



RENKUS-HEINZ

Coherent Topology Systems

CT5K SERIES



Integrating Innovations for Breakthrough Performance

CT Series systems integrate Ralph Heinz' 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. 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.

ACOUSTICALLY COHERENT TOPOLOGIES

are integrated in high performance systems for applications that demand 130 dB peak SPL and reference quality

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

CHOICE OF WIDE PATTERN BANDWIDTH HORNS

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.

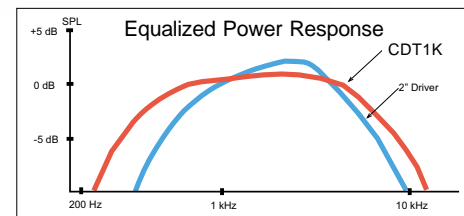
Patented CoEntrant Topology

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.



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 CT5/64K and CT5/94K loudspeakers into true TRAP modules that combine smoothly in arrays to drastically reduce comb filtering effects. The CT5/44K's symmetrical 40° pattern is TRAP-able without rotation.

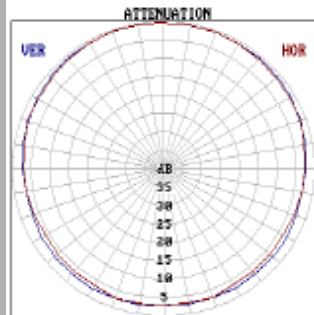
125 Hz

250 Hz

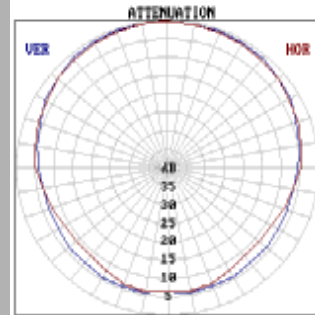
500 Hz

CT5/44K

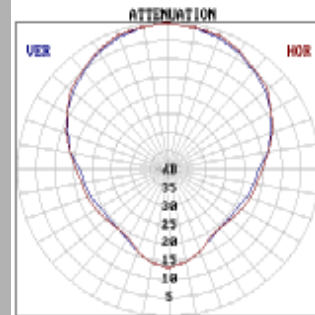
Lap: CT5/44
Frequency : 125Hz
Directivity: 2.1dB (Q = 1.6)
Sensitivity: 90.0dB P = 000 W



Lap: CT5/44
Frequency : 250Hz
Directivity: 4.1dB (Q = 2.6)
Sensitivity: 90.0dB P = 000 W

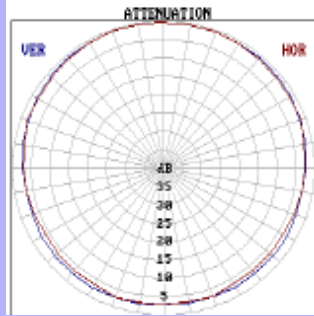


Lap: CT5/44
Frequency : 500Hz
Directivity: 9.1dB (Q = 8.1)
Sensitivity: 90.0dB P = 000 W

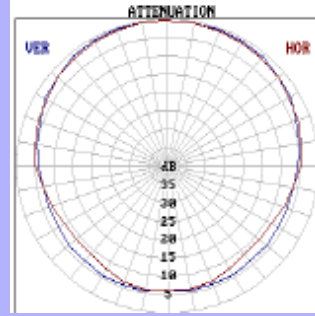


CT5/64K

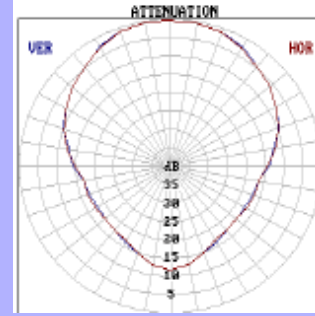
Lap: CT5/64
Frequency : 125Hz
Directivity: 2.1dB (Q = 1.6)
Sensitivity: 90.0dB P = 000 W



Lap: CT5/64
Frequency : 250Hz
Directivity: 4.1dB (Q = 2.6)
Sensitivity: 90.0dB P = 000 W

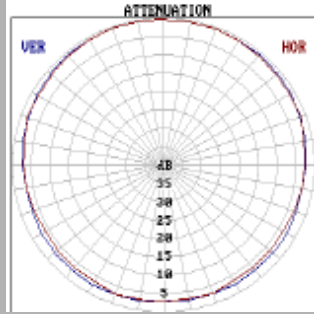


Lap: CT5/64
Frequency : 500Hz
Directivity: 8.5dB (Q = 7.1)
Sensitivity: 90.0dB P = 000 W

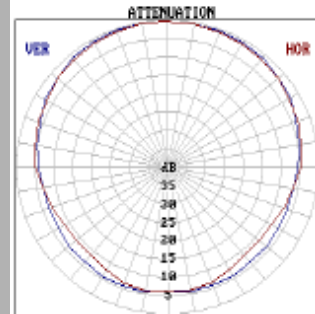


CT5/66K

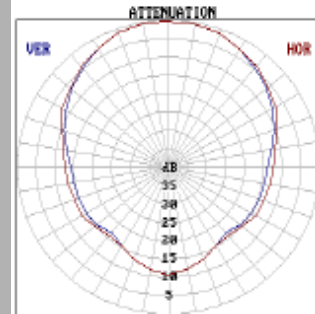
Lap: CT5/66
Frequency : 125Hz
Directivity: 2.1dB (Q = 1.6)
Sensitivity: 90.0dB P = 000 W



Lap: CT5/66
Frequency : 250Hz
Directivity: 4.1dB (Q = 2.6)
Sensitivity: 90.0dB P = 000 W

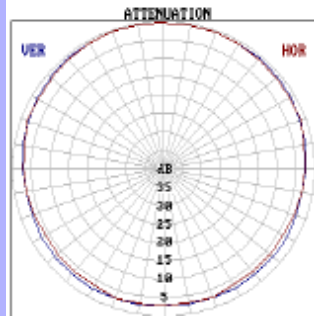


Lap: CT5/66
Frequency : 500Hz
Directivity: 8.3dB (Q = 6.8)
Sensitivity: 90.0dB P = 000 W

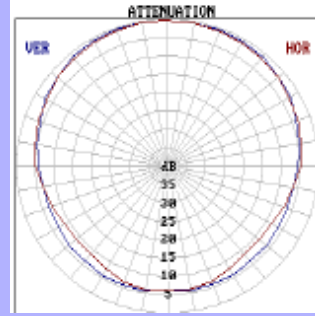


CT5/94K

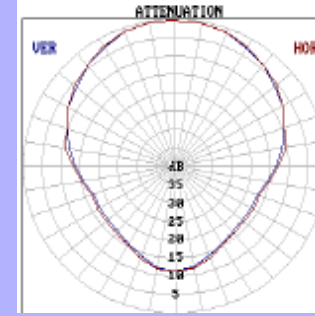
Lap: CT5/94
Frequency : 125Hz
Directivity: 2.1dB (Q = 1.6)
Sensitivity: 90.0dB P = 000 W



Lap: CT5/94
Frequency : 250Hz
Directivity: 4.1dB (Q = 2.6)
Sensitivity: 90.0dB P = 000 W



Lap: CT5/94
Frequency : 500Hz
Directivity: 8.2dB (Q = 6.6)
Sensitivity: 90.0dB P = 000 W



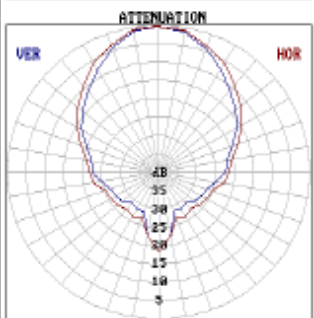
1000 Hz

2000 Hz

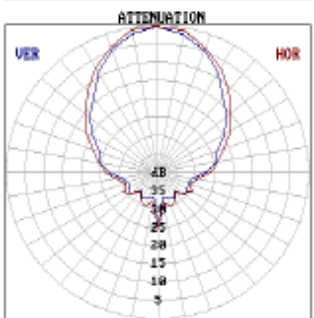
4000 Hz

8000 Hz

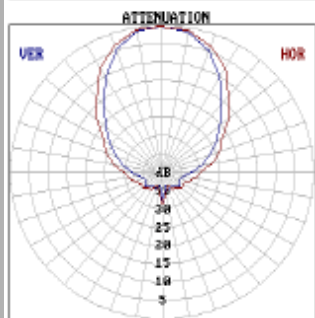
Lap: CTS/44
Frequency : 1000Hz
Directivity: 12.9dB (Q = 19.5)
Sensitivity: 102.0dB P = 300 W



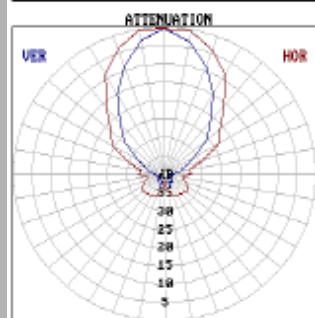
Lap: CTS/44
Frequency : 2000Hz
Directivity: 14.0dB (Q = 25.1)
Sensitivity: 102.0dB P = 300 W



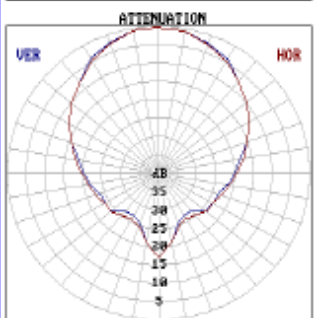
Lap: CTS/44
Frequency : 4000Hz
Directivity: 14.4dB (Q = 27.5)
Sensitivity: 107.0dB P = 00 W



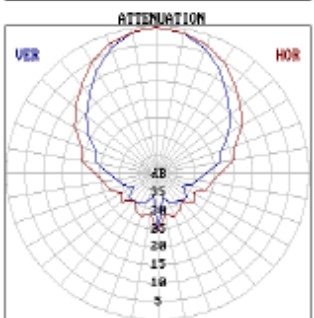
Lap: CTS/44
Frequency : 8000Hz
Directivity: 16.1dB (Q = 40.7)
Sensitivity: 107.0dB P = 00 W



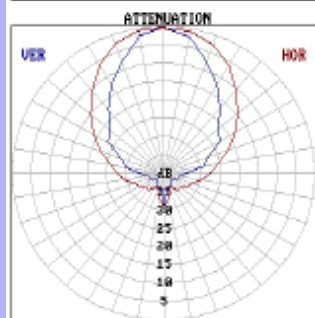
Lap: CTS/64
Frequency : 1000Hz
Directivity: 11.2dB (Q = 13.2)
Sensitivity: 102.0dB P = 300 W



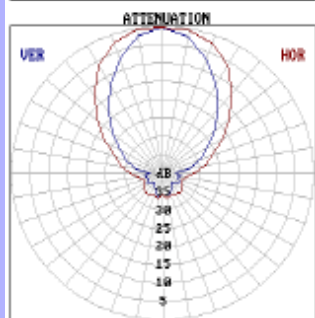
Lap: CTS/64
Frequency : 2000Hz
Directivity: 12.9dB (Q = 19.5)
Sensitivity: 102.0dB P = 300 W



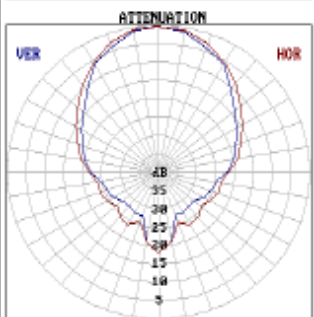
Lap: CTS/64
Frequency : 4000Hz
Directivity: 14.7dB (Q = 29.5)
Sensitivity: 107.0dB P = 00 W



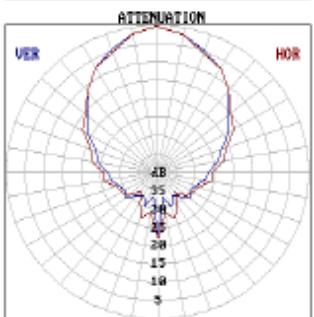
Lap: CTS/64
Frequency : 8000Hz
Directivity: 14.7dB (Q = 29.5)
Sensitivity: 107.0dB P = 00 W



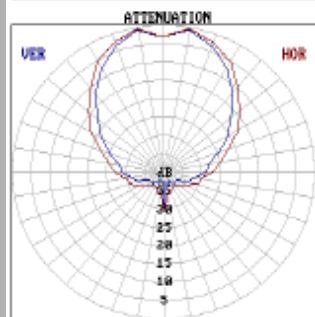
Lap: CTS/66
Frequency : 1000Hz
Directivity: 12.5dB (Q = 17.8)
Sensitivity: 101.0dB P = 300 W



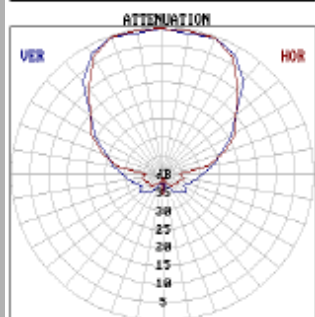
Lap: CTS/66
Frequency : 2000Hz
Directivity: 14.0dB (Q = 25.1)
Sensitivity: 101.0dB P = 300 W



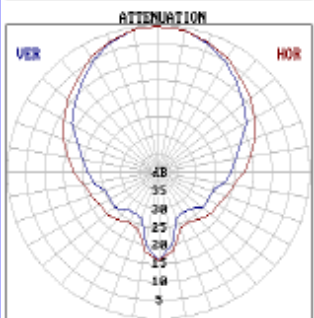
Lap: CTS/66
Frequency : 4000Hz
Directivity: 10.1dB (Q = 10.2)
Sensitivity: 106.0dB P = 00 W



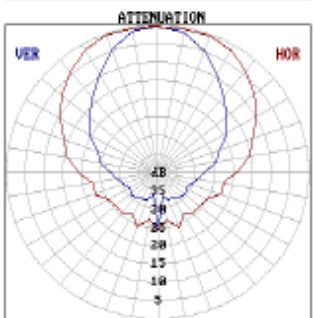
Lap: CTS/66
Frequency : 8000Hz
Directivity: 11.0dB (Q = 12.6)
Sensitivity: 106.0dB P = 00 W



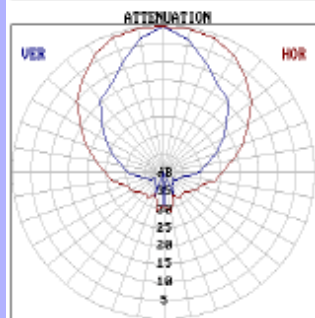
Lap: CTS/94
Frequency : 1000Hz
Directivity: 11.1dB (Q = 12.9)
Sensitivity: 101.0dB P = 300 W



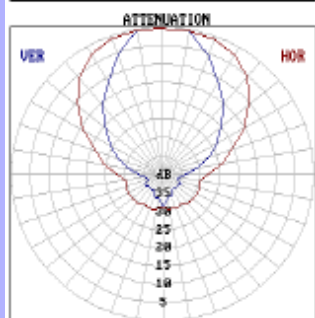
Lap: CTS/94
Frequency : 2000Hz
Directivity: 11.4dB (Q = 13.8)
Sensitivity: 101.0dB P = 300 W



Lap: CTS/94
Frequency : 4000Hz
Directivity: 13.3dB (Q = 21.4)
Sensitivity: 106.0dB P = 00 W



Lap: CTS/94
Frequency : 8000Hz
Directivity: 12.5dB (Q = 17.8)
Sensitivity: 106.0dB P = 00 W

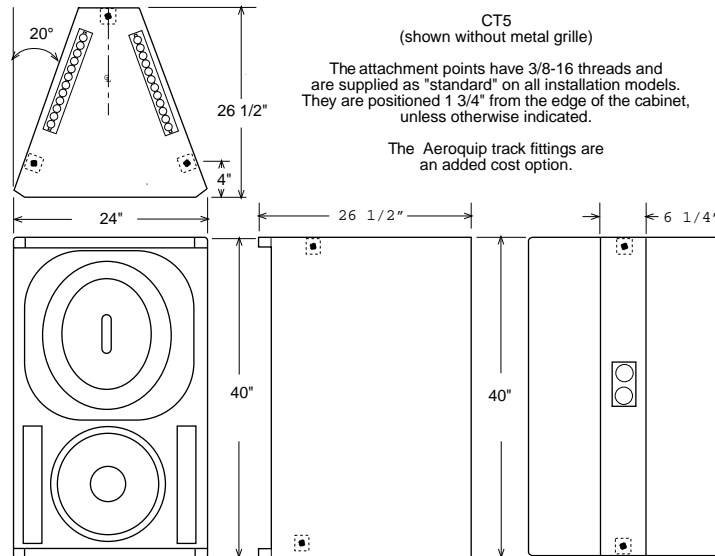


TECHNICAL SPECIFICATIONS

All specifications are with loudspeaker specific processing

SENSITIVITY:	98 dB @ 1w/1m	CROSSOVER POINTS:	600 & 1500 Hz
MAXIMUM SPL:	128 dB pgm on CT5/44K & CT5/64K 127 dB pgm on CT5/66K & CT5/94K	ENCLOSURE MATERIALS:	Multi-ply hardwood with perforated metal grille
DISPERSION:	CT5/44K: 40° H by 40° V CT5/64K: 60° H by 40° V CT5/66K: 60° H by 60° V CT5/94K: 90° H by 40° V	CONNECTOR OPTIONS:	Neutrik NL4MPR or screw terminals
FREQUENCY RESPONSE:	35 Hz to 18 kHz	FINISH OPTIONS:	Black carpet, black or white paint, Natural (unfinished) Weather resistant (add suffix WR)
MID/HIGH DRIVER:	CDT-1K CoEntrant w/2" throat, 1" HF & 8" mids; 300 W pgm into 8 Ohms. Passive M/H crossover.	HARDWARE OPTIONS:	Handles, 12-point 3/8-16 univ. mtg. hdw, FT-010 Aeroquip fly-track
LOW FREQUENCY DRIVER:	SSL15-6K 15" woofer; 4" VC, weather resistant cone. 800 W pgm @ 8 Ohms.	DIMENSIONS:	40" H x 24" W x 26 1/2" D (101.6 cm x 61 cm x 67.3 cm)
		NET WEIGHT:	140 Lbs (63.5 Kg) net
		ASSOCIATED ITEMS:	R-H System Specific power amplifiers and Loudspeaker Specific Processor modules. X series controllers, D26 digital controller

DIMENSIONAL INFORMATION



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 a heavy duty 15" woofer and a CoEntrant mid/high driver coupled to a single complex conic horn. The 15" woofer shall have a 4" VC, heavy-duty fiber cone and 800 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 () dB @ 1w,1m. Maximum program SPL shall be at least () dB. The frequency response shall be 35 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 140 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) (top and bottom mounted Aeroquip fly track).



19201 Cook Street, Foothill Ranch, CA 92610-3501

Tel: 949-588-9997 Fax: 949-588-9514 E-mail: Sales@renkus-heinz.com Web: www.rh.com

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