



### Uncompromised Performance - Unequaled Versatility

The CS66 and CS99 ceiling loudspeakers unite advanced technology and application-driven engineering to bring sound closer to the ultimate reference point: reality.

Patented CoEntrant M/H transducers and unique innovations such as our Complex Conic horns and Quad Source low frequency design combine to deliver natural sounding music and intelligible speech.

Wherever audiences and operators demand superior performance Renkus-Heinz loudspeakers are the choice for transparent, reference quality performance.

### Applications

- Virtually any overhead application where directional control is a critical issue and outstanding sonic performance is required.
- Distributed overhead loudspeaker systems in convention centers, ballrooms, transportation terminals and exhibit halls
- Hotel lobbies and meeting rooms.

### Integrating Innovations for Breakthrough Performance

CS series ceiling loudspeakers integrate several physical solutions to longstanding acoustical problems. Complex Conic horns provide superior pattern control and more natural reproduction than conventional horns. Patented CoEntrant topology creates a new type of wideband, low distortion point source transducer. Quad Source design provides exceptional low frequency control in both planes, reducing spillover between loudspeakers. The result of integrating these new ideas is a system that redefines reference quality in large scale overhead distributed systems.

### Patented CoEntrant Topology

Integrates the acoustic output of an 8" cone and a 1" compression driver into a wideband, high power true point source. The result is a revolutionary new type of transducer that outperforms ordinary compression drivers in every dimension: power handling, frequency response, distortion, reliability, etc.

### Advanced Complex Conic Horn Design

Designed around the spherical expansion of the acoustic pressure wave, Complex Conic horns provide constant beamwidth/directivity without the problems of conventional rectangular horns. The circular mouth has no corners to cause high frequency "feathering" and the resulting distortion. With extended pattern bandwidth, lower distortion and minimal coloration, Complex Conic horns work better and sound far more natural than ordinary horns.

## CS Series

### CS66

60° by 60°

### CS99

90° by 90°

### CEILING LOUDSPEAKERS

Quad 6 1/2" Lows  
CoEntrant M/H Drivers  
Passive 3-Way Loudspeakers



CS99  
shown without metal grille



CS66  
shown without metal grille

- **Compact 3-Way Designs, Outstanding Performance**  
Accurate full-range high-level performance; 70 Hz to 17 kHz, 128 dB Peak SPL on CS66.
- **Quad Source Low Frequency Design**  
Provides superior low frequency directionality in both horizontal and vertical planes.
- **Exclusive Complex Conic Design**  
Provides constant beamwidth/directivity without the problems of conventional rectangular horns.
- **Patented CoEntrant Topology (U.S. Pat. 5,526,456)**  
Integrates the acoustic output of an 8" cone and a 1" HF compression driver into a wideband, true point source with inherent time -alignment.
- **Choice of Coverage Patterns**  
Tightly controlled 60° by 60° and 90° by 90° coverage patterns are ideally suited to overhead distributed loudspeaker systems requiring pattern control not available from traditional 12 and 15" coaxial loudspeakers.

## TECHNICAL INFORMATION

**Sensitivity:**  
**CS66 (1W/1m):** LF -97 dB, MF -101 dB, HF -109 dB  
**CS99 (1W/1m):** LF -94 dB, MF -97 dB, HF -102 dB

**Max SPL (Pgm/Peak):**

	CS66	CS99
LF:	126/129 dB	123/126 dB
MF:	125/128 dB	121/124 dB
HF:	128/129 dB	121/122 dB

**Dispersion:**  
**CS66:** 60° H by 60° V  
**CS99:** 90° H by 90° V

**Freq. Response:**  
**CS66:** 70 Hz to 17 kHz  
**CS99:** 65 Hz to 17 kHz

**Mid/High Drivers:** CDT-1K; 1" HF (75 W Pgm) & 8" MF (300 W Pgm)

**LF Drivers:** Four SSL6.5.6 woofers; 1.5" VC, carbon fiber cone; 800 W Pgm (400 W RMS) total @ 4 Ohms

**Crossover Points:** 350 Hz & 1500 Hz

**Power:** 800 Watts program at 4 Ohms  
**Enclosure:** Multi-ply hardwood, perforated metal grille

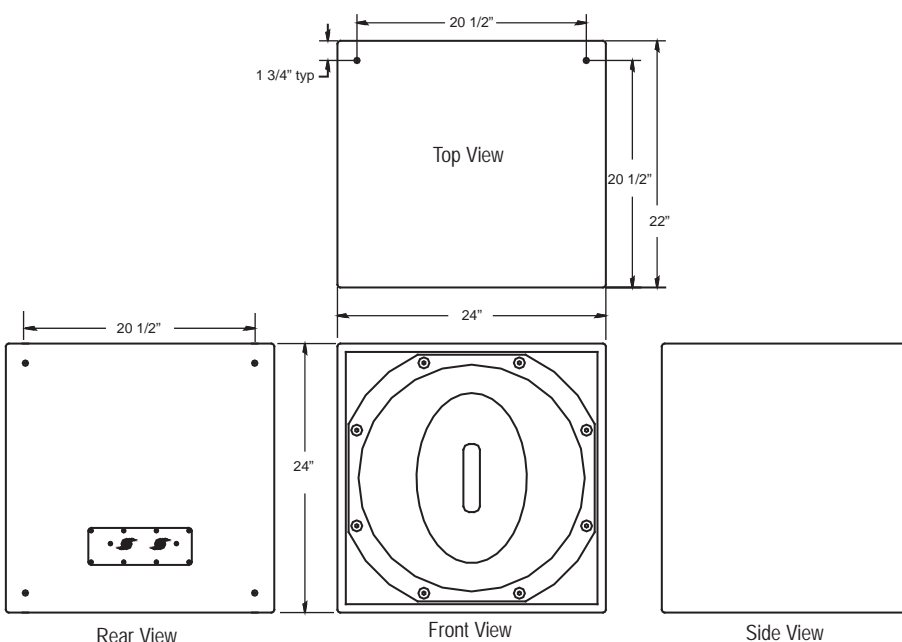
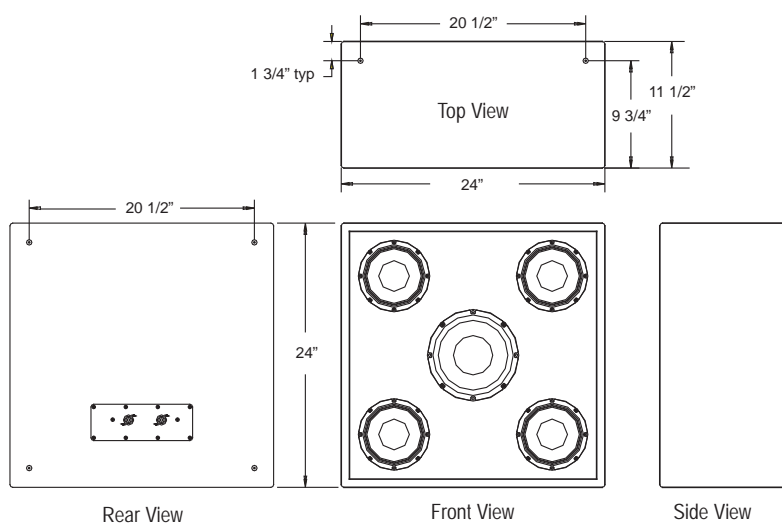
**Connectors:** Neutrik 4-pin SpeakOn connectors or screw terminals

**Finish:** Black, white or custom color paint, Natural (unfinished)

**Hardware:** 8-point 1/4-20 universal mtg hardware

**Dimensions:**  
**CS66:** 24" H x 24" W x 22" D  
 (61 cm x 61 cm x 55.9 cm)  
**CS99:** 24" H x 24" W x 11 1/2" D  
 (61 cm x 61 cm x 29.2 cm)

**Weight**  
**CS66:** 105 Lbs. (47.6 Kg) net  
**CS99:** 85 Lbs (38.6Kg) net



### DIMENSIONAL INFORMATION

The UMH (Universal Mounting Hardware) attachment points have 1/2-24 threads and are positioned 1 3/4" from the edges unless otherwise indicated.

The enclosures are shown without their metal grilles.

For more detailed dimensional information, please refer to the 2D and 3D drawing files on our website, [www.renkus-heinz.com](http://www.renkus-heinz.com)