



Owner's Reference

Stellar™ M1200 Amplifier





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Stellar™ M1200 Amplifier

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Safety Information

Stellar™ M1200 Amplifier

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® Stellar M1200 Amplifier 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® 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® 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® directly if you have any questions or concerns that are not addressed in this reference manual.

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

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Introduction

Stellar™ M1200 Amplifier






Thank You

Thank you for purchasing PS Audio's Stellar M1200 Amplifier. This is your comprehensive Operator's Guide, intended to provide a full overview of the Stellar M1200 Amplifier's functions and capabilities. It is our intention to provide you with full details about the Stellar M1200 Amplifier and to answer any and all questions you may have. If you have additional questions or concerns that are not addressed in this guide, please contact us and we will be happy to assist you.

Contact Information

PS Audio, Inc.
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Boulder, CO 80301
1 (800) PSAUDIO
service@psaudio.com
www.psaudio.com

Symbols Found On The Stellar M1200

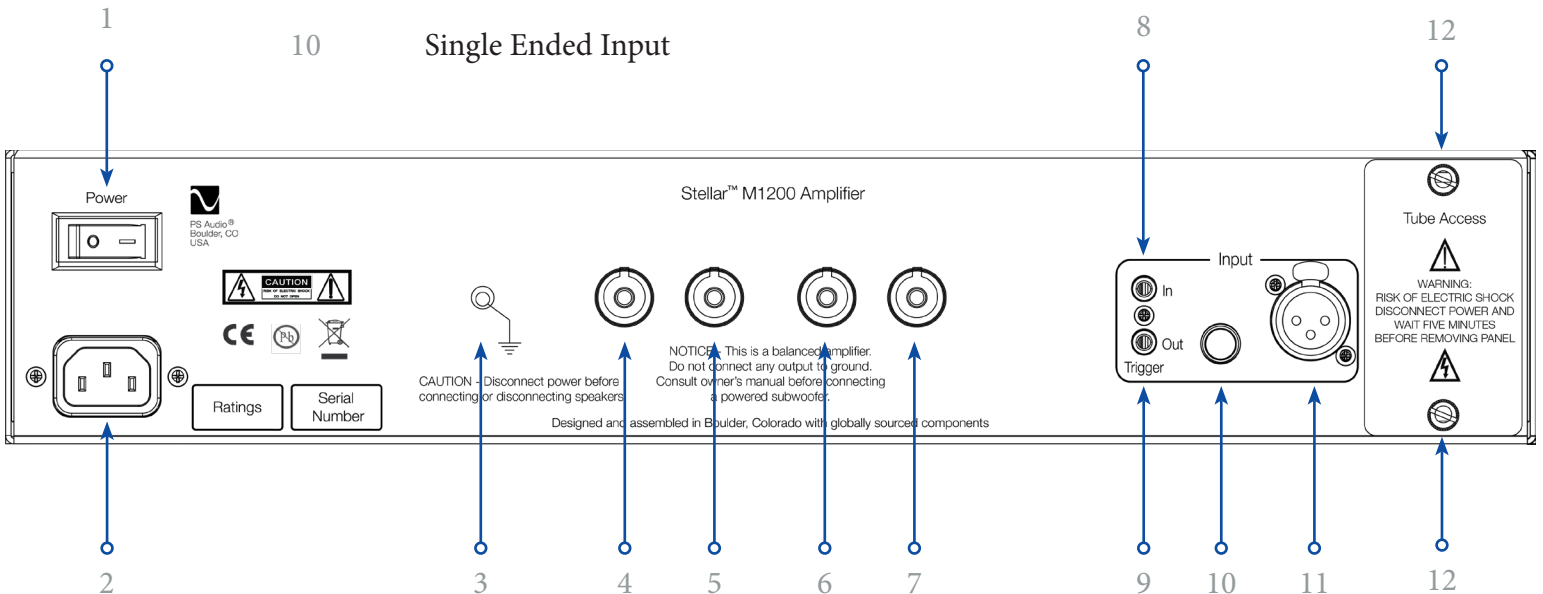
-  Indicates compliance with European Union Legislation for relevant safety (Low Voltage Directive 2006/95/EC) and EMC (EMC Directive 2004/108/EC) requirements.
-  Is intended to tell the user that parts inside the product are a risk of electric shock to persons.
-  Is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.
-  Signifies that the instrument complies with European Union Waste Electrical and Electronic Equipment Directive.
-  Indicates that the unit is in compliance with the European Union Reduction of Hazardous Substances Directive.



Getting Started

Stellar™ M1200 Amplifier

Rear Panel View	1	Power switch	11	Balanced Input
	2	IEC inlet	12	Tube Cover Mounting screws
	3	Chassis Ground Terminal		
	4	Negative Speaker Output		
	5	Positive Speaker Output		
	6	Negative Speaker Output		
	7	Positive Speaker Output		
	8	Trigger Input		
	9	Trigger output		
	10	Single Ended Input		





Getting Started

Stellar M1200 Amplifier

Installation Considerations

Location

Once your new Stellar M1200 Amplifier is unpacked, you will need to find a convenient place to set it. A good location for the Stellar M1200 Amplifier is in a cabinet or on a shelf at an easily accessible height. The Stellar M1200 Amplifier and the Stellar Gain Cell DAC were designed to stack on top of each other if they are not placed on separate shelves. Do not remove the feet.

Mounting

The Stellar M1200 should be placed with consideration of providing air circulation to the unit. If you wish to install the Stellar M1200 into your component rack, the purchase of an aftermarket, custom-designed shelf may be necessary.

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® 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.

Country Specific AC Voltages

The Stellar M1200 Amplifier, as with most PS Audio products, is country specific to its incoming AC voltage. This means the unit can only be operated at its preset voltage, such as 230 volts for most of Europe and Asia, 100 volts for Japan, and 120 volts for the US and other similar countries. Immediate damage can occur if you try and power the Stellar with a voltage it was not designed to operate on.



Getting Started

Stellar M1200 Amplifier

Vacuum Tube Maintenance

The M1200 amplifiers come with their vacuum tubes installed. Changing the tubes is easy. The process is as simple as removing the rear vacuum tube access plate and installing the new tube.

Changing to a different 12AU7 tube can result in a sound that is more to one's preference and allows the opportunity to optimize the system's synergy. If it's desired to try a different tube, obtaining good quality and low noise/microphonic tubes are the customers responsibility. PS Audio will not be held accountable for noises or poor sound quality due to any tube other than ones shipped from the PS Audio factory.

How to Install and Remove Vacuum Tubes

Items Needed:

- #2 Phillips-head screwdriver
- 12AU7 Vacuum Tube

Installing the Tubes

1. Remove the tube access plate on the rear of the M1200 using a Phillips-head screw driver.
2. Orient the tube so that it aligns with the keyed area on the tube socket.
3. Insert the tube into the tube socket until the glass is seated up to the ceramic of the tube socket.
4. Screw the tube access plate back into place.

Removing the Tubes

1. Remove the tube access plate on the rear of the M1200 using a Phillips-head screw driver.

Tube Puller

2. While gently pulling, roll the tube in a circular motion until it frees itself from the socket.

If you are having difficulty reaching the tube with your hands, we offer a specialized tube puller on our website.

Go to <https://www.psaudio.com/product-category/accessories/>

Cables Matter

The cables that you use can have a dramatic influence on the sound of your system. Carefully choose your speaker cables and connecting cables to the equipment. Our preference for input cables is balanced, XLR type, but well-built single ended RCA cables are fine as well. Speaker cables can make or break the performance of an amplifier and great care should be taken in using only the best match for your loudspeakers and Stellar amplifier.



Getting Started

Stellar M1200 Amplifier

Connect the Speaker Cable With the amplifier firmly seated where you have selected, it is time to connect the speaker cables. The Stellar M1200 uses custom machined connectors. These connectors were specially engineered to match the performance specifications of the Stellar amplifiers. The connectors can accept spade, banana or wire connections. There are two sets for the mono channel on the M1200. Most systems will use only one set of the binding posts to connect the speaker cable.

Black Terminal is not Ground It's important to note that the Stellar M1200 is a fully balanced bridge tied load (BTL) amplifier. As with all BTL amplifiers, the black terminal is not ground. If connecting the Stellar to a Rel Acoustics Subwoofer it's important to consult the manufacturer's service documentation to ensure the Stellar is appropriate for the subwoofer. The ground lug on the rear of the amplifier can be used to ground the subwoofer in these applications.

Bi-wire Some may wish to Bi-wire their speakers to the Stellar. This practice involves using one shotgun configured cable or two separate cables. In either case, connect one cable to one set of binding posts and the other to the second set. On the loudspeaker side, one pair of cables goes to the tweeter binding posts, the remaining set to the woofer section.

Plug in Connecting Cables The Stellar M1200 Amplifier accepts either single ended RCA or balanced XLR connections to the preamplifier or DAC feeding it. We highly recommend the use of balanced connections, especially for longer runs.



Getting Started

Stellar M1200 Amplifier

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® 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.

Output Disable Mode

When the logo button is not illuminated, the amplifier is in Output Disable Mode. Output Disable Mode can be activated by pressing the front panel PS Audio logo button, located on the upper left hand corner of the Stellar's front panel. This mode keeps the amplifier in a reduced power mode, maintaining excellent performance benefits while increasing power economy. We recommend leaving the rear panel power switch active at all times, and placing the unit in Output Disable Mode when finished listening. The vacuum tube is turned off during this mode and using this feature while not listening will dramatically increase the tubes lifespan.

Trigger Input and Output

The Stellar M1200 amplifier has a 5V -12V Trigger for remotely powering the unit on and off. It is important to note that the trigger "out" is intended to loop through to a second power amplifier. The Stellar amplifier does not generate a trigger signal. An input Trigger DC voltage is required.

Fault Protect Mode

The Stellar M1200 is designed to protect itself if it detects a dangerous signal surge or transient that could damage the circuit. In these instances, the Stellar goes into Fault Protect Mode. If you see the blue logo button flashing quickly and the amplifier turns itself off, then it has entered this mode. This can happen if it is heavily overdriven. If this occurs remove power from the Stellar and disconnect all inputs and outputs. Then, power the Stellar back on and verify that it powers on normally. If this is the case then power off the Stellar and re-connect the speakers and sources. Try playing music back at a low level at first. If after removing all connected equipment the Stellar continues to enter Fault Protect Mode, please contact PS Audio.

Contact Information

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www.psaudio.com



Getting Started

Stellar M1200 Amplifier

Common Questions From Customers

Question: Does it matter what set of binding posts I use to connect my speakers?

Answer: The M1200 has 2 sets of output binding posts. These are meant for Bi-wiring and the output signal is the same on both sets of outputs. It does not matter which set is used.

Question: Can I stack M1200s? Can I stack M1200s with a GCD?

Answer: It is completely fine to stack M1200s and it is also acceptable to stack them with a GCD. In this configuration, the GCD should be placed on the bottom.

Question: Can the M1200s benefit from isolation underneath the chassis?

Answer: Yes, the sonic performance can be improved with the use of vibration isolators.

Question: Can I plug my M1200s into the Stellar P3 Regenerator?

Answer: We recommend plugging the M1200s into the filtered bypass outputs.

Question: What regenerator is the best fit for the M1200s?

Answer: The M1200s are capable of large amounts of power. We recommend the P20 regenerator to take advantage of as much power as possible from these amplifiers, however, much depends on actual power usage. It may be possible to use a smaller Power Plant regenerator if your speakers are efficient.

Question: How do I connect a REL subwoofer to the M1200?

Answer: Attach the yellow cable to the red binding post on the left M1200 and connect the red cable to the red binding post on the right M1200. Connect the black wire to the chassis ground post on either the left or right M1200.

Question: Can I replace the fuses on my M1200s?

Answer: No, there are no user serviceable fuses in the M1200.

Question: Should I use the XLR or RCA input?

Answer: We highly recommend using the XLR (balanced) input for best sound and performance.

Question: Is the M1200 a balanced amplifier? Is it a bridged amplifier?

Answer: The M1200 is a fully balanced amplifier and has a bridged tied load (BTL) output stage.



Getting Started

Stellar M1200 Amplifier

Debug Of Common Issues

Issue:

Hum or low frequency buzz coming from the speakers

Recommendation:

Unplug the input cables that are connected to the M1200s. If sound goes away a ground loop is present. Move to balanced cables if possible. Plug all equipment into the same receptacle. Debug using other methods from ground loop detection.

Issue:

Hum or low frequency buzz coming from the M1200 chassis

Recommendation:

It is normal for the amplifiers to cause low level amounts of audible hum or low frequency noise.

Issue:

Static or low-level popping in the speakers

Recommendation:

Change vacuum tubes



Specifications

Stellar M1200 Amplifier





Specifications

Stellar M1200 Amplifier

General

Color Options	Black Silver		
Voltage Options	Japan / US Europe / Asia	120V 230V	
Mains Power Input		IEC C14	
Accessories Included	Line cord(s)	US (NEMA 5-15P) Schuko (CEE7/7) UK (BS1363)	(all versions) (230V version) (230V version)
Audio Inputs	RCA (Unbalanced) XLR (Balanced)		
Audio Outputs	4 Binding Posts		
Other	DC Trigger	3.5mm 5-15VDC (x2)	
Vacuum Tube	12AU7 (x1)		

Mechanical

Width	17"
Height	3.75"
Depth	12" (chassis only) 13" (including connectors)
Weight	27lbs
Shipping Width	22"
Shipping Height	8"
Shipping Depth	17"
Shipping Weight	29lbs



Specifications

Stellar M1200 Amplifier

Output Power	(120VAC, 1kHz, 1% THD) 8Ω 4Ω	600W minimum 1200W minimum
Gain		30.5dB +/- 0.5dB
Sensitivity		2.08V
Input Impedance	RCA (Unbalanced) XLR (Balanced)	50kΩ 100kΩ
Damping Factor	50Hz, 2.8Vrms 8Ω 4Ω	> 1100 > 550
Frequency Response	2.8Vrms into 4Ω	10Hz - 20kHz +/- 0.5dB 10Hz - 45kHz +/- 3.0dB
Output Regulation	2.8Vrms @ 20kHz No load - 4Ω	+/- 0.15dB
THD	1kHz, 1W/4Ω 10-20kHz, 1W/4Ω 1kHz, 150W/4Ω	< 0.005% < 0.01% < 0.02%
Signal to Noise	1kHz @ Rated Power	>112dB
Power Factor	Rated Power 4Ω	> 0.9
Power Consumption	Idle 1/8 th Power 4Ω Rated Power 4Ω	27W 209W 1.55kW



Warranty Information

Stellar M1200 Amplifier

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 warranted 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

This warranty does not cover damage due to:

- Accidents, carelessness, improper transportation, misuse, neglect, or abuse
- 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)
- Use in any manner inconsistent with PS Audio's operating instructions (available for download at www.psaudio.com)
- Lack of routine maintenance
- Connection to an improper voltage supply
- Alterations or modifications to the unit
- Improper or unauthorized repair, including repairs not authorized by PS Audio or a PS Audio authorized repair center
- Fire, lightning, flood, "Acts of God," or other contingencies beyond the control of PS Audio
- 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)
- Products with a factory-applied serial number that has in any way been altered, defaced, or removed



Warranty Information

Stellar M1200 Amplifier

Limitations Under This Warranty

In no event will PS Audio's liability to you exceed the original 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 warranted product cannot be repaired, PS Audio will either replace or refund the cost of the unit. We reserve the right to replace any out-of-stock, 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 transferred 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 M1200 Amplifier

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 Warranty Service

PS Audio has authorized distribution in many countries of the world. In each country, 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

Stellar M1200 Amplifier

Your Serial
Number

Your Purchase
Information

Date of Purchase

 P S A U D I O

