


Audioengine B1 Personal Bluetooth Receiver for Headphones and Speakers

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Thread: Audioengine B1 Personal Bluetooth Receiver for Headphones and Speakers

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08-19-2014, 08:58 PM

#1

dalethorn

Senior Member



Join Date: Dec 2012
Location: Los Angeles
Posts: 144

Audioengine B1 Personal Bluetooth Receiver for Headphones and Speakers

Youtube review: <http://youtu.be/-wVxk5U3ZY8>

Photos:

http://dalethorn.com/Photos/Leica_DI...eceiver_01.jpg

http://dalethorn.com/Photos/Leica_DI...eceiver_02.jpg

Sources: MacbookPro Retina with Portaphile Micro/PA2V2/Decware Zen Head external amps (I did not use the Audioengine B1 digital/optical out to an external DAC).

Summary of process: I unpacked the B1, glanced over the booklets, set the MacBook's System Preferences/Bluetooth to 'On' and 'Discoverable', set the computer System Volume to 50 percent, set the iTunes player volume to 100 percent, connected the B1 to power** and to my favorite headphone amp with a dual-RCA to miniplug cable, and connected my favorite premium headphone. I've had a long-term concern about whether I could use Bluetooth for hi-fi listening without suffering sonic 'glitches' or interruptions. I'm not concerned any more. I carried my Mophie** pack, B1, and headphone amp into every corner of my flat, about 35 feet from the computer each direction with multiple walls between the computer and the B1, and didn't experience a single glitch. I need to mention that while the B1 worked

flawlessly then, I've gotten 2 or 3 one-second glitches per 4-hour average listening session, which is typical for computer listening anyway due to the computer's constant polling for activity.

**Instead of plugging the provided power cable into an AC-to-USB adapter, I plugged it into my heavy-duty Mophie battery pack, which works perfectly, and which draws very little power from the Mophie.

Audiophiles who may be interested in the B1 Bluetooth Receiver, normally to drive speakers (or possibly a headphone if not convenient to run a headphone cable directly from the computer), would want to know how much quality is lost in the Bluetooth connection. As I write this I'm listening to a bit-perfect rip of Dave Brubeck's Take Five from a K2HD Sony Japanese release, using the Decware Zen Head amp and AKG K812 headphone. The K812 has some bright areas which I smooth out somewhat using the iTunes equalizer. I mention this only because I have the K812 tuned for best neutral response on my system, and I wanted to compare my "best case" sound when listening with the Macbook using an external DAC/amp, to using the B1 with the Zen Head amp. There's a noticeable difference, but I would judge it to be minor in most respects except for the upper harmonic tones, where the quality tapers off. I expected a distinct loss of fidelity over Bluetooth as compared to wired, but my experience has been very good so far.

Additional audiophile note: Since experienced and expert audiophiles can often hear differences between the best DACs and amps costing thousands of dollars (and I hear many of those differences as well), someone who reads this might be aghast at the notion that the B1 can produce near-audiophile-quality sound from its DAC, let alone over the Bluetooth connection. It's better than I expected. Here's a suggestion: Listen to it with an amp and headphone (or speakers) that you're intimately familiar with, which have excellent reproduction quality, and try to pick out any particular distortions or changes in tonality. Then list those music tracks and the particulars, and I'll have a go at them myself. Whatever the final judgement, I'm satisfied that a high-quality sound is possible with the B1, especially for its intended use.

The B1 Bluetooth Receiver is a very well-made aluminum box about the size of an average portable headphone amp, which makes it especially attractive to me in being able to instantly move it across a room, using the Mophie power pack, for ultimate convenience. I haven't used the digital/optical out to connect it to an external DAC, but given that it's Bluetooth, I doubt that I would need higher quality amplification than I'm already using. But the feature is there for maximum system compatibility. The Bluetooth antenna is short, but works well as described above. The RCA analog output jacks are top-quality and gold-plated, so using an interconnect cable with gold-plated RCA plugs will assure a perfect connection. I've seen, handled, and even owned a lot of gear that wasn't well made, that didn't inspire confidence even if it never failed when I had it, so it's gratifying to have a little box like the B1 that looks and feels like premium audio gear, but doesn't cost a small fortune.

Pairing the B1, i.e. getting the Bluetooth connection from the computer, was easy enough once I learned to ignore the blinking light on the front panel (which usually indicates that it's searching for a connection) and just started the music playing. As long as the computer is working properly and sending out a Bluetooth signal, the B1 should start working pretty quickly once you provide some data by playing a music track etc. I don't know why the light blinks longer than would seem necessary, but maybe it's just asking me to "get started". The accessories supplied include an AC-USB adapter, power cord, RCA interconnect cable, and a microfiber travel bag.

The comments in the music tracks listed below can be compared to other users' experiences with the B1, to get an idea of how good the sound quality is with these sample music tracks. I also invite other users to list any music tracks that they've played, along with any particulars, to highlight the positive or other experiences that they've had with the B1's Bluetooth sound.

Bauhaus - Bela Lugosi's Dead (~1980): Strong midrange sound effects - this is a good worst-case test for resonant-type sounds in the most sensitive midrange area. Handled very well by the B1.

Beethoven Symphony 9, Solti/CSO (1972): Excellent overall sound. Of special note here are the bass impacts beginning around 10:30 of the fourth movement. Those impacts are soft and well in the background, but you can feel the weight they carry with the B1.

Boz Scaggs - Lowdown (1976): Very good sound quality - this is a great test for any nasality in the midrange. Handled extremely well by the B1.

Cantus - Danny Boy (Traditional/Male Choral/Acapella): The B1 plays the voices with enough low end warmth and weight to sound very natural, yet there is no added emphasis of the lower register of the male voices on this track.

Chromatics - I'm On Fire (Synth-Pop, female lead): This track has a good amount of space around the voice and instruments, making for a very pleasant stereo image. The voice is very good, and the tambourine sound is excellent.

David Hazeltine - Fur Elise (Jazz): A very high-quality recording from HDTracks. The B1 reproduces the instruments smoothly with a spacious ambiance, but where the better amps I have reproduce the wire-brush-on-cymbal harmonics as very extended and detailed, the uppermost harmonics aren't quite as cleanly detailed with the B1.

Hans Zimmer - Dark Knight-Aggressive Expansion (Soundtrack): The percussion in this track hits really hard, and the bass tones beginning around 0:45 have the ultra-deep "shuddery" kind of sound and feel that indicates a good deep-bass response. The B1 plays this music very well.

Hugo Audiophile - 15-16 (Electronic): I'm not sure what the 15-16 stands for - perhaps track numbers from a CD album. The deep-bass tones that start around 33-34 seconds into the track reproduce very well with the B1. This is a great recording for evaluating whether a device's bass reproduction is accurate.

Jimmy Smith - Basin Street Blues (early 60's): This track has several loud crescendos of brass and other instruments that don't sound clean and musical with some headphones. The B1 provides excellent detail. Listen particularly to the second crescendo at 15 seconds in for maximum detail effect. I'd like to emphasize that these crescendos are probably the worst-case test I have for instrument separation and detail, and the B1 plays those extremely well.

Kellogg Auditorium, Battle Creek Michigan, Aeolian-Skinner Organ (1933) - Pedal, 32', Resultant, Arpeggio: This 16 hz organ pedal tone differs from other music tones in that you won't "hear" the tone - you'll only feel it. Although most music tones have harmonics (including this one), the harmonics from this tone will be too weak to provide any "feel", so whatever you actually hear would not be part of the fundamental 16

hz tone. There are ~30 hz sounds in the outdoor environment in big cities, generated by large trucks, buses, and subway trains, and they have a quality of "rumble" that's similar to some deep-bass tones found in music. This 16 hz organ tone is easily distinguished from those sounds when compared on a headphone that has good undistorted response at 16 hz. The B1 reproduces the fundamental tone clearly enough, yet most audiophile headphones struggle with very strong ultra-low frequencies in this range.

Michael Tilson Thomas - Rhapsody In Blue (20th Century Classic): Great sound and soundstage, and terrific piano playing and tone. There are some very deep bass impacts starting around 38 seconds into the 17:24 length track, and the weight of those impacts is impressive with the B1.

Richard Strauss (Mester-Pasadena) - Also Sprach Zarathustra (opening) (Classical): The granddaddy of bass is in the opening 1:50 of this recording, and I've heard it only once on a large and expensive loudspeaker system in Cleveland. For most people, that experience would be indistinguishable from being in a fairly strong earthquake. The B1 provides that experience to the degree that I expect when listening with my best headphones.

Scarlatti-Kipnis - Sonata in E Major K381 (Classical, Harpsichord): The harpsichord here is fairly bright and highly detailed, and the B1 renders the tones and transients extremely well.

Tiger Okoshi - Bootsman's Little House (Jazz): The trumpet here is recorded fairly close up and is somewhat bright with a significant "bite". The B1's reproduction is excellent, and the close-miked piano is also a treat. For comparison, I have several Maynard Ferguson tracks that feature a similarly strong trumpet with lots of brassy bite.

Trombone Shorty - Backatown (Jazz-Funk): The deep bass impacts here are strong and work very well with the horns and other instruments. The B1 delivers the impacts with decent weight and great detail, and the horns have the kind of bite that gives them a wonderfully realistic sound.

AKG K812/K712, Beyer T1/T90 Jubilee/DT1350, v-modia M100/XS, Beyer A200p/v-modia Verza/Microstreamer DAC/amps, Portaphile Micro/PA2V2 amps.

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08-19-2014, 09:19 PM

#2

Andre Marc

Addicted to Best!



 Originally Posted by **dalethorn**

Youtube review: <http://youtu.be/-wVxk5U3ZY8>

Photos:

http://dalethorn.com/Photos/Leica_DI...eceiver_01.jpg

http://dalethorn.com/Photos/Leica_DI...eceiver_02.jpg

Join Date: Mar 2012
Location: San Diego
Posts: 2,887

Sources: MacbookPro Retina with Portaphile Micro/PA2V2/Decware Zen Head external amps (I did not use the Audioengine B1 digital/optical out to an external DAC).

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Thanks!!! I just got one in a few days ago. Will read your impressions.

Andre Marc
Professional Audio Reviewer
www.servingthemusic.com
www.avrev.com
<http://www.tonepublications.com/>

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08-19-2014, 11:11 PM

#3

dalethorn ◦

Senior Member



Join Date: Dec 2012
Location: Los Angeles
Posts: 144

I might have missed something that's an inherent property of Bluetooth, or this device. I'm just guessing at this point, but it seems when there is sufficient musical content playing with high-frequency harmonics, those harmonics are most likely to play well and sound good. But when playing some HF test tones, those tones sounded weird, very thin, and distorted compared to playing without Bluetooth. So it may be that some of the tracks I have that didn't sound nearly as good on Bluetooth due to the upper frequencies being suppressed or altered - that may have something to do with Bluetooth itself, but it needs more time to investigate.

AKG K812/K712, Beyer T1/T90 Jubilee/DT1350, v-modas M100/XS, Beyer A200p/v-modas Verza/Microstreamer DAC/amps, Portaphile Micro/PA2V2 amps.

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08-19-2014, 11:29 PM

#4

JackD201 ◦

WBF Founding Member and
Super Moderator



Join Date: Apr 2010
Location: Manila, Philippines
Posts: 8,097

Hi Dale, if you get the chance, it would be great if you could test the effective range of the device both with and without walls between them and the computer. Thanks!

Disclosure of Industry Participation

Co-Founder and Managing Director PureSound PH - Exclusive Distributor (Philippines only) of Lamm, Von Schweikert Audio, Light Harmonic, Valvet, Townshend, Critical Mass Systems, EERA, KR Audio, Living Sounds

08-19-2014, 11:38 PM

#5

dalethorn

Senior Member



Join Date: Dec 2012
Location: Los Angeles
Posts: 144

Originally Posted by **JackD201**

Hi Dale, if you get the chance, it would be great if you could test the effective range of the device both with and without walls between them and the computer. Thanks!

The best I can do is get about 35 feet away indoors, walls or direct line of sight. Either way, the signal is perfectly clear. If I had a large house to test it in, and could go to a different floor 50-100 feet away, maybe that would break the signal, but that seems like an unnecessary constraint given the tiny size and price. I need to learn more about what the expectations are by users, and what Audioengine's responses are. I think this will start to come together in a few weeks.

AKG K812/K712, Beyer T1/T90 Jubilee/DT1350, v-modas M100/XS, Beyer A200p/v-modas Verza/Microstreamer DAC/amps, Portaphile Micro/PA2V2 amps.

08-20-2014, 12:30 AM

#6

JackD201

WBF Founding Member and Super Moderator



Join Date: Apr 2010
Location: Manila, Philippines
Posts: 8,097

Thanks Dale. 35ft is plenty for patio or deck use. 😊

Disclosure of Industry Participation

Co-Founder and Managing Director PureSound PH - Exclusive Distributor (Philippines only) of Lamm, Von Schweikert Audio, Light Harmonic, Valvet, Townshend, Critical Mass Systems, EERA, KR Audio, Living Sounds