



AWC82

All-Weather Compact

2-Way Coaxial Loudspeaker with 8" LF

Professional Series

Key Features:

Highly weather-resistant IP56 rating

Consistent 120° x 120° broadband pattern control

Components:

- 200 mm (8 in) woofer with Kevlar-reinforced cone and 50 mm (2 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.

250 Watt power handling (average continuous pink noise) with high sensitivity provides high SPL capability.

High-power passive crossover network.

Overload protection

80 Hz – 20 kHz frequency response.

200 Watt 70V/100V multi-tap (built-in transformer) or direct 8Ω low-impedance.

Applications:

The AWC82 is a compact, coaxial-driver, 2-way, highly weather-resistant full-range loudspeaker system which is ideal for speech and music-fill 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, swimming pools, and a wide variety of other outdoor or indoor venue types.

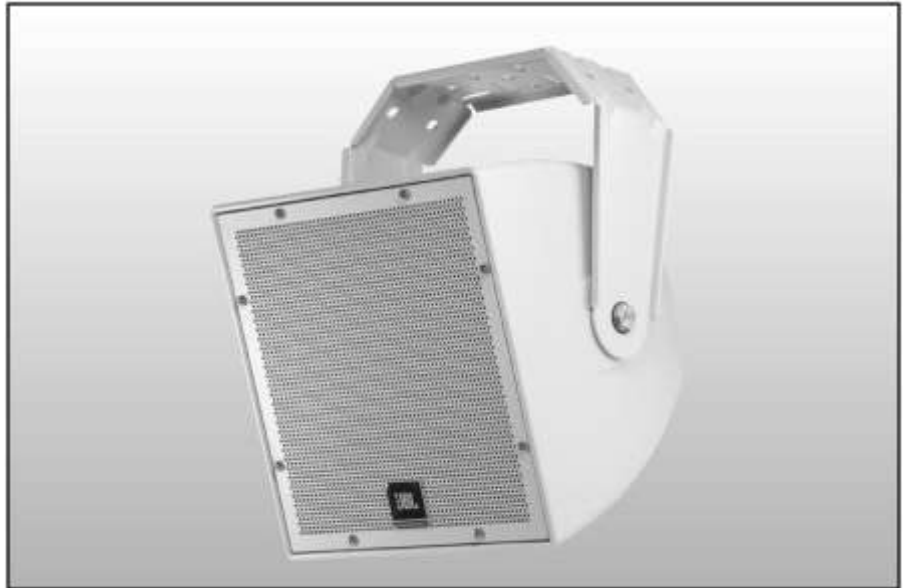
The AWC82 is comprised of a high-power co-axial 200 mm (8 in) low frequency driver and 25 mm (1 in) high frequency compression driver. The co-axial design utilizes a unique tapered pole-piece design and transitions to the cone of the low frequency driver as a large diameter pattern control horn for the 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 120° 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 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 outside diameter between 4 mm (0.16 in) and 9 mm (0.36 in).

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



Specifications:

| | |
|--------------------------------------|--|
| System: | |
| Frequency Range (-10 dB): | 80 Hz – 20 kHz |
| Frequency Response (±3 dB): | 100 Hz – 20 kHz |
| Coverage Pattern: | 120° x 120° |
| Directivity Factor: | 8.1 (1 k – 16 kHz) |
| Directivity Index (DI): | 8.4 dB (1 k – 16 kHz) |
| Long-Term System Power Rating (IEC): | 250 W 2 hrs. 200 W 100 hrs |
| Sensitivity (2.83V @ 1m): | 94 dB (Ave. 100 Hz – 20 kHz) |
| Maximum SPL: | Direct 8Ω: 118 dB (peaks of 124 dB) 200 W Tap: 117 dB |
| Crossover Network: | 1.8 kHz, 3rd 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, 50 mm (2 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 |
| 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 mm: (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: | 300 x 300 x305 mm (11.8 x 11.8 x 12.0), cabinet 331 mm (13.0 in) including gland nut 359 mm (14.2 in) including bracket extending to back |
| Colors: | Available in gray (similar to Pantone 420C) and black (-BK) |
| Net Weight: | 9.8 kg (21.5 lb), 11.6 kg (25.5 lb) with U-bracket |
| Shipping Weight: | 14.1 kg (31.0 lb) |
| 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

3 IEC 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

SPL (dB)

