

Reprinted from

STEREO

STEREO

MAGAZINE FOR HI-FI • HIGH END • MUSIC

Germany

June 1998

On

by

the

Matthias

Mark

Böde

Loudspeakers by

Jim Thiel are well

known for their very

three-dimensional

imaging and coherence.


With his newly developed

coaxial drivers, this American

designer's new CS2.3 has even

exceeded previous performance

in this area.



There are
loudspeakers
and
there are

Loudspeakers. With some, you only deal with professionally as a reviewer. Others you really like. But then there are those where you get so excited that you want to pull complete strangers off the street to hear them so you can share your excitement about this newly found sonic experience.

The brand new Thiel CS2.3 belongs to the last group. Turn it on—and you are convinced! First of all, it is the impetuous, fresh and precise live sound that enters your ears and you can hardly believe that this highly attractive looking Thiel is capable of doing so. The fact is that this slender cabinet with the beautiful veneer finish is a turn-on. A dynamic go-getter.

But it becomes clear very quickly that the CS2.3, in its own special way, caters to sensitive audiophile virtues. The spatiality is right on the mark, the localization of individual voices and instruments can be distinguished precisely from the surroundings and the separa-

tion is nearly perfect. How do these American speakers do it? If you remove the perfectly fitted grille of the CS2.3, you will see the reason why: a phase-correct coaxial driver. The tweeter dome and midrange cone are mounted coaxially and share the same voice coil. Thiel has become somewhat

of a design specialist for coaxial drivers with his popular line of loudspeakers. The compact SCS2 (tested in STEREO 12/97) as well as the more expensive model CS6 use coaxially mounted drivers for different frequency ranges. And each are slightly different. The construction of such a driver in comparison with other solutions is much more extensive and can be tricky.

Maybe, that is the reason why such a solution is not used very often.

Coaxial systems in less professionally executed versions may easily lead to unpleasant diffraction and



As is common with all Thiel loudspeakers, the solid cabinet of the CS2.3 is internally braced. The coaxial driver array has its own separate enclosure.

Jim Thiel designs, and his company manufactures, all drivers, crossovers, and cabinets for Thiel loudspeakers. Here, he is showing a crossover network.



corresponding distortion. Since Thiel and his company develops and manufactures all components for the loudspeakers themselves, they have the ability to better execute his ideas to avoid these problems.

The coaxial driver of the CS2.3 allows for a much improved time and phase response, as well as more balanced frequency

response for all listening positions and distances in comparison with the conventional linear alignments of tweeter and midrange drivers.

Just as with the woofers, the coaxial driver's diaphragm material consists of rigid aluminum, which—according to Thiel—is supposed to be virtually free of unwanted resonances, and we have no reason to doubt it. If not, you would not have this kind open sound.

Just as with all loudspeakers with highly developed drivers, the CS2.3 (by the way its predecessor the CS2.2 was built for seven years with-

The tweeter/midrange coaxial array's diaphragms share the same voice coil, which is a short coil, long gap design.



out any design changes) needs a longer break-in period. At the beginning, the high frequencies were overly extorted and the vocals were crackly. After 20 hours of playing, the sound turned smooth. You can let the system run on full power during the break-in period. The CS2.3 can handle it and even sounds good doing so. If the amplifier can keep up, the CS2.3 can reproduce high levels with remarkable cleanness and stability. The driver's voice coils contribute to this with their short voice coil and long gap motor design, and even with a demanding load, do not leaving their linear area. Another reason for the excellent output capability of the CS2.3 is its strong cabinet; the internal bracing makes it very rigid. The multi-layer front baffle provides a secure driver mounting area. Just as the other floor-standing speakers made by the American, the cabinet of the CS2.3 is sloped back towards the top. This allows Thiel to place the tweeter/midrange and woofer drivers the same distance from the listener. As far as listener's position is concerned, the ideal location should be at least 8 feet from the loudspeakers, otherwise, due to the position of the drivers, the tonal balance may suffer.

For the same reason the CS2.3 should be used only with the front grille in place. I don't know if it is just the fabric in front of the tweeter (which I don't believe) or just the cabinet's edge (which makes more

sense to me) that makes a difference. Without the grille, the Thiel loses some of its perfection. The energy distribution seems to have been moved into the upper mid frequency range and the image seems a bit distorted.



TEST PROFILE

Thiel CS2.3

German Price: DM 9,000/pair (approx. \$6,200 US)

This is the result when accurate sound and audiophile quality feeling come together. The Thiel CS2.3 leaves a lasting impression with its astonishing three-dimensional character and liveliness, as well as its driving, powerful bass. Rated "Excellent."



This would be a pity, because the woofer, which is supported with a foam passive radiator, is agile and is seamlessly connected to the coaxial driver's output. Yes, its drive reminded me of active loudspeaker designs where there is an amplifier in the cabinet for high output bass.

My greatest admiration for the CS2.3 is with the before-mentioned qualities for the spatial resolution. If set up correctly—and Thiel, thank you for your great care with their performance—the loudspeakers completely disappear and the space between and behind the speakers is completely filled. Large orchestras appear exactly as they would in a live performance and become well integrated, just like a jazz trio. The experience is so pleasing and natural that there is no mental effort required to "listen" to it. Even after longer sessions at higher volume levels, my hearing afterwards was fresh, free, and sensible, my attitude happy and exuberant.

Now, I am going out on the street and pull complete strangers in to hear this sound wonder!

LABORATORY REPORT

The amplitude response of the Thiel system is very balanced. The gentle low frequency roll-off is very natural and allows for various room placement. The CS2.3's stable impedance makes it an excellent partner for most amplifiers. The impedance is around 4 ohms and rises slightly in the bass. Its excellent step response indicates one of the reasons for the CS2.3's precise imaging.

Measurements: 11 x 15 x 41.5 inches (w x d x h)

Weight: 70 pounds

Warranty: 10 years