# The Little and Little More Power Manuals

# Headphone Amplifier HeadRoom Corporation

Congratulations on your purchase of a Little HeadRoom headphone amplifier and processor. It's guaranteed to drive your headphones better than the vast majority of headphone jacks available on home equipment. You will hear an improvement in a high-quality headphone's ability to resolve musical detail, express deep, tight bass and present a more natural stereo 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 Little HeadRoom

- 1. The Headphone Jack. 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.
- 2. 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. If you're switching between two or three pairs of headphones with different input impedance ratings, different volume settings will most likely be necessary to achieve similar sound levels.
- **3.** The LED's. Immediately to the right of the volume control knob are two green LEDs. These simply tell you that the unit is on and working. We made them intensely bright so that you can also cut through two inches of steel with them, blind an attacker, or summon the mothership from the opposite end of the solar system. Pretty handy, huh?
- **4.** 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.
- **5. 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 frequence 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.

You may be wondering by now why you haven't been able to find the power switch. Well, limited real estate on the circuit board forced its elimination. (It was either that or the headphone jack.) But it's easy to live without it. Just plug the amp in and you're ready to listen. You should **unplug the headphones** or turn the volume down all the way when plugging or unplugging the amp to avoid smoking them with a surge of electric current. Leaving the amp plugged in all the time is not a problem.

# Rear Panel

The back of the Little is a couple of line-level RCA inputs, a hard-wired power cable and a little spare hole slot. (The hole is where a switch was going to go, but now we just refer to it as the bass port.)

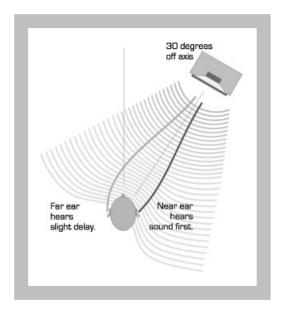
Connect the cables from your audio source to the RCA inputs on the back of the amp. This connection can be made to any line-level audio source, like a CD player, tape deck, phono section or the tape loop of a preamp. Audio cables are usually color coded with the red connector representing the right channel. The left channel connector is usually either black or white.



# How do I hook up my Little?

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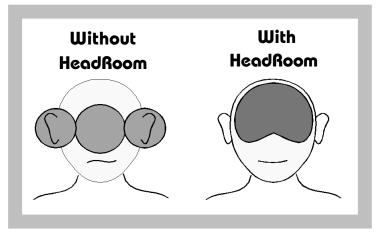
### Why does your HeadRoom amp have a processor?



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, you 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 you 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 Little** 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.

#### Using the Amp as a Preamp

How about another helpful feature: In a pinch, the Little HeadRoom can double as a single-source preamp that actually sounds pretty good. Make sure the Processor and Filter switches are in the OFF position when listening through speakers to avoid having your imaging and frequency response goofed up.

To hook it up, all you have to do is find a good way of converting from the amp's "stereo output to male RCA connectors. This can be easily accomplished by snapping a 1/8"-to-1/4" stereo adapter onto our Long Portable Cable. Remember to have the Little HeadRoom powered up before you turn your power amp on to avoid sending a spike in the audio signal to your speakers.

### About the power supply upgrade

HeadRoom offers a beefed up power supply option for the Little called the More Power supply. It's a true he-man linear power supply that is hard wired to the Little for optimal sound quality. (The upgrade must be performed at HeadRoom World Headquarters by our skilled electronics technicians who will return you unit to you as quickly as possible.) With the addition of the More Power you will hear an exciting new clarity in the highs and deeper, tighter bass. You can consider it a step up from "a darn good headphone amp for the money" to "an entry level high end amp" capable of driving cream o' the crop headphones. Give us a call to check the current upgrade fee, ask questions, and to schedule the return. In our humble, disinterested opinion, it's well worth the money.



# 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 120 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.

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 it, 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 question about hearing damage, call a doctor. Sorry to sound so sobering, but a lifetime of musical enjoyment requires ears in tip top shape.

# More Available Upgrades

There are a number of upgrades available for your Little.

The power supply can be upgraded with the More Power, providing a better power supply for the Little. You can also upgrade the standard electronics module to a premium module, offering significant sound quality improvement. Please call us for details about these upgrade paths.

## 30-day Satisfaction Guarantee

Unless specifically stated otherwise, all HeadRoom purchases come with a 30-day satisfaction guarantee in order to give you the opportunity to evaluate your purchases. We're happy to provide such a policy, and want you to use it if you aren't happy with a product, but to keep costs down we do have a few conditions. (Don't worry, the vast majority of returns are refunded; we just need to make our return policy one that's fair to everyone).

#### PROBLEMS?

• If you're having trouble with a headphone amp or system, please email Sales at sales@headphone.com, or call 800.828.8184, to troubleshoot the problem. If we can fix the problem while you've still got the product, everyone's happy!

#### CONDITIONS

- Products must be returned to us within 30 days of the date you receive the product. So make sure you try your purchase out right away! (It's amazing how many people say they left the country for a while and didn't have a chance to listen before they left.)
- Products must be in "as-new" condition. This means that they're in pristine cosmetic condition, functioning perfectly, and include ALL materials (plastic bags, warranty cards, tie wraps, and any other little bit or piece that came with the product). In other words, please send products back exactly as you received them.
- If a product is returned within the 30-day return period, 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.
- Products returned to us after the 30-day period, or which require more cost to repair than the wholesale value of the product, will be returned to the customer without a refund.

#### **HOW TO SHIP**

- Please ship the product back in the original shipping box (or another that is comparable); please don't send headphones back in JUST the headphone box, as it's a sure bet that they will no longer be in "as-new" condition when we receive them!
- We HIGHLY recommend that you ship returns using an insured and "signature required" delivery method—we can't be responsible for lost or damaged packages.
- Please send returns to:
  HeadRoom Corporation
  2020 Gilkerson Drive
  Bozeman, MT 59715

#### REFUNDS

- Assuming all conditions are met, we will refund the price of the products in your order. If you are doing a partial return, you will be refunded the cost to you of the individual products returned. We cannot refund shipping charges.
- If you purchased a package system at a discount and are only returning 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, if you return part of a package, you end up paying the non-package price for the parts of the package you keep. (Otherwise people could just order packages and return parts of them in order to get a cheaper price.)

### Two-Year Product Warranty

The HeadRoom Little amplifier carries a two-year parts and labor product warranty. HeadRoom corporate headquarters is the only authorized service center for HeadRoom products, either within or out of warranty. If your amp is under warranty, there is no charge for the repair labor, parts and the shipping costs from HeadRoom back to you. (i.e., You're responsible for paying the shipping charges to get the product to us.) For units that are out of warranty, repairs are billed on a parts and labor basis, plus shipping.

If you have any problems with your equipment, please contact us at one of the numbers listed below **before** shipping the equipment back to us. We will attempt to diagnose the problem over the phone, which may save both of us considerable time and effort and money. If the equipment must be returned for repair, we will provide you with a return authorization number. When we receive the equipment, we will repair it as quickly as possible (usually within three days) and return it to you, or call you with an assessment of the problem.

### Contacting HeadRoom

HeadRoom Corporation
2020 Gilkerson Drive Bozeman, MT 59715

toll free 800-828-8184 or 1+ 406-587-9466 fax: 406-587-9484

drop us an email at sales@headphone.com or info@headphone.com

#### www.headphone.com



obsessed headphone geeks at your service.