Jonathan Little and his company Little Labs have been handcrafting microphone preamps, guitar re-amping boxes, distribution boxes, and more in his Hollywood Hills tower laboratory for over three decades. I usually introduce him as "the little black box guy", since 85% of his products come housed in black $6^1/2$ " x $4^1/8$ " DI sized enclosures.



Little Labs Monotor

This little headphone amp provides a great range of quality monitoring options

This month, however, we look at Little Labs latest device, the Monotor, and it is dressed in pearl white! It was previewed at AES and NAMM last year with its big brother the Monotor Presentor also in white.

A guided Mono-tour

The Monotor is an audiophile headphone amplifier designed for use in professional recording studios. You're probably thinking, "Everything from my mixer to my sound card already has a headphone out." Yes, they do. Having said that, while there are obvious exceptions (see the Apogee Symphony I/O MKII reviewed in last month's issue), really good-sounding headphone outs are not the norm. Also, many larger studios still use older pro consoles that do not offer dedicated headphone outs.

The Monotor shares the same direct box-sized tolex-covered metal enclosure as most of the Little Labs fare. It is a very simple and sparse device, especially compared to many of Jonathan's boxes like the Pepper. However, what it does puts it on par with many full-fledged monitor controllers... and even puts many competitors to shame when it comes to detailed and informed listening choices.

Starting on the left side of of the front panel are four headphone outputs: a pair of ¹/₄" and a pair of minijacks. These are fed by two dedicated amplifier stages, one for each large/small jack pair. All four are active at all times, sharing the same output feed.

The headphone amplifier stage is the only active circuit in the Monotor, using what Jonathan dubs "a Zen circuit

design". Before the headphone driver outputs, the signal path is completely passive, as is all summing in the Monotor.

The manual recommends that if two people are using the Monotor at the same time, it's best to start with each person using a separate side/amp.

However, I noticed no audible degradation, even when all four outs were used simultaneously. If you are using four pairs of matched headphones, the level and sound are perfectly matched. Note that this won't be the case when using headphones with widely different impedances; higher-impedance phones will be lower in volume than low-impedance ones.

That is, of course, part of the magic of the Monotor. It can drive expensive headphones much better than many budget headphone amps. It also helps that the Monotor circuitry is dead silent on its own... as in, "Is this thing even on?" silent. It also gets really, really loud!

Said volume level is controlled by a stepped output attenuator. On each side of the attenuator are a pair of holes which hide recessed push buttons... so recessed that I thought my unit was perhaps a prototype that was missing them, until I took the face plate off to see that they are recessed over an inch inside the case! These bypass the left and right attenuation levels and disable the output knob. This sets the Monotor's level to a fixed, wide-open setting.

This is handy for a few different scenarios. For example, it's good to bypass this control when your DAC or sound card has its own quality volume control. This eliminates the tug of war between two level settings in the audio chain. Another possible use is that since you can choose to bypass only one pair of outputs, it offers a quick and easy way to send the tracking mix to one output pair and the source being tracked to the other. With one channel getting a direct feed controlled from your DAW, and the other being attenuated with the output knob, the tracking musician can do quick level adjustments on their own to hear more of themselves or more of the mix.

Putting the Mono in Monotor

The last control on the front is a stepped switch with 6 LED lights above it. Each light indicates one of the unit's six output settings, in green when selected and red when not. The first two, marked R/L and L/R, are stereo outputs. L/R is normal left and right listening while R/L allows you to flip the stereo image between left and right.

The next three choices are mono outputs. These include L + R, which is true mono summing of the channels, and a mono output of one channel (L or R) sent to both ears. The last output choice is labeled L–R; it allows you to collapse the center of your phantom image and check for phase issues. This is the setting where, on many recordings, you can cancel out the vocals or just listen to effects... or make stereo effects that get a spacious signal through phase inversion disappear.

Backing it up

On the back of the unit is a 4-pin bipolar DC input jack for use with the unit's beefy external power supply. Next are a pair of Amphenol input jacks with a choice of XLR or 1/4" TRS input. Next to

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these are an additional pair of 1/4" TRS inputs. While labeled as inputs, they are actually multi-function jacks. As inputs, they allow for a secondary, parallel input source. They can also act as an output passthrough pair, one that bypasses the front panel attenuation and mono-stereophase controls. This allows the unit to be hooked up in series between your sound card and monitor speakers, or it can be used to daisychain multiple Monotor units.

Lastly is a small minijack input for inserting a smartphone, MP3 player, or another additional input source into the unit. This input is summed with the other inputs and sent to all the headphones and parallel outputs, post the mono functions and volume control.

In use

First, I used the Monotor with my home listening setup, on the outputs of my Apogee Duet for iPad and Mac along with JRiver's Media Center software for high-resolution playback of 24/96 and 24/192 music. I listened with my Audio-Technica ATR-M70x headphones, reviewed by Mike Metlay in our May 2015 issue.

Next, I used it in my studio for both tracking and mixing. I took a direct feed from my Apogee Symphony I/O converters into the Monotor, set up as a mult from

my patchbay. Here I used several different headphones: the abovementioned ATR-M70x as well as Audio-Technica's ATR-M20x (reviewed May 2014). These inexpensive but great-sounding phones are my standard studio/client headphones, and I keep five pairs on hand for sessions. I also used my trusty AKG K271 MKII phones and a pair of Direct Sound's Extreme Isolation EX-29 headphones, great for loud guitar tracking and drums. I also used the Monotor to conduct listening tests with the Westone AM series in-ear monitors (review forthcoming).

tors (review forthcoming).

End result? Across all headphones and in all applications, the Monotor offered some of the best headphone listening experiences of my life! So much so, in fact, that at home I haven't hooked my monitor speakers back up... I've been doing all of my hi-fi enjoyment listening through the Monotor. It's downright sonically addicting.

In the studio it's a fantastic mix tool that allows you to check mixes in great detail, both functionally and sonically. The dead silent yet super loud capability of the Monotor really lets you hear the idiosyncrasies of your gear, from hiss to sputters and more, as well as making it easy to discern and pinpoint clicks, pops, and noises in your mix.

This is *not* the box to use if you're listening to compressed audio. Actually, I guess it is, if you want to hear what data compression is doing to your own mixes. Be warned, though: the Monotor with a good set of headphones will shame most codecs painfully. If you want a real shock, try using the L–R setting on a 128k MP3 file—it really lets you hear exactly what is being affected (read, "destroyed") by the compression process.

Wrapping up

Many reviewers (myself included) describe Little Labs as one of those companies that builds devices to solve problems you didn't know you had. With the Monotor, that has never been more clear. I really thought that the built-in headphone outputs on most of my studio devices were more than sufficient for critical tasks. Well, most of them are at least adequate... but with the Monotor it's obvious how much better the headphone monitoring experience can be. I, for one, do not want to go back.

Price: \$540

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