RENKUS-HEINZ

Coherent Topology Systems

CT5212K SERIES

ACOUSTICALLY COHERENT TOPOLOGIES

Are integrated in high performance systems for applications that demand 135 dB peak SPL and reference quality output

COENTRANT TOPOLOGY (U.S. Pat. 5,526,456)

Integrates a midrange cone and HF compression driver into a true point source with inherent time-alignment

COMPLEX CONIC: THE NEXT STEP IN HORN EVOLUTION

Complex Conic horns provide superior pattern control and more natural sound; may be rotated 90°

TRAP "TRUE ARRAY PRINCIPLE" CONFIGURATION

Assures coincident acoustical centers and minimal comb filtering in tight packed arrays

DOUBLET SOURCE DIRECTIVITY

Provides effective low frequency pattern control in the vertical plane

WIDE CHOICE OF HORN COVERAGE PATTERNS

90° x 40°, 60° x 40°, 60° x 60° and 40° x 40° patterns are suitable for applications from medium-throw single enclosures to tight-packed long throw clusters

Integrating Innovations for Breakthrough Performance

CT Series systems integrate Ralph Heinz's latest breakthroughs to achieve unprecedented performance. Because acoustics is a physical phenomenon, these advanced systems incorporate physical solutions to longstanding acoustical problems. TRue Array Principle (TRAP) enclosures ensure optimum coverage in tight-packed arrays. 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. Doublet design provides exceptional low frequency control in the vertical plane, reducing spillover beneath the loudspeaker. The result of integrating these new ideas is a system that redefines reference quality in medium- to large-scale sound reinforcement.

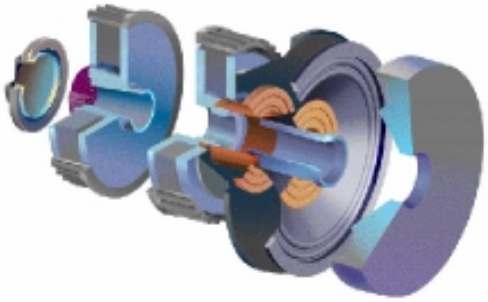
Advanced Complex Conic Horn Design

Designed around the spherical expansion of the acoustic pressure wave, Complex Conic horns provide constant beamwidth/directivity without the problems of conventional rectangular horns. These unique waveguides eliminate low frequency "pattern flip". 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.

Because they have no large planar surfaces, Complex Conic horns are less prone to in-band resonances than ordinary horns. To eliminate resonance-induced coloration, CT Series horns are molded from UHMW Polyurethane.

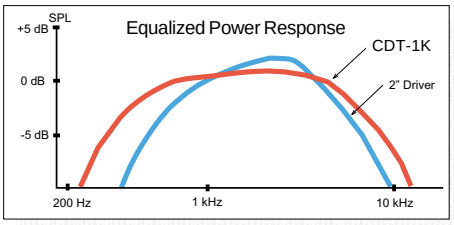
Patented CoEntrant Topology

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. reliabilitv. etc.



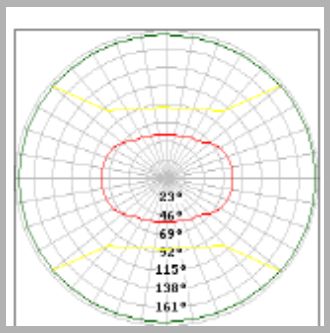
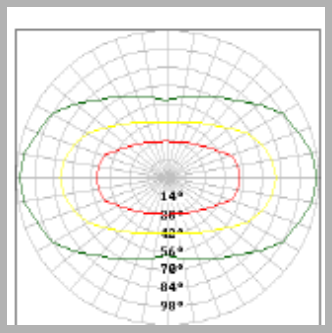
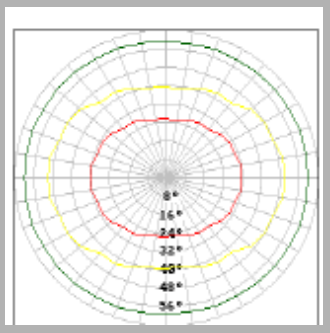
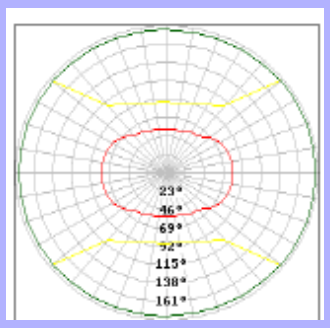
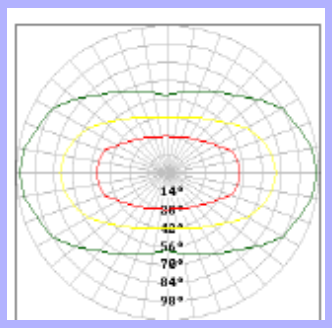
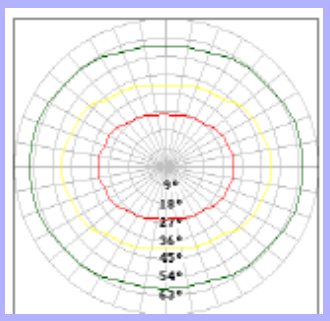
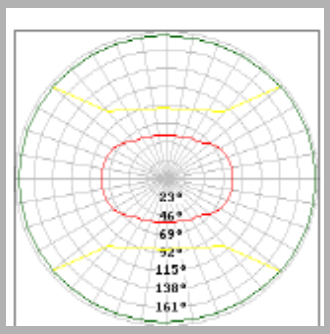
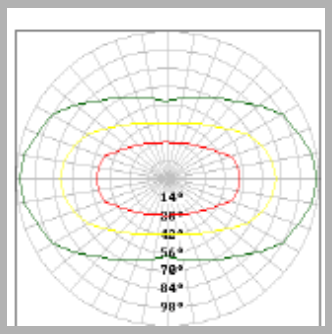
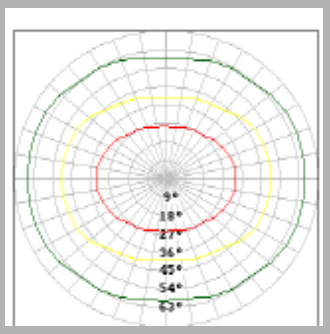
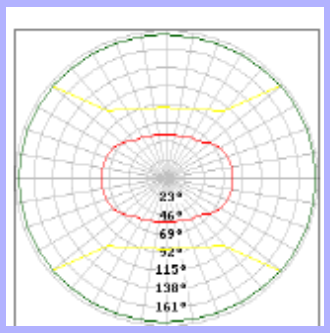
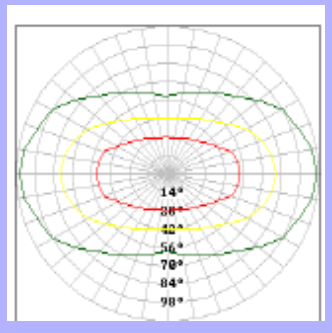
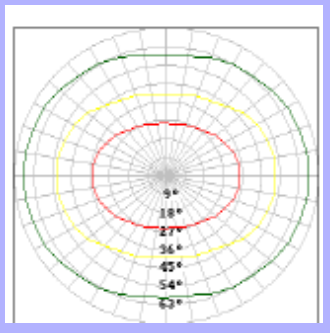
Cutaway view showing the unique Coentrant design of the CDT-1K

Equalized Power Response Chart clearly shows the superior bandwidth of the CDT-1K

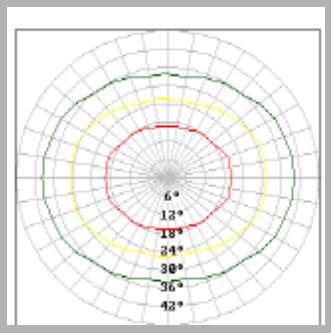
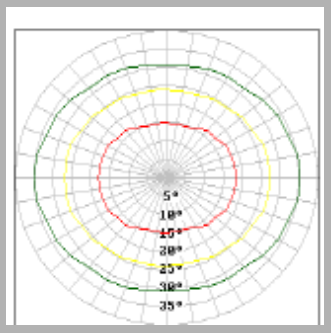
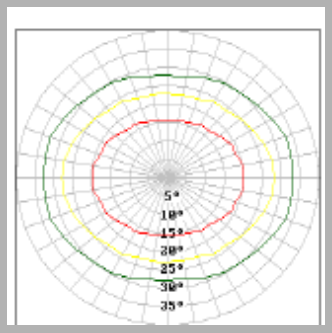
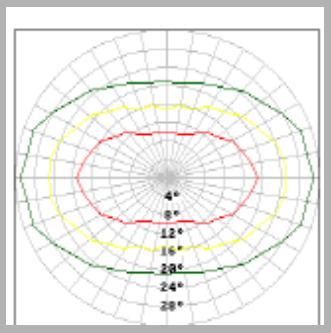
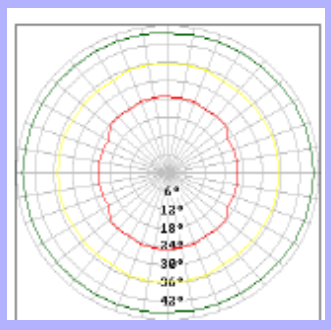
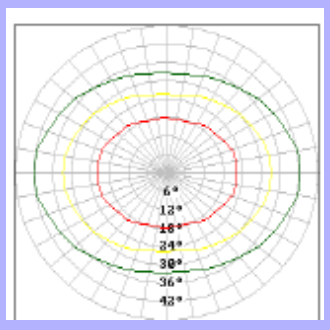
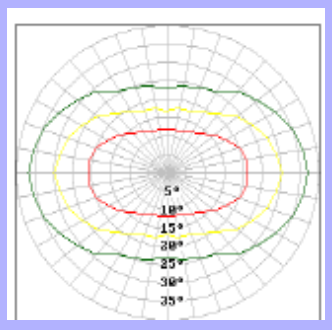
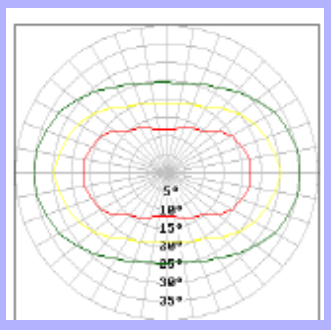
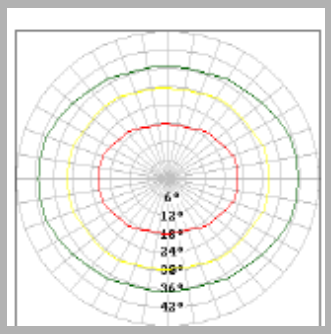
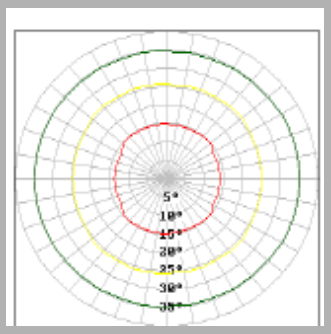
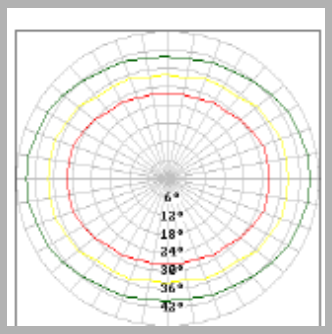
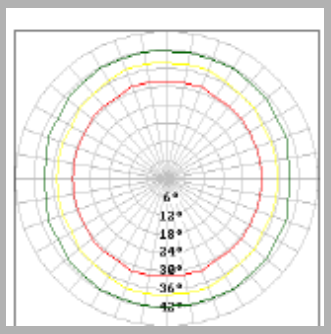
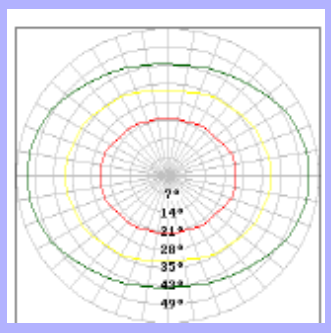
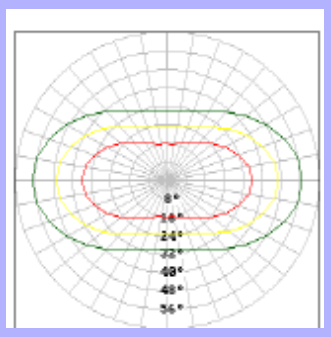
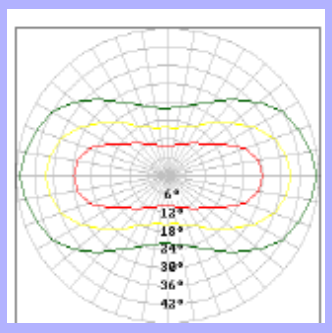
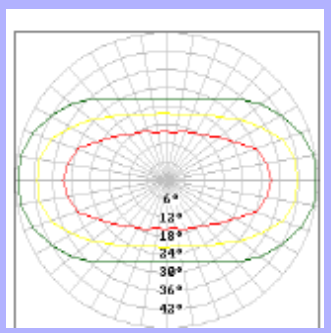


TRAP (TRue Array Principle) Operation

The Complex Conic waveguides used in these loudspeakers can also be easily rotated 90° within the cabinet. This converts the /64K and /94K loudspeakers into true TRAP modules that combine smoothly in arrays to drastically reduce comb filtering effects. The /44K's symmetrical 40° pattern is TRAP-able without rotation.

	Red = -3 dB	Yellow = -6 dB	Green = -9 dB
	125 Hz	*250 Hz*	*500 Hz*
CT5212 /44K			
CT5212 /64K			
CT5212 /66K			
CT5212 /94K			

Red = -3 dB **Yellow = -6 dB** **Green = -9 dB**

1000 Hz	*2000 Hz*	*4000 Hz*	*8000 Hz*
			
			
			
			

TECHNICAL SPECIFICATIONS
All specifications are with loudspeaker specific processing

SENSITIVITY : 101 dB @ (1w/1m)

MAXIMUM SPL: 132 dB program, 135 dB peak

DISPERSION:
CT5212/44K: 40° H by 40° V
CT5212/64K: 60° H by 40° V
CT5212/66K: 60° H by 60° V
CT5212/94K: 90° H by 40° V

FREQUENCY RESPONSE: 50 Hz to 18 kHz

MID/HIGH DRIVER: CDT-1K CoEntrant w/2" throat, 1" HF & 8" mids; 300 W pgm into 8 Ohms. Passive Mid/High crossover.

LOW FREQUENCY DRIVER: Two SSL12-7K 12" woofers; 4" VC, weather resistant cone. 1400 W pgm @ 4 Ohms (total)

CROSSOVER POINTS: 350 & 1500 Hz

ENCLOSURE MATERIALS: Multi-ply hardwood with perforated metal grille

CONNECTOR OPTIONS: Neutrik NL4MPR or screw terminals

FINISH OPTIONS: Black carpet, black or white paint, Natural (unfinished)
Weather resistant (add suffix WR)

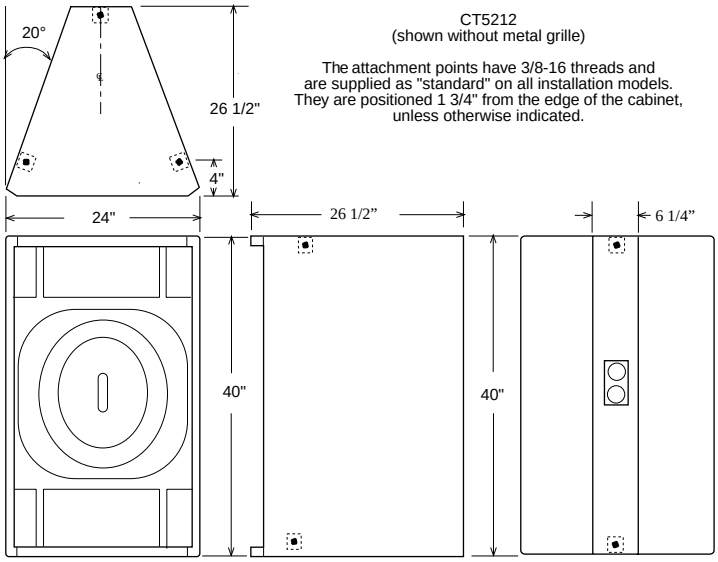
HARDWARE OPTIONS: Handles,
12-point 3/8-16 univ. mtg. hdw,

DIMENSIONS: 40" H x 24" W x 26 1/2" D
(101.6 cm x 61 cm x 67.3 cm)

NET WEIGHT: 142 Lbs (64.4 Kg) net

ASSOCIATED ITEMS: R-H System Specific power amplifiers and Loudspeaker Specific Processor modules. X series controllers, D26 digital controller

DIMENSIONAL INFORMATION



CT5212
(shown without metal grille)

The attachment points have 3/8-16 threads and are supplied as "standard" on all installation models. They are positioned 1 3/4" from the edge of the cabinet, unless otherwise indicated.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The loudspeaker shall be a Renkus-Heinz ( ) or approved equal full-range, 3-way loudspeaker system utilizing Complex Conic horn technology. Loudspeakers having conventional constant beamwidth or conical horns, or systems with separate midrange and high frequency transducers, will not be considered equal.

The loudspeaker system shall consist of dual, heavy duty 12" woofers and a CoEntrant mid/high driver coupled to a single complex conic horn. The 12" woofers shall have a 4" VC, heavy-duty fiber cone and 700 Watt power rating. The mid/high driver shall include a 1" HF driver and 8" weather resistant treated paper cone mid-frequency driver having a 300 Watt at 8 Ohms power rating. The enclosure shall be a 40° trapezoidal cabinet constructed from multi-ply hardwood. It shall include a built-in mid/high crossover network.

The loudspeaker shall provide closely controlled ( ) horizontal dispersion and ( ) vertical coverage. Sensitivity shall be no less than 101dB @ 1w,1m. Maximum program SPL shall be at least 132 dB. The frequency response shall be 50 Hz to 18 kHz.

The finish shall be (black carpet) (black paint) (white paint) (natural) (weather resistant). Connectors shall be (4-pin Neutrik)(screw terminals). The loudspeaker shall be no larger than 40" high, 24" wide and 26 1/2" deep. It shall weigh no more than 142 Lbs. A matching perforated metal grille shall be included. The enclosure shall be equipped with (universal mounting hardware providing a minimum of twelve 3/8-16 attachment points).

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