

TECHNICAL DATA SHEET



HALO-C 2-way passive line array element



FEATURES AND BENEFITS:

- signature EM Acoustics passive crossover for unprecedented frequency & phase response
- extremely consistent horizontal dispersion pattern for predictable results in use
- small enclosure footprint and low weight ensure discreet system that is easy to rig
- high power-to-size ratio
- passive design minimises processing requirement, and reduces amplifier channel count
- lightweight plywood enclosure offers significantly less panel flexure than plastic designs
- intuitive, safe rigging system for both flown and groundstacked systems

The HALO Compact system is designed to fulfil requirements for a wide range of professional audio applications. At 17kg (37.4lbs) in weight and only 492mm wide (19.4"), HALO Compact is a truly compact solution – yet as it is capable of continuous sound pressure levels in excess of 120dB it is an ideal solution for small-to-medium theatres, houses of worship, conference & corporate A/V and even small to medium scale live sound reinforcement. Any application where size & weight are critical concerns yet high SPLs are required is a perfect fit for the HALO Compact system.

HALO Compact is a development from the original HALO system, keeping the same breathtaking sonic performance that can only be achieved by using a truly plane-wave AMT high frequency drive unit. A wider 95-degree horizontal coverage allows greater flexibility whilst in use, and the use of a more powerful 8" (203mm) low frequency drive unit adds more body to the overall sonic performance, as well as higher SPL capability than the original HALO system. Arrays can be assembled from anything from three elements up to a maximum of 24 whilst still retaining a 10:1 safety factor. The extremely flexible rigging system allows the user to cope with a wide variety of scenarios both in flown and ground-stacked configurations.

HALO Compact exhibits extremely flat frequency and phase responses, and a wavefront which is truly plane as opposed to a manipulation of a spherical wavefront. The end result is a system which remains intelligible over much greater distances than users have come to expect from conventional compression-driver based designs. Such is the uniformity of frequency & phase response as well as dispersion in both horizontal and vertical planes, HALO Compact elements can even be used singly as front fills or under-balcony fills where precise vertical directivity is essential. When used as complete systems, HALO Compact elements partner with the HALO-CS flyable subwoofer, and the FG-HALO-C flying grid to suspend the system. For additional low frequency support, EMS-215 or EMS-118 subwoofers, or for larger systems the MSE-218 subwoofer can be used to underpin the arrays.

HALO Compact contains a 197mm (7.8") AMT high frequency drive unit on a bespoke 95-degree dispersion waveguide, linked via a signature EM Acoustics passive crossover to a high power neodymium 8" (203mm) LF drive unit. Exact drive unit placement, coupled with the crossover topology and waveguide design extends the horizontal coverage pattern to below 1kHz. The true plane wave output of the AMT drive unit and waveguide combination yields a precise, well-behaved vertical pattern allowing seamless array integration and minimising destructive interference between adjacent elements.

The HALO Compact enclosure is constructed from premium 12mm & 18mm (1/2" & 3/4") multi-laminate birch plywood – rebated, screwed and glued together. Intelligent bracing design minimises panel flexure, thereby reducing unwanted resonance whilst still keeping the enclosure weight low. The flying hardware is manufactured from ultra-high-tensile Domex steel, finished in a polyester powder coat with aircraft-grade ball lock pins to ensure swift yet safe array assembly. A perforated steel grille backed with acoustically transparent black fabric finishes the enclosure with a sleek but stylish appearance. Two Neutrik SpeakON™ NLT4MP tour-grade connectors are provided on the rear of the enclosure for input and link through.

The enclosure is finished in black or white semi-matt textured paint as standard, however weather-protection options as well as custom RAL code colours are also available.

HALO-C elements require a single amplifier channel capable of delivering 600-800W RMS into an 8 ohm load. For best results, the EM Acoustics AQ-10 power amplifier should be used. Due to the passive nature of HALO-C elements, excellent use can be made of four-channel amplifiers such as the AQ-10 which can drive 16 HALO-C elements in total (4 per channel).

APPLICATIONS:

- small-to-medium theatre and touring events
- small-to-medium live sound reinforcement
- houses of worship
- conference and corporate A/V
- theme parks



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TECHNICAL SPECIFICATIONS

ENCLOSURE TYPE: DIMENSIONS (HxWxD):

NET/SHIPPING WEIGHT: FREQUENCY RESPONSE¹: SENSITIVITY²: DISPERSION³: DRIVE UNITS:

POWER HANDLING: MAXIMUM SPL4: NOMINAL IMPEDANCE: CROSSOVER: CONNECTORS ENCLOSURE:

RIGGING & HARDWARE:

GRILLE: OPTIONS: ACCESSORIES:

SPARE PARTS:

two-way passive compact line array element 216 (8.5) x 492 (19.4) x 400 (15.7) mm/(ins) - enclosure only 252 (9.9) x 524 (20.6) x 400 (15.7) mm/(ins) - extremities of rigging/pins 17/19kg (37.4/41.8lbs) 75Hz - 20kHz +/- 3dB 94dB 95H, vertical dependant on array configuration 8" (203mm) neodymium LF cone drive unit 7.8" (197mm) AMT HF drive unit 325W RMS, 650W program 124dB continuous, 132dB peak 8 ohms asymmetric internal passive 2 x Neutrik SpeakON™ NLT4MP 12mm (1/2") & 18mm (3/4") multi-laminate Birch plywood – rebated, screwed & glued. finished in impact resistant textured paint four-point integral flying system, tested to 24 elements at 10:1 safety factor secured with aircraft-grade ball-lock pins splay angles 0, 0.5, 1, 1.5 and 2-15 degrees in 1-degree increments perforated steel backed with acoustically transparent fabric Colours/Weather Protection Notes on measurement conditions: CASE-HALO-C four element touring flightcase various flying hardware options - see flying hardware datasheet DU-805 8" drive unit RBD-HALO-C 7.8" AMT drive unit RK-805 recone kit RC-HALO-C replacement HF diaphragm PX-HALO-C passive crossover assembly

RFG-HALO-C replacement grille/fabric

¹Measured on-axis at 2m in an anechoic environment and referenced to 1m. ²Measured in half space at 2m with 4W sine wave input and referenced to 1m.

³Nominal dispersion, measured in an anechoic environment and averaged over stated bandwidth *Calculated and verified by subjective listening test of familiar program material.





ENGINEERING DRAWING



RIGGING ACCESSORIES

A wide variety of accessories are available for rigging HALO-C enclosures both in flown and groundstacked configurations. Please consult the seperate rigging hardware datasheet for more information on these different options.

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