

PRO AUDIO REVIEW

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STUDIO

EQUIPMENT REVIEW

Thiel Audio Power Point Speakers

BY TOM JUNG

Accurate monitoring is enough of a problem with stereo, whereas adding three or four additional speakers can make this problem grow exponentially. Surround sound can be a much more involving experience than conventional two-channel stereo, having the capability to take movie and music consumption another level. The biggest problem in setting up a multichannel speaker system is location or placement of speakers. Domestically, getting five or more speakers in a family or living room to coexist with furniture and still be acceptable to wife or significant other can be a real challenge many are not willing to undergo. While in a professional environment or control room the same problems exists (maybe not the wife or so) with the addition of equipment racks, computers and road cases full of gear. The few remaining big studios, design rooms specifically for surround, but in the real world where much of the work is done these days, smallish rooms with monitor speakers either on stands or placed on meter bridges of consoles is the norm.

FEATURES

Located in Lexington Kentucky Jim Thiel and his brother started building speakers in their garage back in 1977. Today, Jim, along with co-owner Kathy Gornik, have built the company into a 30,000 square foot manufacturing facility with more than 30 employees. Jim pioneered the principle of time and phase

accuracy in speakers with the use of sloped baffles, coaxial driver mounting and phase coherent crossover network design. Thiel is one of a few manufacturers that actually designs and builds its own drivers, which, by the way, are works of art.

The Power Point is a wedge-shaped surface mountable speaker, housing a coaxial driver mounted in a sealed enclosure that can be affixed to ceilings, walls or even placed on the floor. The PowerPoint uses a very low distortion, short coil/long gap, high output, metal diaphragm 6.5-inch woofer that is coaxially mounted with a 1-inch, high output, low distortion metal dome tweeter. The coaxial driver mounting really works here because the sounds from the individual drivers reach your ear at the same time, regardless of speaker placement or listening position.

Fast Facts

Applications:

Surround monitoring, home theater

Key Features:

6.5-inch woofer; coaxially mounted 1-inch tweeter; ceiling, wall or floor mounting

Price:

\$1,300 each

Contact:

Thiel Audio at 859-254-9427, www.thielaudio.com.



Specifications include a frequency response of 3 dB from 75 Hz to 20 kHz, a sensitivity of 89 dB at 2.8 V-1m with a 4 ohm nominal impedance. The cabinet measures 19.75 inches long, 5.5 inches high, and 12.25 inches wide.

The real beauty here is the ability to position these speakers in spaces where it would simply be impossible to place a stand or floor mounted speaker. Many engineers (including myself) are using the ITU speaker set up specification that dictates the surround speakers to be placed at 110 degrees either side of center. This arrangement places the speaker close to the middle of the room in some cases, which is far from ideal and even impossible in many instances. The Power Point has a 45-degree front baffle relative to the mounting surface.

IN USE

Over the past few years I have been experimenting with an overhead or elevated center surround speaker, which can really be a problem when it comes to speaker placement. The Power Point is the most perfectly suited speaker for this application I have found, so when it came time for review I asked the nice folks at Thiel for three Power Points for left, center

and right surrounds.

I first placed the three Power Points on the floor and listened to them with frontal channel information. It was obvious right off that these speakers were not your ordinary 6/12-inch two-way. They sounded very smooth and natural without the usual recessed upper midrange from the very top end down to around 70 Hz where the bottom rolled off very gently. A unique property of this design is the reduced boundary reflections, be it floor, ceiling or wall, whichever boundary the Power Point is upon, that reflection is eliminated, which is the same basic principal of boundary microphones. The result is clarity in the midrange, sort of like removing a sonic blur or cleaning a dirty window.

The Power Points sounded so good on the floor I got out my cordless drill and proceeded to mount them on the ceiling where they really belong. I mounted one directly behind the listening position (center surround), and the other two, 110 degrees from front center to become left surround and right surround. I repatched and routed the surround channels to the Power Points, set levels with pink noise and, Voila! These speakers might just be the ideal surround monitoring solution. With the front speakers at ear level and the surrounds up and behind, the experience is what I feel surround sound is all about. With properly recorded material the ambience retrieval is simply wonderful with the Thiel Power Point ceiling mounted speakers.

SUMMARY

The Thiel Power Point is a great solution to a problem that exists with surround monitoring and home theater playback by using the

THIEL CS1.6 SPEAKERS

The CS1.6 is a 36-inch high floor standing two-way speaker with a two-inch thick slanted front baffle that corrects for phase and time alignment. The unique slotted bass reflex system reduces unwanted port noise while the baffle's rounded edges reduce diffraction effects for improved spatial and transient performance.

The 6.5-inch woofer uses a much larger than normal diameter voice coil to greatly extend the woofer's bandwidth for improved upper midrange performance. The large diameter coil distributes its driving force over a large area of the cone rather than concentrating it at the center, while using a short coil/long gap motor system dramatically reducing distortion. Equally innovative is the woofer's centrally located neodymium magnet that is placed inside the coil, rather than outside, creating an inherently shielded speaker to prevent picture distortion when placed near video displays. A new high efficiency tweeter also uses a short coil/long gap motor system design for reduced distortion.

Amplitude response is rated at 50 Hz to 20 kHz plus or minus 2 dB while sensitivity is rated at 90 dB 1 watt at 1 meter into 4 ohms.

I only had two of the CS1.6s up front so a true 5.0 or 6.0 set up with the Power Points for the surrounds didn't happen. But listening in stereo to the 1.6s you could tell that both models were products of the same great speaker designer Jim Thiel. The right on tonal balance and phase corrected first order crossovers are almost trademarks of Jim's design. The CS1.6 is available in a wide variety of real wood, laminate or painted finishes. Price in studio black is \$1,900 per pair.

— Tom Jung



Thiel CS1.6 speakers

ceiling as a mounting surface. Not to be confused with other ceiling speakers, the quality of parts and construction here are first rate and the design is as good as it gets both visually and performance wise. Even if you do have the floor space to position floor standing or stands mounted speakers (which is unlikely) the Power Points still have the edge with their smooth accurate uncolored sound and minimized boundary reflection properties. Though

they may seem a bit pricey initially, nothing I've seen even comes close to solving this problem. A real breakthrough product.

Tom Jung, founder of DMP Records, is *Pro Audio Review's* technical consultant and a regular contributor.

THIEL

Ultimate Performance Loudspeakers