

The AirHead and Total AirHead Owner's Manual

Headphone Amplifier HeadRoom Corporation

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

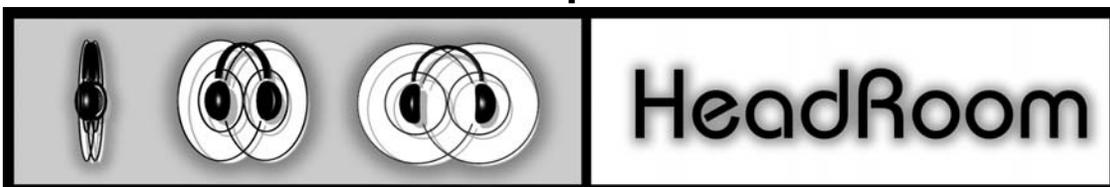
The HeadRoom AirHead



The HeadRoom Total AirHead

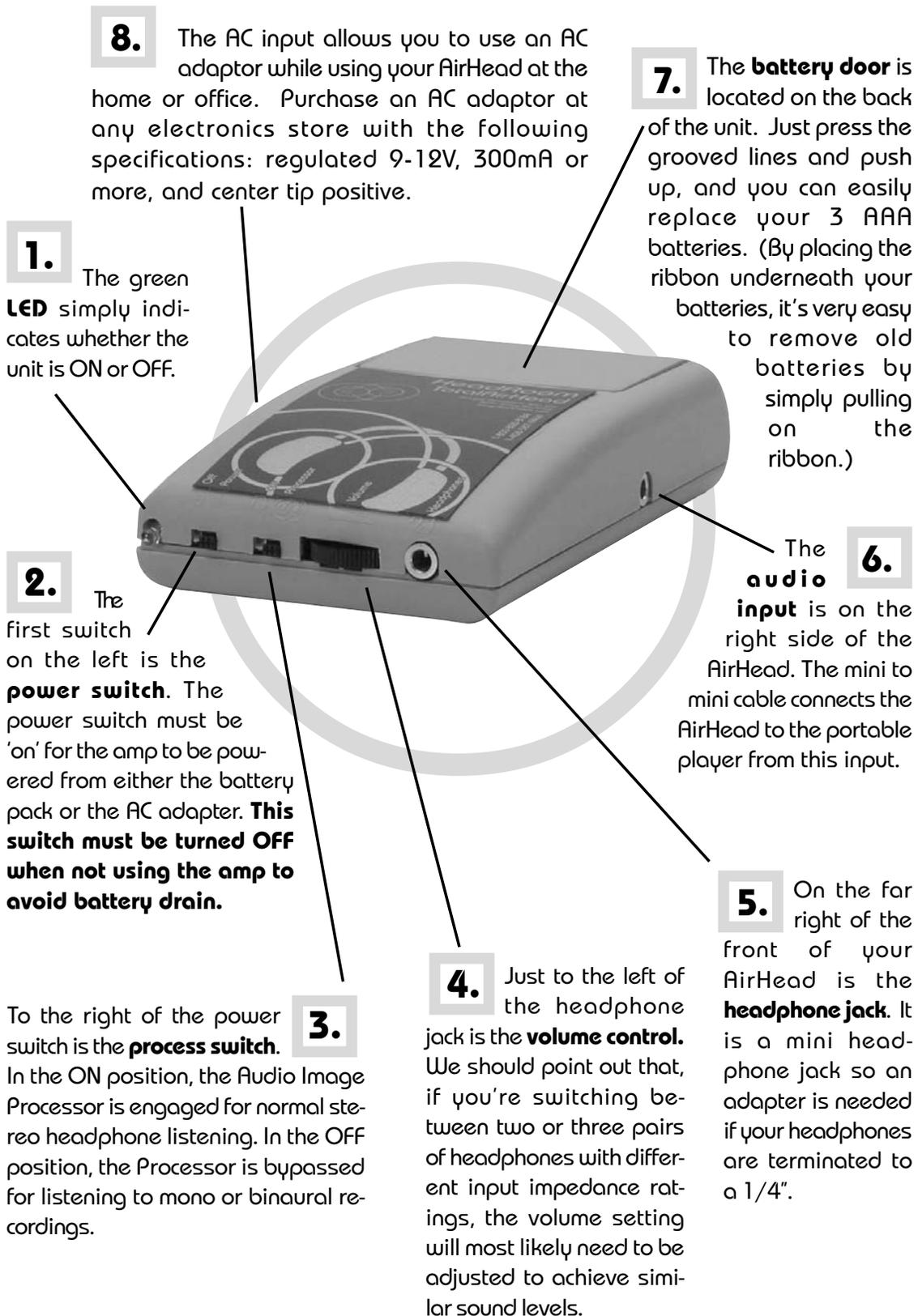


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Getting to Know Your New HeadRoom Amp



Hooking up the AirHead

1. Hooking up the AirHead to your source is very simple. Most portable CD players, MP3's, MiniDiscs, radios, and other portable devices will have an 1/8" line out or an 1/8" headphone jack. The line out is preferable, but if there isn't one on the unit then use the headphone jack. The ends of the mini-to-mini cable are identical, so it doesn't matter which end you plug in.

2. To hook your AirHead up to a computer, using the speaker out will work best.

3. If your source has RCA plugs, then you will want to get a portable cable, which terminates to RCA on one end (to plug into your source) and terminates to a mini plug on the other (to plug in your AirHead).

4. Plug your headphones into the headphone jack of the AirHead. The AirHead has a 1/8" plug, so you may need to pull off the 1/4" adaptor attached to some headphones.



A mini-to-mini cable is included the AirHead and the Total AirHead



The portable cable is the way to connect your AirHead amp to RCA inputs

AirHead & Total AirHead Specifications

amplifier Type: Bi-Polar
output Stage Biasing: A/B
volume Control: Rotary Pot
number of Inputs: 1
line Outputs: N
loop Outputs: N
input Impedance: 31000
output Impedance: 0.0200
max Gain: 3.7
output Voltage @ Clipping: 1.7

output power @ 30 ohms: 21
output power @ 100 ohms: 10
output power @ 300 ohms: 4
thd 10 mwatts @ 30 ohms: 0.01700
thd 10 mwatts @ 100 ohms: 0.01500
thd 10 mwatts 300 ohms: 0.01400
crosstalk 10 mwatts @ 30 ohms: 80
crosstalk 10 mwatts @ 100 ohms: 80
crosstalk 10 mwatts @ 300 ohms: 80

Portable Listening

Setting up your system in a HeadRoom custom bag is easy. Pictured here is the AirBag, one of the most popular bags to use with the AirHead. You can follow these same steps with any carrying cases from the HeadRoom line. The AirBag is the best way to take your portable CD player and AirHead amp on the road on the road.



To properly load up your AirBag, just follow these simple steps:

- 1.** Take the shoulder strap out of the the bag and hook it the top D rings of the bag.
- 2.** Next, Hook up one end of your mini-to-mini cable to the line out of the AirHead, located on the side of the unit.
- 3.** Run the other end of the cable in the top pocket of the AirBag. This is where the AirHead will sit. Run the open end of the cable all the way down to the bottom of the pocket until you feel a small slit at the bottom. This is where you will run the cable to connect to your CD player. Then put your AirHead amp in the top pocket of the Airbag.
- 4.** Now take some velcro provided with the bag and press a piece of the velcro on the the bottom of your CD player. (It's very sticky but it will come back up). You can see the other side of the velcro in the main pocket of your AirBag; this is where your CD player will sit.
- 5.** Once your CD player is secured in the main pocket, simply connect the other end of the mini-tomini cable sticking through the slit into the line-out or headphone jack or your CD player. (A line out is preferable, but if your source doesn't have one then the headphone jack will work just fine).
- 6.** Finally, load some of your favorite CD's in the convenient CD sleeves found in the bottom pocket of the AirBag. Happy Listening!

Purchase the AirBag with the AirHead- or within 30 days- and receive a 20% discount on the bag!



Frequently Asked Questions & Troubleshooting

We recommend turning the amp OFF or ALL THE WAY DOWN before plugging in and unplugging your headphones to avoid causing a short circuit in the amp.

Can I use two pair of headphones at the same time?

You can run two pair of headphones off your AirHead provided that they are of similar impedance levels. Consult your headphone manufacturer's website to confirm your headphones' impedance level.

How long does the batteries last on my Total AirHead?

The AirHead and Total AirHead can be powered for approximately 40 hours on 3 AAA batteries.

What's the difference between the AirHead and the Total AirHead?

The Total AirHead uses exactly the same circuit board as the standard AirHead except it is upgraded with many of the same parts as we use in our Premium and reference electronics modules used in our high end amps. Resistors in the audio chain have been replaced with super-low temperature and voltage coefficient thin-film resistors and output coupling electrolytic capacitors have been replaced with very fast organic electrolyte Os-Con caps.

Can the unit drain batteries even when it's turned off?

It will not drain your batteries, but if you are storing the unit for a period of time, it is a good idea to remove the batteries to prevent accidental leakage.

Does HeadRoom recommend using rechargeable batteries?

We do not recommend using rechargeable batteries because we believe it degrades the sound quality slightly. The battery life is also not as long.

What headphones is my AirHead able to drive?

With the exception of AKG K-1000's, your AirHead can drive any pair of headphones.

Can I run my AirHead without batteries by plugging it in?

Yes! A power supply is available as an accessory to the AirHead. Consult page 2 for wall wart specifications.

Can I upgrade my AirHead to a Total AirHead?

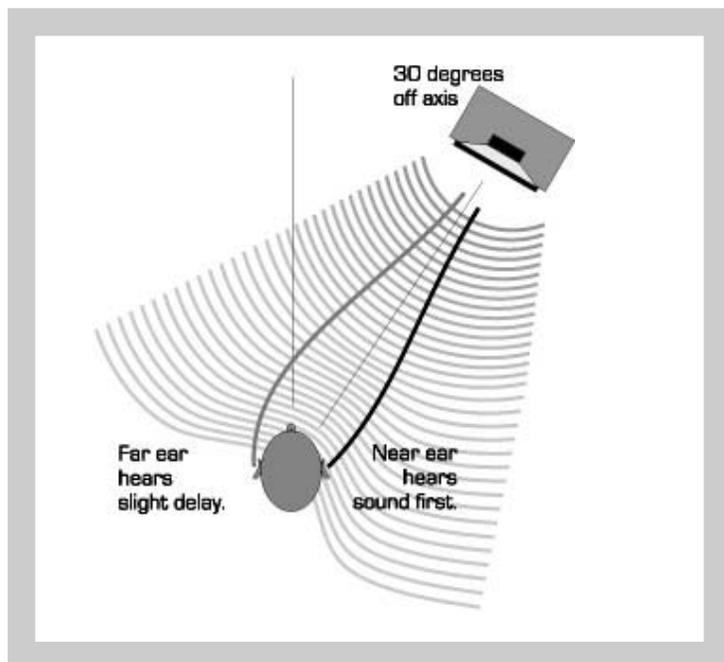
-No. if you purchase an AirHead and would like to exchange it for a Total AirHead (or vice versa) within the first 30 days of your purchase, you can exchange it for a full credit towards the other unit.

Which volume control is best to use?

turn the volume on your portable source about up 1/2 way up if it doesn't have a line out. Then use the volume control on the amp to adjust the level. If you do have a line out feature on your source, then you will want to plug your mini-to-mini cable in to that and the volume level on the source does not matter.

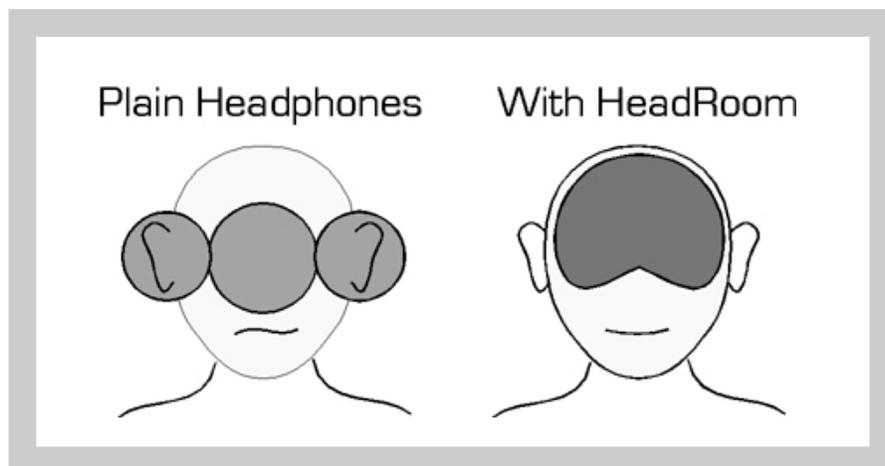
Why Does Your HeadRoom Amp Have a Processor?

The AirHead and Total AirHead 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 ear, slightly delay it (about 300 ms), and feed it to the opposite ear. This is the acoustic information your mind needs 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.



And Now A Word About Your Hearing

People have a natural tendency to listen to music at much louder levels with headphones than they would with speakers. 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. If you 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 have 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.

Two-Year Product Warranty

There is a two-year product warranty for the AirHead and Total AirHead. If anytime within the first two years of your purchase you have a problem with your AirHead or Total AirHead, you can return it for repairs under the following terms of our warranty policy.

If you have any problems with your headphone listening system, please **call us first 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, plus shipping basis. 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.

obsessed headphone geeks at your service.



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