



## 8CX Coaxial Passive Point Source



### APPLICATIONS

Front Fill  
Cinema / Theater  
FX Speakers  
Convention Centers  
Educational Facilities  
Night Clubs

### FEATURES

Coaxial, Horn-loaded  
Two-Way Passive  
LF Device: 8 in. (203.2mm)  
HF Device:  
Exit: 1 in. (25.4mm)  
Voice Coil Diam: 1.75 in. (44.5mm)  
Coverage Options:  
70° H x 70° V | 100° H x 100° V  
Integral Rigging Points  
& Pole Mount  
Durable Polyurea Coating  
NL4 SpeakON Connectors  
& 2-Pos. Terminal Strip

### GENERAL DESCRIPTION

Clair Brothers 8CX loudspeaker has been designed as a hi-fidelity, small-format point source speaker. The frequency response is full range, 88Hz–20,000Hz, allowing for use for speech and music reproduction. The 8CX features the latest in neodymium coaxial transducer technology with a pair of options in horizontal dispersion angles. A 100° conic horn is available and best suited for near field coverage applications and a 70° conic constant directivity horn is also available for applications requiring tighter coverage and increased projection. The dispersion specification is noted in the following unique product ID's: 8CX-P-100, 8CX-P-70.

The 8CX features a SpeakON In/thru connectors as well as a single two-position terminal strip. An internal passive crossover network provides third-order filtering allowing for exceptionally clear output with remarkable coherence through the crossover region. The 8CX is well-suited for front fill applications with full PA systems just as it is equally well equipped to stand alone as a main speaker in a smaller environment.

#### Mechanical & Accessories:

Like its series companions, the 5CX and 5CB, the 8CX offers a seemingly unlimited number of ways to rig and/or mount utilizing a family of mounting accessories. The 8CX has (12) integral mounting points (M10 x 1.5 thread) and an integrated standard pole mount. The

accessories include yoke mounting brackets for both vertical and horizontal mounting positions as well as tilt adaptors to enable pan and tilt in either configuration. The brackets also have a companion pole mount socket to allow unrestrained pan and tilt when used as a pole mount speaker. Additional accessories include: threaded stud plates, pipe clamp mounts, chain rigging points, VESA tilt mount and array mode top-bar plates.

The 8CX is well-suited for down-firing applications, such as large convention centers or high ceiling commercial spaces. In particular, the pair of mounting points available on each panel of the cabinet are spaced at the same spacing as slots on standard Unistrut hardware, allowing for exceptional compatibility in commercial integration projects. Please contact Clair Brothers for more information regarding coverage area planning and simulation.

### OPTIONS & ACCESSORIES

Vertical and Horizontal Yoke Mounting Brackets w/  
Tilt Adaptors  
Threaded Stud Plates (M10, 3/8-16, 1/2-13)  
Pipe Clamp Mount  
Chain Rigging Points  
VESA Tilt Mount  
Array Mode Top-Bar Plates

Call or e-mail Clair Brothers for more information on available options.  
(717-665-4000) e-mail: [sales@clairbrothers.com](mailto:sales@clairbrothers.com)

# 8CX Coaxial Passive Point Source



## AUDIO SPECIFICATIONS

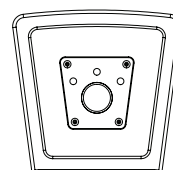
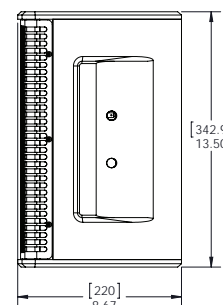
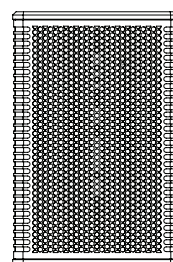
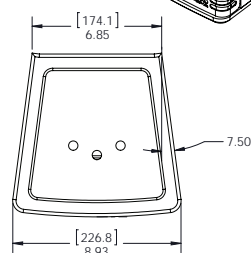
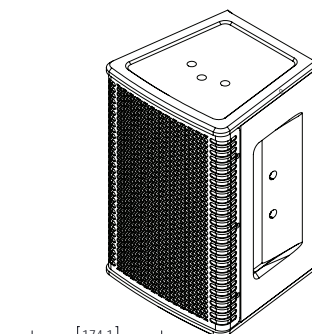
|                                |          |   |
|--------------------------------|----------|---|
| Loudspeaker Type               | Passive  | Coaxial Point Source  |
| Frequency Response             |          | 100Hz-18kHz (+/- 2dB)   88Hz-20kHz (-10dB)                              |
| Recommended Power Amplifier    |          | 250–500W @ 8 Ohms   |
| Sensitivity (1 Watt @ 1 Meter) | LF       | 97 dB SPL   |
|                                | HF       | 106 dB SPL  |
|                                | Passive  | 99 dB SPL   |
| Maximum Output                 |          | 128 dB SPL  |
| Drivers                        | LF       | (1) 8 in. (203.2mm)   |
|                                | HF       | (1) Exit 1 in. (25.4mm); VC diam. 1.75 in. (44.5mm)                     |
| Nominal Impedance              |          | 8 Ohms  |
| Power Handling                 |          | 250W Program / 500W Peak  |
| Dispersion                     | Options: | 100° H x 100° V (Conic)   8CX-P-100<br>70° H x 70° V (Conic)   8CX-P-70 |
| Input Connection               |          | (2) NL4 SpeakON Connectors<br>& (1) 2-Position Terminal Strip           |

## MECHANICAL SPECIFICATIONS

|                 |                         |                                  |
|-----------------|-------------------------|----------------------------------|
| Enclosure       | Shell                   | 15mm Baltic Birch                |
|                 | Finish                  | Black Polyurea Coating           |
| Rigging         | Integral Rigging Points | (12) M10 x 1.5 Thread            |
|                 | Pole Mount              | Integral 0° Pole Mount Socket    |
| Grille          |                         | Powder Coated Steel, Foam Backed |
| Dimensions      | Height                  | 13.50 in. (342.9mm)              |
|                 | Width                   | 8.93 in. (226.8mm)               |
|                 | Depth                   | 8.67 in. (220.2mm)               |
| Weight          |                         | 18 lbs. (8.2kg)                  |
| Shipping Weight |                         | 21 lbs. (9.5kg)                  |

Note: All wattage figures are calculated using the rated nominal impedance.

Clair Brothers products are designed to perform optimally by utilizing factory recommended proprietary DSP settings.



| 8CX Terminal Strip Config. |     |
|----------------------------|-----|
| Terminal Color             | Use |
| Black                      | (-) |
| Red                        | (+) |

| 8CX NL4 Pin Configuration |       |
|---------------------------|-------|
| Pin                       | Use   |
| 1- / 1+                   | - / + |
| 2- / 2+                   | - / + |

## ARCHITECT AND ENGINEER SPECIFICATIONS

The loudspeaker system shall be a two-way passive, coaxial point source loudspeaker cabinet featuring a total of (2) drivers. The front of the enclosure shall be fitted with a perforated, powder coated steel grille backed with foam. The system shall have an amplitude response of 100Hz to 18,000 Hz (+/- 2 dB). The loudspeaker system shall be loaded with one woofer; this low frequency driver shall be 8" nominal diameter with 2" voice coil diameter capable of handling 250W of power as per AES Standard. The high frequency section shall consist of a 1.75" voice coil diameter compression driver mounted coaxially on a 100°H x 100°V (or 70°H x 70°V) horn. The high frequency horn shall provide complete pattern control over the bandwidth. The high frequency horn shall be a constant directivity conic profile. The driver is capable of handling 50 watts (1 kHz to 10 kHz) of pink noise with a 6 dB crest factor for two hours (as per AES-1984 and ANSI S4.26-1984 standards). The enclosure shall be trapezoidal in geometry, constructed with 15mm, 11-ply Baltic birch and covered with a durable black polyurea coating. The dimensions shall be 13.50" high, 8.93" wide, and 8.67" deep. The 8CX enclosure shall incorporate twelve (12) integral rigging points, each with M10 x 1.5 thread for mounting bracket attachment. The passive system weight shall be 18 lbs (8.2kg). The loudspeaker system shall be the Clair Brothers 8CX-P-100 or 8CX-P-70 loudspeaker.

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Due to constant research, development and improvements all specifications are subject to change without notice.

