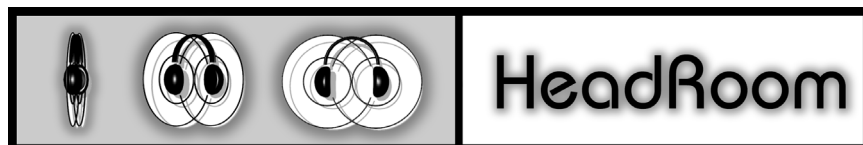
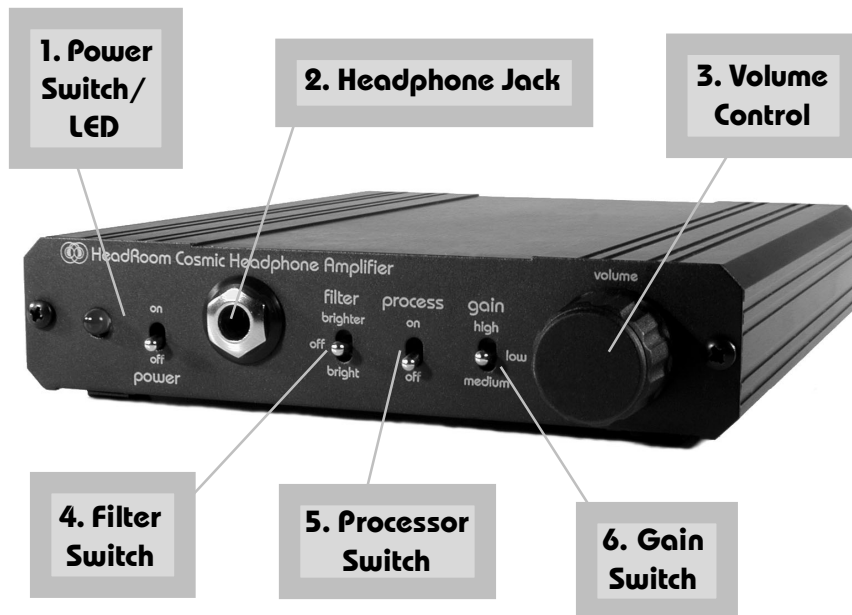


The Cosmic Owner's Manual

Headphone Amplifier
HeadRoom Corporation

Welcome to the world of fantastic portable audio! You have purchased the finest portable headphone amplifier/processor available. You will hear a clear improvement in a high-quality headphone's ability to resolve musical detail, express deep, tight bass and present a more natural audio image. All of our amps are hand-built in Bozeman, Montana of high-quality components and with plenty of TLC.



obsessed headphone geeks at your service.

A Tour of Your Cosmic HeadRoom Amp

1. The Power Switch/ LED. 1 is On, 0 is off. When the amp is on, the glowing red LED tells you so. When using the amp portably, make sure to turn your unit OFF when you are not using it to avoid battery drain!

2. The Headphone Jack. Upgraded from past models, this is a 1/4" headphone jack. Adaptors for 1/8" jacks are available, as well as splitters to run more than one pair of headphones.

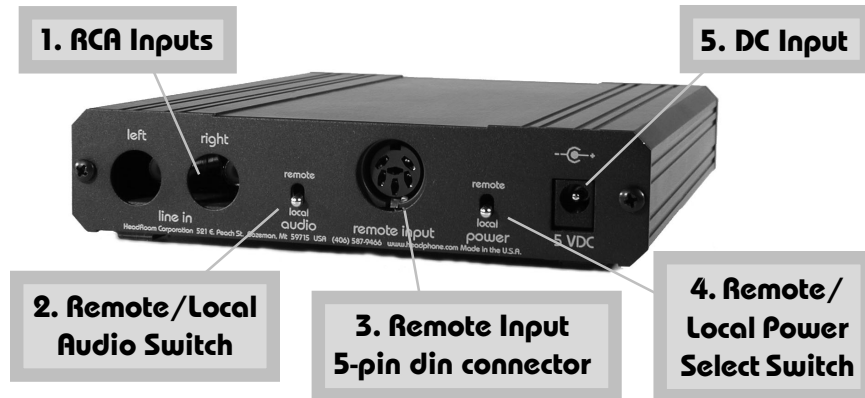
3. The Volume Control. We recommend turning the amp OFF or ALL THE WAY DOWN before plugging in or unplugging your headphones to avoid short-circuiting the amp. As you turn the volume control knob clockwise, the volume increases.

4. The Filter Switch. The filter switch is used to compensate for the warming action of the processor. In the center position there is no filter in the circuit; generally this is preferred. But if the processor is causing too much bass or blurring of the central image, a mild high frequency boost filter can be turned on. The "bright" setting accentuates the highs at about 3 kHz; with the "brighter" setting the filter starts an octave earlier and catches some of the upper mids. Basically, set it to what ever sounds best to you.

5. The Processor Switch. This switch engages and disengages the headphone audio image processing circuit. Headphone audio imaging is not very good; typically the image is a blob on the left, a blob on the right, and a blob in the middle. The HeadRoom audio image processor provides the natural acoustic cross-feed normally heard from the left speaker to the right ear, and from the right speaker to the left ear. Adding the cross-feed signal gives your brain enough information to build up the stable and natural audio image needed to have a quality listening experience.

6. The Gain Switch. A new feature on the Cosmic, the 3-position Gain Switch accommodates various headphones' power needs. For instance, the Low Gain setting would be used for Grado headphones, allowing a larger range on the volume control pot. Experimenting with your headphones and the gain switch may help you to determine which setting you prefer. If have any questions regarding your headphones, feel free to call and ask us.

Cosmic Rear Panel



1. RCA Inputs. The RCA jacks are recessed into the back panel to minimize torsional stress on the connectors and cables. The RCA jack openings on the back panel measure .5 inches. Audio cables are usually color coded with the red connector representing the right channel. The left channel connector may be black or white. Plug your source in here with an interconnect cable, we have several recommendations.

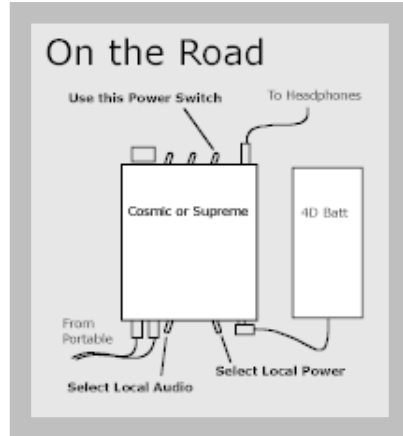
2. Remote/Local Audio Switch. To achieve the best sound from your Cosmic amp, use the RCA Inputs and leave this switch in the 'Local' position. For convenience, the input may be run through the Base Station One, in which case the switch should be set to 'Remote'. The switch should also be set to 'Remote' when using the Supreme/Cosmic power supply, included with the amp.

3. Remote Input. The included Supreme/Cosmic power supply will bypass the internal DC/DC convertor and deliver +/- 15V of regulated voltage directly to the electronics. For enhanced sound quality, the Base Station One offers a significant power supply upgrade. Plug the Supreme/Cosmic power supply or the B.S.1. cable into this 5 pin DIN connector.

4. Remote/Local Power Select Switch. When the Base Station One or the Supreme/Cosmic Power Supply is connected, this switch should be in the 'Remote' position, thereby bypassing all other power sources such as the battery pack or walwart. When using batteries or alternate AC power source out of the DC input, set this switch to 'Local'.

5. Alternate DC Input. This is your plug-in for both the 4-D cell battery pack as well as some power supplies. While we prefer the Supreme/Cosmic power supply, there are alternatives that may be smaller or easier to obtain. They must be regulated supplies 5-6V., and at least 500 mA (milliamps) with center tip-positive.

Hooking up Your Cosmic



The Cosmic can be operated on four D-cell batteries using the 4-D battery pack supplied with the amp. This is considered "local power", and the POWER switch on the rear of the amp should be set to LOCAL. The power supply included with the Cosmic connects into the 5-pin din connector on the back of the amp, which is also used by the Base Station One. When using either of these supplies, the Power switch on the rear of the amp should be set to 'REMOTE'.

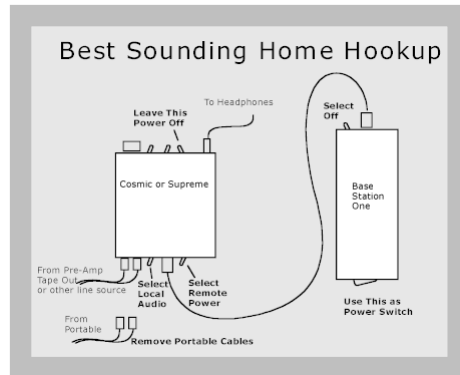
The Base Station One

To get the best sound from your Cosmic, use the Base Station One as the power source. Though the Cosmic sounds excellent by itself, the BaseStation One will further smooth the highs and tighten the bass for even greater audio ecstasy. In our humble opinion, the BS1 is a truly worthwhile upgrade. Give us a call for more information and to try it out for 30 days.

The BaseStation One is the REMOTE power source, and the POWER switch on the rear of the amp should be set accordingly. To connect the BS1 to the amp, use the BS1-Cosmic interconnect (blue cable with din connectors) that comes with the BS1.



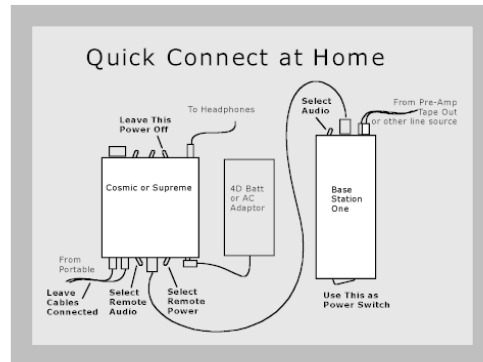
Using the Cosmic with the Base Station One



For ultimate sound quality, continue to use the LOCAL inputs directly from the audio source to the back of the amp. Use the BaseStation One only as a power source. Using the BS1-Cosmic interconnect to carry both power and audio will cause a very, very slight degradation of the signal quality coming from the source. In this configuration, the switch on the front of the BS1 should be in the OFF position.

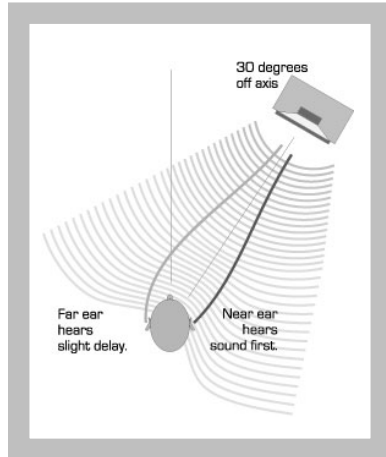
For convenience, an audio input is also available on the BS1 for a low-hassle method of connecting the headphone amp to a home system. Just leave the inputs from your home equipment plugged into the front of the BS1 and flip the switch on the BS1 to AUDIO.

To connect the amp, plug in the blue cable and flip both the AUDIO and POWER switches on the rear of the amp to REMOTE. Both power and audio will come from the BS1 to the amp.



The BS1 has an ON/OFF rocker switch above the power cord socket on the rear of the unit. This becomes the power switch for the amp. When using the BS1, the POWER switch on the front of the Supreme should always be in the OFF position to prevent battery drain. An AC power cord is supplied with the BS1 and is plugged into the 3-prong connector on the back of the unit.

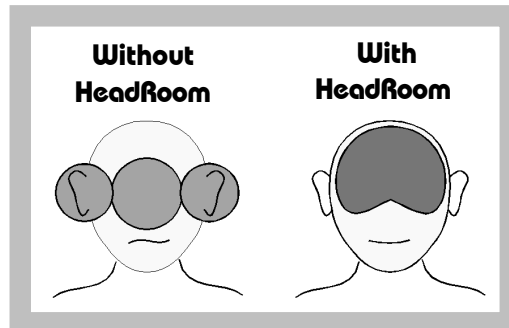
Why does your HeadRoom amp have a processor?



Because it makes headphone listening much more natural. When listening to speakers, you hear both the left and the right signals in both ears. Not so with headphones. When you stick a pair of speakers directly to your ears (i.e., headphones), you lose the spatial/acoustic cues your mind needs to locate sounds in space.

Despite this lack of acoustic data, your mind attempts to laterally locate sounds. The result is a troubling blobs-in-the-head sonic image. Your brain ends up frustrated and fatigued.

The Audio Image Processor solves this problem. Analog filters are used to take an attenuated signal from each channel, slightly delay it (about 300 microseconds, depending on the frequency), and feed it to the opposite ear. This is the acoustic information your mind needs to create a believable audio image in your head. This added information eases the burden on your brain by spreading out the clumped image in your head. Ahh, sweet relief.



How Can the Processor be Tested?

If you have already tried out the Processor, you have probably noticed that there isn't a huge difference in the sound when switching the Processor on and off. If you would like a more obvious demonstration of the effect of the Processor, just unplug one of the RCA inputs to The Cosmic and listen for a few moments with the Processor off. Now switch the Processor on and hear the difference. [pause for experimentation] See, it really *is* doing something dramatic.

And Now A Word About Your Hearing...

People have a natural tendency to listen to music on headphones at much louder levels than they would on speakers. If you hope to avoid permanent hearing damage, it's important to be careful not to listen at extremely loud levels or to listen for too long at moderately loud levels. Because HeadRoom amps must be capable of driving even the most inefficient dynamic headphones to satisfactory listening levels, the amps are able to drive headphones of average and high efficiencies to *very* high levels. As a result, you may not be listening at a safe level even though the volume control on the amp is less than half way up. Generally speaking, when listening to headphones, you should only turn up the volume to the point at which the sound isn't too quiet.

The most common hearing damage caused by prolonged or excessively loud sound is called tinnitus. It manifests itself as a sustained ringing in the ears and can become a permanent condition. If you find that your ears are ringing or that there is a sensation of pressure or fatigue, give them a rest for a couple of days (or until they feel fresh). These symptoms are your body telling you that your ears need a break. Should you choose to ignore these symptoms, you are risking permanent hearing damage. As a general rule, sound pressure levels under 80 decibels will not damage hearing, even if listened to continually. On the other hand, anything over 100 decibels may cause permanent damage fast. Sound pressure levels anywhere in between can also be damaging. The louder the sound, the shorter the exposure time required to cause permanent damage.

Now, don't fool yourself into thinking that you either have full-blown tinnitus or you don't have it at all—you can get a slight case. For example, you might only notice your ears ringing in bed at night. Once you have a slight case of tinnitus, your ears are much more susceptible to further damage. So, if you get tinnitus, it's important to be much more careful about exposure to loud sounds. Now that we've told you to be careful, don't blame us if you blow it. If you have any more questions about hearing damage, call a doctor. Sorry to sound so sobering, but a lifetime of musical enjoyment requires ears in tiptop shape.

Five-Year Product Warranty

The Cosmic amplifier carries a five-year parts and labor product warranty. If you have any problems with your headphone listening system, please first call us at 1-800-828-8184. We will try to diagnose the problem over the phone, which can save both of us considerable time, effort and money. If the equipment must be returned for repair, we will authorize a return for you. HeadRoom is the only authorized service center for HeadRoom products, either in or out of warranty. If a unit is under warranty, there is no cost for the repair labor, parts, or shipping from HeadRoom back to you (i.e., You're responsible for paying the shipping charges to get the product to us). For units out of warranty, repairs are billed on a time and parts basis, plus shipping costs. When we receive the equipment, we will initiate repairs quickly (usually within three working days) and return the unit to you, or call you with an assessment of the problem.

30-day Satisfaction Guaranty

Unless specifically stated, all HeadRoom purchases come with a 30-day satisfaction guaranty. We do this because we want to give you the opportunity to change your mind after you get to hear the products you bought. We're very glad to give you this option, and we want you to use it if you aren't happy with your purchase, but we also want you to be aware of the conditions under which we can provide you this guaranty:

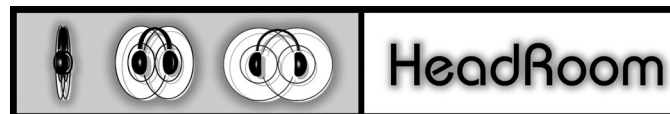
- Please return all packages to 2020 Gilkerson Drive, Bozeman, MT 59715
- Assuming all conditions are met, we are willing to refund the entire purchased amount for products returned. We do not refund shipping charges.
- If you are experiencing trouble with a headphone amp or a headphone system, please email Sales at sales@headphone.com to troubleshoot the problem. This can save all of us considerable time, effort, and money.
- If you are doing a partial return, you will be refunded the cost to you of the products returned. If you purchased a package system at a discount and are keeping some of the items in the package, your refund will be adjusted based on the retail price of the equipment you are keeping. In other words, we don't give full-price refunds on products purchased at a discount.
- If you are doing a partial return and exchange for other product, you will be eligible for all discounts that would apply to the set of products that you end up keeping.
- Products must be returned to us within 30 days of the date you receive the product. SO if you think you might want to return something to us, listen right away; it's amazing how many people say they went out of the country and didn't have a chance to listen before they left.
- Products must be in as new condition. This means that they are not only in pristine cosmetic condition and functioning perfectly, but that they are repacked with ALL materials (plastic bags, warranty cards, tie wraps, and ANY other little bit or piece that came with the product) just as you received it. Please use the original box it was received in (or another that is comparable); and please don't send your headphones back in JUST the headphone box!
- If a product is returned within 30-days, but is not in as new condition, we will charge you a 15% restocking fee PLUS any labor and materials required to return the product to as new condition.
- Return packages shipped to us must be sent "signature required" and insured, otherwise they are sent back at your own risk!
- Products returned to us after the 30-day period, or which require more cost to repair than the wholesale value of the product will simply be returned to the customer.

We want you to know that we're not hard cases about this; the vast majority of returns are refunded.

Contacting HeadRoom..

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obsessed headphone geeks at your service.



www.headphone.com