

Audioengine HD6 Powered Bookshelf Speakers Offer Great Looks and Even Better Sound

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The first time I went to visit Raina, I made fun of the huge speakers attached to her stereo. “Those are freaking huge!?” I said. Fast forward a year, and I’m using the [AudioEngine HD6 Powered Speakers](#). These speakers are fairly large bookshelf speakers. They are also the best speakers I have heard in a long time.

At \$749.00, you can’t call the HD6 Powered Speakers inexpensive, but I can absolutely say they are an amazing value. The amazingly good sound and power combine with some awesome audiophile-grade tech, and a host of different ways to connect to the speakers come together to create my favorite bookshelf speakers — ever! Seriously, these speakers are a fan-freaking-tastic.

From Audioengine:

Our flagship HD6 powered speaker system represents a major milestone for Audioengine and shows just how far we’ve come in 10 years. Featuring built-in amplifiers that really pack a punch as well as analog and digital inputs including aptX® Bluetooth and optical, the HD6 is not just another great-sounding pair of Audioengine powered speakers, but a complete audio system. Easy to set up, simple to use, and designed for the way people listen to music today.

Audioengine took everything they have learned over the past ten years and packed it into the HD6 speakers.

Let’s start with power. Each HD6 speaker has a 5.5” Kevlar woofer and a 1” silk dome tweeter. The HD6 have 50W RMS, 75W peak per channel for a total peak output power of 150W. Unless you don’t value your hearing that’s going to be way more than enough for pretty much anyone and any room. (We’ll run down the audio numbers in the specifications section.) Key to the audio prowess of these speakers is the fact that the HD6 is not a “box-built” system in which a company buys speakers and other components off the shelf and then puts them together to create the speaker. Instead, each component in the HD6 is custom-designed to Audioengine’s specifications. Each component is either fabricated in the company factories or is made to their specific design specifications. (That includes components such as circuit boards, transformers, magnets and wiring harnesses.) The same holds true for the speaker cabinets that are constructed specifically to Audioengine design standards.

The speaker cabinets, drivers, innovative bass port designs, amplifiers, and passive crossovers are all critically tuned together for each Audioengine model. This, in turn, makes for a much more efficient system that requires less power than passive speakers and a separate integrated amplifier or similar A/V components. We build all this goodness into the left speaker cabinet to make it super-easy to connect your smartphone, tablet, computer, TV, network player – or any other audio product.

The speakers measure 17” by 20” by 15”. That’s certainly not large compared to the speakers I had growing up- or Raina’s current setup- but it also isn’t as small as many of the speakers today’s consumer is opting to use. The left speaker that houses the electronics weighs in at 17.5 pounds. The right speaker is just a speaker and weighs 12.5

pounds.

Audioengine describes the HD6 as having a “retro-forward” design. I think that’s a pretty apt way to describe the speakers.

The HD6 come in three finishes: Black, Walnut and Cherry. The furniture-grade wood veneers and detachable magnetic grills give the speakers an elegant look that sits between “old-school” and “damn these look amazing in any decor.” I love the fact that the walnut and cherry veneers are not an up-charge from the simple black cabinets. They really look like fine furniture... Fine furniture that sounds freaking amazing!

Inside the box you get the speakers, an abundance of cables, and a slick metal remote.

From the minute you open the box you will know you are dealing with a premium product that was built by people who really care about the audio experience AND the aesthetics of the product creating the audio.

Built-in B1 and D1: We’ve taken features from two of our best-selling products, the B1 aptX Bluetooth Receiver and the D1 24-bit DAC, and combined some of this circuitry with advanced speaker components to achieve a complete high-end analog and digital audio system.

I previously reviewed the Audioengine B2 Bluetooth speaker and love it. ([Read the review.](#)) The B2 takes Bluetooth audio to the next level by implementing the aptX codec. This high-quality audio converter delivers far better Bluetooth sound than you have come to expect. It’s a great speaker That sounds amazing and, fortunately, Audioengine took what they learned from the B2 and implemented it in the HD6 speakers.

I also reviewed the Audioengine B1 Bluetooth Receiver. ([Read the review.](#)) It brings aptX, 24-bit upsampling DAC, and extended range to non-Bluetooth and standard Bluetooth speakers. That technology also comes into play with the HD6 speakers. The technology of these products along with that of their D1 24-bit DAC make their way into the HD6 speakers.

Setup was a breeze. In part this is because all of the technology is built into one of the two speakers. The powerful built-in power amplifiers mean you not only save space but you also eliminate the need to connect HD6 to a stereo receiver or external power amp. The speakers have all the tech you need baked right into them. To get going you simply connect the speakers using the included speaker cable, attach the Bluetooth range-extending antenna to the back of the speaker and plug it in. That’s all there is to it. From there you simply have to decide how you want to connect to the speakers.

Versatile connectivity: We’ve included features from some of our best-selling products making HD6 quite possibly the most versatile powered speaker available. Stream TIDAL, Spotify, Pandora, YouTube – or any streaming service or media player – wirelessly from your smartphone, tablet or computer. For the highest resolution connect to the optical input, which is perfect for network music players. It can also be used to connect any component with an optical output, including your TV system. You can also connect your favorite turntable or a subwoofer, so no matter how you connect and listen, HD6 has you covered.

Option 1: Connect via Bluetooth. Thanks to aptX you’ll get a strong, great-sounding audio stream

High-quality Bluetooth audio: The Bluetooth built into the HD6 powered speakers features aptX

coding which is an advanced Bluetooth audio codec with very impressive sound. And even if your phone or tablet doesn't have aptX, the HD6 Bluetooth solution is backwards-compatible with SBC and AAC codecs, so you can wirelessly stream music from any Bluetooth-enabled device and still enjoy all your music. High-fidelity Bluetooth aptX that really works and sounds great.

Option 2: Plug a 3.5mm cable into the speakers and run it to your audio source for a wired connection.

Option 3: Go old-school and connect via the RCA L/R connector

Option 4: Use the SPDIF optical connection to connect the speakers to your entertainment system

The HD6 Bluetooth receiver and optical input both utilize the AKM AK4396A DAC, widely known for its low-noise and high-fidelity. The optical input configures the AK4396A as a bit-perfect 24-bit DAC, which will process sample rates up to 192kHz natively.

The internal components of the HD6 were designed and tuned to work together and deliver Audioengine's Signature Sound. It also results in a much more efficient system than you would get with a component system consisting of passive speakers and amplifiers.

The HD6 have all-new woofers with die-cast aluminum frames. This serves up a lower-end that delivers great performance. The silk dome tweeters are also new and, as Audioengine notes, "provide even smoother, more extended highs, superior stereo separation, and incredible imaging."

Unless you are accustomed to purchasing higher-end audio components you may balk at the \$750 price tag. Never fear! You can purchase the speakers directly from Audioengine and try them out risk-free for 30 days. If you don't absolutely love the HD6 by day 30 you can simply return them for a refund. But don't kid yourself, once you set up the HD6 and start listening to your music you won't think for. Even a second about returning them. Seriously, you will love the sound, volume and connectivity options the HD6 bring to the table.

Features:

- **Speaker type:** 2.0 powered bookshelf-style speaker system featuring wireless and digital optical inputs
- **Power output:** 150W peak power total (50W RMS, 75W peak per channel)
- **Inputs:** 3.5mm mini-jack, RCA L/R, digital optical (SPDIF,) Bluetooth aptX
- **Outputs:** Variable line-out w/2.0V RMS max output, 47ohm output impedance
- **Input voltages:** 115/240V, 50/60Hz manually-switchable
- **Amplifier type:** Analog dual-class A/B monolithic
- **Drivers:** 5.5" Kevlar woofers, 1" silk dome tweeters
- **Frequency response:** 50Hz-22kHz \pm 1.5dB
- **Analog input impedance:** 48Kohms unbalanced (mini-jack and RCA inputs)
- **Bluetooth specifications:** Internal D/A converter: AKM AK4396, Input bit depth: 24-bits Upsampled
- **Bluetooth receiver type:** Bluetooth 4.0 audio
- **Supported codecs:** aptX, AAC, SBC
- **Wireless operation range:** Up to 100ft (30m) typical

- **Input data rate:** Determined by Bluetooth
- **Wireless latency:** ~30 milliseconds (ms)
- **Power consumption:** Idle: 10W, Mute: 6W, Sleep: 4W

Other tidbits from Audioengine:

- **Amplifier Design:** The amplifiers in powered Audioengine speakers are located in the left speaker and are a conservatively rated class A/B analog monoblock design. This is a more traditional speaker/amplifier marriage which provides excellent quality audio and greater flexibility. All circuit boards for the power and preamp sections are vertically mounted for maximum mechanical shock protection.
- **Driver designs:** Audioengine uses audiophile-quality, ferrofluid-cooled silk dome tweeters with neodymium magnets. Silk tweeters hold up well under high power and the edge-driven design gives very smooth response. The woofers are Kevlar woven glass aramid composite with rubber surrounds. Kevlar is obviously very strong, which means the woofer retains its shape when being driven at high levels. The HD6 woofers are housed in cast aluminum frames which provide high rigidity and increased heat dispersion.
- **Power transformers:** Power transformers are critical to high-quality audio performance, especially in the low-end and again, no off-the-shelf parts. Audioengine uses gapless core toroidal transformers which have a tighter radiated magnetic field, translating to lower noise. They are lighter than standard, lower-cost “EI” transformers and also generate less heat.

The Audioengine HD6 are amazing. They sound great, they have a host of connectivity options and they look fantastic. Raina and I close on a house in May and I have already told her that, when thinking about how we set up the living room, we need to consider where these will go. Yes, the HD6 offer both the sound and the aesthetic I want in our main living space. I'm a huge fan and I know you will be too. [Check them out here.](#)

Source: Manufacturer review sample

What I Like: Look fantastic; Sound amazing; Get loud with little to no distortions; Offer range of connectivity options; Come with 30 day trial option

What Need Improvement: Nothing. If you have the money these are the speaker to buy

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