

# EQUIPMENT REPORT



## Bluesound Audio Ecosystem

So Long, Sonos!

Spencer Holbert

In the not so distant past, multi-zone audio systems were expensive, cumbersome, and time-consuming propositions that required a team of installers, the routing of cables through walls and attics, and a whole lot of patience. Add multi-zone rack preamps, multiple amps, multiple sources, multiple speakers, in-wall control panels, and hundreds of feet of wire, and installing a multi-zone audio system was akin to remodeling your house. Then a company called Sonos hit the boards in 2002, and since then multi-zone audio has become simpler and cheaper with each passing year. However, while the new wireless systems were easier to install and use, they were also limited to MP3 and CD-quality audio, and that quality was further limited by inferior parts and sonics. But what if you could combine the ease of wireless streaming, high-res sound, and legendary audio components, all in one system? Well, that's exactly what Bluesound has accomplished, and the result is true high-end audio with twenty-first-century connectivity.

### What's Bluesound?

While Bluesound might be a new name in the hi-fi world, Lenbrook—the parent company of NAD, PSB, and now Bluesound—has a long history of designing high-performance components and speakers at affordable prices. At the heart of Bluesound are the design philosophies of Paul Barton, founder of PSB, and the engineers at NAD Electronics. With powerhouse audio companies backing Bluesound, the resulting line of products is spectacular. The Bluesound “ecosystem” consists of five components: The Node, the Pownode, the Vault, the Duo, and the Pulse. Because the Node and Pownode are essentially the same product, except that the Pownode has a built-in amplifier, the review samples I received included everything but the Node.

### Bluesound Vault

The Bluesound Vault has been my new best friend for the past three months. The Vault is a music server, hard drive, and CD-ripper in one sleek box. The Vault sports 1TB of internal hard-drive storage, and ripping CDs to it is as easy as such things get. Insert the your CD into the front slot and give the Vault five minutes to rip; the Vault then automatically acquires album artwork and metadata, and ejects the CD when it's done. If you

have a large CD collection and want to finally store everything on a music server that's affordable and functional, the Vault is far simpler to use than a computer-based system—and a whole lot cheaper. While the ripping process is slower than it is with a really fast computer drive, the fact that you don't have to do anything besides insert CDs is a huge time-saver.

But the power of the Vault isn't simply its ability to rip CDs; the Vault also allows you to consolidate your digital music management in one sleek, easy-to-use system. I've had a computer-based music server in my home for years, so all of my CDs have long since been saved to Network Attached Storage devices (NAS drives). When I connected the Vault to my home network via Ethernet (the Vault requires Ethernet connection in order to deliver high-res music to all devices), it found my NAS drives, and after I selected “Re-index Music Collection” in the Bluesound iPad app the Vault went to work. The initial indexing took about 20 minutes for 10,000 songs, and when the process was finished I had full access to all my digital music—some of which was stored on the Vault, and some on multiple NAS drives. I now have the ability to search for music, create playlists, stream music to other Bluesound devices, output to an external DAC via the optical connector, and even stream to multiple devices simultaneously—all from the iPad app.

The Vault has a built-in DAC capable of playing PCM audio files up to 192kHz/24-bit. While I found its analog output more than adequate for those just getting into high-res audio, consumers with a component or reference DAC will want to use the optical output from the Vault to send music to their reference systems.

The Vault goes way beyond locally stored digital audio, though. It also allows you to stream Internet radio via Rdio, Slacker, and TuneIn, as well as streaming music services like Qobuz, Deezer, Wimp (not yet available in the U.S.), and Spotify. While Internet radio isn't high-res, it is still great to be able to stream NPR in the mornings, or use Spotify to discover new music and create playlists, or stream radio to multiple devices—again, all from your smartphone and iPad.

If having control of and access to all of your digital music—both locally stored and Internet-streamed—isn't reason enough to own a Vault, then maybe the fact that this little box does everything while maintaining a low profile is. You can place the

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Vault anywhere in your home as long as it's connected to your network via Ethernet, and if you want to use it in your reference system with a component DAC, the Vault is dead silent. Many NAS drives make noise when they spin up, and larger multi-drive systems like my Drobo have fans that can create unacceptable levels of noise for a listening room. The Vault never makes itself known, runs silent and generally cool, and is easily hidden away. There's no need for a keyboard or monitor for initial setup, as with a Mac Mini, and the ability to stream high-res audio and Internet services to multiple devices is killer. In all honesty, now that I've had the Vault in my home, I don't think I can live without it. Finally, one device that does everything without blowing the budget!

### Bluesound Pownode

Most people want the ability to play music in more than one room, but that generally means buying a complete second system with sources, cables, and all the accouterments of a stand-alone stereo system. Enter the Bluesound Pownode, an integrated amplifier and network-attached (wireless or Ethernet) music-management device. The Pownode has many of the same features as the Vault, without the CD drive and internal storage. Connect it to your home network, launch the Bluesound app, and the Pownode will find your NAS drives and index all of your digital music. Every Bluesound device is controlled using the same app, so the Vault and Pownode work in a symbiotic relationship (or individually) to provide you with music whenever and wherever you want.

The Pownode is a "just add speakers" kind of system. With 150W into 8 ohms and 80W into 4 ohms, the NAD-designed DirectDigital amplifier has plenty of juice to really rock out. The Pownode also has an RCA subwoofer-out, so connecting a 2.1 system is a breeze.

I connected the Pownode to the Bluesound Duo, which comprises a pair of bookshelf speakers and a high-quality 8" 280W subwoofer designed by none other than PSB. I set up the Pownode and Duo combo (you can use any speakers with the Pownode, not just the Duo) in several different rooms during the course of my audition, and it was simply amazing to just plug the Pownode in, connect the Duo, and then stream music via the Bluesound app. You can wirelessly control volume, listen to your favorite local or international radio stations, build playlists from the music stored on the Vault (or other NAS drives), stream Spotify, and do all of this with little to no work or bother. For parties, I streamed music via the Vault to my main system, to the Pownode, and to the Pulse (which I will discuss), and controlled everything wirelessly as I walked around the house. No running back and forth to adjust volume, change tracks, or even sources. You can even control multiple sources for each Pownode you install. Say you want jazz in the kitchen, blues on the back patio, and high-res classical on your reference system. With the Bluesound Pownode, you can have an independently managed music system in each and every room, or stream the same high-res music to all rooms simultaneously; the choice is yours.

While the Pownode is a really great digital integrated amplifier, I would by no means call it a replacement for a reference system. When it comes to comparably priced alternatives, though,

the Pownode blows away the competition. High-quality amplification from NAD, wireless control and integration, and the ability to stream high-res audio in native 192kHz/24-bit will have you singing "So long Sonos!" At \$699, the Pownode is one of the cheapest and fastest ways to have a high-res system anywhere you want—just plug it in! And if you already have a system and need a way to stream and manage digital music, just add the Node, which only costs \$449. You get all of the features of the Pownode, minus the amplification.

### Bluesound Pulse

The Bluesound Pulse isn't just a "lifestyle" product; it's everything you need to add music to a room in one box. With the same great DirectDigital amplification as the Pownode, a 25-bit/844kHz DAC, a built-in high-end speaker, and the capability of wirelessly streaming high-res music from the Vault or NAS drives, the Pulse sounds great for what it is. Are you going to be blown away by incredibly three-dimensional soundstages? No. But the Pulse is an instant means of accessing and playing back high-quality music. During BBQs, I brought the Pulse to the backyard and everyone loved it. Stream all that high-res music from your network, create playlists, stream Internet radio or Spotify, all

## SPECS & PRICING

### BLUESOUND ECOSYSTEM

#### Vault

**Storage capacity:** 1TB internal (infinitely expanded with NAS drives)

**Formats:** MP3, AAC, WMA, FLAC, ALAC, WAV, AIFF

**DAC:** PCM audio up to 192kHz/24-bit

**Inputs:** Ethernet network

**Outputs:** RCA, optical, Ethernet

**Weight:** 6 lbs.

**Dimensions:** 11" x 9" x 8"

**Price:** \$999

#### Pownode

**Inputs:** Wireless/Ethernet streaming up to 192kHz/24-bit

**Power:** 50Wpc into 4 ohms

**Weight:** 4.5 lbs.

**Dimensions:** 9" x 8" x 7"

**Price:** \$699

#### Pulse

**Inputs:** Wireless/Ethernet streaming up to 192kHz/24-bit

**Amplification:** Bi-amped

**DirectDigital** 80Wpc

**Frequency response:** 45Hz-20kHz

**Weight:** 13 lbs.

**Dimensions:** 15" x 7" x 7"

**Price:** \$699

#### Duo 2.1 Speaker System

**Frequency response:** 36Hz-23kHz

**Powered sub:** 280W peak, Class H MOSFET

**Weight:** 24 lbs. (sub), 5 lbs. (speakers)

**Dimensions (sub):** 9.5" x 15" x 14"

**Dimensions (speakers):** 5" x 7" x 8"

**Price:** \$999

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from the same great Bluesound app.

Plug in the Pulse, connect to it via the Bluesound app, go through the painless set-up process, and within five minutes you will be playing your favorite tunes. And if you need to move to another room, just unplug it and move it with you; the Pulse automatically reconnects to your home network once it's plugged in again, and needs only 30 seconds or so to boot up. Again, you can "group" all of your Bluesound devices to play the same music in every room, or stream from multiple sources to have different music playing in each room.

### Bluesound Duo

The Bluesound Duo 2.1 speaker system is another symbiotic piece of the Bluesound ecosystem. At \$999, the Duo isn't the cheapest option for the "just add speakers" Pownode, but what you get are high-quality transducers that work seamlessly with the NAD technology employed in the Pownode. As mentioned, the 280W powered subwoofer with 8" driver really fills out a room with added low end. (The system uses digital equalization with the DirectDigital amplification found in the Pownode to enhance the performance of any 2.1 system.)

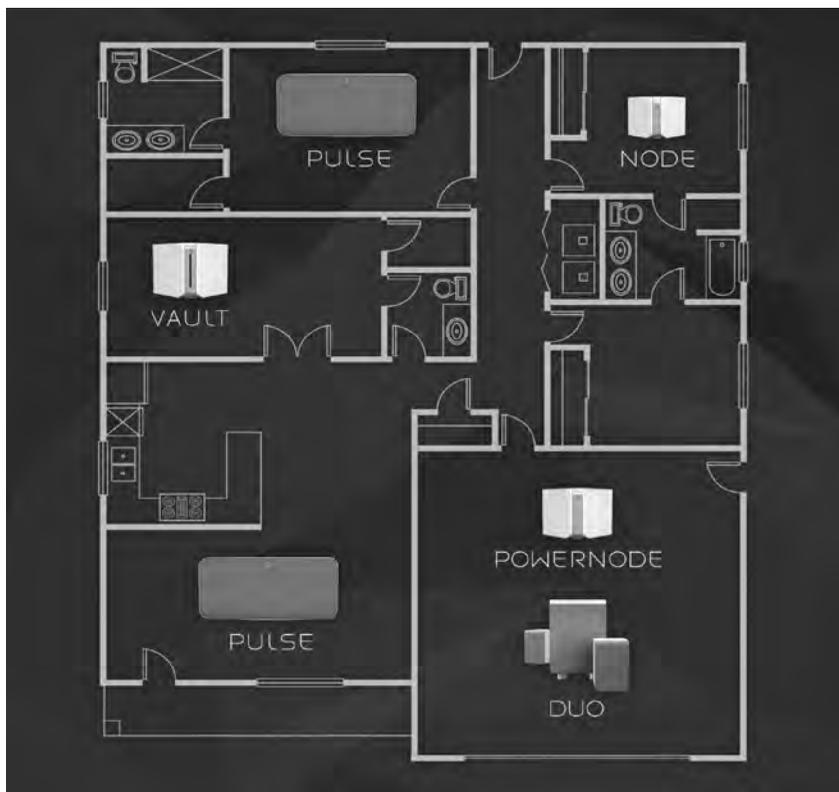
I used the Pownode/Duo combo at my desk in a nearfield setup, and also in bedrooms and living rooms, and the sound quality was exceptional (which you would expect from a PSB-backed design). Especially in the nearfield setup, it was easy to achieve great soundstaging and imaging with the Duo, and the integration of the subwoofer was seamless using the Duo's crossover, phase switches, and volume controls.

One of my concerns with having all of these stereo components plugged in is energy consumption; however, the total standby power consumption of the subwoofer is only 0.5W, which allows me to leave everything "on" without watching my electric meter whirring away. Again, the Duo isn't for those looking for any ole cheapo speaker to play back music; these are high-quality, audiophile-grade speakers for your secondary system.

### The Bluesound Ecosystem: Final Thoughts

Each of the Bluesound products works synergistically in a home ecosystem capable of wireless and Ethernet audio streaming, and all are controlled from a sleek tablet or smartphone app. When used in conjunction with a home network, audio can be streamed to each device using the same source or multiple sources. Each device's volume and input can be controlled individually and wirelessly, or devices can be grouped together and controlled as one. High-res audio can be streamed to all devices in native resolution, and all of your digital music can be managed from the Bluesound app. Even if you already have NAS drives full of music, the Bluesound ecosystem will be able to manage everything from one spot.

While the Bluesound ecosystem can be used without being hooked up to the 'Net, a high-speed Internet connection will



transform it, allowing you to stream from Internet radio and music services like Spotify. In an all-wireless system, the Bluesound ecosystem can handle up to eight different devices—plenty for most people. But if you have a very large house, and want music streaming in every room—both inside and out—you can manage up to 34 different devices when everything is connected via Ethernet to your home network. In essence, you can have a 34-zone audio system, capable of streaming from multiple sources. With such a large system, make sure you are using gigabit routers and switches, have an extremely fast Internet connection (50 megabits per second or faster), and are wiring with CAT6 Ethernet cables. The point is, though, that such a system would have cost an extremely large amount of money even ten years ago, and would be limited to CD-quality audio. With Bluesound, you can build a huge multi-zone/multi-source whole-house audio system that is easy to set up and easy to control, and has the ability to stream high-res audio, all for a fraction of the price (and hassle!) of professionally installed systems. Given that Bluesound is essentially a twenty-first-century combination of the best of NAD and PSB, you know you're getting high-quality products.

I can't stress strongly enough how amazing it is to be able to stream high-res music to all my rooms, and control everything from an incredibly intuitive smartphone and iPad app. I recently purchased a Victorian-style home built in 1910, and was worried about filling this beautiful 104-year-old house with wires and marring it with holes in the walls and floors. Now, everything can be accomplished wirelessly, set up in an hour (not days), and I don't have to do damage to my historic digs. I will be purchasing the review samples and a few additional Bluesound devices—that's how much I like these products.

Thank you Bluesound, and so long Sonos! **tas**