



PS AUDIO®

Owner's Reference Sprout

Instructions for Use



Sprout®

4826 Sterling Drive, Boulder, CO 80301 . PH: 720.406.8946 . www.psaudio.com

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One man's quest for music

Sprout is my vision of a simple, elegant means of playing music at home. I created it for those of us who want quality sound without the hassles that sometimes come with it.

I've admired the design principles of Dieter Rams, who taught us to design as little as possible. I fashioned Sprout to honor that ideal. I wanted Sprout to be a device you and I connect with. Rather than a display screen and endless menus, Sprout's user interface is a direct hand-to-Sprout connection through just two knobs. These allow intuitive, direct control of Sprout, and provide feedback to the user through a positive click and immediate response to changes in volume.

Sprout's ease of use should make it appealing and accessible to those who would find most audio gear intimidating; it should also appeal to those who have "been there, done that" and seek a better, simpler way to play music in their home.

Sprout is for those of us who care about their home, their music, and their enjoyment of music in the home.

Sprout is personal and I am honored you connected with it.

Thank you.

Scott McGowan



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



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.



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.

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 user serviceable 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.



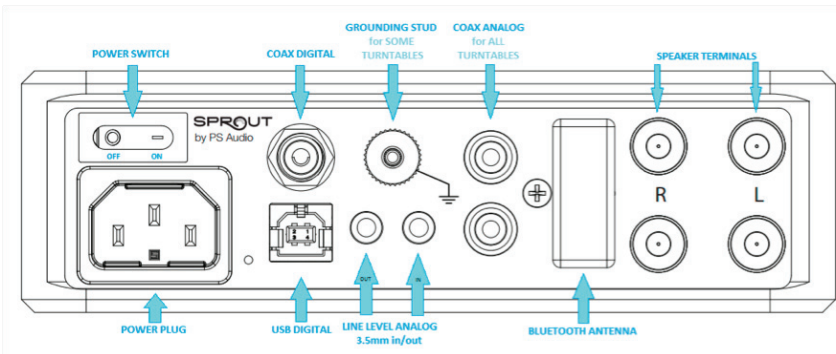
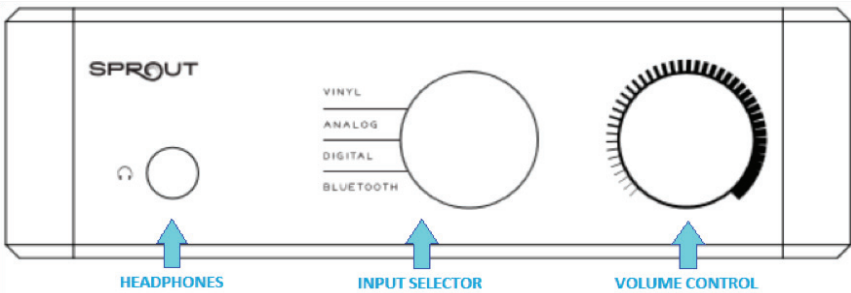
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You own Sprout

Nicely done

We hope you read this manual so you can make the most out of Sprout. Audio equipment can be pretty confusing—but Sprout is simple. Give us a sec, we'll make it painless.





What else is in the Box?

Accessories

Other than Sprout, you've got:

- Power Cable: 6ft
- Power Adaptors: (Only in 230V regions) Schuko, Australian UK
- Headphone Adaptor: 3.5mm to 1/4" Jack
- Sprout Decal
- Owner's manual

Where is your music?

Phone or tablet, Computer or MP3, CDs, TV, tape deck, vinyl records, you name it.

Sprout has four inputs:

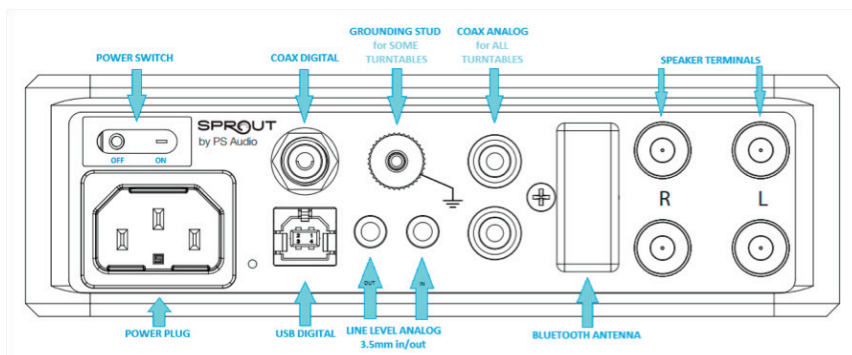
- Vinyl
- Analog
- Digital
- Bluetooth

Depending on how you store your music, you will have to select the intended input. This is as easy as it sounds.

Let's get connected

First things first. Let's connect Sprout up to your inputs and outputs. Then we can get started playing music.

Onward!



Connect the inputs first

Sprout has four rear panel inputs you can connect your sources to: two digital, one analog and one phono for your vinyl. It can connect wirelessly via Bluetooth

Digital sources

Digital technology is the force behind our land-lines, smart phones, computers, and the internet itself. It's also a great way to hang on to your music. We use digital formats, (like FLAC, ALAC ,WAV, and MP3s) to store our favorite tunes. Sprout can play these formats using your computer or smart phone.

Sprout can connect to three digital devices, two from the rear panel connections and one wirelessly via Bluetooth from your phone, computer or tablet.

The two digital inputs available on the rear panel are USB and COAX.

USB Connection. USB connects Sprout to your computer. Once connected, Sprout will become the audio output of your computer, playing from programs like iTunes or Windows Media Player. Using a



standard USB cable, connect Sprout to your computer's USB port. If you are running a Mac computer, the driver for Sprout is built in. If you are instead on a Windows computer, you will need to download and install the USB driver onto your computer. To download the USB driver go to PS Audio's website: www.psaudio.com. Go to Support->Downloads and download the USB driver.

It will be necessary to unzip the file and install it on your computer. This will connect your Windows computer to Sprout. You must then select "PS Audio USB 2.0 Audio Out" (on a Mac) as your output device or, "PS Audio Sprout" on Windows.

COAX Connection. If you have a CD player, transport, Apple TV 1, Sonos or any digital audio device with a coaxial digital output, use a standard RCA interconnect cable to connect the digital output of your device to Sprout's COAXIAL input as shown in the back panel diagram.

Wireless Bluetooth Connection. Sprout's wireless Bluetooth antenna is built into the back panel as shown on the rear panel diagram. It is unnecessary to connect anything for this to operate. See operating instructions to understand its use.

Vinyl Turntable Connection. Do you listen to records? We do too. To use Sprout for vinyl, the phono inputs must be connected only to a turntable. Connecting a standard analog source that is not a turntable into these inputs is going to sound pretty strange. Some turntables are already amplified, do not plug this into Sprout. Sprout will connect to a standard Moving Magnet cartridge turntable without any problems.

Plug the left and right cables from your turntable into Sprout's input labeled Vinyl. The red vinyl input is right, the white is left.

Sprout plays both grounded and ungrounded turntables. Most turntables have a ground wire, in addition to the RCA output cables. This ground wire lowers the chance for hum. Connect the turntable



ground wire to the rear panel ground binding post located directly above the analog in and out connections.

Analog inputs and outputs. Sweet! Facing Sprout's rear panel there are two small connectors labeled Analog, Out, In.

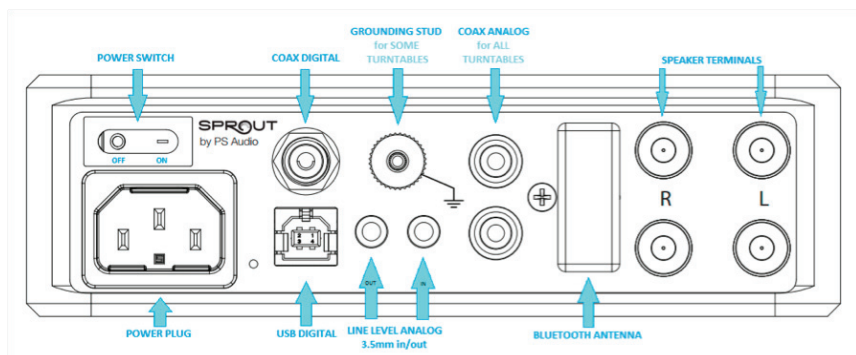
Analog Output. The connector labeled "Out" located above "Analog" on the rear panel is a buffered stereo line output. This is the full audio output directly from Sprout's volume control. Whatever you are listening to on Sprout will be available on this output. Connect this output to a separate power amplifier or subwoofer.

Connecting a subwoofer. Many small speaker pairs benefit from the addition of a subwoofer to augment the low bass of the little speakers, giving a much richer, full range musical sound. Use the Analog Output of Sprout to feed a subwoofer. Most subwoofers have RCA input connections. Sprout's output is a smaller 3.5mm connector. Use a 3.5mm to RCA adapter to connect the two devices.

Analog Input. The connector labeled "In" located above "Analog" on the rear panel is a stereo line input. Use this input to connect the output of a mobile device, television, tape deck or any source with an analog output. The connector is a 3.5mm stereo jack. It may be necessary to use a 3.5mm to RCA adapter to connect some devices to Sprout.

Connecting a television or cable box. Sprout can easily be connected to a television or cable TV box through its analog inputs. Most modern TVs and cable set top boxes have an analog (line) audio output available. Many use Sprout's 3.5mm connector, while others use the larger RCA connections. It may be necessary to use a 3.5mm to RCA adapter if the outputs and input connectors don't line up.

It is also possible to connect a television or cable box digital output to Sprout. Using the analog inputs is preferred because this arrangement uses the television volume control with the device's remote control.



Speaker Connections

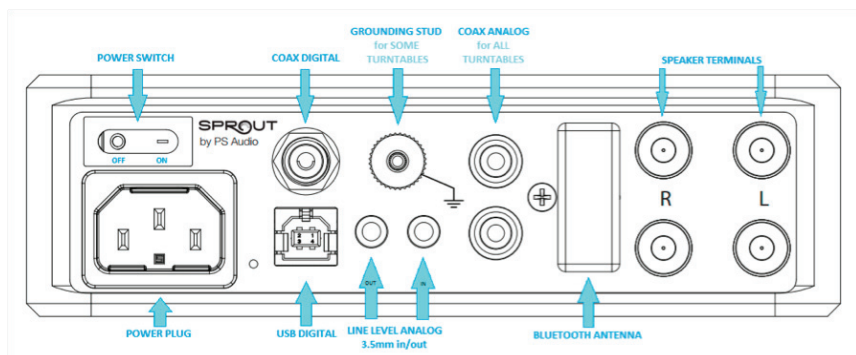
Sprout's power amplifier provides enough wattage to power just about any loudspeaker pair. However, we recommend only **one** pair of loudspeakers be connected at a time.

Loudspeaker Connections. It is important to make sure you match colors and channels from Sprout to your loudspeakers correctly. Red should go to red, black to black. Failure to do so will produce some funky sounds, lack of bass and won't give you what Sprout's capable of.

Facing Sprout's rear panel, the right loudspeaker pair is on the left, the left loudspeaker pair is on the right. This might seem backwards but viewed from the front panel, it is correct.

Connect red (+) of the right speaker to Sprout's red (+) right speaker output. Connect the black (-) of the right speaker to Sprout's (-) right speaker output directly below it. Follow the same convention for the left.

Make sure none of the wires touch each other or Sprout will not play.



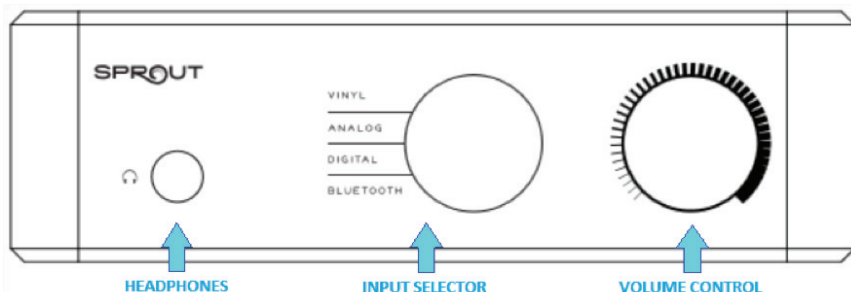
Connect the AC power

Using the supplied AC power cable or an aftermarket cable you might have, connect Sprout to your home's AC wall socket for power.

Sprout may only be connected to your country's voltage. Sprout will not operate in a country it was not purchased in. ***Serious damage to Sprout will occur if you attempt to do otherwise.*** If you are in the United States, Canada, Mexico, Japan or any country with 120 volts AC as standard, Sprout will only work in your country. Do not attempt to use a 120 volt Sprout in a 230 volt country like those in Europe, UK, Asia, Australia or Africa. Serious damage will occur.

Plug Sprout into the proper AC receptacle. If you are outside North America and your home's receptacles do not match Sprout's AC cord, use the supplied adapters to connect Sprout to your home's AC power.

Turn Sprout On. Using the main AC power switch, located on the rear panel of Sprout just above the incoming AC receptacle, turn Sprout on and start enjoying some music!



Using Sprout

Now that your sources are connected, the AC plug is feeding power and the rear panel AC power switch is on, let's play some music.

Playing music on Sprout couldn't be simpler. Choose what you wish to listen to using the Input Selector and turn the volume knob up or down to adjust the loudness of the music. If you have a pair of loudspeakers connected to Sprout's output connectors, music should play through your speakers. If you are listening through headphones plugged into the front panel, music should play through the headphones.

Input Selector. There are four input choices on the Input Selector: Vinyl, Analog, Digital, Bluetooth. Select which of these you wish to listen to.

Vinyl. If you have a turntable (record player) connected to Sprout's rear panel inputs labeled "Vinyl" you should get music playing when the Input Selector is in this position with the record on. Sprout accepts a moving magnet (normal) cartridge. The sound should be great. If the sound is boomy or distorted check to make sure you do not have a turntable with a built in amplifier. Sprout is designed to



accept the direct output of your turntable's phono cartridge.

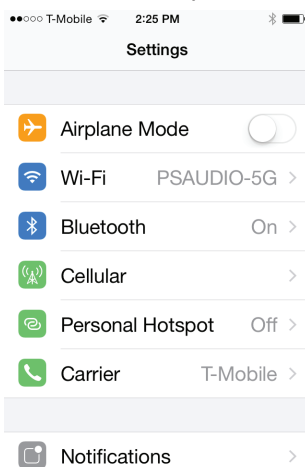
Analog. Select this input if you have a phone, television, Sonos or other device with an analog output connected to Sprout's rear panel connector labeled "Analog In".

Digital. Select this input if you have either of the two digital inputs connected: USB or COAX. We recommend you plug only one of these two digital inputs in at a time. Should you have both USB and COAX plugged in at the same time, USB will take precedence over COAX when the computer it is connected to is on.

The digital inputs can accept sample rates and bit depths up to 192kHz/24 bits.

If you are using USB connected to a computer, it may be necessary for that computer to have a PS Audio driver installed to connect Sprout. If you have a Mac it is already installed. If you are connecting to a Windows computer, you must install the PS Audio Driver first. See the previous input connection instructions in this manual for details.

Bluetooth. Select this input if you have connected a mobile device or computer enabled with Bluetooth to Sprout. Bluetooth is a wireless method of connecting devices together. To connect to Sprout from a Bluetooth enabled device, such as an iPhone or an Android, go to the mobile devices settings menu and find Bluetooth. Make sure the mobile device's Bluetooth is active and on.





With Bluetooth active on your mobile device, go to the discovery screen for Bluetooth devices in the Setting menu (see your phone's instructions). Look for "Sprout" and connect to it. Sprout will remember your phone and automatically connect with up to two devices once it has learned your mobile device's identity.

Once your mobile device is connected to Sprout, anything you play on your mobile device will now play on Sprout.



To control the volume when connected via Bluetooth there are two methods: Sprout's main volume control and the mobile device's volume control. Typically you would turn Sprout's volume control to a comfortable listening level first, perhaps the 12 o'clock position on the volume knob. Then use the mobile device's volume control for fine adjustments.

Headphones. Plugging a pair of headphones into Sprout's front panel headphone connector automatically disconnects both the loudspeaker outputs as well as the Analog outputs. In this way, Sprout provides a truly personal listening experience for the headphone user. Disconnecting the headphones restores the loudspeaker and Analog Outputs.



Headphone jacks come in **two different sizes**

- 3.5mm (called three-and-a-half mil) which you find on most SmartPhones and MP3 players. They look like this:



- 1/4" (called quarter-inch) which you'll find in a lot of specialty headphones. They are quite a bit bigger, and look like this:



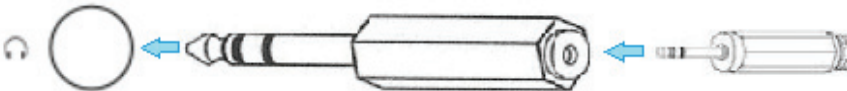
You might notice that Sprout has an input for a quarter-inch jack

You may also notice that Sprout comes with an adaptor.

So you can plug your headphones in like this:



OR like this



Sprout's near-zero output impedance headphone amplifier has been designed to power any modern headphone perfectly.



Troubleshooting

Sprout is easy to setup and use. From time to time a few problems might be encountered and we trust this quick troubleshooting guide may assist you. Should you have any problems we don't resolve in this section, we're always here to help. Feel free to contact PS Audio or your dealer for assistance, should it be needed.

Can't get anything to work. Sprout has a rear panel power switch just above where the AC power cable plugs in. Make sure this switch is in the "ON" position.

Speakers keep cutting out. Sprout is well protected against accidental misuse. If Sprout plays then cuts out there's likely one of two problems: you have a speaker wire touching or you're playing it too loud. The first thing to check is your speaker cables. Look closely on both the speaker and Sprout ends of the cable. Make sure the bare wire of the speaker cable is not touching Sprout's chassis or another speaker cable.

If the connections are okay and Sprout cuts out when you're playing it loudly, it may be your speakers are too power hungry or you're asking too much of Sprout. Turn it down to see if the problem goes away. Sprout plays loud and nice with just about any loudspeaker, but it isn't going to go beyond its capabilities.

Can't get the COAX input to play. Sprout really wants only one or the other digital inputs connected at the same time. You can connect both the COAX and USB inputs up simultaneously, but USB will always override COAX. Either turn the computer off or disconnect the USB cable to allow the COAX output from a CD player to work when in the Digital mode.

Can't get my TV to play nice with Sprout. You'll want to make sure the "Line Out" on the back of your television is connected to Sprout's Analog Inputs. Then, go to the TV's settings menu and select Audio



Settings or Speaker Settings. Change it to the Audio System setting which disables the television's internal speakers and sends the sound to Sprout.

The goal here is to disable the TV Speakers and use the Audio System. We don't want music or programming to come out of the television's speakers. We only want it going into Sprout.

Some TV's have fixed analog outputs. It's usually written right on the back of the TV next to the connectors. When you are connected, if the remote control doesn't change the volume through Sprout automatically, bummer, you will need to change the volume on Sprout's front panel by hand. Cool?

However, your TV may have variable analog outputs. This means when you use the TV's remote to control the volume, it changes the amplitude of the line-level signal. If your TV has variable line-level outputs, rock and roll. You can use the TV's remote to control the volume AND you can use Sprout to control the volume. That's called secondary volume and master volume, respectively.



Limited Three Year Warranty

Should I Register My Product?

Registering your product validates the warranty start date.

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 a 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.

Registration can be completed online, by phone, by mail, or by email.

You may wish to sign up for PS Audio's monthly newsletters, specials, product updates, and/or Paul's Daily Posts.

What Does this Warranty Cover?

This warranty covers defects in material and workmanship for products purchased from PS Audio or its authorized dealers and agents.

What Will PS Audio Do to Correct the Problem?

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. The product will be repaired without charge for parts or labor, replaced, or the purchase price refunded through the original point of purchase, at the option of PS Audio.

What is the Period of Coverage?

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.

Who Pays for Shipping?



You are responsible to pay for the safe and proper shipment of the warranted product to PS Audio or its authorized repair center.

PS Audio or it's authorized repair center will pay the cost of returning the repaired or replacement product to you under this warranty.

What Does this Warranty 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 manuals (available for download at psaudio.com)

Use in any manner inconsistent with PS Audio's operating instructions (available for download at 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 psaudio.com)

Products with a factory-applied serial number that has in any way been altered, defaced, or removed

Limitations on PS Audio's Obligations Under this Warranty

In no event will PS Audio's liability to you exceed the original purchase price of the unit.

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

This warranty does not cover consequential and incidental damages.

Some states do not allow the exclusion or limitation of incidental or



consequential damages, so the above limitation or exclusion may not apply to you.

In the event your warranted product cannot be repaired, PS Audio will replace or refund 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.

How Can the Warranty be Transferred?

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 transfer of registration.

How Do I Get Warranty Service?

To locate an authorized PS Audio repair center, for service assistance, or for help with the operation of a product or just for information, please contact PS Audio customer support.

Warranty Service Within the US

You must first obtain a Return Merchandise Authorization Number (RMA#) to receive warranty service and prior to returning any item. Contact PS Audio or an authorized PS Audio repair center to receive an RMA#.

You must put the RMA# on all returns. If it is not clearly marked, PS Audio will return the package back to you, freight collect.

You should include a description of the problem, along with the RMA# inside the packaging.

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 packing, PS Audio can sell and ship to you replacement packaging.

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 in 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.

How State Law Applies

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

Warranty Service Outside of the US

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 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.

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