

## DC Hi-Fi Group Audition Lipinski L50 Active: An "Amazing" Little Speaker (go to <u>Amazon Lipinski Store</u> for more info)

A month ago, at our Feb. DC Hi-Fi Group meeting, members got to hear Lipinski's flagship Signature Grand, a six-unit speaker system, which delivers an amazing balance of accuracy in a large listening room.

The members were also treated to the luscious, comparatively tiny, Lipinski L50 active speaker, which is the latest model from Audio Engineer Andrew Lipinski's twenty+ years experience developing speakers and electronics for recording studio use and picky audiophiles (<u>http://www.lipinskisound.com</u>). Members who made the demo said they were impressed. One member remarked that it was an "amazing sounding speaker" for such a small size. In the meantime, other members, who did not get a chance to hear them at the demos, have asked me to do a more in-depth look at the speakers. So here it is.

## More in-depth listening

For a longer listen, Lipinski President Lukas Lipinski dropped them off at my home-listening room a week after the Feb. 25 demo, so I could give them a go with my transparency system: the Benchmark DAC3-HGC D/A and Benchmark HPA4 preamp, plus some vinyl spins through my Clearaudio Emotion TT. With a couple weeks more of listening to L50s with lots of HI-Res music and LPs, I can say, with certainty, that these speakers are even more impressive than I when first heard them at the Feb. demo. The L50 active relays a sense of accuracy that is not typical in this size speaker. In fact, other than the lack of real deep bass, it projects like a much larger speaker — with that Lipinski tight frequency response that I first heard while reviewing the original Lipinski L505's in *Pro Audio Review* in 2005.

The new Lipinski L50 boasts some cool design features including: active biamplification (2 x 40-watt continuous, onboard Class-A amplifiers, analog Class-A crossover (3 kHz). Lipinski claims flat response from 60 Hz to well in excess of 20 kHz. The company specs show that bass remains relatively flat to 40 Hz (-1 dB at 39 Hz) and only 3 dB down at 35 Hz. My flat-mode, RTA measurement, in room (three feet from sidewalls seven feet from back wall) revealed more of a roll-off than the specs, but bass was only 2 dB off at 45 Hz. Closer to the walls it would have been closer to the specs.

To compensate for boundary bass bumps and nodes (and for extra tuning flexibility when working with a subwoofer), a bass-cut circuit can be activated via three, rear-panel DIP switches (Switch 1 Up, 70 Hz; Switch 2 UP, 100 Hz; and Switch 3 Up, 150 Hz.) The L50s connect via balanced XLR or RCA unbalanced input and each connector type also contains a full bandwidth signal output to feed a subwoofer. An IEC AC sockets allows the power for the electronics.

## "They ain't cheap, but for those that want an extremely accurate speaker in a small footprint, the Lipinski L50s, in my opinion, are a best-in-class speaker"

Extended play time

I listened to the L50s in my nearfield audiophile room for three days without any subwoofer, and the bass impression was enough for many recordings; 45-50 Hz bass is certainly hearable on Pop, Jazz and certain kinds of Classical.

But when I added one subwoofer per speaker to the Lipinski L50 tandem, the system kicked up to a whole different level. I heard a more-robust, low-bass that fleshed out a much-fuller, overall sound! The subwoofers were a pair of SVS S3000 MicroCube compacts, with 2 x 8-inch drivers, Class D amps and the handy phone crossover/level/phase/EQ adjustment app. After some trial and error with sub placement, I got the SVS sub/L50 system to measure just about flat at 28 Hz to 20 kHz.

On recording after recording, the Lipinski's were major league articulate. The mids and treble dynamics were now coupled with a full-range bass. For example, the tympani whacks on the 24/176 Reference Recording of Stravinsky "Rite of Spring" (Minnesota Symphony Orchestra - Eiji Oue) were powerful, fast and taut, while the brilliant bite of the horn section pushed the harmonics to quite a live-like level — with just the right amount of brass edge. The whole system now was much more fleshed out with Lipinski's' ability to relay shimmering highs and low lows — with the assistance of the SVS's. With subs, this system rivals much bigger speakers in its top end and bass — with an airy, realness in the midrange and treble. A Steinway sounds like a Steinway. In a small, room they are stellar.

#### Can you say multichannel?

These powered speakers would also be ideal for a multichannel/home theater (immersive as they call it now) speaker system in a small-tomedium room. Such accuracy and small size — with onboard power — solves a lot of issues: no speaker cables, just a line signal path directly (XLR recommended) from the preamp/processor; and no big separate amps to clog your rack. All you need is the processor, cables and some AC outlets nearby for powering each speaker. With stands or wall mounting, you could have a 5.1/7.1 arrangement, or 5.1.2, or 7.1.2 speaker arrangement or more to accommodate a Dolby Atmos or DTSX system. A subwoofer completes the picture.

For a quick "see if they integrate" experiment, I tried the Lipinski L50 pair in my multichannel system, which normally are L-R anchored with Westlake Professional Tower 5's, about \$40,000. I switched in the L50 actives by running Wireworld XLR cables from the Marantz 8802A preamp L-R outputs to the speakers. A Westlake Lc2.65 center and two NHTs rear speakers remained powered by a Parasound amplifier. A Paradigm 15-inch powered sub completed the package.

Even with the smorgasbord of different speakers used for 5.1, the L50s L/R performance on several concert Blu-rays and a few effect-laden movies was excellent. Very accurate; the sense of space and pinpoint imaging were exemplary. Crossover to the sub was set at 80 Hz, but the speakers' effective bass, without the sub, was convincing in the three concert movies I watched, including Adele "Live At The Royal Albert Hall" Blue-ray.

## "Tympani on the 24/176 Reference Recording of Stravinsky "Rite of Spring" (Minnesota Symphony Orchestra - Eiji Oue) were powerful, fast and taut — with that brilliant bite to the horn section"

#### My Take

The L50s Class A amps, small as they be, are superb in their neutral character; these speakers do not have any amp color. And that, my friends, is exactly what you want in a speaker. To have such revealing accuracy from the Lipinski L50 is pretty darn impressive. They blow away every small, powered monitor i have ever heard. The only niggle in the L50 listening experience (besides the price) was the lack of a soft start/delay turn on. You hit the on/off rocker switch and a loud snap can be heard through the drivers. There is a bit of a thump on turn-off as well. It did not hurt anything, but it is quite noticeable. And, hopefully, Lipinski will eventually make a matching subwoofer for the L50s. I would like to see a larger, two-way model with a single 10-inch woofer or two 8-inch woofs.

All in all, the Lipinski L50 is an accurate little speaker that needs no external amp. If you are cramped for space for stereo or multi-channel speakers and you want a true, accurate speaker rendering of your audio recordings, they are worth a listen The L50s are only available from the *Lipinski Amazon Store*, which is a limiting factor in auditioning before you buy. But, hey, lots of audio gear is now purchased online without ever hearing it. If any DCHFG members, who didn't make the group demo, want to hear the Lipinski L50 pair, with or without subwoofers, email me *dchifigroup@verizon.net* and you can schedule a sit down, one-on-one listening session and hear it with our favorite music. I have them for another few weeks.

John Gatski is founder/president of The DC Hi-Fi Group, and has reviewed professional audio and consumer audio products since 1990 Last Edit: <u>Mar 9, 2023 at 1:56pm</u> by John Gatski President/Founder

#### <u>speakertom</u> Full Member ☆☆☆

# <u>A Long Listen: Lipinski L50 Active Mini-Speakers Mar 10, 2023 at 7:30am</u> Post by speakertom on Mar 10, 2023 at 7:30am

# John:



Great review on the L50. It would be interesting to see if the sound would improve if you high pass the L50s at around 80Hz when using the sub. It could possibly lower IM distortion at higher volumes.

Posts: 184

# <u>lipinski</u>

## New Member

# A Long Listen: Lipinski L50 Active Mini-Speakers Mar 10, 2023 at 1:22pm

Post by lipinski on Mar 10, 2023 at 1:22pm

LIPINSKI speakertom we (Lipinski) definitely recommend you high pass the L50s, specifically because it increases 'cleanliness' since the mid-woofer doesn't s o u w b have to work as hard, and is pickup up by the subs. But the quality then depends on the subs performance at higher registers. (directly from Dr. Andrew Lipinski)

Posts: 2

# <u>speakertom</u>

Full Member

<u>A Long Listen: Lipinski L50 Active Mini-Speakers Mar 10, 2023 at 1:46pm lipinski</u> and <u>noel</u> like this **Post by speakertom on <u>Mar 10, 2023 at 1:46pm</u>** Hi Andrew:



Glad to hear your recommendation. In 2001 I did a review for audioXpress of the B&W 602 speaker which was a competent 2 way at the time. One of the things I noticed was congestion when low bass was present at higher levels. I high passed them electrically and then used my sealed box subs for below 80Hz. The improvement was substantial. Every time I have done that with smaller speakers I have achieved the same improvement. I am also pleased to see that you have included optimized amplifiers in the speaker. It is an improvement long overdue in the high end market.

Posts: 184

<u>lipinski</u>	A Long Listen: Lipinski L50 Active Mini-Speakers Mar 10, 2023 at 5:20pm noel likes this
	Post by lipinski on Mar 10, 2023 at 5:20pm
<b>🚖</b>	Hi Tom,

LIPINSKI Nice to hear your comment. I agree on this way of thinking and it's been the course of my R&D for the past decade.

On one side I understand why audiophiles embraced passive speakers – to be able to experiment with different power amplifiers and speaker cables which sonically match the rest of the equipment they use.

On the other side I did some research how loudspeaker's passive components - even the best quality - degrade square wave signal. Please see my

simulation network:

(image 003)

And here is how square wave signal is degraded after passive crossover: green is the original signal, red – after passing condenser, and blue after passing coil; I would like to emphasize – even with the best quality air tape coil with waxed paper dielectric.

(image 001)

My answer to this is to use active components. Since I have professional audio background, active speakers is nothing new for me. But for number of years I was not happy with what I heard. The reason is that to build active crossover we need operational amplifiers – and a few of them. Everyone I know is using different kind of integrated circuits. Single IC – mostly class AB – is using tens of transistors, resistors, capacitors, so finally audio signal is passing through hundreds of components. Not good for pure audio of course. This is why I designed my own operational amplifiers – class A, built on only three discrete transistors. Here is my application of my own operational amplifiers in my microphone amplifier.

On top of this "the best" ICs require feedback of magnitude a few million. Vacuum tube requires feedback in neighborhood of only few thousands. My OpAmps require about 4 thousand. Additionally they do not produce second harmonic distortion like vacuum tube – whether you like it or not, this is still distortion. My research evidenced that amount of applied feedback affects micro-dynamics – which in my opinion is the most important parameter in audio. In short this is my approach to active crossovers and active speakers.

Thanks again for your comment

Prof. Dr. Andrew Lipinski

Ps. On the top of this, active speakers do not require long speaker cables runs. I experimented with top quality (and pricy) 10' long cables vs low cost 1' cable and ... shorter cable sonically always wins. In active speaker we need only few inches of speaker cable.

## **Attachments:**

