

Specifications

Technical measurements provide a means of objectively determining certain aspects of speaker performance. A good speaker must perform well in all measurable respects and we are very proud of the technical performance of our loudspeakers. However, good specifications alone are not sufficient to guarantee a sonically accurate speaker because measurements only partly describe performance. For this reason, extensive listening plays a major role in our design process. By correlating perceived imperfections with measurements, problems can be identified and corrected, and the results checked again by listening. This painstaking process provides more than good technical performance; it ensures you a lifetime of musical enjoyment.

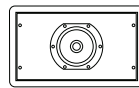
Driver complement and description: THIEL speakers use dynamic drivers to provide a point source radiation pattern, good dispersion over a wide area, excellent dynamic and bass capabilities, and an absence of rearward out-of-phase energy. The performance of THIEL's custom-built drivers are the result of innovative design techniques and the use of unusual materials to reduce cone resonances, lower distortion, and increase output capability.

Frequency Response: The top graph line shows how closely the speaker's tonal accuracy approaches the ideal of equal response at all frequencies. The curves are all very flat with no large deviations. This is also true for both the octave-averaged response (center line) which correlates to the perceived balance, and the averaged 30° off-axis response (lower line) which is correlated to the room's ambient energy.

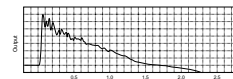
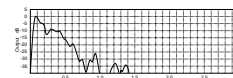
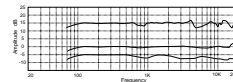
Time Response: Response to an impulse input shows that the speaker's output is very focused in time and reduces very quickly, resulting in very clear and clean reproduction.

Step Response: A step signal, like musical sound, is made up of many frequencies with precise amplitude, time, and phase relationships. THIEL speakers reproduce a step signal extremely well, indicating phase, time and amplitude accuracy with very little ringing in time.

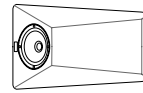
PowerPlane



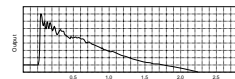
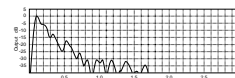
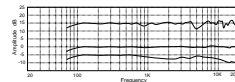
2-way in-wall system with 1" metal dome tweeter coaxially mounted in a 6.5" metal cone, short coil/long gap woofer with copper pole sleeve and cast magnesium chassis; neodymium magnets



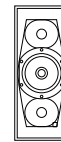
PowerPoint



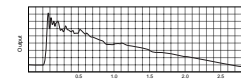
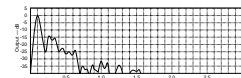
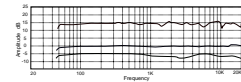
2-way on-wall system with 1" metal dome tweeter coaxially mounted in a 6.5" metal cone, short coil/long gap woofer with copper pole sleeve and cast magnesium chassis; neodymium magnets



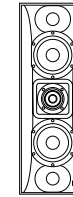
SCS3



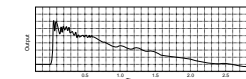
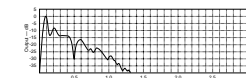
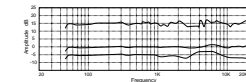
2-way system with 1" metal dome tweeter coaxially mounted in a 6.5" metal cone, short coil/long gap woofer with copper pole sleeve and cast magnesium chassis; dual ported; magnetically shielded



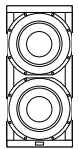
MCS1



3-way system with 1" metal dome tweeter coaxially mounted with 3.5" midrange; two 6.5" metal cone, short coil/long gap woofers with copper pole sleeves, 2.5-pound magnets, and cast magnesium chassis; dual port; magnetically shielded



SW1



Powered subwoofer with two 10" metal cone, short coil/long gap woofers with 2.5" diameter voice coils, copper pole sleeves, 20-pound magnet structures, high excursion suspensions, and cast aluminum chassis.

Amplifier:
 Type: Switching, Class D
 Power: 600 watts, RMS
 Distortion: less than 1% at full rated output.

Crossover (optional):
 Distortion: less than .1% at 3 volt output.

Size: 19" w x 9" d x 1.75" h

Subwoofer Cabinet:
 LFE Response:

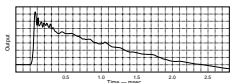
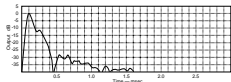
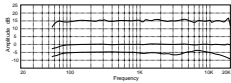
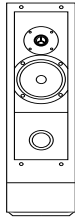
35 Hz–300 Hz, -3dB

Acoustic Output:
 up to 105 dB @20 Hz
 112 dB @30 Hz

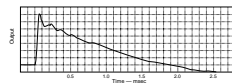
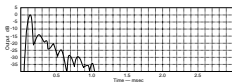
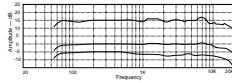
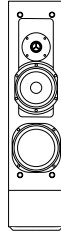
Bandwidth (-3 dB)	75 Hz–20 kHz	75 Hz–20 kHz	46 Hz–22 kHz	47 Hz–23 kHz	10 Hz–300 Hz
Amplitude response	75 Hz–20 kHz ±3 dB	75 Hz–20 kHz ±3 dB	48 Hz–20 kHz ±2 dB	50 Hz–20 kHz ±2 dB	
Phase response	minimum ±10°	minimum ±10°	minimum ±10°	minimum ±10°	
Sensitivity	89 dB @ 2.8 V-1m	89 dB @ 2.8 V-1m	87 dB @ 2.8 V-1m	90 dB @ 2.8 V-1m	1 volt for 100 dB@1m
Impedance	4 ohms (3 minimum)	4 ohms (3 minimum)	4 ohms (3 minimum)	4 ohms (3 minimum)	
Recommended Power	30-200 watts	30-200 watts	30-200 watts	50-300 watts	
Size (W x D x H)	18.75 x 4 x 11.5 inches	19.75 x 5.5 x 12.25 inches	7.5 x 10 x 19 inches	10 x 12.25 x 28.5 inches	10 x 20 x 21 inches
Weight	11 pounds	10 pounds	30 pounds	61 pounds	100 pounds
Warranty	10 years	10 years	10 years	10 years	10 years

PCS

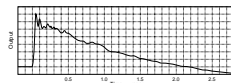
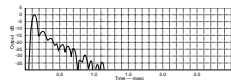
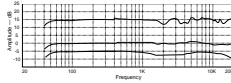
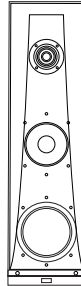
3-way system with 1" dome tweeter coaxially mounted with 3.5" midrange; 6.5" woofer with copper stabilized motor system; all with low distortion, short coil/long gap motor systems, aluminum diaphragms, cast aluminum chassis; ported

**CS.5**

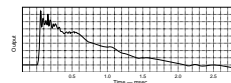
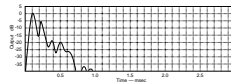
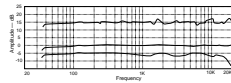
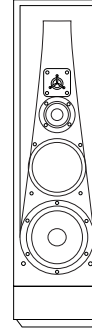
2-way system with 1" metal dome tweeter; 6.5" treated paper cone, short coil/long gap woofer with copper pole sleeve and cast magnesium chassis; ported; magnetically shielded

**CS1.5**

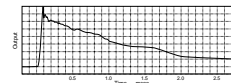
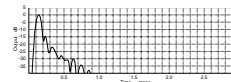
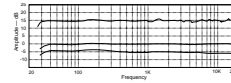
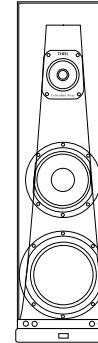
2-way system with 1" metal dome tweeter; 6.5" metal cone, short coil/long gap woofer with copper pole sleeve, double 2.4-pound magnet, and cast magnesium chassis; passive radiator; magnetically shielded

**CS2.3**

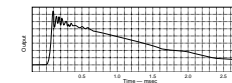
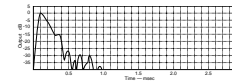
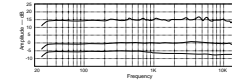
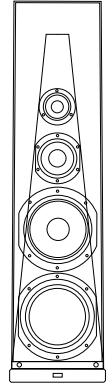
3-way system with 1" dome tweeter coaxially mounted with 3.5" midrange; 8" woofer with copper stabilized motor system; all with low distortion, short coil/long gap motor systems, aluminum diaphragms, cast aluminum chassis; passive radiator

**CS3.6**

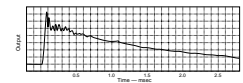
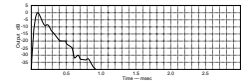
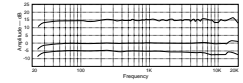
3-way system with 1" metal dome short coil/long gap tweeter; 4.5" double-cone midrange with short coil/long gap magnet system; 10" metal cone woofer with specially shaped pole and heavy copper rings; passive radiator

**CS6**

3-way system with 1" tweeter coaxially mounted in 4" three-layer diaphragm midrange driver; 10" woofer with 10-pound magnet; 12" passive radiator; all drivers with metal diaphragms and short coil/long gap motors; mineral/polymer baffle

**CS7.2**

4-way system with 1" tweeter coaxially mounted in 3" three-layer diaphragm midrange driver; 6.5" lower midrange; 12" woofer; passive radiator; all drivers with metal diaphragms and short coil/long gap motors; cast mineral/polymer composite baffle



55 Hz–23 kHz

57 Hz–18 kHz ±2 dB

minimum ±10°

87 dB @ 2.8 V-1m

4 ohms (3.3 minimum)

50-300 watts

7.25 x 11.5 x 19 inches

30 pounds

10 years

55 Hz–20 kHz

55 Hz–20 kHz ±3 dB

minimum ±10°

87 dB @ 2.8 V-1m

4 ohms (3.2 minimum)

30-150 watts

8 x 11 x 31.25 inches

35 pounds

10 years

42 Hz–22 kHz

42 Hz–22 kHz ±3 dB

minimum ±10°

86 dB @ 2.8 V-1m

4 ohms (3 minimum)

50-150 watts

8.5 x 11 x 33 inches

42 pounds

10 years

35 Hz–23 kHz

37 Hz–20 kHz ±2 dB

minimum ±5°

87 dB @ 2.8 V-1m

4 ohms (3 minimum)

100-400 watts

11 x 15 x 41.5 inches

70 pounds

10 years

27 Hz–22 kHz

29 Hz–20 kHz ±1.5 dB

minimum ±10°

86 dB @ 2.8 V-1m

4 ohms (2.5 minimum)

100-400 watts

12.5 x 17 x 48.5 inches

107 pounds

10 years

27 Hz–25 kHz

29 Hz–18 kHz ±2 dB

minimum ±10°

86 dB @ 2.8 V-1m

4 ohms (2.4 minimum)

100-500 watts

13 x 18.5 x 50 inches

156 pounds

10 years

23 Hz–20 kHz

25 Hz–17 kHz ±1.5 dB

minimum ±10°

86 dB @ 2.8 V-1m

4 ohms (3 minimum)

100-500 watts

14 x 19 x 55 inches

168 pounds

10 years