

The Coda Amp and Overture DAC Manuals

HeadRoom Corporation

Here at HeadRoom, we feel like we're at the end of our beginning. We wanted to reflect a moment to finish up what we started. The Coda Amp and Overture DAC is our reflection. The "coda" is a distinct bit of music you put at the end of a song; and the Coda Amp is the finishing touch to our entire product line of aluminum enclosure amps. An overture, musically speaking, is a symbol of things to come. Likewise, the Overture DAC is the first time we'll pair up digital to analog conversion with headphone amplification; but it's certainly not the last. Knowing that it would take a bit of time to pull off the big job of integrating D/A capabilities into the product line, we decided to take a moment to produce this sweet portable pairing of headphone amp and DAC.

And, oh my goodness, they're sweet! Take the optical digital out of a portable source, or better yet, a USB connection from your computer; plug in a good set of headphones and you've got great sound... immersive sound... incredible resolution and clarity like you've never had before from a supposedly crap source.

Oh, yes: this is the way personal audio ought to be.



www.headphone.com

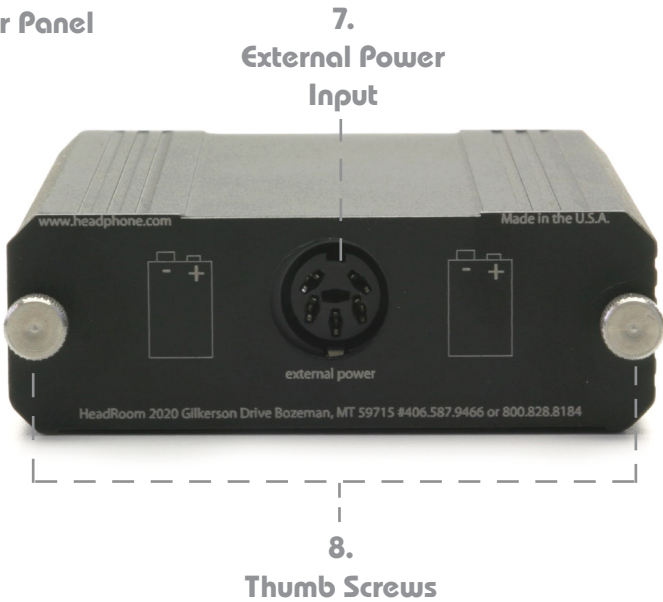


A Tour of Your Coda Amp

Front Panel



Rear Panel



The Coda Amp

Packing HeadRoom's mobile electronics module, two nine-volt batteries, and all the knobs and switches you need into an all but bullet proof aluminum enclosure is pushing it a bit, but you won't care because your head will be thanking you for the lovely tunes.

Front Panel

1. Line Input The line in is where you plug in the source. Preferably the Overture DAC; but it could be the line out of your iRiver or the headphone out of an iPod. If you purchased the Coda amp individually, a 12" mini-mini cable is included with the amp.

2. Headphone Out The headphone out is where you plug in your headphones. There isn't room for a full sized jack, but this 1/8th inch mini-plug will take the small plug of your Etymotic, Shure, or Ultimate Ear (if you're lucky) in-ear-monitors. We also sell a short flexible Grado 1/4" -1/8" adaptor for your big cans; and don't forget you can get a replacable Cardas short cable for your Sennheiser HD650 headphones with a mini-plug on it.

3. Processor Switch The processor switch engages the crossfeed circuit. The audio image on headphones is often 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 at the left and right ear as heard from the left and right speaker. Adding back the normally occurring cross-feed signal gives your brain enough information to build the stable and natural audio image needed to have a quality listening experience.

4. Volume Control You never know where the volume control should be set as different headphones often have widely different impedances and efficiencies, so use your ears to choose your listening level, not the level on the dial. (We recommend you choose a moderate level so as not to blow out your ears. They're your ears, of course, but tinnitus sucks.) We also 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.

5. Power Source Switch Immediately to the right of the volume control is the power source switch. It will run on either the two internal 9-Volt batteries or an external power supply. If the batteries are in and external supply is attached, the only way you can turn it off is by selecting 'external' and then unplugging the connector. We offer two power supplies: the less expensive, lovingly known as "brick", power supply comes with the amp, the more expensive Base Station One will give you cleaner juice, and therefore cleaner, more dynamic sound.

6. Power LED When the unit is on, (powered by either batteries or external supply) you will see the LED lit.

Rear Panel

7. External Power Input Connect either of your power supplies here.

8. Thumb Screws To change your batteries, unscrew the screws and remove the rear panel. Orientation of 2 nine-volt batteries is indicated by the illustrations on the rear panel.

A Tour of Your Overture DAC

The unlikely marriage of a well supported Texas Instruments USB sound device chip (to get the S/PDIF signal), Cirrus Logic's flagship D/A converter, HeadRoom', and two 9-Volt batteries bears the fruit of incredibly good sound anywhere you want to set up a personal listening station. Take a tour of the front and rear panels and here's what you'll find:

Front Panel:

1. Line Output The line out is the best sounding stereo-mini plug out there. This is the signal source you plug into the input of your headphone amp. The Overture DAC/Coda amp combination comes with a 6" Cardas cable. Don't forget to check out our other Cardas mini to mini cables; they come in many flavors . . . ok, four different lengths.

2. Optical In The optical input is your typical Toslink connector. You get this input signal from the optical output of your player. Not so many portable audio players have optical outputs anymore (call or check our web site for recommendations), but many portable DVD players and some hard disk drive players do. Of course, you can get this signal from many pieces of home equipment.

3. USB Input The USB input gets its signal from a computer: laptop or desktop; PC, Mac, or Unix. There aren't any portable players of any kind that have the ability to talk to an external USB sound device . . . yet.

4. Input Selector Switch If you only have one input, the position of the input selection switch won't matter as the receiver chip is smart enough to select the only channel that is on. But if you are using both inputs you'll have to select the one you want with this switch.

5. Power Source Switch To the far right is the power source switch. It will run on either the two internal 9-Volt batteries or an external power supply. If the batteries are in and external supply is attached, the only way you can turn it off is by selecting 'external DC' and then unplugging the power supply from the back of the unit. We offer two power supplies: the less expensive version, lovingly known as "brick", power supply comes with the amp, the more expensive Base Station One will give you cleaner juice, and therefore cleaner, more dynamic sound.

6. Power LED When the unit is on, (powered by either batteries or external supply) you will see the LED lit.

Rear Panel:

7. External Power Input Connect either of your power supplies here.

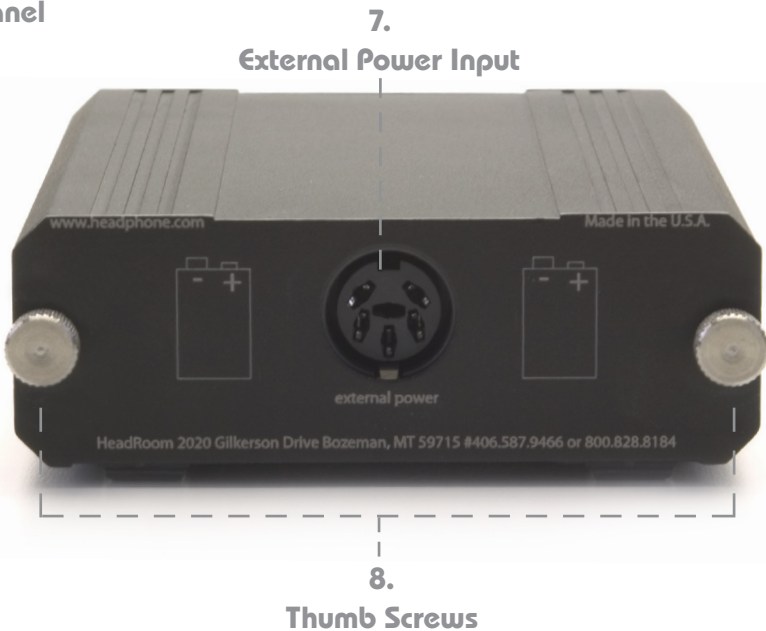
8. Thumb Screws To change your batteries, unscrew the screws and remove the rear panel. Orientation of 2 nine volt batteries is indicated by the illustrations on the rear panel.

The Overture DAC

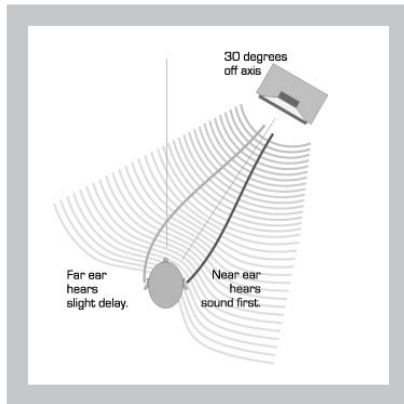
Front Panel



Rear Panel



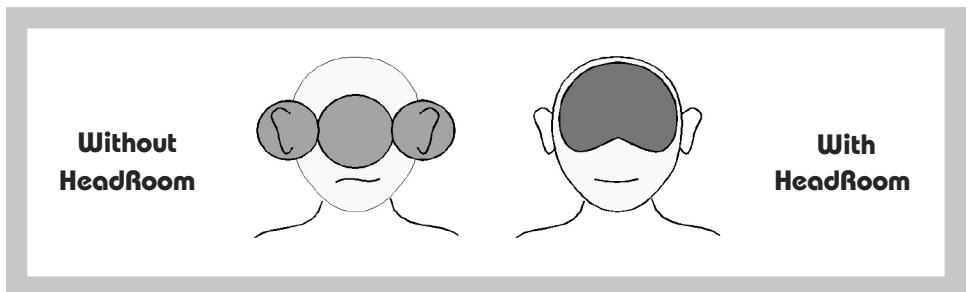
Why does your HeadRoom amp have a processor?



Imagine you are listening to a pair of speakers and you turn off the left speaker, both ears continue to hear the sound from the right speaker. But because the left ear is slight farther away than the right, it hears the sound slightly after the right ear. This time difference is called the "inter-aural time difference" and it is the main thing your brain listens to for left-to-right sound imaging.

But in headphones if you turn off the left channel, only the right ear hears the sound. In headphones, if there is any sound that is only in the left channel, or only in the right channel, then only that ear hears the sound. This is not natural, and you brain becomes fatigued trying to figure out where sound is coming from. This problem with headphones tends to create an audio image that is three blobs, left, right, and center.

HeadRoom amplifiers cure this problem by allowing you to cross-feed a little of the left and right channels through a short time delay using the processor switch. The usefulness of the circuit varies depending on what type of recording you are listening to: old studio recordings (The Beatles and old jazz for example) that have instruments hard panned left or right, benefit greatly from the processor; mono and binaural recordings need no processor at all; live and classical recordings miked from a distance benefit somewhat less, and can often be listened to without the processor quite comfortably.



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
Attn: Returns
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 Coda amplifier and Overture DAC carry 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 five working days) and return it to you, or call you with an assessment of the problem.

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.

www.headphone.com



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