

Introducing the new

THIEL CS1.6

Coherent Source® Loudspeaker

THE CS1.6 IS A TWO-WAY, floor-standing model incorporating several new innovative design techniques that greatly improve performance in a small, floor-standing loudspeaker. The 36-inch tall CS1.6 delivers a much purer and more open upper midrange response coupled with a sweeter and smoother high frequency performance than conventional two-way models. The new CS1.6 also offers a very high 90 dB efficiency to work well with lower amounts of amplifier power.

Innovative Woofer and Tweeter Design

Much of the CS1.6's outstanding performance is the result of its new high output, high efficiency aluminum dome, 1-inch tweeter and the innovative woofer diaphragm/voice coil design. Both drivers incorporate short coil/long gap, copper stabilized motor systems to greatly reduce distortion, employ metal

diaphragms for very uniform frequency response and clarity, and use long

excursion motor systems for high output capability.



CS1.6 tweeter



CS1.6 woofer



- *High performance sound from a small, floor-standing loudspeaker*
- *High 90dB efficiency to improve output capability with lower power amplifiers*
- *Completely time and phase coherent for greater realism*
- *Specially designed, ultra-low distortion woofer and tweeter*
- *Magnetically shielded for placement near video displays*
- *Beautiful cabinetry, available in a variety of finishes, integrates well into any room.*
- *Provides great realism for both music and movies*

Completely Time and Phase Coherent

As with all THIEL loudspeakers, the CS1.6 is completely time and phase coherent for much greater sonic realism. THIEL's Coherent Source® technology achieves the elimination of both time and phase distortions that cause alterations in the reproduced musical waveforms of most loudspeakers. Eliminating these distortions results in enhanced realism, clarity, transparency and immediacy as well as improved imaging and soundstaging in both the lateral and depth perspectives.

Phase coherence is achieved by utilizing a sophisticated first-order electrical crossover system in conjunction with unusually wide bandwidth drivers. Time coherence is achieved by placement of the drivers on a baffle that is sloped at the correct angle to cause the sound energy from each to reach the listener at the same time.

24 Years of Innovation

Since 1977, THIEL has designed and built award-winning and critically acclaimed loudspeakers for the finest home audio and video sound systems. All THIEL speakers are backed with a 10 year warranty.

CS1.6 with optional metal base



High performance from a small, floor-standing loudspeaker

The CS1.6 is a two-way, floor-standing speaker system that incorporates THIEL's latest innovative driver technology, rugged cabinet construction, and phase/time correct Coherent Source® design. All-metal diaphragm, low-distortion drivers are used for outstanding tonal response and the advanced phase correct crossover design greatly improves spatial fidelity and clarity.

Cabinet construction

The compact cabinet is built with a 2-inch thick front baffle and 1-inch thick cabinet walls for extreme rigidity to reduce unwanted vibration, improving clarity and spatial performance. The baffle's rounded edges reduce diffraction effects for improved tonal, spatial, and transient performance, and its sloped front correctly time aligns the tweeter with the woofer.

The unique slotted bass reflex system reduces unwanted port noise and grille loading effects.

Finished in the world's finest woods

The CS1.6 is available in a wide variety of exquisite, real-wood, laminate, and painted cabinet finishes, finely crafted to enhance any home environment.



High output, high efficiency tweeter

The CS1.6 tweeter is a high output, high efficiency aluminum dome unit with long excursion abilities that reduce distortion and increase output capability. The new high frequency driver uses a short coil/long gap motor system design for low distortion, a copper sleeve to stabilize the strength of the magnetic field for reduced distortion, and practically unbreakable lead wires for increased reliability—features all shared with THIEL's more expensive models' tweeters.

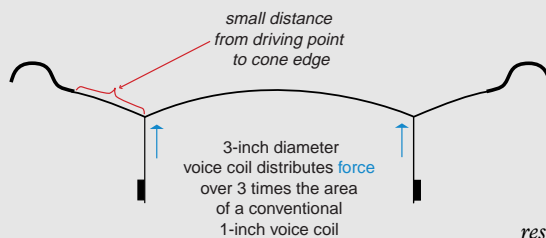
Metal diaphragm, low distortion woofer

The CS1.6's 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. This coil design coupled with the woofer's metal diaphragm increases the cone's stiffness and frequency of unwanted resonances for very clear and open reproduction. The short coil/long gap, copper-stabilized motor system dramatically reduces 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.

CS1.6 Specifications: Bandwidth (–3dB): 48 Hz-20 kHz; Amplitude Response: 50 Hz-20 kHz ± 2 dB; Phase Response: Minimum $\pm 10^\circ$; Sensitivity: 90 dB@2.8 V-1m; Impedance: 4 ohms (3.0 ohms minimum); Recommended Power: 50-300 watts; Size: 9" W x 11.5" D x 35.5" H; Weight: 38 pounds

HOW IT WORKS: The CS1.6's Innovative Woofer/Voice Coil Design

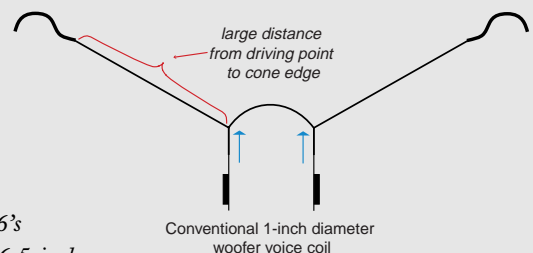
THIEL CS1.6 Voice Coil/Diaphragm Design



Achieving excellent upper midrange performance presents one of the greatest challenges in a two-way speaker configuration. One of the most innovative solutions to improving upper midrange

response is the design of the CS1.6's woofer diaphragm and voice coil. The 6.5-inch woofer's design employs an unusually large, 3-inch

Conventional Woofer Voice Coil/Diaphragm Design



diameter voice coil to drive its aluminum diaphragm. The large diameter places the coil much nearer the edge of the diaphragm and distributes the force over a three-fold greater area of the cone compared with a small coil which concentrates the force at the diaphragm's center. The result is a much stiffer diaphragm that moves unwanted resonances to a much higher frequency for improved upper midrange performance.

THIEL

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