

ELECTRONICALLY REPRINTED FROM JANUARY 2007

NHT Controller preamplifier-processor and Power⁵ multichannel power amplifier

California company Now Hear This (NHT), which has been around since 1986, has always taken a no-nonsense route based on good engineering principles and innovative thinking. Two of their strikingly good ideas were the use of side-firing woofers, and integrating an active subwoofer with a pair of small monitor speakers. Both philosophies culminated in the Xd series of DSP-EQ'd active loudspeakers, which I had the pleasure of reviewing in the November 2005 issue. My first reaction to the concept was "Why hasn't anyone done this before?" The results completely justified an approach that, I believe, points loudspeaker design in a new direction.

But...electronics from a speaker company? For NHT's Xd speakers, the amps came from PowerPhysics, the all-important EQ from DEQX. NHT supplied only the speakers and, of course, many of the ideas. Now they've released a multichannel preamplifier-processor, the Controller (\$2750), and a matching five-channel power amplifier, the Power⁵ (\$2000). Either would be an audacious release from a speaker company, but NHT is no longer just a speaker company.

In October 2005, NHT became wholly owned and managed by the Vinci Group, which also includes Vinci Labs (www.vincilabs.com/newproducts/products.html). The significance of this is that Vinci Labs, based in Tampere, Finland, and with facilities in Thailand and Singapore, has been responsible for the design and production of OEM devices that are the building blocks, if not the heart and soul, of many multichannel audio products at almost all price points. Vinci has as much experience in feature sets, design, and implementation as anyone out there. Their alliance with NHT creates a formidable combination, and the results of their collaboration are apparent in these first two products.

NHT Controller: Sounds like the title of an action movie, no? Well, the Controller is just a preamp-processor, but its features are what set it apart. They include an outstandingly clear, large, communicative front-panel display touchscreen that makes use of the onscreen display a choice of convenience, not necessity. While you're listening, the Status screen tells



NHT Controller with its multi-talented touch-screen panel (left) and touch-wheel volume and navigator (right). The display was readable from across the room and that greatly enhanced the efficacy of the remote control.

you which source you've selected, how it's connected, how its signal is being processed, and the volume setting. You can dim the display, or set it to turn off 10 seconds after last use. More remarkable, the display features a proximity-detection sensor that, on sensing the approach of your hand, switches to Start Screen, from which the user can access the Sound Mode, Source, and Setup screens. But having the Controller detect your presence is not the only sexy bit. The Touch Wheel, surprisingly reminiscent of something you'd find on an Apple iPod, makes volume adjustments a breeze, and can also be used as a menu-navigation control. Add a light-touch Standby switch and a headphone jack and that's it for the sculpted front panel.

I rarely touched that front panel—I found the almost too-compact remote control so much handier to use. Anything you can do at the front panel you can do from the remote, and for most of those operations the remote provides direct access without stepping through menus. It's one of the friendliest remotes I've ever used, suffering from only one fault that made it less than completely intuitive in operation: The volume is adjusted via buttons bearing left- and right-pointing arrows, not up- and down-pointing ones. Surely the latter would have been just as suitable for input selection. Even after two months of using this remote, I often still change the input when I want to adjust the volume. Also, I'd like the remote's oval Power button to be round or square, to

avoid the suggestion that it can be adjusted up and down. But don't get the wrong idea—this minuscule wand did everything else very well. Mebbe I need another month or two with it...

Around back is the familiar thicket of audio and video inputs and outputs arranged in logical groups. Notable among the digital and stereo analog inputs are the 7.1-channel analog input, the 7.1 analog output, and the outputs for a second zone for stereo that's independent from the main output in source selection and volume. Multiple video inputs for composite, S-video, component, and HDMI sources and outputs in each format are provided, but no scaling or deinterlacing. Some format transformations are available (eg, composite/S-video inputs to component HDMI outputs), but component and HDMI are unfortunately not mutually convertible. In addition, the audio on the HDMI input/output is at present limited to Dolby Digital, DTS, and stereo PCM, although NHT promises an HDMI 1.3 upgrade. (For other in/out issues, see www.nhthifi.com/2006/products/s/controller.html.)

With each new processor, the big hump to get over is setup. The Controller made this easy—it's one place where Vinci Labs' real-world experience shows. The only small issue, for me, was that the menu hierarchy is skewed toward the convenience of those who own NHT speakers. But that's the home-field advantage, and as you'll see, there's a lot to it. In the meantime, those who *don't* have NHT

speakers must begin by choosing the *last* option on the Speaker Setup menu, and tell the Controller how many speakers you have and whether they're Large, Medium, or Small. Crossover frequencies for Medium and Small speakers are independently selectable in 5Hz increments from 20 to 200Hz. After that, with the help of a built-in signal generator and your own level meter, you can manually enter the speakers' distances from the listening position and set their output levels—but you'd be better off using NHT's Auto Distance and Auto Level routines with the supplied microphone. Enter these modes and plug in the microphone when prompted. The calibration procedure tests each channel three times to ensure accuracy and consistency.

If you do own NHT speakers, you begin with the first item, NHT Speaker Wizard, and select from lists which speaker model serves each channel (mixes of speakers made by NHT and other companies can also be accommodated). You don't have to say how big any NHT model is—the Controller already knows that, and many other aspects of these members of the family. According to Esa Piirila of NHT Europe,

Of course, even with NHT speakers, one needs to go through the autocalibration procedure to account for room acoustics and placement. Nonetheless, there is a distinct advantage to combining the Controller with NHT speakers, and one can only hope that the DSP engine's considerable horsepower will aid those of us with non-NHT speakers in future firmware upgrades. Since I used my standard speaker setup of Paradigm Studio/60s and Studio/20s, I can't comment on how effective this is.

Other setup pages permit the user to define inputs by name and to select video source, digital audio source, analog audio source, gain offset, and audio preset (tone controls, channel trims, and lip-sync offset) for each input. Preferred processing modes (DPL IIx, Neo:6, Dolby EX, Surround 6.1, etc.) can also be preset, and are accessible from the remote control. All in all, the Controller is extremely logically structured.

Here's the feature I liked best: The 7.1-channel Analog Direct input uses the channel-balance adjustments specified for the digital inputs and adds *analog* bass management! For this unique input, you can select from the menu All Small speakers, All Large, or L&R Large (with the rest Small), and a fixed 80Hz crossover is applied to all settings. Sure, I'd like more options, such as L/C/R Large and/or adjustable crossover frequencies, but short of redigitizing the multichannel input, I don't expect it. For those of us who insist on using high-resolution SACD and DVD-Audio players with minimal or no bass management, the NHT Controller is one of the most audio-friendly pre-pros yet.

NHT Power⁵: This five-channel, 200Wpc power amplifier has the same sculpted front chassis as the Controller. It, too, has a touch-screen switch for On/Standby, and a bank of LEDs to indicate channel status. When a channel's LED is green, the channel is on and working properly. When red, the channel is in fault mode—but I never saw red.

The Power⁵'s specs are impressive, with low distortion (<0.05% THD+noise at 200W each, all channels driven simultaneously, 0.001% IM and 0.01% TIM), soft clipping, and comprehensive protection features. The rear panel has five RCA jacks and five pairs of multiway binding posts. There are AC connections, a 12V trigger loop-through, and, interestingly, an Ethernet jack to permit the Power⁵ to communicate with the Controller so that the latter can control the Power⁵'s On/Mute/Standby status. If set to two-channel output, the Controller will also shut down the Power⁵'s center three channels so that its power supply can be optimized for output and heat reduction. In addition, the Controller can continuously monitor the Power⁵'s operation. Full details and specs are available at www.nhthifi.com/2006/products/power5.html.

Hooking Up: I'd just converted my system to all-balanced Kubala-Sosna connections between my Meridian 861 processor and Bryston 9B-ST power amplifier. And because I planned to incorporate the new Audyssey Sound Equalizer into this system, I also needed at least two sets of six RCA cables each. After discussions at Home Entertainment 2006 and the CEDIA Expo with cable designer Jay Victor and Belkin, I decided to try PureAV Silver Series RCA cables (AV50300). These are beautifully constructed, with hybrid PCOCC conductors, silver-solder joints, and substantial, color-coded connectors plated in 24K gold. And at only \$39.99/1.2m, they seem underpriced. I especially like the solidity of the rubber grips on the connectors, and the PureAVs' slithery jackets make it easy to route them through the tangle of cables behind my rack. I briefly swapped the PureAV Silvers in the L/R channels for some pricier RCA cables from Alpha-Core and Straight Wire that I dug out of my closet, but found the Silvers equally clear and quiet. Firmly fitted to the NHT electronics, the Silvers were just the ticket for this system, and a challenge to higher-priced RCA links.

Up and Running: There was much to enjoy about the NHTs' sound. The Power⁵ amp was lively, powerful, and completely lacking in noise or hum. It had more than adequate power for the Paradigm Reference Studios, whether they were bass-managed or run full-range. Blockbusters like the Penderecki *Credo* (SACD, Polskie Radio PR SACD 1) or the new recording of Mahler's Symphony 6 from Christoph Eschenbach and the Philadelphia Orchestra

(SACD, Ondine ODE 1084-SD) presented the Power⁵ with little challenge, even with all channels blazing. Subtlety and delicacy were served as well, as was evident with a lovely disc of Sibelius songs for soprano and orchestra; on *Luonnotar*, Soile Isokoski's voice soared over the orchestral flying carpet provided by Leif Segerstam and the Helsinki Philharmonic (SACD, Ondine ODE 1080-5). Compared to my reference Bryston 9B-ST, the Power⁵ seemed less overtly muscular while clearly not lacking for power. In fact, the more I listened to it, the more convincing it became—all of the audible spectrum was smoothly in balance.

The combination of the Power⁵ and Controller was addictive and will remain in my system a fair bit longer. The characteristic consistency across the channels made for a relatively seamless surround soundstage that rivaled that of the Meridian 861, especially with hi-rez SACDs and DVD-As, which the Meridian must redigitize. Run from the analog outputs of the Simaudio Moon Orbiter universal player, and with bass below 80Hz EQ'd by the Velocity SMS-1, the five-channel output was remarkably transparent at all output levels through the Paradigms, and with simple as well as complex music. The Penderecki and Mahler SACDs mentioned above were perfect demonstration discs, and all my long-term references confirmed the sound's honesty and consistency. Even nondiscrete surround sources were sources of delight. The 5.1-channel DTS soundtrack of a new DVD-V of Prokofiev's *Love for Three Oranges*, with Stéphane Denève conducting soloists and the Rotterdam Philharmonic Orchestra (BBC Audio Arts OA 0957D), was colorful and exciting, the voices up there on stage and the orchestra immediate and dynamic. The NHT Controller's DPL IIx processing did a dandy job with cable TV movies and music, too.

Overall, the \$4750 combination of NHT's Controller and Power⁵ rivaled the best processor-amp partnerships I've used, and would be worthy of speakers even more sophisticated than the Paradigm Reference Studios. The Controller, in particular, offers a unique combination of intelligent design, audiophile considerations, and outright good sound far better than you'd expect at the price.

Next time in the Round

The new Audyssey Sound Equalizer and AudysseyPro software have just been installed between the NHT Controller and Power⁵, and I can say only two things about it at this point. First, when operated in bypass mode, the Audyssey's presence is marked only by slightly lower system gain. Second, when operated as intended, the new Audyssey is more effective than the version used in the Denon AVR-4806 receiver that I wrote about last. This, and more, next time in the Round. ■■