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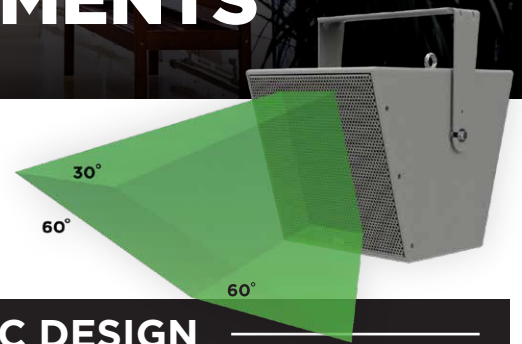
CCA-80 AISLE LOUDSPEAKER

The Ultimate Loudspeaker Solution
for Long, Narrow Spaces

A LOUDSPEAKER OPTIMIZED FOR CHALLENGING ENVIRONMENTS

Warehouses, airports, retailers, and other large facilities often feature long, narrow spaces like aisles and concourses that present unique acoustic challenges. Until now, high ceilings, extensive floor plans, and reflective surfaces have made effective loudspeaker installations both difficult and costly.

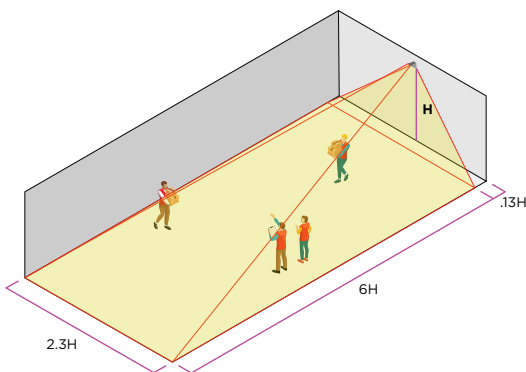
The Commercial CCA-80 aisle loudspeaker is specifically engineered to address these issues, delivering exceptional speech intelligibility and clear background music in these acoustically challenging spaces.



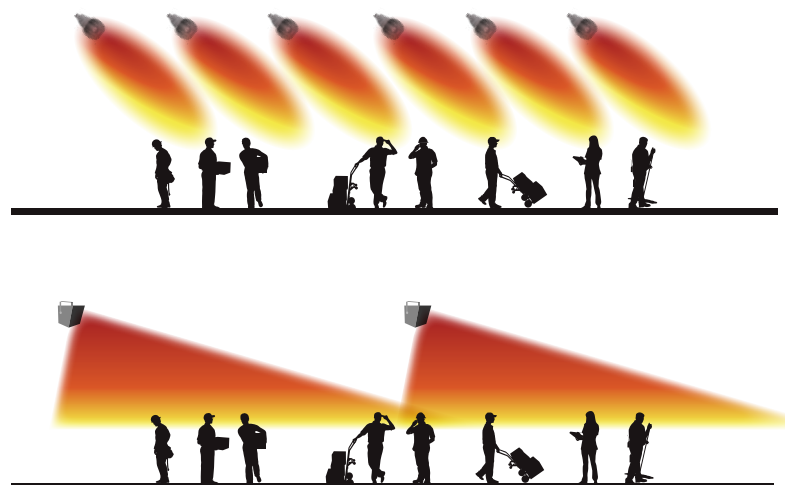
ASYMMETRIC DESIGN

The CCA-80 is designed with an asymmetric horizontal dispersion pattern: a 30-degree dispersion at the top of the horn gradually widens to 60 degrees at the bottom. Unlike standard horn style loudspeakers, the asymmetric dispersion projects a rectangular pattern, allowing for controlled sound coverage over longer distances and providing consistent sound levels from directly beneath the loudspeaker to the end of its throw distance.

ASYMMETRY MEANS CONSTANT COVERAGE



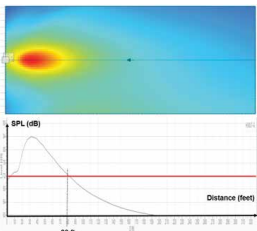
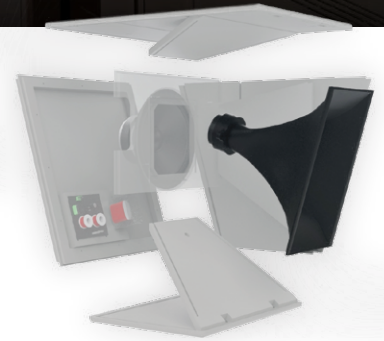
The asymmetric horizontal dispersion pattern provides consistent sound levels from directly beneath the loudspeaker to the end of its throw distance. Audio is heard clearly — at consistent SPL — over a distance up to six times the loudspeaker's mounting height — three times the distance of typical point-source loudspeakers.



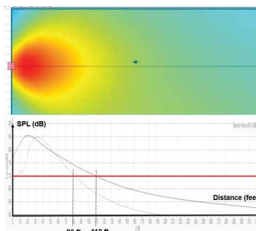
The long throw and even coverage of the CCA-80 minimizes coverage gaps, helping reduce the total number of loudspeakers needed per installation.

LONG-THROW, AMPLITUDE SHADED HORN

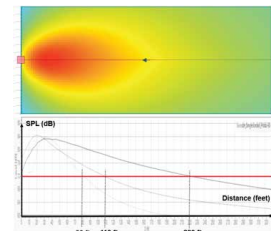
The upper portion of the CCA-80 horn is designed for longer throw distances, resulting in twice the throw distance of any installed loudspeaker, while SPL is reduced directly below the loudspeaker.



Typical horn lacks throw distance



Competitor asymmetrical speakers aren't optimized for aisles

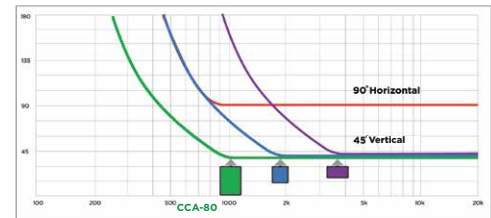
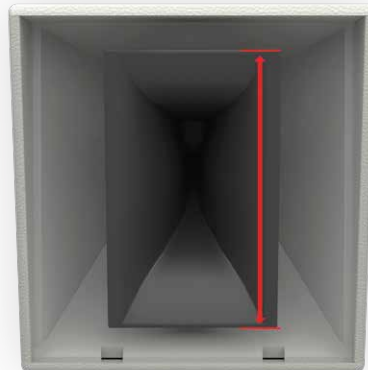


The CCA-80 is designed to cover long, reverberant spaces

LARGE HORN MOUTH FOR GREATER INTELLIGIBILITY

Typical paging horns have short, wide mouths which cannot support their stated nominal coverage angle through the entire speech band. The widening dispersion allows sound to bounce off additional surfaces, reducing intelligibility.

The CCA-80 features a large horn mouth, which allows pattern control through the critical voice range.





EVEN MORE BENEFITS

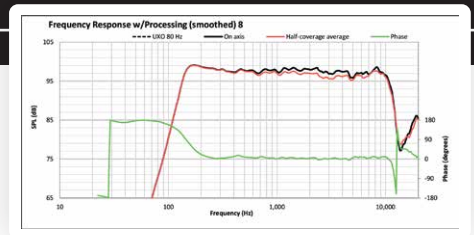
TRIAxIAL DESIGN

Concentric low, mid, and high frequency drivers deliver maximum coherency, making the CCA-80 an excellent choice for full-range music playback as well as clear voice paging.



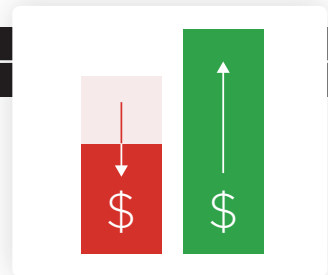
FULL RANGE AUDIO

Seamless audio is delivered from 110 Hz to 13 kHz, ensuring superior music reproduction and voice clarity while eliminating crossover distortion and providing precise imaging, coherent sound staging, and natural tonal balance.



REDUCED SYSTEM COST

The CCA-80's optimized coverage pattern and superior 6:1 projection ratio means fewer speakers are needed to cover large areas compared to traditional paging systems, reducing installation complexity and costs.



EFFICIENT DESIGN

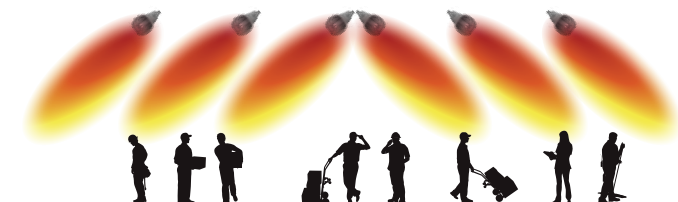
The single, passive input — set at either low impedance, 70 volts, or 100 volts — runs so efficiently that large, costly amplifiers are not required to drive the loudspeaker, further reducing system installation costs.



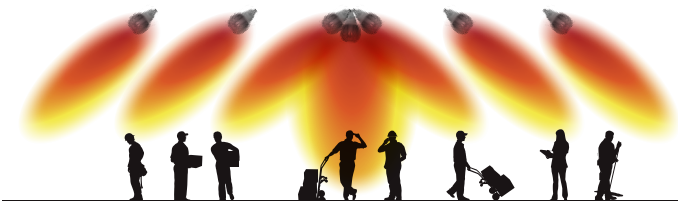


CCA-80D: THE ANSWER TO THE CENTER AISLE GAP

The CCA-80D consists of dual CCA-80 speakers mounted back to back, eliminating the center aisle gap, reducing the number of mounting positions, amplifier channels, and delay alignment channels required. A single-point dual mounting bracket is shipped with the CCA-80D.



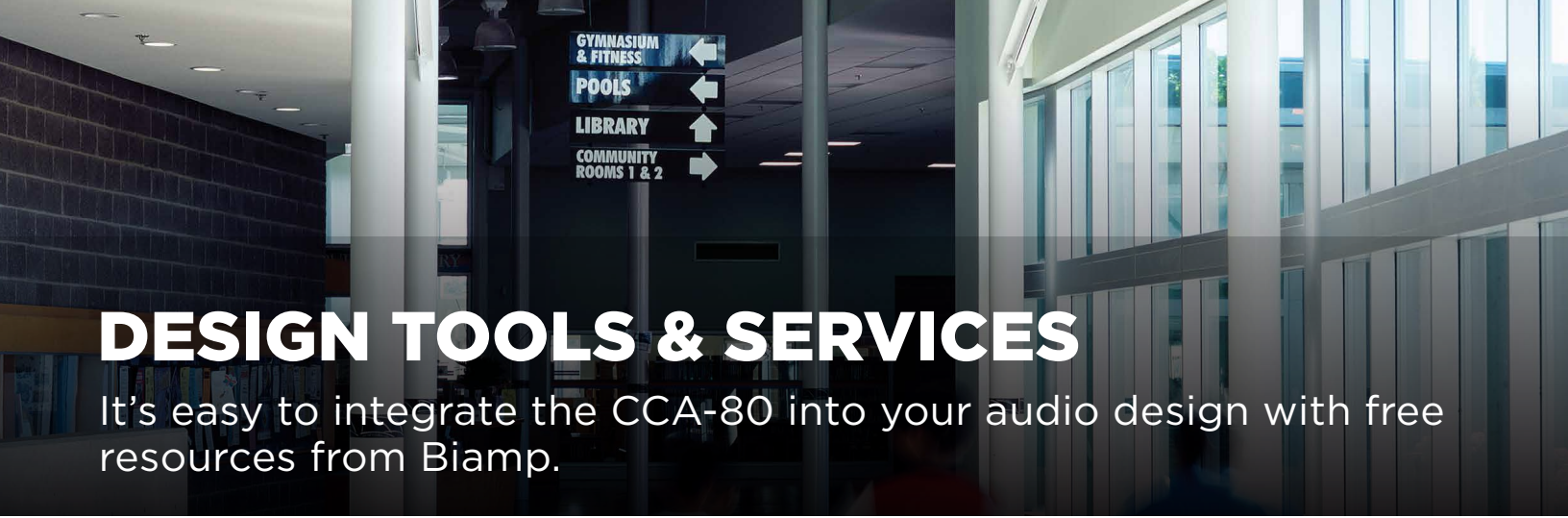
A typical installation leaves a large coverage gap.



Simply adding an additional loudspeaker makes things worse by creating overpowering SPL and interference that degrades intelligibility.



Built-in down-tilt PLUS the “soft edges” of the CCA-80D pattern sum coherently beneath the speaker to fill in previous coverage gap and provide exceptional intelligibility.



DESIGN TOOLS & SERVICES

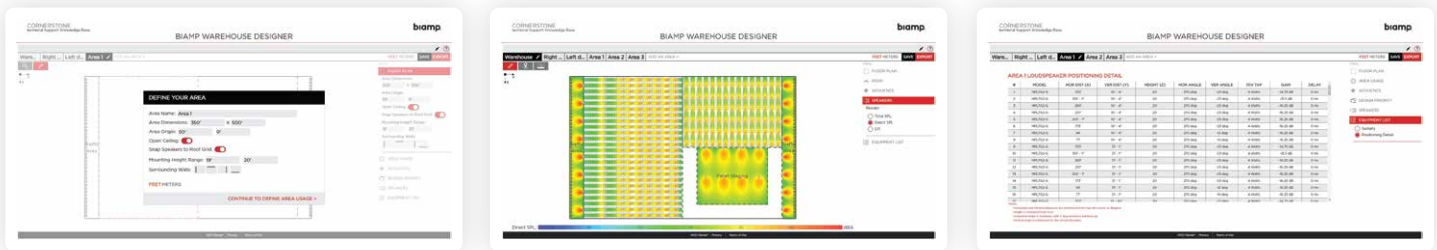
It's easy to integrate the CCA-80 into your audio design with free resources from Biamp.

WAREHOUSE DESIGNER

With a suite of free online resources that redefines project-planning simplicity, Warehouse Designer gives our AV integrator partners the easiest solution for planning loudspeaker deployments in all types of warehouses, and other open floorplan facilities, regardless of size and complexity.

Answer just a few basic questions using the intuitive user interface and let Warehouse Designer do the rest. This streamlined tool enables any user to rapidly simulate audio coverage and generate precise product specifications and cost estimates across multiple warehouse configurations, regardless of prior experience with loudspeaker design or facility acoustics. This new tool helps even those with limited loudspeaker expertise quickly determine estimated product and budgetary needs across multiple warehouse scenarios. It's the fastest and easiest way to create initial project estimates for refinement by the Biamp design team.

Get started at https://design-tools.biamp.com/warehouse_designer



LOUDSPEAKER DESIGN SERVICES

Leverage the expertise of Biamp's Loudspeaker Solutions Applications Engineers, skilled technical experts that provide EASE sound system design for any application, including sports venues, houses of worship, auditoria, theme parks, worship facilities and convention centers. Team members provide technical support and product suggestions to Biamp dealers, distributors, and end users worldwide.

— TECHNICAL SPECIFICATIONS —

Operating Mode	Passive, selectable low-impedance or 70 V / 100 V operation		
Operating Environment	Indoor		
Operating Range (-10 dB) ²	110 Hz to 13 kHz		
Constant Coverage Pattern	The horizontal coverage varies as a function of the vertical angle to provide consistent SPL		
Transducers	LF: (1) 8" (200 mm) with 1.2" (31 mm) CCAW voice coil MF: (1) 2.6" (65 mm) diaphragm coaxial midrange compression driver HF: (1) 1.3" (33 mm) diaphragm coaxial high-frequency driver		
Sensitivity ³	@ 1 m 98 dB (1 W, 8 Ω)	98 dB (2.83 V)	98 dB (1 W, 8 Ω)
Nominal Continuous Power Handling at Rated Impedance ⁴	Passive	20 V (50 W, 8 Ω Rated Impedance)	
Nominal Maximum SPL ⁵ (Processed)	Passive	Continuous 114 dB	Peak 126 dB
Rated Continuous Voltage ⁶	Passive	20.0 V (26 dBV)	
Rated Maximum SPL ⁷ (Processed)	Passive	Continuous 114 dB	Peak 126 dB
Transformer / Autoformer	70 V: 50 W, 25 W, 12.5 W, 6.25 W 3.125 W; 100 V: 50 W, 25 W, 12.5 W, 6.25 W		
Crossover	950 Hz, 3.1 kHz crossovers		
Required Processing	100 Hz, 12 dB / oct. Butterworth high pass filter; DSP preset for ALC and Voltera amplifiers		
Recommended Amplifiers	Passive	50 W - 100 W, 8 Ω (20 V - 28 V)	

— PHYSICAL —

Input Connection	Input Connection 8-position, 2-sided pluggable terminal block
Controls	70 V / 100 V operation jumper
Mounting Provisions	Two (2) M10 rigging points for U-Bracket One (1) M10 rigging point for safety cable
Dimensions H x W x D	15.6" x 14.8" x 19.6" [396 x 377 x 499 mm]
Weight (with mounting bracket)	CCA-80: 31.9 lbs [14.5 kg] CCA-80D: 70.5 lbs [32 kg]
Accessories (included)	CCA-80: Thick zinc-plated steel U-Bracket CCA-80D: Dual mounting bracket and (2) U-brackets
Models (Order by mounting option)	CCA-80: Constant Coverage Triaxial Loudspeaker CCA-80D: CCA-80 (x2), Dual Mounting Bracket, Hardware (to mount U-Brackets to the dual bracket)

— OPTIONS —

Accessories	SPA-HBC100 Beam Clamp Kit
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— NOTES —

1. PERFORMANCE SPECIFICATIONS All measurements are performed using a time-windowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community and Voltera Amplified Loudspeaker Controllers (ALC SERIES).

2. OPERATING RANGE The frequency range over which the on-axis equalized/processed response remains within 10 dB of the average SPL.

3. SENSITIVITY The broadband SPL of the loudspeaker when pink noise is applied (band limited to the loudspeaker's Operating Range) at an input voltage of 2.83 V, in accordance with IEC 60268-5. Also listed for a voltage that would produce 1 watt into the rated impedance. Measured in whole space with no external processing applied, except where indicated. Shown graphically as the response to a 2.83 V swept-sine input signal referenced to 1 m.

4. NOMINAL CONTINUOUS POWER HANDLING The maximum continuous nominal input voltage at the rated impedance that the system can withstand, without damage, for a period of 2 hours using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.

5. NOMINAL MAXIMUM SPL The SPL produced when an IEC 60268-1 signal is applied, at the maximum continuous nominal input voltage, to the equalized/ processed loudspeaker system. Referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6 dB) crest factor of the IEC 60268-1 test signal.

6. RATED CONTINUOUS VOLTAGE The maximum continuous rated input voltage for the system that results in no more than a 3 dB change in the system's response during operation using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.

7. RATED MAXIMUM SPL The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.

8. FREQUENCY RESPONSE w/PROCESSING The variation in acoustic output level with frequency for a swept-sine measurement signal. The measurement uses the recommended signal processing for the loudspeaker system. All data are referenced to 1 meter. The on-axis magnitude and phase responses, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have 1/6 octave smoothing applied.

9. COVERAGE The horizontal polar radiation pattern varies by frequency congruent with the asymmetrical vertical pattern. Therefore, conventional horizontal & vertical coverage pattern degree indicators do not apply. This product's radiation pattern is best evaluated in the GLL and/or CLF data file format.

Data presented on this spec sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website.

Biamp strives to improve its products on a continual basis. Specifications are therefore subject to change without notice.



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