Little Labs saw the need for an audiophile headphone amp designed for the working audio engineer - devoid of gimmicks - providing accurate, low fatigue, great sounding source analysis. Introducing the Little Labs Monotor™.

Features include:

- Dual 1/4” AND 3.5mm separately amplified headphone jacks, for no, “where’s that adapter” hook up and partner monitoring.

- Extensive mono monitoring capability: left plus right, left, right, and even left minus right, for phase check and digital compressed audio file artifact analysis.

- Minimal audiophile (almost completely passive) zen circuit path using a single, truly state of the art active stage per headphone output (0.5Ω independently verified output impedance, beware of false .04 ohm output impedance claims).

- Internal state of the art super low noise linear voltage regulation, providing audiophile full current/voltage (unlike USB wimp powered headphone amps).

- Stereo mini aux input for talkback communication or easy portable player hookup.

- High gain, low noise, for very high spl monitoring, even with high impedance headphones.

- XLR/TRS combo jack inputs in parallel with TRS jacks for easy in-line monitoring hook up.

- Quality stepped volume attenuator with internal bypass for remote volume control capability.

- Rack-mountable: Up to 4 Little Labs devices fit in a 1u space.

- Made in the USA.

www.littlelabs.com or dial 323-851-6860
The front of the monitor has four headphone output jacks, two 3.5mm and two 1/4" - The two jacks to the left are fed by one stereo amp and the two jacks to the right are fed by a separate stereo amp. For the best performance use one set of phones per stereo amp output. But if you need to use all four, you will not damage the monitor and performance difference for casual use is minimal.

Stereo / mono function switch selects: stereo reverse (maybe that hi hat sounds better on the right?), regular stereo, mono left plus right, left only (in both ears), right only (in both ears), left minus right for hearing what is out of phase (between what is feeding the left and right in) and also useful for compressed digital audio file artifact analysis.

The little holes on either side of the level potentiometer conceal a push switch set back about an inch. The left switch pushed in bypasses the left side of the level potentiometer, the right, the right side of the level potentiometer. These can be used for a variety of scenarios (see more in the manual). The most common is when using the monitor with a high quality digital to analog converter that has a built in level control (like the Oppo 105). The highest quality level pot is no level pot.

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The xlr combo jack inputs to the MONOTOR are typically fed from line level sources such as your stereo buss of your console, the output of your D to A converter, the output of the monitor section of your console, a cd or dvd player, a phono pre amp, a tape machine, or to any line level device you want to monitor. The inputs to the MONOTOR are balanced, but the source can be balanced or unbalanced.

The stereo aux in mini jack can be fed from a phone or any stereo stereo jack device, including ipods or stereo video camera mic headphone outs (talkback). This input sums with the main inputs post the mono functions and volume control.
Monotor list price: $600 usd

Links for further information:

- Monotor inquiry doc: http://www.littlelabs.com/MONOINQ.PDF
- Full Monotor manual: http://www.littlelabs.com/MONOMAN.PDF
- Monotor tear sheet: http://www.littlelabs.com/MONOTEAR.PDF
- Hi rez Mono pic front: http://www.littlelabs.com/Monotorhirez.jpg
- Hi rez Mono pic rear: http://www.littlelabs.com/Monotor_rear_hirez.jpg
- Little Labs web site: http://www.littlelabs.com/
Thank you for inquiring about the Little Labs MONOTOR™ source analyzing pro headphone amp.

The MONOTOR is designed to fulfill the need for professional monitoring at the highest resolution possible, allowing you long fatigue-free analytical listening sessions.

Headphone listening amounts for 80% of what the consumer listens with today, and as the world gets more populated, this percentage will increase. For the professional mixer, monitoring on headphones is not only necessary, it is essential.

As a tech at A&M records recording studios and mastering rooms throughout the 80’s and 90’s, I found the studio control rooms, although excellent rooms and fine for evaluating a balance, they never came close to having the high resolution monitoring capabilities of the mastering rooms. Every component in the audio signal chain of the mastering rooms was carefully selected and anything not necessary was deleted, compared to the studios large mixing consoles going through (necessarily) dozens of amplifiers before reaching your ears, the resolution between the two was readily apparent. The mastering rooms were very carefully appointed under the direction of a legendary staff of mastering engineer greats including Alan Yoshida, Bernie Grundman, Patricia Sullivan, Dave Collins, Stephen Marcussen and others thru out the years. Much of the electronics used were built in house. In these rooms we were able to analyze minute differences in the sonic signature of components, even different brands of resistors could be detected and evaluated for sonic neutrality. This allowed us to have a mastering chain that would allow an engineer to come in and hear details such as edits, hums, hiss, unwanted distortions, reverb tails, things that would get by often un-noticed in the studio control room environment. This allowed a final polish to be put on a mix, with the engineer confident that no matter what system it was played on by the consumer, all that would be heard would be what was intended.

Fast forward to 2016, a much different recording monitoring environment is the norm, often makeshift and acoustically imperfect. Despite huge quality improvements in digital technology, the monitoring environment has, in most cases, become less than ideal and resolution has suffered. The Little Labs MONOTOR was designed so two people per MONOTOR (each headphone out is independently powered) could listen deep into a track at the highest resolution possible when paired with a quality set of headphones.

The headphone amp in the pro world has been neglected with few offerings, most of it junk, or the more expensive stuff available includes the gimmick cross feed circuitry, and quite often is driven by several active stages with unsuitable output drivers, great for old consoles to get a guitar sound, but not for driving high resolution headphones. Many audiophile headphone amps exist with often euphonic yet inaccurate reproduction, and at a ridiculous price. A trend of digital to analog converters combined with headphone amps is also popular. Some of the digital to analog converters are of decent quality, but typically a studio or mastering facility will have much better digital to analog converters in house (the MONOTOR makes evaluating converters easy). The USB powered headphone amp/digital to analog converters are crippled by default by use of dc to dc converters used to squeeze every bit of power out of a usb port. Internally powered headphones and bluetooth headphones are also crippled by a neutered power supply. I’m not saying these headphone amps sound bad, it’s just that they are not at a level of resolution found in a properly appointed mastering facility.

The Little Labs MONOTOR is designed with what I call a zen circuit topology. Only a single state of the art active stage is used in the circuit path of each headphone ear, with all else, straight wire passive
(this includes all the mono functions as well). All passive components in the audio path were selected for sonic neutrality, this includes dale/vishay resistors, nichicon muse series caps and specialized polystyrene film decoupling caps. The MONOTOR uses a full voltage state of the art super low noise internal linear regulation system (4 uVrms) with massive capacitance for power on demand on each rail. Just one internal filter capacitor used (there are 6) is bigger than a whole USB dongle digital to analog converter/headphone amp. This allows for a noticeably improved dynamic range over other headphone amps. You will also be able to drive even high impedance phones to full volume without any strain whatsoever, and no detectable hiss even at the highest volumes. The MONOTOR when I say it is state of the art, it truly is, and could not have been built just a year ago. I’m proud to say, this is not a rehashed old analog circuit, with this labor of love, we’ve taken analog to another level.

The MONOTOR paired with a good set of headphones will give you a reference at the highest resolution, so in imperfect environments you’ll quickly be able to evaluate as you only could in the best mastering facilities. You might be wondering what I use for headphones, (the headphone field has become huge in the last ten years) but the reference I use with the MONOTOR is the relatively reasonably cost Sennheiser HD600 with a Cardas cable (cable given to me by Bernie Grundmans Mastering facility and ex A&M super tech Beno May, thanks Beno!). This simple set up will set you back less than $1000 usd (slightly more with the Cardas cable) and give you performance you could spend easy 10 times that trying to achieve, with most likely worse resolution. This doesn’t mean your own favorite headphones aren’t suitable for the MONOTOR, it will drive any headphone to the best of the ability of that headphone.

So cheers, thanks for inquiring, and..Happy Listening!

Jonathan