

AWC129 All-Weather Compact 2-Way Coaxial Loudspeaker with 12" LF

Professional Series

Key Features:

- ► Highly weather-resistant IP56 rating
- ► Consistent 90° x 90° broadband pattern control
- Components:
 - 300 mm (12 in) woofer with Kevlar-reinforced cone and 75 mm (3 in) voice coil.
 - 25 mm (1 in) exit compression driver with unique patented design and high temperature polymer diaphragm.
- ► Extraordinary clarity for speech, with extended frequency response for music.
- Advanced high-slope crossover network for constant coverage and smooth, natural midrange.
- ▶ 400 Watt power handling (average continuous pink noise) with high sensitivity provides high SPL capability.
- ► High-power passive crossover network.
- ▶ Overload protection
- ▶ 55 Hz 20 kHz frequency response.
- \triangleright 200 Watt 70V/100V multi-tap (built-in transformer) or direct 8Ω low-impedance.

Applications:

The AWC129 is a compact, coaxial-driver, 2-way, highly weather-resistant full-range loudspeaker system which is ideal for speech and music in a wide variety of applications, including sports facilities, racetracks, stadiums, fairgrounds, rodeos, skating rinks, themed entertainment venues, cruise ships, water parks, outdoor background music/paging systems, swimning pools, and a wide variety of other outdoor or indoor venue types.

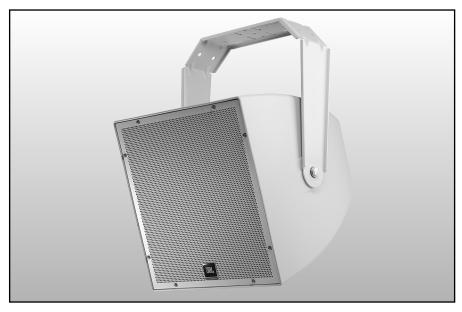
The AWC129 is comprised of a high-power coaxial 300 mm (12 in) low frequency driver and 25 mm (1 in) high frequency compression driver. The co-axial design utilizes a unique tapered polepiece design and transitions to the cone of the low frequency driver as a large diameter pattern control horn for the high frequencies, both eliminating high-frequency beaming which is common among this category of speaker and extending pattern control to the lowest possible frequencies. The result is a coaxial speaker with wide, extremely consistent 90° coverage on a broadband basis.

Component features include a Kevlar-reinforced low frequency cone for reliability, well-damped surround for smooth frequency response, high temperature 75 mm (3 in) voice coil and a reduced distortion design through saturated-gap magnet geometry. The high frequency compression driver features a unique patented design, high temperature polymer diaphragm, and fluid-cooling for high output levels with low distortion.

The paintable enclosure is constructed of thick ABS plus fiberglass and is heavily braced to maximize low-frequency performance. The corrosion-resistant zinc-rich extra-thick powder coated steel grille is backed with open cell foam and high thread-count mesh, providing excellent protection in the harshest environments. The system is rated IP-56, per IEC529 when installed at minimum 5° down-tilt.

The system is equipped with a 200W 70V/100V multi-tap transformer. Connection is made via outdoor-rated terminals in a recessed terminal cup. A protective terminal compartment cover is included, along with gland nut, which forms a water-tight seal with round-jacketed cable having The high frequency compression driver features a unique patented design, high temperature polymer diaphragm, and fluid-cooling for high output levels with low distortion.

A heavy-duty weather-capable zinc-rich, thick powder coated U-type mounting bracket is included.



Specifications:

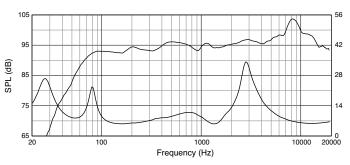
| System: | |
|--|--|
| Frequency Range (-10 dB)1: | 55 Hz – 20 kHz |
| Frequency Response (±3 dB)1: | 80 Hz – 20 kHz |
| Coverage Pattern ² : | 90° x 90° |
| Directivity Factor: | 10.1 (1 k – 16 kHz) |
| Directivity Index (DI): | 9.5 dB (1k – 16 kHz) |
| Long-Term System Power Rating (IEC) ³ : | 400 W (1600 W peak), 2 hrs. 250 W (1000 W peak), 100 hrs |
| Sensitivity (2.83V @ 1m): | 96 dB (Ave. 80 Hz – 20 kHz) |
| Maximum SPL ⁴ : | Direct 8 Ω : 122 dB (peaks of 128 dB) 200 W Tap: 119 dB |
| Crossover Network: | $1.5\ \mathrm{kHz},3\mathrm{rd}$ order (18 dB/oct) high-pass plus conjugate to HF, 2nd order low-pass to LF |
| Nominal Impedance: | 8 ohms |
| Transformer Taps: | 70V: 200W, 100W, 50W, 25W 100V: 200W, 100W, 50W |
| Transducers: | |
| Low Frequency Driver: | Kevlar-reinforced cone with weather treatment, 75 mm (3 in) voice coil. |
| High Frequency Driver: | 25 mm (1 in) diaphragm and voice coil diameter, high temperature polymer diaphragm, patented design, fluid-cooling. |
| HF Driver Protection: | Minimum audibility SonicGuard™ HF overload protection |
| Physical: | |
| Enclosure: | ABS with Glass enclosure, heavily braced |
| Attachment: | Two M10 (fine-thread) points for included U-bracket. M6 secondary safety attachment point on back panel. |
| Grille: | Corrosion-resistant zinc-rich extra-thick powder coated steel grille, 3-layer assembly with foam and woven poly mesh backing. |
| Input Connection: | CE-compliant covered barrier strip terminals. Barrier terminals accept up to 8 mm outside 4 mm inside open-lug (#6 or #8) plus bare wire up to 2.5 mm² (12 AWG) wire or spade lugs. Terminal compartment cover equipped with gland nut that forms water-tight seal with round jacketed cables with outside diameters between 4.0 mm (0.16°) and 9.0 mm (0.36°) |
| Environmental: | IP56 per IEC529, with a minimum 5° downward aiming angle. Exceeds Mil Spec 810 for humidity, salt spray, temperature & UV, and ASTM G85 for salt spray (168 hrs). |
| Dimensions: | 402 x 402 x 445 mm (15.8 x 15.8 x 17.5), cabinet 470 mm (18.5 in) depth with gland nut 542 mm (21.4 in) including bracket extending to back |
| Colors: | Available in gray (similar to Pantone 420C) and black (-BK) |
| Net Weight: | 15.9 kg (35.0 lb), 18.9 kg (41.5 lb) with u-bracket |
| Shipping Weight: | 23.4 kg (51.5 lbs) |
| Included Accessories: | U-bracket, matches loudspeaker color (gray or black), zinc-rich extra- thick powder coated, steel. |

- ¹ Full-space (free-field)
- ² Average 1 kHz to 10 kHz
- FIEC standard, full bandwidth pink noise with 6 dB crest factor.
- ⁴ Calculated based on power rating and measured full-space sensitivity

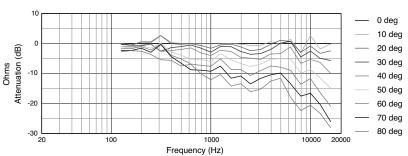
JBL continually engages in research related to product improvement. Changes introduced into existing products without notice are an expression of that philosophy.

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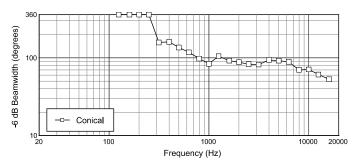
Frequency Response and Impedance



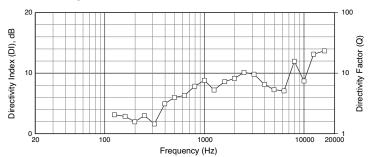
Off-Axis Frequency Response



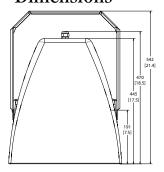
Beamwidth

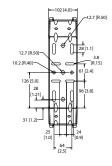


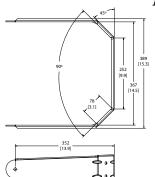
Directivity Index:



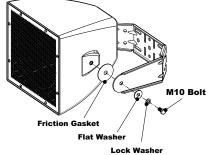
Dimensions

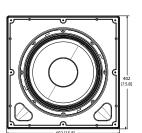




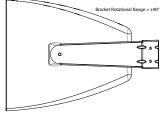


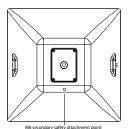
Attaching U-Bracket to Cabinet



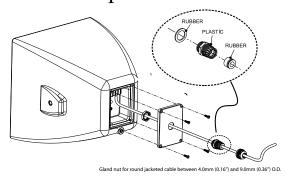


Dimensions in mm (in)





Terminal Compartment





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