



# Owner's Reference

Owner's Reference UPC-HB Power Center

## Instructions for use



## UPC-HB Power Center

4826 Sterling Drive, Boulder, CO 80301

PH: 720.406.8946 service@psaudio.com www.psaudio.com

Document 15-040-11-1

**Introduction i**



# Introduction

P S A U D I O ®

Owner's Reference UPC-HB Power Center

## Important Safety Instructions



### **Read these instructions Heed all warnings Follow all instructions**



**WARNING.** TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

Clean only with a dry cloth.

Do not place flammable material on top of or beneath the component.

All PS Audio components require adequate ventilation at all times during operation. Rack mounting is acceptable where appropriate.

Do not remove or bypass the ground pin on the end of the AC cord unless absolutely necessary to reduce hum from ground loops of connected equipment. This may cause RFI (radio frequency interference) to be induced into your playback setup. All PS 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 or when unused for long periods of time.

When making connections to this or any other component, make sure all components are 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 fuses inside this product.

**THERE ARE NO USER-SERVICEABLE PARTS INSIDE ANY PS AUDIO PRODUCT. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL**

Please contact your authorized dealer, distributor, or PS Audio if you have any questions not addressed in this reference manual.

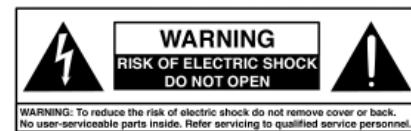
This product is manufactured in the United States of America. PS Audio® is a registered trademark of PS Audio International Inc., and is restricted for use by PS Audio International, Inc., its subsidiaries, and authorized agents.



The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.



The lightning flash with arrow-head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.





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# Introduction

Owner's Reference UPC-HB Power Center

Thank you for your purchase of the PS Audio UPC-HB Power Center.

## What will it do?

The UPC-HB is designed to provide AC cleaning, isolation and complete protection from surges, spikes and power line problems from the AC power line, as well as providing hum free operation for products connected.

## Cleaning and Isolation

The UPC-HB is based on PS Audio's unique Ultimate PowerCell™ and Humbuster™ technology. Ultimate PowerCells combine an energy store and release system coupled with a low resistance inductive cleaning element that provides cleaner, low impedance, non-restricting AC power to the load. Ultimate PowerCells also provide noise isolation from equipment connected to them. Humbuster technology eliminates DC on the AC line and reduces mechanical transformer hum in connected units. The Humbuster will not typically reduce hum in the loudspeakers.

There is one Ultimate PowerCell in the UPC-HB and one Humbuster circuit. The Humbuster circuit is powered through the Ultimate Power Cell.

## Surge and spike protection

Surge and spike protection is provided by non-degrading multiple Tranzorbers backed up by high current MOV's. Tranzorbers eliminate 99% of all surges and spikes that occur on the line and these Tranzorbers will continue to keep your equipment safe for many years to come. Unlike MOV's, Tranzorbers are non-degrading. In the unlikely event the surge or spike is large enough to potentially damage the Tranzorbers in the UPC, protection circuitry within the UPC will engage the backup MOV's and disconnect your equipment from the power line. In this way, MOV's are rarely used and then only for backup purposes.

## What you can expect

You can expect 100% safe operation for any connected equipment along with improved performance.

Equipment connected to the Humbuster circuit should enjoy lower internal mechanical noise.



# Getting Started

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## Location

Once your new UPC-HB is unpacked, you'll need to find a convenient place to set it.

There are several ways to mount the UPC-HB: on a rack shelf, on the floor behind the equipment, or simply on a shelf next to the powered equipment.

## Cautions

If the UPC-HB is to be placed on the floor or carpet, make sure the unit is not going to come in contact with water or cleaning solvents.

## Isolation

The UPC-HB can benefit from aftermarket isolation devices such as cones, spikes and Sorbothane pads.

## Power Cables

Once you have chosen the location for the UPC-HB you can use the supplied AC power cord to connect it to the AC wall receptacle or you can use an aftermarket power cord and receptacle.

We strongly recommend the use of a PS Audio xStream Power™ AC cable and a PS Power Port™ AC receptacle to feed the UPC-HB power. While the supplied power cable is adequate for the task it is not going to provide the best performance. Choosing any xStream Power cable will make a significant performance improvement over the stock power cable.

## Conditioners

If you are using additional power conditioning equipment, such as a PS Audio Power Plant, it is recommended that the UPC-HB be placed after the Power Plant and used to isolate equipment connected and powered by the Power Plant.



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Once you have decided on the location and chosen the appropriate power cables, you are ready to install the UPC-HB.

## Two choices

The UPC-HB has two output choices available: "FILTER ONLY" or "FILTER AND HUMBUSTER".

Choose FILTER ONLY if you want to run equipment with the benefits of filtered AC. Examples would be analog sources and digital sources. Analog sources might be a preamplifier, phono stage or analog power amplifier. Digital sources might be a CD player or a D to A converter. Choose FILTER AND HUMBUSTER if you want to lower or eliminate hum inside a unit, sensitive to DC on the line. Examples might be a noisy power amplifier .

## Filter Only

You can power any piece of equipment you wish with either the FILTER ONLY or the FILTER AND HUMBUSTER outlets with no concerns.



## Filter and Humbuster

Both Power Ports on each of the two output choices are tied together and are in parallel. This means that the two receptacles in FILTER ONLY are tied together and the two receptacles on FILTER AND HUMBUSTER are tied together.

Both the FILTER ONLY and the FILTER AND HUMBUSTER are first cleaned by the UPC-HB's Ultimate Power Cell and connected equipment will benefit from either set of outputs.

## Turn off

Turn off the unit you are going to power with the UPC-HB. We recommend turning all equipment in the system off or to standby mode when powering down the unit you wish to power with the UPC-HB.

## Remove the power cord

Remove the power cord that was powering your AV unit from its power source. The power source could be a wall AC receptacle, the output of a power conditioner, surge and spike protector or a Power Plant AC regenerator.

## Insert the UPC

Insert the UPC-HB into the system. Plug the UPC-HB into the power source using the AC power cable you selected. It is advisable to use as short a power cable as possible to the UPC-HB. We do not recommend plugging the UPC-HB into an extension strip or plug extender unless it is of the highest quality and heavy duty design, such as the PS Audio Juice Bar or device with similar properties.

If the AC power source is a balanced transformer or Power Plant, plug the UPC-HB into the output of the transformer or Power Plant.

## Connect the power

Once the UPC-HB has been connected to the power source, make sure that power source is energized and providing AC power to the UPC-HB.

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## Avoid switched outlets

If you are using an AC wall receptacle to power the UPC-HB, make sure the AC receptacle is not a switched outlet. Switched outlets are those outlets that can be turned on/off with the wall switch. It is advisable to leave the UPC 200 powered at all times.

## Connect your equipment

Once the UPC-HB has been powered, plug your AV equipment into one of the two the AC receptacles on the UPC-HB. Make sure to use a high quality aftermarket AC power cable to power your equipment from the UPC-HB. It is important to note that the AC power cable is a critical link in the chain and great care should be taken to ensure only the best non-restrictive AC power cable is used to power both the UPC 200 and your AV equipment.

Turn your equipment back on. Make sure everything is powered up properly with the UPC-HB between the AC receptacle and your AV equipment.

At this point you should be ready to enjoy the benefits of clean safe power provided by the UPC-HB.



# Questions And Answers

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Should the unit  
be on all the  
time?

The UPC-HB is best left powered on at all times. The current draw is negligible and keeping it powered on will make sure the internal AC capacitors stay working properly.

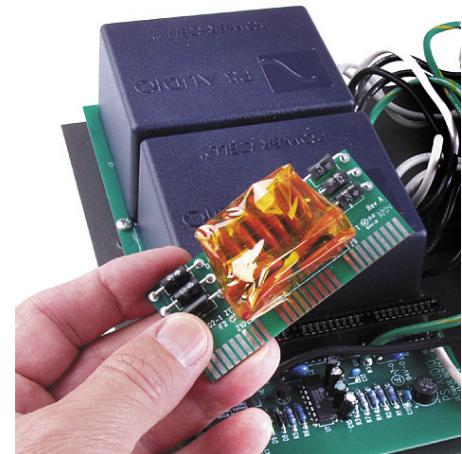
There is no harm in leaving the unit on at all times as the lifespan of the UPC-HB will be unaffected by leaving it on.

Are there any  
internal fuses?

There are no user replaceable internal fuses inside the UPC-HB. There is a user replaceable surge board. The components inside the UPC-HB have lethal voltages when powered and even when un-powered. Capacitors inside the UPC-HB can retain an electrical charge after the unit has been powered down. Do not attempt to get inside the unit for any reason unless instructed to do so by your dealer or an authorized service representative. Should the UPC-HB cease to function, contact your dealer or PS Audio's service center for help.

Is the AC  
receptacle  
important?

The AC receptacle is a critical link in the electrical chain. If you are using a standard AC wall receptacle to power your equipment, we would recommend the use of a Power Port AC receptacle, a hospital grade AC receptacle or at the minimum a high quality spec grade receptacle. The connection between the wall AC receptacle and your equipment can be a critical link in the success of your equipment's performance.



Placement?

Placement of the UPC-HB is not critical.

Placement with respect to other equipment can be important. In general, place the UPC 200 between the unit you are powering and the AC source. If you are using a power conditioner, balanced isolation transformer or Power Plant, place the UPC-HB between those devices and the unit you will be powering.

Isolation?

Isolation through the use of spikes, cones or Sorbothane feet is recommended for the UPC-HB if space and budget allows. Isolation of any piece of high-end stereo and theater equipment is always recommended wherever practical.

Eliminating hum

The UPC-HB will not eliminate hum in the loudspeaker. Using the Filter and Humbuster output should reduce mechanical humming noises inside the unit. So, for instance, if you have a power amplifier that has a humming/buzzing noise coming from inside its chassis, that would be a good candidate for removing hum.

What voltages  
can I run the UPC  
200 on and how  
much power will  
it handle?

The UPC-HB is specific to your country's voltage. Do not use the UPC-HB on a voltage higher than it is rated for. For instance, do not take a 120 volt rated UPC 200 and attempt to use it in a 220 volt country. Failure to observe this cautionary note will void your warranty. If you need to operate the UPC-HB at a voltage other than the voltage it was designed for, contact your dealer, distributor or the



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factory for the proper surge board. The internal surge board is a plug-in board that will accept either 120 volt or 220 volt surge boards from the factory. Once the proper surge board is installed, the UPC-HB may be operated at any voltage, appropriate to the board.

## Multiple sources

The UPC-HB is non-current limiting and may be used with any sized power amplifier, projector or source equipment in your system. Multiple source equipment may be connected to a single UPC-HB if desired, and for this application we recommend the addition of a PS Juice Bar outlet extender.



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# Troubleshooting

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No power comes through the unit

If no power comes out of the UPC-HB it probably indicates no power is going into the UPC-HB. There are no internal fuses. Check the front panel of the UPC-HB to see if the power light is lit. If it is not, and no power is coming from the outlets of the UPC-HB, there are several possibilities:

No AC in

Plug your AV unit into the same power source as the UPC-HB to test.

Another possibility is the line cord. Swap line cords and make sure the unit has power. Sometimes the line cord feeding the UPC-HB is not functioning properly. Test both cords if necessary.

Switched receptacle

If the UPC-HB and its powered equipment lose power mysteriously, chances are pretty good that you have the UPC-HB connected to a switched receptacle on the wall or the back of a receiver or a power conditioner. Switched AC receptacles are those receptacles that are controlled by a wall mounted power switch and are typically intended to be used to power on/off a lamp in the room. Most times these receptacles are unmarked and inadvertent switching on or off of the power switch can cause a lot of headaches trying to track down the reason your new equipment does not power up. Most switched receptacles are on the top AC receptacle in a two gang box. Always use the lower receptacle on the wall port if you are unsure.

Internal surge board died

If there is a surge too large for the UPC-HB's internal surge protector to handle, the UPC-HB will disconnect your equipment from the AC line. Therefore, no power will be delivered through the UPC-HB rear mounted outlets.

If you have determined the UPC-HB does not pass power, after performing the above tests, turn to the service section of this manual for details on receiving service.

If the results are less than expected

If you do not hear or see a significant improvement in your system's performance, there are several possibilities:

Whenever you place any piece of equipment in line with the AC power you add another power cable. So, even if the new unit did nothing to improve the AC power, the mere act of adding two power cables in series with each other can have a deleterious effect on performance. It is, therefore, critical that the two power cords be of a higher quality and larger gauge than the original if possible.

Upgrade the power cables

Use shorter power cables of high quality so that the total length of the two power cables equals the original length of the one power cable. i.e. two 1 meter cables with the UPC-HB between them, relative to a single 2 meter cable plugged directly into the wall.

Use heavier gauge cables

A typical power cable is 14 gauge and can constrict or limit the power delivery to and from the UPC-HB. The heavier the wire gauge of the power cables connecting the UPC-HB to the wall, the better. The same rule applies to the output of the UPC-HB, heavier gauge power cables are better.

All high-end audio and video equipment needs a period to break in. Break in periods of up to two weeks are not uncommon, however the average we suggest is 24 hours. To break in the unit, all you



# Troubleshooting

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## Break in

need to do is have it plugged into an AC power source and powering a piece of equipment.

## Expectations

Expectations are a funny thing. If you are not expecting much, you're usually quite happy with any result at all and the opposite is equally true. The UPC-HB will lower the apparent noise floor of recordings, improve the harmonic structure of instruments, increase depth and ambience and for video, improve black levels and color saturation. If you expect 1000 veils to be removed from your system, or the picture to magically become three dimensional, you'll most likely be disappointed. The improvements are subtle to dramatic depending on your system's resolving power and program material. We suggest you listen for signs of improvement on music featuring non-complex music containing a lot of upper harmonics, such as acoustic guitar, piano, human voice, light orchestral pieces.

## Video results

Video will also have a lower noise floor and this will be displayed as apparent blacker blacks, richer colors and a more three dimensional image. Again, these can range from subtle to dramatic depending on the quality of the power line in the first place and the resolution of the video source.



# Warranty

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## TERMS AND CONDITIONS

PS Audio warrants the product designated herein to be free of manufacturing defects in material and workmanship, subject to the following conditions, for a period of three (3) years from the date of purchase by the original purchaser or date of shipment to the authorized PS Audio dealer, whichever comes first.

### Conditions

This Warranty is subject to the following conditions and limitations: the Warranty is void and inapplicable if the product has been used or handled other than in accordance with the instructions in the owner's manual, abused, or misused, damaged by accident or neglect or in being transported, or the defect is due to the product being repaired or tampered with by anyone other than PS Audio or an authorized PS Audio repair center.

- a. The product must be packaged and returned to PS Audio or an authorized PS Audio repair center by the customer at his or her sole expense in the original packing material. PS Audio will pay return freight of its choice for original purchasers.
- b. Return Authorization Number (RA Number) is required before any product is returned to our factory for any reason. This number must be visible on the exterior of the shipping container for PS Audio to accept the return. Units shipped to us without a Return Authorization Number or without a visible RA Number on the exterior of the shipping container will be returned to the sender, freight collect.
- c. RETURNED PRODUCT MUST BE ACCOMPANIED BY A WRITTEN DESCRIPTION OF THE DEFECT.

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 product without notice or obligation to any person.

### Remedy

In the event the product fails to meet this Warranty and the above conditions have been met, the purchaser's sole remedy under this Limited Warranty shall be to return the product to PS Audio or an authorized PS Audio repair center where the defect will be repaired without charge for parts or labor.

### Transfer of Warranty

This Warranty is for the benefit of the original purchaser of the covered product and may be transferred to a subsequent purchaser of the product.

#### Extended warranty policies:

1. By submitting the registration card, via mail or internet, within 90 days of purchase, the warranty period will be extended to 5-years from the date of purchase.
2. If outside of the 90-day window of purchase, a 2-year extended warranty can be

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# Warranty

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purchased for any PS Audio product within the original 3-year warranty period for a fee of \$50.

3. To qualify for the extended warranty the Product must be purchased through an authorized PS Audio dealer or distributor and you must present a written receipt.
4. All of the policies of the extended warranty are the same as the limited warranty

## Miscellaneous

This warranty does not cover the cost of custom installation, customer instruction, setup adjustments or signal reception problems.

This warranty does not cover cosmetic damage or any damage due to accident, misuse, abuse, negligence or modification of, or to any part of the Product, without initial express consent from PS Audio. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by PS Audio to service the Product.

This warranty is invalid if the factory applied serial number has been altered or removed from the Product.

To locate the servicer or dealer nearest you, or for service assistance or resolution of a service problem, or for product information or operation, call or email PS Audio.

ANY IMPLIED WARRANTIES RELATING TO THE ABOVE PRODUCT SHALL BE LIMITED TO THE DURATION OF THIS WARRANTY. THE WARRANTY DOES NOT EXTEND TO ANY INCIDENTAL OR CONSEQUENTIAL COSTS OR DAMAGES TO THE PURCHASER. Some states do not allow limitations on how long an implied warranty lasts or an exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Inquiries regarding the above Limited Warranty may be sent to the following address: PS Audio International, Inc., 4826 Sterling Drive, Boulder, Colorado 80301 ATTN: Customer Service; Email: [customerservice@psaudio.com](mailto:customerservice@psaudio.com); Voice 720-406-8946; FAX: 720-406-8967.

## Outside the US

PS Audio has authorized distribution in many countries of the world. In each country, the authorized importing retailer or distributor has accepted the responsibility for warranty of products sold by that retailer or distributor. Warranty service should normally be obtained from the importing retailer or distributor from whom you purchased your product. In the unlikely event of service required beyond the capability of the importer, PS Audio will fulfill the conditions of the warranty. Such product must be returned at the owner's expense to the PS Audio factory, together with a photocopy of the bill of sale for that product, a detailed description of the problem, and any information necessary for return shipment.

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P S A U D I O

# Service

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## If you require service in North America

In the unlikely event there is a problem with your PS Audio component, please contact your dealer, distributor, or the PS Audio corporate research center to discuss the problem before you return the component to our California manufacturing facilities for repair. Products shipped to either the factory or the corporate research facilities will be refused and returned freight collect if not accompanied by a PS Audio Service Department issued return authorization number (RA Number).

## Obtain an RA number

Return authorization numbers must be prominently displayed on the outside of the box and an accompanying letter describing the problem and re-listing the RA number must be inside the box to qualify for service.

If you are transferring your warranty, you must first contact PS Audio or your dealer or distributor for details.

To contact the PS Audio Service Department:

## Contact information

TELEPHONE 720-406-8946  
HOURS Monday-Friday, 9:00 am to 5:00 pm MST  
FAX 720-406-8967  
E-MAIL [service@psaudio.com](mailto:service@psaudio.com)  
WEBSITE <http://www.psaudio.com>

## If you are in the United States or Canada

If you are in the United States or Canada use the following procedure:

1. Obtain a Return Authorization Number (R/A number) and shipping address from the PS Audio Service Department.
2. Insure and accept all liability for loss or damage to the product during shipment to the PS Audio factory and ensure all freight (shipping) charges are prepaid.

The product may also be hand delivered to the California or Colorado facilities if arrangements with the Service Department have been made in advance. Proof of purchase will be required for warranty validation at the time of hand delivery.

## Use original packing

Use the original packaging to ensure the safe transit of the product to the factory, dealer, or distributor. PS Audio may, at its discretion, return a product in new packaging and bill the owner for such packaging if the product received by PS Audio was boxed in nonstandard packaging or if the original packaging was so damaged to the point it was unusable. If PS Audio determines that new packaging is required, the owner will be notified before the product is returned.

To purchase additional packaging, please contact your authorized PS Audio dealer, distributor, or the PS Audio Service Department for assistance.

## If you are outside the US or Canada

If you are outside the United States or Canada and require service you must contact your country's dealer or distributor for instructions. PS Audio warranties its products (see warranty section) worldwide.

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# Service

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Service for PS Audio products outside the United States and Canada is handled through your country's distributor or dealer.

1. Obtain a Return Authorization Number (R/A number) and shipping address from your dealer or distributor's Service Department.
2. Insure and accept all liability for loss or damage to the product during shipment to the dealer or distributor's Service Department and ensure all freight (shipping) charges are prepaid.

If you have  
problems

If you feel your country's dealer or distributor is either unwilling or unable to service your PS Audio products, please contact our service department at [service@psaudio.com](mailto:service@psaudio.com) or at the above contact numbers to discuss the situation.

Voltage changes

Voltage changes to match your country's voltage and frequency requirements to your PS Audio product are possible only through your dealer, your country's authorized PS Audio distributor or the factory. Units purchased outside your country of residence will not be changed to the appropriate voltage unless prior arrangements have been made at the time of purchase. Please refer any questions to your dealer or distributor or by contacting the PS Audio service department.

Your PS Audio product serial number is:

Your serial  
number

Please fill in the dealer or distributor's information from where you originally purchased the unit.

Your purchase  
information

Date of purchase

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# Notes

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Notes

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