3 should be placed with consideration of providing air circulation to the unit. If you wish to install the P3 into your component rack, the purchase of an aftermarket, custom-designed shelf may be necessary.

If your equipment is located a long distance from the P3, it is preferable to use a long, heavy-gauge shielded power cable between the AC receptacle in the wall and the Power Plant. This is preferable to long individual power cables between the connected components and the P3.

#### Conditioners

We discourage the use of any other power conditioning equipment, before or after the P3, without considerable evaluation. A critical determination will have to be made as to whether there are any sonic or visual shortcomings. The P3 has a significant input & output passive filter design, and adding extra power cables to its input or additional filtering to its output may, in fact, be undesirable.

Plugging In The Power Cable You may use either the provided power cable or an aftermarket power cable to connect your unit to AC power. For best results, we strongly recommend the use of a PS Audio PerfectWave<sup>®</sup> Power AC cable, or any high-quality aftermarket power cable. It is always preferable to feed your equipment using an excellent power cable, as there will be a significant performance improvement over the stock power cable.

> To connect your unit to AC power, plug the flat end of the power cord into the IEC AC inlet and the pronged end into a wall socket.

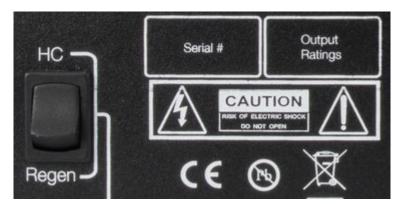




### Stellar Power Plant 3

Plugging In Your Equipment The Stellar Power Plant 3 has a total of six (due to varying outlet sizes, the German, Australian, and United Kingdom versions of this product will only have four) outlets for regenerated power, two of which can be used for equipment requiring a higher output current than the P3 can support. To activate the Filtered High Current setting on those two outlets, flip the bypass switch on the rear panel to the up position (as pictured below). By selecting Filtered High Current, the regenerator will be bypassed and your AC power will be filtered and able to deliver up to 13A of current.

#### CAUTION: YOU MUST SHUT OFF THE UNIT'S POWER BEFORE SWITCHING BETWEEN THE FILTERED HIGH CURRENT AND REGENERATING SETTINGS.



With the P3 powered off, plug in your desired equipment to the outlets on the back panel of the unit.



Powering On Your P3 Once the unit is connected to power, flip the master power switch on the rear panel to the on position. The PS Audio Logo LED button on the upper left corner of the front panel will flash for approximately 3 seconds while the unit initializes. Once you hear a click and the Logo LED button is glowing solid blue, the unit has finished initializing and is ready for use.



## **Operation Guide**

### Stellar Power Plant 3

Idle Mode

The master power switch on the rear panel should remain on at all times (except when making new connections). When your connected equipment is not in use, the P3 can be placed in idle mode. Putting your unit in idle mode will deactivate all of its output relays. We recommend individually powering down your connected components before placing your P3 into idle mode. If you wish to fully power down your P3 (by flipping the master switch on the rear panel or by unplugging the power cord), you must first place the unit into idle mode.

Idle mode can be activated by pressing the PS Audio logo button, located on the upper left hand corner of the P3's front panel. When the logo idle button is not lit, the P3 is in idle mode. Idle mode can also be activated by pressing the red power button in the top right hand corner of the remote.

To take the P3 out of idle mode, press the PS Audio logo button, located on the upper left hand corner of the P3's front panel. This button will glow blue when the P3 is not in idle mode. Pressing the On button on the remote will also take the P3 out of idle mode.





## **Operation Guide**

### Stellar Power Plant 3

Output

The Stellar Power Plant 3 has a maximum output power of 300 watts. The Output LED on the front panel of the P3 will glow either green, yellow, or red, depending on the output power of the unit.

When the LED is glowing solid green, the unit is pulling up to  $\sim$ 90% (270W) of the maximum output power.

When the LED is glowing solid yellow, the unit is pulling between ~90-100% (270W-300W) of the maximum output power.

If the LED is glowing solid red, the unit is detecting power over 300W. The unit will go into fault mode when power exceeds 330W for a continuous period of 30 seconds.





## **Operation Guide**

### Stellar Power Plant 3

MultiWave Function

The MultiWave function increases the charge time of the P3's output waveform by altering the peak of the sine wave. A longer charging time, occurring at the peak of the output sine wave, lowers the connected equipment's power supply ripple, much the same way as increasing the power supply capacitance of connected equipment.

To toggle this feature on and off, press the MW button on the remote. The MultiWave LED on the front panel will glow blue when MultiWave is turned on. When the MultiWave function is turned off, the P3 uses the traditional sinewave as its default waveform.



CleanWave Function CleanWave injects a series of higher frequencies that ride on the main sine wave to help degauss connected magnets. To enable this function, press the Clean button on the remote. To ensure that CleanWave is effective, make sure all connected equipment is on and functioning. CleanWave can be used between CDs, movies, and vinyl. It is not recommended to activate CleanWave while you are listening, as it may not sound correct until the CleanWave cycle has finished. The cycle will last for 5 seconds, during which time the CleanWave LED on the front panel will glow blue. When the cycle has finished, the LED will turn off.



# Troubleshooting

Fault Mode	If the PS Audio LED Logo button is rapidly flashing blue, your Stellar Power Plant 3 has detected an error and entered into fault mode, disabling all outputs. When in fault mode, the status of the other LEDs on the front panel will help indicate what error the unit has detected.
Output LED Flashing Red and Yellow	If you notice the Output LED is flashing, alternating between red and yellow, the incoming voltage from your wall outlet is too low.
Output LED Flashing Green and Red	If the Output LED is flashing, alternating between green and red, the incoming voltage from your wall outlet is too high.
CleanWave and MultiWave LEDs Flashing Simultaneously	If the CleanWave and MultiWave LEDs are flashing simultaneously (and the Output LED is solid red), the Power Plant has exceeded the maximum output power supply for a continuous period of 30 seconds. To find the component that is drawing more power than the P3's capability, remove all cables that are plugged into the unit's outputs, power cycle your Power Plant, and begin reconnecting your equipment, one at a time. In order for the Power Plant to kick into fault mode, it must be overdriven for more than 30 seconds. For this reason, you will have to allow each connected component to run for at least 30 seconds before connecting any other components.
Output LED Flashing Red	When the Output LED is flashing red, the unit has entered fault mode for short circuit protection. This means that the Power Plant has detected a short in one of your connected components. To find the shorted component, start by removing all cables plugged into the P3's outputs, and power cycle the unit. You may then begin reconnecting your equipment, one at a time. Your Power Plant will enter into fault mode as soon as the shorted device is reconnected.
MultiWave LED Flashing	If the MultiWave LED is flashing blue (and the Output LED is solid red), the unit has detected an Amp fault. Please contact PS Audio Customer Support for assistance.
Output LED Flashing Blue and Red	If the output LED is flashing, alternating between blue and red, the unit has detected DC voltage on its output. Please contact PS Audio Customer Support for assistance.
CleanWave LED Solid Blue	When the CleanWave LED is solid blue (and the Output LED is solid red), the unit has detected a corrupt flash. Please contact PS Audio Customer Support for assistance.



## Specifications

### Stellar Power Plant 3

Specifications By Country







## Specifications

Instrument Specification	U.S./Japan	Europe/Asia
Unit Dimensions	17" W x 12" D x 3.25" H (43cm x 30.48cm x 8.255cm)	17" W x 12" D x 3.25" H (43cm x 30.48cm x 8.255 cm)
Unit Weight	31.4 lbs ( 14.24 kg)	31.4 lbs ( 14.24 kg)
Shipping Dimensions	22" x 17" x 8" (55.88cm x 43.18cm x 20.32cm)	17" W x 12" D x 3.25" H (43cm x 30.48cm x 8.255 cm)
Shipping Weight	39.4 lbs (17.87 kg)	39.4 lbs (17.87 kg)
Nominal Input Voltage	US - 108 – 145 VAC JP - 85 – 125 VAC	200 –270 VAC
Maximum Continuous Load	US - 300VA JP - 300VA	300VA
Maximum Peak Load (30 seconds)	1000VA	1000VA
Voltage Regulation	<0.1%	<0.2%
Typical Output THD	<0.3%	<0.3%
Output Impedance	<0.008 ohm	<0.008 ohm
Efficiency @ 300VA	>85%	>85%
Input Frequency	45 – 65 Hz	45 – 65 Hz
Energy Dissipation	680J	850J
Peak Current Surge	60,000A	60,000A
Max Surge Voltage	6,000V	6,000V
Clamp Level	340V	800V
DC Trigger	None	None



# Warranty Information

Registering Your Product	By registering your product, you are validating the start date of your limited warranty. This limited warranty is in effect for 3 years from the date the unit was first purchased from PS Audio or its dealers and agents. If you do not register your product within 30 days of service, a copy of your purchase receipt from an authorized PS Audio dealer may be used as proof of purchase to establish the warranty start date. If no proof of purchase from an authorized PS audio dealer or registration is provided, the production date of the product will be used to determine the warranty start date. You can register your product online, by phone, by mail, or by email.
What This Warranty Covers	This warranty covers defects in material and workmanship for products purchased from PS Audio or its authorized dealers and agents. In the event your product fails, your sole remedy under this limited warranty shall be to return the product to PS Audio or an authorized PS Audio repair center. At the option of PS Audio, the product will be repaired without charge for parts or labor, replaced, or the purchase price refunded through the original point of purchase.
Shipping	You are responsible to pay for the safe and proper shipment of the warrantied product to PS Audio or its authorized repair center. Under this limited warranty, PS Audio or its authorized repair center will pay the cost of returning the repaired or replacement product to you.
What This Warranty Does Not Cover	<ul> <li>This warranty does not cover damage due to:</li> <li>Accidents, carelessness, improper transportation, misuse, neglect, or abuse</li> <li>Failure to follow the operating instructions that are provided by PS Audio in the Owner's Reference Manual (available for download at www.psaudio.com)</li> <li>Use in any manner inconsistent with PS Audio's operating instructions (available for download at www.psaudio.com)</li> <li>Lack of routine maintenance</li> <li>Connection to an improper voltage supply</li> <li>Alterations or modifications to the unit</li> <li>Improper or unauthorized repair, including repairs not authorized by PS Audio or a PS Audio authorized repair center</li> <li>Fire, lightning, flood, "Acts of God," or other contingencies beyond the control of PS Audio</li> <li>Products purchased through an unauthorized source (if you have questions as to whether or not a dealer is authorized, please contact customer support at www. psaudio.com</li> <li>Products with a factory-applied serial number that has in any way been altered, defaced, or removed</li> </ul>



# Warranty Information

### Stellar Power Plant 3

Limitations Under This Warranty In no event will PS Audio's liability to you exceed the origianl purchase price of your unit. This warranty does not cover the cost of custom installation, customer instruction, setup adjustments, or signal reception problems. Consequential and incidental damages are not covered under this warranty. However, some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you. In the event that your warrantied product cannot be repaired, PS Audio will either replace or refund the cost of the unit. We reserve the right to replace any out-ofstock, discontinued, or limited edition products with a comparable product. Discontinued products may not be available for warranty replacement.

Warranty Transfer This warranty is for the benefit of the original purchaser of the product. The warranty may be trasferred to a subsequent purchaser during the 3 year warranty period. To do this, you must contact PS Audio directly to set up a transfer of warranty registration.



# Service Information

### Stellar Power Plant 3

Warranty Service Within North America Please contact PS Audio customer support for service assistance, help with locating an authorized PS Audio repair center, help with the operation of a product, or for more information.

#### Obtaining An RMA#

In order to receive warranty service, you must first obtain a Return Merchandise Authorization Number (RMA#) prior to returning any item. Please contact PS Audio or an authorized PS Audio repair center to receive an RMA#. The RMA# must be on all returned items. If it is not clearly marked, PS Audio will return the package back to you, freight collect.

#### Packaging and Shipping

Original packaging should be used for the safe transit of your PS Audio unit to the repair center. If you do not have the original packaging, PS Audio can sell and ship replacement packaging to you. You are responsible for the cost of shipping the product to a PS Audio authorized repair center. You should insure the product for its full retail cost, in the event it gets lost or damaged in transit. PS Audio is not responsible for damage incurred during the transit of products sent to us. Shipping your product in non-PS Audio packaging may void this warranty. PS Audio reserves the right to charge you for new factory packaging to return your product after a repair.

#### State Law

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

International PS Audio has authorized distribution in many countries of the world. In each country, Warranty Service the authorized importing distributor has accepted the responsibility for warranty of the products sold by that distributor. Warranty service should be obtained where the product was purchased.

Changes To Our Products PS Audio reserves the right to modify the design of any product without obligation to purchasers of previously manufactured products, and to change the prices or specifications of any products without notice or obligation to any person.



## Your Product

Your Serial Number	
Your Purchase Information	
Date of Purchase	

