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*Enjoyment of Sound*  
**Excellence in Audio**

## Thiel CS6 Loudspeaker

**T**here are more brands of loudspeakers than any other audio category. A loudspeaker seems like a simple structure and maybe that's the reason for this occurrence. Building a nice cabinet, buying some capacitors, and using drivers from some Danish parts manufacturer seems easy enough. Because of this simplistic idea, most of the new faces that show up at the U.S. CES are loudspeaker manufacturers. I believe this happens all around the world, including the market in China. People think the easiest way to begin their new business is the "Promised Land" of building loudspeakers. Are design and production of loudspeakers as easy as ABC? Smart readers like you know the answer. Otherwise, there is no reason to explain why the number of out-of-business loudspeaker manufacturers is as great as the number of newcomers in this market.

How complicated can it be to design and produce a prize-winning loudspeaker? How much money, labor or material is invested in it? I have had some answers to this question after I visited Thiel, the American loudspeaker company located in Kentucky. Thiel Audio, which was founded by Jim Thiel twenty-one years ago, invests a great many resources in design, production and management. From design, prototype, product testing, product improvement, production of parts, cabinet production, driver production, and retesting, to product distribution and service, every detail is carefully tested and optimized by professionals. No wonder Thiel has become known and admired throughout the world.

### Exceptional Performance

I personally like the CS2.3 and CS6 models of Thiel's loudspeakers. This is because the performance for the price of these models is very good. Moreover, their size fits well into the limited living space in Hong Kong. This is the best choice for those who are going to switch from having shelf-size loudspeakers to floor-standing loudspeakers. My colleague, Wing-Kwan Wong, was attracted to the CS2.3 after he tested them at his home. I like the CS6 because its size is smaller than the CS7.2 yet it still performs well in a medium size (about 200 square feet or bigger) of listening space. Meanwhile, I listened to the performance of the CS6 in different rooms at the trade shows many times. Although these rooms were not ideal places for a listening test, the CS6 still performed as a number one product. No matter what aspect of a loudspeaker's perfor-

mance you look at—specifications, correct phase response, the high frequencies, length and richness of the middle frequencies, the output of bass, or the overall performance—it has the exceptional quality of an excellent loudspeaker. \$7900 [U.S.] is a very reasonable price for the CS6. However, it still needed a more detailed evaluation to tell whether or not it is the best bet. Therefore, I brought the CS6 to our magazine's studio to get the complete answer.

### Building Up From Scratch

The size of a speaker is 52" high 13" wide, and 18" deep. It is not small, but it is still hard to imagine that these loudspeakers weighs 175 pounds. My friends worked hard to help me move them and place them in an appropriate position. Of course, they would not be spiked to the floor before the optimum position was found. At first, I was confused about the heavy weight of the CS6. Then, as my memory came back, my mind was totally clear. Following their outstanding tradition,



*Jim Thiel's tweeter/midrange coaxial array*

# REVIEW

## Thiel CS6

Thiel uses 1-inch MDF to make both the side and back cabinet walls of the cabinets. The cabinet is braced internally and the front baffle is made of 3-inch thick cast concrete. All of these features, along with the high quality drivers, make the CS6 a super loudspeaker.

The CS6 is not an assembly line speaker like many other brands. All the drivers have been developed by Jim Thiel himself and their drivers are entirely built at Thiel. A tweeter/midrange coaxial array shows Jim Thiel's state-of-the-art design. He believes this design approach keeps the sensitive mid and treble frequencies perfectly time coherent for the listener, regardless of where you sit, improving imaging and transient fidelity. Performers and instruments seem to occupy real space in the room, and details in the recording or soundtrack are heard much more clearly. The aluminum diaphragm of the tweeter in the array uses a short voice coil and long magnetic gap, and a large-roll rubber surround suspension helps provide very high output. The midrange driver uses a three-layer sandwich construction diaphragm of aluminum/polystyrene/aluminum. The shallow cone shape not only acts as a "waveguide" for the tweeter's energy, but also reduces diffraction which can occur in conventional coaxials. The three layers increases the diaphragm's rigidity and improves clarity and realism. The double magnets themselves weight 10 pounds.

### Heavyweight Design

The 10-inch woofer is significant. The huge double magnets alone weigh in at 20 pounds. The woofer also uses a short coil/long gap motor system for exceptionally clean, deep bass response to 27Hz with a fraction of the distortion found in most other bass drivers. Jim Thiel also points out that the extremely rigid metal diaphragms reduce unwanted vibration for cleaner

and more open reproduction within its operating range.

As mentioned before, the front baffle is made of 3-inch thick concrete. It is extremely heavy. The cabinet uses this thick concrete baffle to greatly reduce energy storage and unwanted vibration for improved clarity and imaging performance. Internal cabinet bracing, 1-inch thick cabinet walls, and cast magnesium driver chassis further reduce unwanted vibration.

Finally, the midrange driver also has its own non-reflective sub-enclosure to isolate the midrange from interaction with woofer and further reduce diffraction for the best midrange performance.

### Easy-going

I paid special attention in my listening test because the CS6 is second only to the flagship model [CS7.2] in Thiel's line. This test was performed with other system components such as Luxman's D-10 CD player (a single CD player with excellent specifications and rich texture; it is, lately, my favorite), BAT's VK-60 vacuum tube amplifiers, Gryphon LE



*10-inch aluminum diaphragm woofer*

# REVIEW

## Thiel CS6

and Krell FPB 600 amplifiers. Cables used are NBS Signature and Straight Wire's Crescendo. The speaker wires are the recently popular Fantastic Invincible brand .

Fans with foresight liked the CS6 just as soon as it was on the market. The first few shipments sold like hot cakes. Even display models did not last a week. The pair delivered to our studio was a brand new pair. However, even though its initial performance is acceptable to 80% of average customers, it would be obvious that the CS6 significantly improved during the break-in process. It took at least 200 hours to reach perfection, but I still could enjoy the excellent sound performance from the CS6s even though I hate the break-in process. This was such a blessing for a reporter like me.

The CS6 has another great advantage. I was so worried about moving it around for the optimum position because it has a tall and heavy cabinet, however, it was surprisingly easy. I spent only about 30 minutes to get a quite nice setup. When it played, the natural three-dimensional imaging of music and singers seemed to occupy real space. In addition, the mid and high frequencies are very open and wide. This is partly due to the fact that the edges of the front baffles are rounded to prevent diffraction, therefore, the speaker's output travels well out into the room. These large loudspeakers seem to disappear and the image remains steady without any problems. This does not mean that all expensive loudspeakers can do the same thing. Positioning most loudspeakers in the ideal location can be exhausting. Some loudspeakers will hold music within them, no matter how many times you have tried to place them just right. This competitive advantage belongs to the CS6 (the CS2.3, which is lower CS6 two levels, also has the same advantage. It is one of best choices in its price range).

### The Touch of Imaging Performance

It is not difficult to comment on the CS6. When playing music through the CS6s with their metal diaphragm drivers you can feel the luxury, the crystalline clarity, and the surprisingly detailed definition. You just know these loudspeakers are unique. You cannot help but give them your full attention and find more CDs to play so you to hear everything on them.

You listen to the CS6's playing the violin from the song "Singing from the Fishboat at Dusk" by Ngai Shan. Although he not play the famous million dollar master's violin on this version, you were still touched by the texture of music from the friction between the bow and strings. The rise of dust from the friction seemed almost visual. It was full of passion, even though Shan was not at his best here. The sound was clear but not harsh. Your ears were full of music. The location of the solo violin and the piano accompaniment could be imagined in the same way as described in the CD's introduction: "We are there!" The CS6 is truly, a very praiseworthy loudspeaker.



*12-inch passive radiator*

# Thiel CS6

