



THIEL AUDIO

POWERPOINT 1.2

Reviewer: John Potis

Analog Source: Rega P9 turntable, Hadcock GH 228 Export arm, Rega Super Elys

Digital source: Acoustic Arts Drive 1/ Bel Canto DAC2

Preamp: Bel Canto Pre2P

Power Amp: Bryston 7B ST

Speakers: Hørning Perikles

Cables: JPS Labs Superconductor and Superconductor FX interconnects and speaker wire, Furutech Digi Reference S/PDIF

Power Cords: ZCable Heavys & Black Lightning, PS Power AC, Analog AC, Digital AC and Kaptovator power cords

Powerline conditioning: Balanced Power Technology 3.5 Signature Plus with ZCable Heavy Power Cord

Sundry accessories: Vibrapod Isolators and Cones, Auric Illuminator, Ultra & Heavy ZSleeves

Room size: 12' by 16' with 9' ceiling

Review component retail: \$1,450 ea. PowerPoint 1.2 loudspeakers; \$2,900 Thiel SS1 subwoofer; \$350 PX02 passive two-channel crossover



Okay, I was stumped. 6moons reviewers aren't asked to review home theater speakers very often. Why then did Thiel approach me to review their new PowerPoint 1.2 with matching SS1 subwoofer? I wasn't sure but what the heck - I was game. Alas, when I was sent just *one* pair, I wondered. "Shouldn't I be reviewing an entire multichannel system?" I was assured that two of them would be fine. Okay.

Home theater speakers? Well, that was my assumption. I mean, two speakers intended for mounting to either the ceiling in front of you or to the walls behind you - we've just got to be talking theater. Right? Well, that was to be just the first of a few dispelled untruths. Read on.

I recall first hearing the original PowerPoint a few years ago at CES. I recall a fairly large room with three PowerPoints set across the floor in front of me. I recall that the sound was fine but also somewhat disconcerting. All that sound coming from small speakers *on the floor*? The image it brought to mind was akin to the Star Trek teleporters. The apparatus was on the floor but the images (the bodies) were clearly above them suspended in mid-air. Suspended by what? In my home, I used the PowerPoint 1.2 on the floor, which was no less disconcerting at first. Imagine an equipment rack full of gear with almost no speakers flanking it. *Strange*.



The nuts and bolts of it all

The new version of Thiel's PowerPoint is called the PowerPoint 1.2. Unlike its predecessor that used a 3/8-inch thick thermoformed acrylic plastic enclosure, the 1.2 sports a new cast aluminum cabinet said to offer significant sonic improvement in both clarity and dynamics. With a newly reshaped chassis, the 1.2 is also sleeker than its predecessor. As is true for all Thiel speakers these days, the PowerPoint's drivers are made completely in house. While the coaxial driver array may look similar to that of the PCS at first glance, appearance is skin deep only. In order to achieve both time and phase coherence, Thiel has been mounting its tweeters inside the mid-woofer's voice coil for generations now.

That much remains the same. However, unlike the PCS and CS 2.4 that use no electronic crossover between tweeter and midrange, the array in the PowerPoint 1.2 includes a tweeter that is a separate and self-contained unit mounted coaxially and coincidentally in the center of the woofer. It is the same tweeter first developed for the \$16,000/pr. CS7.2 and said to be a very high output, low distortion design. An electrical crossover network supplies signal to the tweeter and woofer. According to Jim Thiel, *"another important point about the PowerPoint drivers, in this case the [6½-inch] woofer, is that it uses a very shallow diaphragm so as to not degrade the tweeter's output. It maintains great strength nonetheless by the use of a layer of cast polystyrene foam laminated to the rear of the aluminum diaphragm. Also, the woofer uses a neodymium magnet --unusual for woofers because of its high cost -- to provide a large amount of magnetic energy while still being small enough to allow driver mounting very close to the ceiling. This design element is critical for the functioning of the PowerPoint's boundary reflection reduction operation. Both drivers also utilize our short coil/long magnetic gap and copper-stabilized motor design for very low distortion."*

The PowerPoint 1.2 is said to have a frequency response of ± 3 dB from 75Hz to 20kHz, a sensitivity of 89 dB @ 2.8 V-1m, phase response within ± 10 degrees of minimum and a 4-ohm nominal impedance. Horizontally oriented, the cabinet's dimensions are 21" deep, 6.5" tall and 12" wide. Weight is 16. Thiel recommends amplifiers from 30 to 200 watts. For bass duties, Thiel sent along their SS1 subwoofer. By Thiel standards, the SS1 is the baby of the family. By most standards, it's anything but. The 11-inch wide, 17-inch deep and 20-inch tall enclosure holds a 10-inch aluminum woofer and a 500-watt RMS Class D amplifier and weighs in at a solid 55 pounds. Thiel quotes a sensitivity of 120dB (at one volt) at 1 meter and an acoustic output of up to 99dB at 20Hz and 106dB at 30Hz. Clearly these figures won't qualify the SS1 as a super-sub in terms of output (you can find woofers with higher output at 20Hz for a lot less money). But Thiel's emphasis is on quality, not quantity. That's me speaking, not Thiel. And in the name of quality, Thiel has taken some unusual steps.



First, in order to spare the user the trial-and error process of mating their subwoofer with their Thiel speakers, Thiel has designed the PX series of passive crossovers - one for every model of Thiel speaker made. No more fumbling around looking for that correct low-pass point. No more experimenting looking for correct subwoofer phase. Thiel has done all the work for you. The brushed aluminum and extremely attractive PX02 crossover measures 2 inches high, 7 inches wide and 6.5 inches deep. More on the PX02 later.

Second, Thiel studied the effects of wall proximity on bass (which we all know are monumental) and then gave the user the ability to dial location information directly into the subwoofer, allowing the SS1 to compensate automatically. Allow me to quote Thiel: *"The effects of the third category of problems are well known. Almost every subwoofer installation is plagued by response irregularities that are habitually attributed to 'room resonances'. A study of the situation reveals that the majority of serious problems are not, in fact, strictly speaking room resonance problem, but rather boundary problems of cancellation and reinforcement. Even though the effects on performance are similar, the distinction is important because it indicates a quite different type of solution. Room resonance problems cannot really be solved by any method other than physically changing the proportions and size of the room. Further, even mitigating the effects can only be accomplished for one listener location, with the usual result of worsening the problems for other locations. And implementing such mitigations requires sonic measurements in the listening room with microphones and adjustable equalizers."*

"Boundary problems are fundamentally and importantly different. Boundary effects are substantially consistent throughout the room and therefore corrections are improvements for all locations. Also, the effects of nearby boundaries are predictable and therefore can be corrected without measurements. Such a built-in system of boundary compensation is an important aspect of the Thiel Smart Sub system."

According to Thiel, the degree of reinforcement, cancellation frequency and cancellation severity are the three variables addressed. As distances to adjacent walls directly affect these variables, they are accurately compensated for at a given distance. The SS1 can thusly be calibrated for just about any likely placement. All you do is dial in the distance to the two adjacent walls.

Sounds good in theory but does it work in practice? If my experience with the SS2 was any indication, it would work just fine. I had high hopes for the SS1.



Where theory meets the tarmac

I received the Thiel combo at the conclusion of a particularly draining week at work. Looking forward to some fun and diversion, I set about hooking the system up. What followed was a disaster by just about anybody's definition. The PX02 crossover is designed to take a speaker level input. This is to say, you hook the PX02 to your amplifier. It takes the signal, processes/filters it and sends it along to the SS1 Smart Sub via a single length of balanced interconnect. It works well and sounds great. But in case the user wishes to use a pair of subs, the PX02 is shipped with a bridging pin that connects the positive and negative input binding posts at one of the channel's inputs. In my exhausted stupor, I saw the strap but paid it no mind. When I fired up my Bryston 7B STs, I was rudely awakened when the left monoblock shut down because of the short circuit. I still didn't make the connection. Who would expect to receive a component configured to blow up your amplifier? I checked my wiring, replaced the fuse in my Bryston, held my breath and fired up the amplifier again. This time the amp sparked from within, went dead and required a trip back to Bryston. It forgave my stupidity once but twice was not an option. It was then that I focused on the bridging strap and wrote the folks at Thiel. What came back was a promise that forthcoming PX02s would include the bridging strap attached to the owner's manual. I have no idea how long it'll take those PX02s to get to the dealers so if you buy one, beware that little strap!



As for the Bryston amp? Let me just say that the people at Bryston USA are terrific. I'm embarrassed to say that this was the second time I've availed myself of their 20-year warranty. The first time was fully my own fault. I called Bryston, told them of my dumb-ass attack and they told me where to send the amp. They didn't even laugh at me. Having admitted that I was stupid, I asked how I would arrange payment for the repairs and was told that it was covered under warranty. Both times all they required was that I ship the amp with a letter detailing the problem and supply a return address. Both times I did so and received my amplifier back within a week. You just can't ask for better service than this. *Kudos Bryston USA!*

PowerPoint 1.2

While the Bryston was in rehab, I took the opportunity to plug the PowerPoint 1.2s into my multi-channel system and watch a couple movies in two-channel mode. What I heard took me by surprise to say the least. I was astounded by what I heard to say the most. In the video system, just two PowerPoint 1.2s sounded big. Big, full and robust. Solid, too. Not big as in a little speaker trying to sound big by stretching reality here or there but just plain big. Though floor-mounted, there was no problem locating phantom-center dialog within my TV's screen. The human ear/brain does a remarkably poor job locating the source of sounds in the vertical plane and it has a tendency to locate sounds within the listening room straight ahead of the listener. I heard the same phenomenon from an array of Magnepan CC3s pinned against the ceiling for review a few years ago. So there was no sonic indication from the PowerPoints that I wasn't listening to a tall tower speaker. Neither was there any aural suggestion that I was listening to a 6.5-inch woofer in a relatively small enclosure. I figured that some credit must go to the bass reinforcement of the adjacent room boundary, in this case the immediate proximity of the floor. But down to their lower bass limit, the PowerPoint 1.2 was extraordinarily robust and articulate. I've never heard a smallish speaker like the PowerPoint 1.2 perform in this manner.

When I queried Mr. Thiel about this, he told me, *"You are more or less right about the floor or ceiling reinforcement of the bass response. Actually, the crossover is designed so that the speaker provides the correct lo-/mid and bass balance in the environment in which the speaker is intended to be used. So if the speaker had been a freestanding design, the crossover would have been adjusted to provide the same bass balance you hear from the PowerPoint when the PowerPoint is against floor or ceiling. So the wall reinforcement does not cause a different tonal balance if the speaker is properly designed. However, the wall reinforcement does cause a given bass output level to be achieved with less movement of the woofer's diaphragm. And therefore a given level of bass output will exhibit less distortion and compression and as such be more dynamic and effortless."*

Not only was it robust but it sounded remarkably linear -no boom, no suck-outs. The same can be said for midrange performance. The Gallo A'Diva speakers that the Thiels replaced suddenly sounded like miniatures - little boys sent to do a man's job while the Thiels sounded like cavalry. Where the admittedly and decidedly less expensive yet over-achieving A'Divas sounded clear and detailed, they also sounded as though they lacked density and body. The Thiels had that body, that density - that ability to conjure reality from thin air. While home theater enthusiasts often credit their systems for sounding better than commercial theaters, the fact is that while linear and refined, most home theater's I know lack the gravitas - the weight of a real theater. And I'm not talking about overloaded bass. I'm talking about a sonic saturation here that occurs through the midrange as well as the bass. Suddenly, my living room had that saturation. As far as my experience in my own home theater goes, it was a singular event. I'd never before heard it like this. I'd never heard such well-balanced density with absolutely no excess boom or bloom.



Obviously and for optimized performance, the PowerPoint 1.2 will have to be placed either on the ceiling or floor where the tweeters' output is not obstructed by furniture or fixtures. You'll want to keep them in open line of sight. However, I was somewhat surprised by how little they suffered when I placed them wide enough such that I couldn't see one of them because of the obstructing arm of an overstuffed love seat that runs perpendicular to the front wall. Once I focused on the on-screen action, I found the sound completely acceptable. *The Incredibles* were in heavy rotation during this time and most enjoyable. The PowerPoint 1.2s not only exhibited big density but conjured a nice big soundfield around the TV and accurately tracked all the on-screen mayhem. If you know the movie, you know the considerable amount of moving about the soundstage of all the voices and general chaos. That the two-channel Thiels could satisfy was no little feat.

Weeks later when the PowerPoint 1.2s made it back into the two-channel room, little about their observed performance changed with the exception that they were now mated to the SS1 subwoofer via the PX02 crossover. Consistent with my previous experience with the SS2/PX02 combination, setup couldn't have been easier. It's truly plug-and-play. In neither experience did I so much as have to adjust the volume on the subwoofer. The integration of the sub was flawless - so much so that I vow right now to never review another subwoofer for Thiel (unless they want to send me the gargantuan SS4 just for fun). Why? Because after you get over the technical aspects, they don't leave much to talk about. More so than with any other sub I've ever used, they just don't draw attention to themselves and, shall I say it - they are somewhat repetitive to write about. It's true that they achieve the best bass I've ever used in my room. Within the context of an all-Thiel system, they also achieve the best and easiest system integration there is. This is all terrific no doubt. But when it comes to writing about it, how many examples of the best reproduction of bass can I come up with? Do people want to read about that? Don't they wonder to themselves, "Can it really be that good?" The answer is yes - it's *that* good.

I was speaking to a dealer a while ago about the \$4,900 SS2 subwoofer of which I'm so fond. He didn't stock it. He asked me whether it was really worth \$4,900? At first I was taken aback and had to think. To tell you the truth, when I reviewed the PCS/SS2 system, I really didn't consider it a combination of a pair of \$3,000 speakers plus a \$4,900 subwoofer (a lot for a subwoofer). But as I remembered my mind-set as I wrote that review, I recalled not thinking of it in those terms. I was thinking of the review subjects as a \$7,900 system. And as a \$7,900 speaker system, the PCS/SS2 rates my highest recommendation. The PCS satellites are wonderful speakers. When you couple them with extremely good bass in an idiot-proof package, it results in excellent and foolproof performance. That's a no-brainer recommendation if I've ever come across one. At \$2900 for the SS1, I find it just as commendable as the SS2. Yes, it's still expensive. But its purchase must be viewed as more than just a way to add bass to a system. It must be considered in the overall context of how it elevates the performance of the entire system in such a flawless way. Those who know me know that I'm all about value. This position then may seem hard to take. But I'm certain that those who experience the Thiels will know what I'm talking about. And, they will agree. You can buy accomplished subs for less but without a tremendous amount of luck and/or skill, you probably won't meld it as seamlessly into the system. And if I may be so superficial, it probably won't look as good as the Thiel subwoofer either. These things are beautiful. They are extremely well finished (to match your speakers) and I find their styling striking.

There's nothing boring about the PowerPoint 1.2, however. Neither in the listening nor the writing about it. These are truly unique speakers. Not only do they sound good, they also go a long way toward answering a question plaguing American manufacturers today: "*How do we compete with the Chinese?*" Through innovation, that's how. With the PowerPoint 1.2, Thiel has done what Americans have always done best - differentiate themselves by thinking outside the box. As a matter of fact, they thought the PowerPoint 1.2 completely out of any box and into a sculpted and cast aluminum enclosure. Also of note is the fact that the PowerPoint 1.2 comes in a matte white finish just waiting to be painted to match your room (not that there's anything wrong with the white stock finish). It also comes complete with a conical mask [below] designed to keep paint off the drivers during customization - an excellent and thoughtful touch. I also noted that the tweeter, though hidden behind a finger-proof and sonically invisible grill, is further protected by yet another perforated grill. Clearly the PowerPoint is designed to be as near bulletproof as possible. When it comes to making music, the PowerPoint 1.2s are distinctly Thiel-like but they won't do a couple of things their regular series does. They don't quite throw the awe-inspiring soundstage for one. While center images are astonishingly well developed and solid -- and while the soundstage extends laterally with aplomb -- the 1.2s don't illuminate the upper and outermost corners of the soundstage as the rest of the line will. However, that solidity manifested in the theater room was no less evident in the two-channel room. They don't quite reach the same level of transparency of other Thiels either not because they are opaque or veiled (they aren't) but because of their extreme density. You can't listen through them in the same way you do with other Thiels. It's not a matter of listening through clouds or muck, though. What inhibits the perception of such transparency is this aforementioned *density*. You don't listen through the speakers any more than you can see through a performer standing in front of you. The PowerPoint 1.2 has a less ethereal presentation than I recall of its siblings but one that's remarkably life-like nonetheless. It simply has more meat on its bone. Someone might say there's more *there* there.

Soundstaging aside, I think that some may even prefer its meaty presentation to that of its floorstanding siblings. Those who may not express a preference but want to avail themselves of an extremely room-friendly sound source will find the trade off well worth it - if they truly care at all. Like the PCS/SS2 system, the PowerPoint 1.2/SS1 system maintains excellent coherence from top to bottom. It truly sings with a single voice. In particular, I found its treble performance enjoyable. Midrange/treble blending is as seamless as that achieved by its siblings, which is to say exemplary. There's no harshness, hardness or glare and yet there's no blurring of reality either. It's extended, honest and well-behaved. The midrange is all Thiel. Clean, clear, undistorted, incisive and surprisingly dynamic - due to that low excursion high-powered neodymium magnet thing I'm sure. As a system, the Thiels are surprisingly effortless. At 89dB, the PowerPoints are fairly efficient for such a small speaker system, too - the natural trade off for 75Hz bass extension. I wrote earlier about the PowerPoint 1.2's gravitas. That was not to infer that the Thiels are heavy-handed with the music. No sir. James Galway's *Mozart - Flute Concertos* [BMG 09026-68256-2] sounded - well, like Mozart concertos: light, fleet-footed and unearthly. The PowerPoints painted a perfectly enjoyable facsimile of the St. Martin In the Fields Orchestra before me with excellent depth and cubits of space. Listened to from anywhere in the room, the front wall was awash in the image of the orchestra. This piece offered little for the SS1 woofer to do but the PowerPoints sounded superb. Not being the type of music that I usually sit through motionless with my eyes closed, I did get up and wander around the room. It was then that I noticed how very good the PowerPoints were at providing a large window of background music. Not really a reference disc of mine either, Double's *Blue* CD [A&M CD 5133/DX640] turned out to be a nice treat. "Woman Of The World" was spacious and airy with lots of lateral spread to the soundstage. "I Know A Place" features an opening female vocal located way off to the left. It was surprisingly well placed and vivid given the nature of these floor-bound speakers. The piano runs were nicely submerged in an authentic sense of space and the lead vocals were solid and appropriately placed in space. "The Captain Of My Heart" sounded big. Tons of artificial reverb assured that it would but that's okay once in a while. Hardly an audiophile recording, this CD is soft and lacks the microdynamics and incisiveness that makes a system come alive. The Thiel system is so coherent and balanced that I think it brought out the most that this recording had to offer to make it completely palatable.

A CD that offered up not only lots of color and textures but also some fun was Squirrel Nut Zippers' *Perennial Favorites* [35498-0169-2]. If you don't know it, I can only describe it as modern Dixieland Jazz with lots of attitude. "Suits are Pickin' Up The Bill" was a great place to start because it's a sonic blast. Lots of banjo, baritone sax, alto sax, cornet and bass and it too sounded big and awfully transparent and intimate - nothing between the music and me. Bass was lightning fast and engulfed the room. The PowerPoints delivered an accurate and varied palette of textures with lucid ease. Next up was "Ghost Of Stephen Foster", which added some jumpy rhythms to the mix and was translated with equal aplomb. Be it music or video soundtracks, the PowerPoints deliver a surprising level of dynamics. A very different affair altogether was "Pallin' With Al" which features distant violin and muted Jazz guitar tones. Once again I was appreciative of the Thiel's authority and balance. They just went with the flow and didn't skip a beat. "Fat Cat Keeps Getting Fatter" features the vocals of Kathrine Whalen who -- if you're not familiar -- sound a lot like Norah Jones, a vocalist that I just don't get and who makes me consider ending my life. So deadpan. So not fun. Oh well, at least the Thiels were honest enough through the upper midrange that they didn't add any artificial sweetness, which would make her sound even more morose. So yes, I could tolerate her on the Thiels. Regretfully, her voice dominates the rest of the CD despite the fact that it's backed by instrumentals the Thiels capture as great fun.

For more lively female vocals, I turned to Diane Shuur captured in front of an audience in *GRP Live In Session* [GRP-A-1023] and I found something cool. The record noise stayed down at the floor inside the speaker. It stayed away from the stage of performers. I wish all speakers did this! Aside from that, Shuur sounded fantastic, a welcome relief from Whalen's wailings. Equally impressive were Carlos Vega's drums, which were powerful and had tons of speed and snap as they usually do. In small to medium-sized rooms, the SS1 sub delivers a surprising amount of power and slam. But my favorite cut on the album has always been "Dolphin Dreams" and the Thiels fulfilled the promise. Soundstaging was so spacious as to border on the spiritual. I could hear through to Abe Laboriel's bass lines to experience why some think he's the best bassist extant. Man, he is good. He's got the touch! Dave Grusin's tickled ivories served as the perfect backdrop for Lee Rittenour's string-actuated synth tones. By now I had just about forgotten that I was listening to a pair of tiny speakers sitting on the floor as I stared into a huge kaleidoscopic window of color, texture and sound. That's how they'd managed to make me completely forget about 'em, hiding there in the carpet fibers.

Conclusion:

So why again was it that Thiel decided to send me merely two of their home theater speakers? Now it should be as obvious to you as it became to me. These are not just home theater speakers. Neither are they your typical out-of-sight out-of-mind, aesthetics-first sound-is-secondary, room-designer-approved after-thought speakers. They may be special application speakers but Thiel wanted to make sure that I knew that they were designed to be musical first. In my theater room, the 1.2s were an immediate hit with both my wife and her hubby. She loved 'em. I could have cared less that they visually disappeared into the room. I was very impressed by their performance. At \$2900/pair, they're not cheap but far from expensive to represent fine value. That they also fill a niche created by people who don't want to see their speakers is a great thing. But make no mistake - they aren't merely a great choice for those forced to make their systems fade from view. Even if you have the flexibility to place speakers anywhere -- under no pressure about cosmetics or real estate in other words -- you should check out these PowerPoints anyway. You may find that they are hardly the compromise you -- and I -- had assumed they would be. They are really good speakers that just happen to be a bit different. Admittedly, the SS1 is a tougher sell. \$2900 is expensive for a subwoofer and on paper, it faces stiff competition. But if you're in the market for a small pair of Thiels, you need to hear them with one of Thiel's Smart Subs. Long after you've forgotten what you spent on your system, you'll be enjoying the benefits of Thiel's Smart Sub technology - and I predict that you'll be glad. Don't be penny wise and dollar foolish. Get the right sub for your Thiels the first time around. Get a Thiel Smart Sub.

In the stereo room, the PowerPoints could be an example of a great product without much of a market. I could be wrong too. I simply don't know. Frankly, I can't imagine that many stereo users will be looking to mount their speakers on either floor or ceiling. If you are -- well, check out the PowerPoints. If not, the thought of placing speakers in such ways may be a hurdle that few audiophiles will feel inclined to jump. But one thing is for sure. Their surprising performance in the two-channel room demonstrated to me that they are worthy of just about any application imaginable. Hence do not confuse them with your typical in- or on-wall jobs! After all, if they can excel in two-channel stereo (and they do), they can do anything. At this point, my only regret is that I didn't get to try a full-blown multichannel system of PowerPoints. I hereby nominate the PowerPoint 1.2 for our coveted Blue Moon award. It raises the performance standard of special application speakers to heights that no die-hard audiophile would ever have to apologize for. Believe me, that's no small accomplishment.

John Potis , September 2005, 6moons.com



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• IN THE SPECIAL APPLICATION SPEAKER CATEGORY •