

# Make Room for HEOS

By Darryl Wilkinson

## Denon HEOS Wireless Multiroom Sound System

**PRICE \$2,148**  
as reviewed

**WHEN I ASKED THE FOLKS AT Denon** why they felt the need to develop a multiroom, streaming music system, this was the answer they gave: "Probably for similar reasons why we developed the LP turntable and didn't continue to manufacture gramophones." That wasn't quite the answer I was looking for, but it was an interesting way of putting a tangible perspective on the past 100-plus years that Denon has been involved in the audio industry.

### AT A GLANCE

**+** Plus

- Stellar audio performance
- Simple, intuitive app

**-** Minus

- No desktop controller
- Fewer streaming services than Sonos

In this day and age, it's the rare person who sits at home enjoying selections from his or her collection of bulky spinning cylinders; streaming songs is what's popular now. In

fact, our collective propensity for listening to audio from the Internet or music stored on NAS drives and computers has resulted in wireless speakers of various kinds becoming the product du jour of nearly every audio manufacturer on the planet. So the question I really should have asked was how Denon thought they could build a system that would rise above the flood of streaming music speakers and systems on the market—and, specifically, how in the world Denon thought they could compete head to head with the Goliath of streaming music systems, Sonos.

### Denon and Goliath

Certainly, Denon has a 100-year leg up on a lot of other companies. But sometimes, a decades-long legacy can be a hindrance rather than a

# SOUND & VISION

help—especially when it comes to digital technology. Since I didn't get an answer to the question I should have asked, the only thing I can do is turn to the product itself for explanation. In the case of the new HEOS wireless multiroom sound system, it's obvious that Denon decided to take on Goliath not by slinging stones but by following Sonos' well-trodden and highly successful path.

The HEOS ecosystem consists of five products. You can start a system with any single one of them. Three of them—the HEOS 3 (\$300), HEOS 5 (\$400), and HEOS 7 (\$600)—are all-in-one, powered speaker systems. The HEOS Link (\$349) is a small stereo preamp that's designed to connect a dedicated multichannel A/V or two-channel music system to the network. The HEOS Amp (\$499) is essentially a stereo (100 watts x 2) integrated amplifier (with HEOS connectivity) that can be used with most any passive speakers. Anyone familiar with the Sonos product line will immediately notice the similarities. While some people might think the model assortment is a blatant ripoff, it's actually an incredibly logical collection of products—as Sonos has proven very well over the years. (There's also a sixth HEOS product, the \$100 HEOS Extend, a Wi-Fi repeater that extends the range



● The HEOS line includes speakers of three different sizes, plus a preamp and amp (pictured here).

## RATING

### Denon HEOS Amp

Performance ★★★★★

Features ★★★★★

Ergonomics ★★★★★

Value ★★★★★



## MULTIROOM SYSTEM

### DENON HEOS WIRELESS MULTIROOM SOUND SYSTEM

PRICE: \$2,148 (HEOS 3, \$300; HEOS 5, \$400; HEOS 7, \$600; HEOS Amp, \$499; HEOS Link, \$349)

Denon • (855) 499-2820 • HEOSbyDenon.com

of your wireless network. Since it's not technically an audio product, I didn't ask to test one out.)

Quite a number of basic aspects are common to all of the audio products in the HEOS ecosystem. For starters, despite the fact that the Denon folks refer to the system as a "wireless multiroom sound system," all of the HEOS components can be hooked up to your home network non-wirelessly using Ethernet connections. Furthermore, there are no specific requirements or proprietary protocols when it comes to connectivity. HEOS uses your home's standard Wi-Fi (dual-band 802.11n) or Ethernet network and can stream music files from DLNA-compliant devices, such as NAS drives or computers. It does not support Apple's AirPlay or DTS's Play-Fi wireless protocols; nor are any of the HEOS models Bluetooth enabled. A USB port on the back of each component allows for playback of files stored on portable drives, which then become available to any component in the system.

Each HEOS component has at least one Aux input—so you can take a Bluetooth, AirPlay, or Play-Fi receiver (or even one of them newfangled Denon DP-300F turntables with a built-in phono preamp) and add it to any HEOS device—and audio from that input can be streamed to any other HEOS model. Systems can range from a single HEOS component up to as many as 32 devices. All the speaker systems have up/down volume controls and mute buttons for when your smart device

isn't handy, and according to Denon, HEOS will be ready for full integration with a variety of third-party controllers (most likely to include models from URC, Control4, and Crestron) by the end of 2014.

### The App's the Thing

Regardless of which HEOS product you add to your system or how many, everything is controlled via the free HEOS app (available in both Android and iOS versions). I've said many times before that the remote or app used to control a system—audio or home automation—has to be intuitive and convenient to operate, or people won't use the system. The absolutely stellar nature of the Sonos app is a huge reason for that company's ongoing success. Fortunately, the Denon folks recognized this; the HEOS app is, if not great, about as good as it can get.

It's built on a foundation of three main pages or "tabs"—Rooms, Music, and Now Playing—which are selected from an always-visible menu bar across the bottom of the screen. Unsurprisingly, Rooms is where you select the room(s) in which you want music to play. You can group rooms on this page simply by dragging and dropping the icon for one room onto another room or group of rooms. Likewise, to remove a room, you drag it out of the group's rectangle and drop it in its own place on the screen. Similar to the Sonos app, room volumes can be changed globally as a group or individually within the



● Every HEOS component has Aux and USB inputs to add devices to your system.

group. The listings on the main screen also indicate each room's music source and playback status (playing, paused, or stopped).

After selecting a room or rooms, you navigate to the Music page to choose what you want to listen to. During my evaluation, HEOS was offering access to Pandora, TuneIn, Spotify (via Spotify Connect), and Rhapsody. They've since added Napster and Deezer (worldwide, but coming soon to the U.S.). At press time, they were said to be launching with Sirius XM and iHeart Radio, and two more unnamed services were expected to be on board by the time you read this. If my math is correct, that makes for a grand total of eight services. The last time I counted, Sonos offered access to 37 music services (some subscription free, some requiring a premium subscription, and some available only as part of the Sonos Beta program). Denon told me that, to close the gap, they intend to add two more

streaming services per quarter over the next few years "based on popularity and fit with our HEOS customer." For now, they feel they've got most people covered with the bigger services they do offer.

The Now Playing screen tells you what's playing in the room or grouping listed at the top of the page. You can change the volume and track, see cover art, check the playlist, and create favorites from this page—unless you're listening to Spotify, in which case, thanks to the HEOS app's Spotify Connect integration, you'll be switched to the Spotify app on your phone or tablet.

Moving among the tabs to, say, group different speakers or make a fresh music selection, is a simple matter, and the app remembers what the user was doing in each of the three tabs. So, for example, if you're browsing a long playlist and need to quickly remove a room from your music group because the phone rang, you'll find yourself in the same spot when you return to the Music



HEOS

HEOS

HEOS

## TEST REPORT

● All HEOS components, including the HEOS Link preamp, connect via W-Fi or wired over Ethernet.

## RATING

Denon HEOS Link Stereo Preamplifier  
Performance ★★★★★  
Features ★★★★★  
Ergonomics ★★★★★  
Value ★★★★★



## SPECS

**HEOS 3:** Full-range driver (2), port (1), Class D amp (2); 10.7 x 5.1 x 6.5 in (WxHxD); 4.2 lb • **HEOS 5:** Tweeter (2), woofer (2), passive radiator (1), Class D amp (4); 11.6 x 8.2 x 6.5 in (WxHxD); 6.6 lb • **HEOS 7:** Tweeter (2), midrange driver (2), woofer (1), passive radiator (2), Class D amp (5); 3.5mm analog stereo output (headphone); 18.9 x 8 x 6.5 in (WxHxD); 9 lb • **Speaker Inputs (All Models):** Aux (3.5mm analog audio), USB • **HEOS Amp:** 2 x 100 watts (Class D) • **Inputs:** Analog audio (3.5 mm, RCA), optical digital, USB • **Outputs:** Subwoofer (RCA); 8.7 x 3.7 x 8.5 in (WxHxD); 6.2 lb • **HEOS Link: Inputs:** analog audio (3.5mm, RCA), optical digital, USB • **Outputs:** Analog stereo audio (RCA), subwoofer (RCA), optical digital, coaxial digital, 3.5mm IR, 12-volt trigger; 6.1 x 2.9 x 5.9 in (WxHxD); 2.9 lb • **System Audio Formats:** MP3, WMA, AAC (MPEG-4), FLAC, WAV; 32 kHz, 44.1 kHz, 48 kHz • **Music Services Supported:** Rhapsody, Pandora, Spotify, Tunes • **Apps (free):** iOS, Android • **Other:** RJ-45, 802.11 a/b/g/n (2.4 GHz/5 GHz), DLNA-compliant



page. There's also a cool "Pinch-to-Party" grouping function in the Rooms tab that lets you tap a room that's playing music you'd like to share, then use a finger-pinch on the screen to automatically send it to all zones. You reverse it with a zoom gesture.

At present, Denon doesn't offer any sort of desktop client for system control. Controllers for both PC and Mac are said to be under development.

### Setup Time Is Shorter Than This Paragraph

About the only way that Denon could make setting up the system any easier is if they sent a white-gloved, tuxedo-clad technician to unbox the gear and plug it in for you. Connecting a HEOS component to your Wi-Fi network is ridiculously easy and involves plugging one end of the included 3.5mm cable into the headphone jack of your smart device and the other end into the Aux input on the HEOS speaker or amp. After a couple of taps on your phone's or tablet's screen, all of the Wi-Fi network's setup parameters are transferred, and the HEOS component is ready to go. Adding a speaker system using Ethernet requires plugging in the Ethernet cable—and that's about it.

### Hearing the HEOS

The smallest of the speaker systems, the HEOS 3, differs from the other two in more than just size, with the most important distinction being that two HEOS 3s can be configured to work as a stereo pair. Denon claims to have exceptional synchronization among its speakers, which they point out could benefit stereo imaging. The HEOS 3 is also designed to be used horizontally or vertically. Since the orientation has a big effect on the sound, there's a setting in the HEOS app to select the proper equalization curve for horizontal or vertical operation. Another feature exclusive to the HEOS 3 is a threaded insert on the back for use with a wall-mount bracket or speaker stand. Two full-range drivers and a two-channel Class D amp live inside the cabinet, and there's a large downward-sloping port on the back.

The HEOS 3 puts out a surprising amount of bass, regardless of its orientation. There's a lot of output from the rear-firing port. When oriented vertically, the HEOS 3 has a somewhat small and narrow soundstage, but there's no doubt it was quite good for a \$300 stereo speaker system. The speaker broke out from quite good to really excellent when placed horizontally. With the

correct EQ setting, the horizontal HEOS 3 blossomed with a much wider, bigger soundfield. During the beginning of Gwyneth Herbert's "So Worn Out" (*Ten Lives*), the placement of instruments was slightly muddled—but Ms. Herbert's voice was clean and clear. One of the notes I made while listening to "I Love the

Life I Live" from the Kenny Wayne Shepherd Band's excellent *Goin'*

## RATING

Denon HEOS 3 Speaker  
Performance ★★★★★  
Features ★★★★★  
Ergonomics ★★★★★  
Value ★★★★★



● The HEOS 3 has a threaded insert on its back panel for wall-mounting.

## HEOS can stand tall next to Sonos.

## TEST REPORT

● The HEOS 5 has a built-in, hidden handle on its back.

### RATING

Denon HEOS 5 Speaker  
Performance ★★★★★  
Features ★★★★★  
Ergonomics ★★★★★  
Value ★★★★★



Home was how balanced the vocals were without being placed too forward or too far back. The overall sound of the HEOS 3 was big—much bigger than what you'd expect from such a diminutive speaker.

The HEOS 5 includes four active drivers (two tweeters with two woofers) plus a passive radiator. The middle model of the three HEOS speakers ups the power ante over the HEOS 3 by using four dedicated Class D amps. It's a compact speaker, weighing only 6.6 pounds, and it has a convenient, built-in hidden handle on the back near the apex of the sloping front and rear sides. I was immediately struck by the deeper bass extension and more natural character of the HEOS 5, along with the system's smoother-sounding overall response. Besides the more convincing bass, there was an added throaty, visceral impact to the vocals on the Shepherd track. I expected the soundstage to be wider than the HEOS 3's, and it was noticeably so with the John Butler Trio's "Funky Tonight" (*Grand National*). The guitar strings also had more life and snap. As with the smaller HEOS speaker, placing the HEOS 5 too close to a wall might overemphasize the bass. Each HEOS component has individual bass and treble adjustments, so you can work with the settings to help make amends for placement issues.

The big-daddy speaker, the HEOS 7, is long and low, with the same inward-sloping front and back styling of the HEOS 5 but without a built-in handle. There's something about the proportions and cosmetics of the



HEOS 7 that screams "performance" at the top of its lungs, even before you hear the five active drivers (two tweeters, two mids, one woofer) and two passive radiators. The HEOS 7 is powerful, with a tremendous soundstage. In fact, there's little about this speaker to find fault in. On the Herbert track, I noticed a slight hot spot when I sat dead center in front of the speaker, but it was minor, and I found it acceptable in the context of the width and liveliness of the wall of sound created by the HEOS 7 in my 12 x 24-foot room. Interestingly, the HEOS 7 is the only model that includes a headphone output.

The HEOS Amp and HEOS Link are basically cut from the same cloth but use slightly different patterns. Both models include analog stereo and optical digital audio inputs and subwoofer outputs. The Link adds both optical and coaxial digital audio outputs, as well as a 12-volt trigger output and an IR emitter output. Being approximately 9 and 6 inches wide (respectively), neither the Amp nor the Link is a full-size, stackable component. In the case of the Amp and its stout 100 watts x 2 amplifier, stackability isn't likely to be an issue. The preamp-only Link, on the other hand, will need to go on a shelf of its own in your A/V rack if you're incorporating it into a bigger system.

Without a doubt, I was amazed at the testicular fortitude of the HEOS Amp and its refusal to give up no matter how hard I drove it with several speakers. What impressed me most about this little-amp-that-can was how well it performed when driving a pair of large Legacy Harmony in-walls. Not only was the sound



warm and alive with dynamic presence, but the bass output was strong enough that I never felt the need to use the HEOS Amp's subwoofer preamp

output. As for the HEOS Link, when I hooked it up as a streaming audio source to an Anthem AVM 50v processor and an Anthem MCA 50 amplifier, it performed impeccably.

### Conclusion

Denon's HEOS system is simply terrific and terrifically simple. As big a fan I am of everything that Sonos has done over the years, I can honestly say that HEOS is the first system *in toto* that can stand tall next to the Goliathan Sonos and be considered a worthy contender. HEOS has a long way to go in terms of adding streaming services, and only time will tell if HEOS can match Sonos

when it comes to amazing customer service. But for the money, each HEOS component is a spectacular achievement in the multiroom, streaming audio realm. I'm not saying everyone should ditch their Sonos systems and buy a bunch of HEOS gear. The important thing here is that if you're looking for a streaming system with refined cosmetics, an extensive set of inputs, and superb sound, you should give HEOS serious consideration. Sonos is still the king, but HEOS is making a shiny crown of its own. ♦

### RATING

Denon HEOS 7 Speaker  
Performance ★★★★★  
Features ★★★★★  
Ergonomics ★★★★★  
Value ★★★★★



## The HEOS system is simply terrific and terrifically simple.

● The HEOS 7 flagship speaker is the only model that includes a headphone output.