# RENKUS-HEINZ

# CA/CX Series

**CX121** — Non-Powered

**CA121-A** — Powered, Analog

**CA121-RN** — RHAON Empowered

**CA121-RD1** — RHAON & Dante

**CA121-RD** — RHAON & Dante Redundant

## 12" LF + 1" HF Two-way, Complex Conic Loudspeaker

### Superb Performance, Exceptional Value

Drawing from years of experience and industry leading technologies like Complex Conic waveguides, CA/CX loudspeakers are designed to meet the needs of today's Installed-AV professionals, with a broad range of systems to provide effective solutions for every sound reinforcement challenge at competitive price points.

The new C Series loudspeakers incorporate the newest generation of Complex Conic horns, with the latest drivers to provide clean, natural sound and tight pattern control. Unlike conventional loudspeaker designs, Complex Conic horns provide consistent beamwidth over a wider frequency range, with the natural, transparent sound that Renkus-Heinz is known for. And as with all Renkus-Heinz products, C Series loudspeakers are backed by Renkus-Heinz's renowned worldwide customer support.

### Applications

- The CX/CA121 is a 12" Complex Conic loudspeaker perfect for any application where, consistent directivity and great sonic performance are required.

- Main loudspeaker in HOW, Auditorium or club applications.

- Large, high quality distributed systems in stadiums, gyms or arenas.

- Side fill or delays in larger, performance systems

- Monitoring and fold back applications for large platforms or stages

### Appealing Design, Sizable Performance

The CX/CA121 was developed for applications needing consistent directivity and great sonics from an attractive loudspeaker—at an attractive price.

It features a 1.75" voice coil high frequency compression driver with a 1" throat coupled to a large Complex Conic horn. The patented Complex Conic horn eliminates high frequency beaming and provides wide angle coverage out to 20 kHz and beyond. The high-efficiency 12" woofer produces a very strong low end. Together these deliver a surprisingly high 128 dB peak output level from 60 Hz to 20 kHz.

### Designed In Flexibility

Twelve M10 Universal Mounting Points and 10 mm u-bracket mounting plates make installation easy and clean. The Complex Conic horn is field rotatable allowing the installer the flexibility of installing the loudspeaker either vertically or horizontally while maintaining the dispersion necessary for the project.

The CX/CA121 and it's (optional) matching U-Bracket are available in either white or black paint allowing them to bend into most environments.

Available externally powered or with four flavors of built-in amplification; RHAON II networking, monitoring and control, and Dante digital audio, the CX/CA121 brings new levels of versatility to compact loudspeakers.



- **Complex Conic Horn**

  Consistent directivity, superior sonics and field rotatable. Large size insures consistent directivity through the crossover.

- **High Power & Strong Bass**

  60 Hz to 20 kHz response and 128 dB, peak SPL.

- **Right-sized**

  Just 27 x 14-3/8 x 14-1/4 inches / 686 x 365 x 362 mm.

- **Optional U-Bracket Mount**

  Allows easy horizontal mounting and aiming.

- **Available SA1250 Amplifier**

  SA1250 amplifier offers high output, full protection limiting, analog, and optional AES and Dante inputs.

## CA/CX121 Specifications

| | CX121 | CA121-A | CA121-RN | CA121-RD1 & RD |
|---|---|---|---|---|
| **Connectors:** | 2 x Speakon® NL4<br>Four-place terminal strip, all paralleled | 2 x XLR-3, In & Loop-out | 2 x XLR-3, In & Loop-out, Analog and AES<br>2 x RJ45, primary & secondary | |
| **Sensitivity:** | 97 dB (1W/1m) | 1.0 volt for rated output, analog | | |
| **Power Handling:** | Passive: 350 W AES @ 8 ohms,<br>Bi-amp: 350 W AES @ 8 ohms, LF<br>60 W AES @ 8 ohms, HF | See SA1250 amplifier specs below | | |
| **Crossover Frequency:** | 1.6 kHz, passive, bi-amp selectable | 1.6 kHz active electronic | | |
| **Max. SPL:** | 128 dB (peak, whole space) | 127 dB (peak, whole space) | | |
| **Weight:** | 45 lbs./20.4 kg | | | |
| **Frequency Response:** | 60 Hz to 20 kHz (+/- 3dB) | | | |
| **Dispersion** | 90° horizontal x 40° vertical, Rotatable Complex Conic Horn | | | |
| **Enclosure:** | 11 ply birch plywood | | | |
| **Grille:** | 16 GA powder-coated, plated steel | | | |
| **Transducers:** | Woofer: SSL12-26; High Frequency Driver: SSD1747-8; Replacement HF Diaphragm CD1747-8 | | | |
| **Finish:** | Black (RAL9010) or White (RAL9011) paint | | | |
| **Mounting:** | 12 x M10 UMH points; 2 x M10 u-bracket nutplate. Optional: UBRKT/CT121B (black), UBRKT/CT121W (white) | | | |
| **Dimensions:** | 14-$\frac{3}{8}$" w x 27" h x 14-$\frac{1}{4}$" d<br>365 mm w x 686 mm h x 362 mm d | | | |

## SA1250 Amplifier Specifications

| | SA1250-A | SA1250-RN | SA1250-RD1 (Ultimo) | SA1250-RD (Brooklyn II) |
|---|---|---|---|---|
| **Audio Connections:** | 2 x XLR-3, In & Loop-out, Analog | 2 x XLR-3, In & Loop-out, Analog and AES | 2 x XLR-3, In & Loop-out, Analog and AES<br>1 x RJ45 Dante Ethernet | 2 x XLR-3, In & Loop-out, Analog and AES<br>2 x RJ45 Dante Primary & Secondary Ethernet |
| **Latency:** | 6.25 ms | 6.25 ms | 6.25 ms Analog & AES<br>6.25 ms + Dante transport latency | 6.25 ms Analog & AES<br>6.25 ms + Dante transport latency |
| **User DSP:** | None | Eight fully parametric filters, high and low shelf, high and low pass filters, delay to 340 ms. | | |
| **Software:** | None | RHAON II | RHAON II and Dante Controller | |
| **Max. Input Level:** | +22 dBu, Analog | +22 dBu, Analog, 0 dBFS digital | +22 dBu, Analog, 0 dBFS digital | +22 dBu, Analog, 0 dBFS digital |
| **Network Connections:** | None | 2 x RJ45, Looping Ethernet/RHAON | 2 x RJ45, DANTE/Looping Ethernet/RHAON (Note: Dante and RHAON share a single Ethernet network.) | 2 x RJ45 Dante Primary & Secondary Ethernet/RHAON (Note: Dante and RHAON share a single or redundant Ethernet network.) |
| **Power Output:** | LF= 1000 watts, @ 8 ohms / HF = 250 watts @ 8 ohms. Multi-band peak and thermal limiting on both channels protects the drivers. | | | |
| **Mains Voltage:** | 100-240 volts, 50/60 Hz auto-switching | | | |
| **Power Consumption:** | Idle: 300 mW. 1/8 power: 240 W (onset of limiting) 1/3 power: 550 W (hard limiting) | | | |
| **Power Connector:** | Neutrik powerCON TRUE-1 | | | |
| **Temperature Limits** | Max.: 140º F/60º C, with no direct sun exposure; Min.: -22º F/-30º C; leave unit on to keep interior warm below 32º F/0º C. | | | |

*Note: All analog inputs and outputs comply with AES Standard 48-2005 on interconnecting, grounding and shielding.*



= Aproximate Center of Gravity
CX Dim A = 6-7/8 in. (175 mm)
CA Dim A = 6-7/8 in. (175 mm)
CX Dim B = 13 in. (330 mm)
CA Dim B = 13 in. (330 mm)

M10 Attachment points, 12 places