

HQ-112.43

High efficiency Long Throw point source



- » Two way active high efficiency system (passive or biamp use)
- » Long throw
- » 40° x 30° coverage
- » 12" speaker in compression configuration
- » 3" voice coil neodymium compression driver
- » Rotatable horns; vertical or horizontal arrays can be configured

The D.A.S. HQ-112.43 is a high-performance externally powered mid-high point source unit.

The HQ-112.43 system is intended as a flyable point source system where very high sound pressure levels are in order, such as indoor or outdoor sport venues, stadiums, arenas etc. It can be flown in the same array in conjunction with other units as the HQ-112.64, HQ-112.95 and the HQ-218.

The system comprises two frequency sections that are easily accessed through NL-4 connectors or covered barrier strip terminals.

Mid frequency reproduction is handled by a 12HQ, 12" cone loudspeaker coupled to a large horn and a phase plug combination. This compression arrangement develops the high sensitivity and a polar pattern control required for this type of systems. The 12HQ utilizes a 3" coil, massive magnetic structure specially designed to deliver high efficiency in the speaker working range.

The transducer handling high frequency reproduction incorporates the

latest compression driver technology. The M-78N driver utilizes a neodymium magnet structure, 1.5" exit and a 3" titanium diaphragm. The compression driver has been specially designed to increase the efficiency in the vocal range, between 1kHz and 8kHz. A dedicated phase plug combined with the use of ferrofluid allows to obtain the desired results.

The high-Q horns provide a precise coverage pattern and high SPL over long distances.

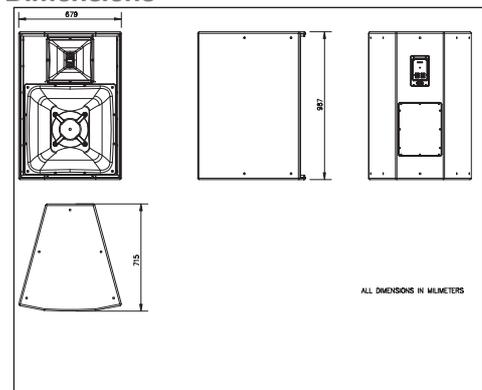
The enclosure is manufactured from multi layer birch plywood and it is finished as a standard version (CX) with black ISO-flex polyurea paint. Totally exposed systems can be finished in fiberglass. System IP rating is IP-54.

The cabinet includes 20 x M10 rigging points that are intended to fix stainless steel plates to create clusters.

Technical Specifications

Frequency Range (-10 dB)	80 Hz - 18 kHz
Horizontal Coverage (-6 dB)	40° Nominal
Vertical Coverage (-6 dB)	30° Nominal
RMS (Average) Power Handling ⁽¹⁾	Passive: 400 W Bi-Amp MF: 400 W, HF: 150 W
On-Axis Sensitivity 1 W / 1 m	Passive: 111 dB SPL Bi-Amp MF: 111 dB SPL, HF: 112 dB SPL
Rated Maximum Peak SPL at 1 m ⁽²⁾	Passive: 143 dB SPL Bi-Amp MF: 143 dB SPL, HF: 140 dB SPL
Transducers/Replacement Parts	MF: 12HQ/GM 12HQ HF: M-78N/GM M-75
Nominal Impedance	Passive 8 ohms Bi-Amp MF: 8 ohms, HF: 8 ohms
Enclosure Geometry	Trapezoidal
Enclosure Material	Birch Plywood
Color/Finish	CX: Black ISO Flex Black Paint DX: Fiberglass/Military Grey Pantone 402C
Rigging Points	20 x M10 threaded inserts
Connectors	2 x NL-4 Covered Barrier Strip
Dimensions (H x W x D)	98.7 x 67.9 x 71.5 cm 39.4 x 27.2 x 28.2 in
Weight	56 kg (123.2 lbs)
Accessories	ANL-2 - M10 Stainless steel rigging kit

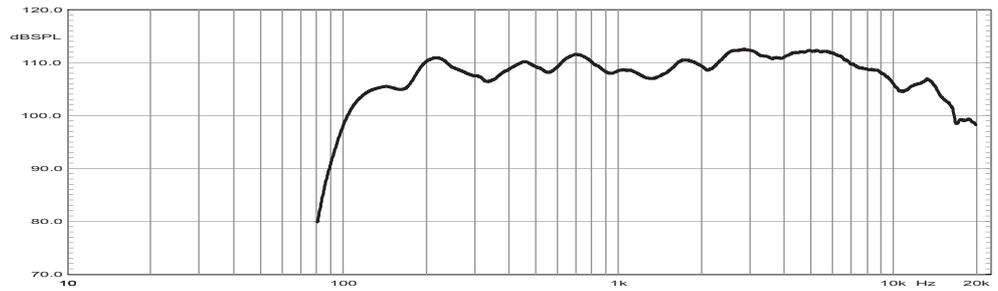
Dimensions



¹ Corresponds to the AES power handling rating for the component, based on a 2 hour test using a 6 dB crest factor bandlimited pink noise signal.
² Corresponds to the signal crests for the test described in ¹.

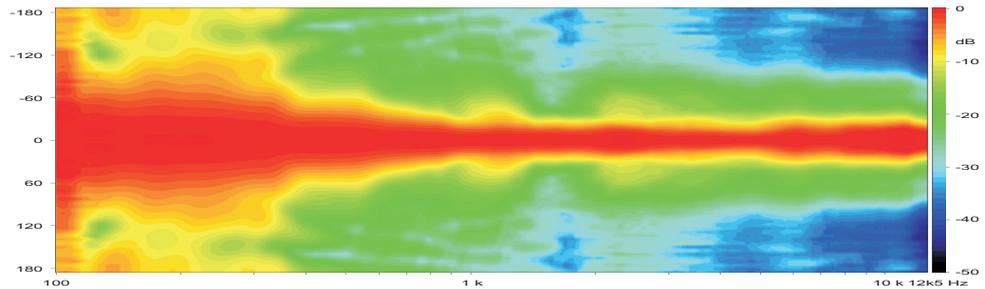
Frequency Response

Shows the frequency response at 1 m of a unit radiating to an anechoic environment and driven by a 2.83 V swept sine wave signal.



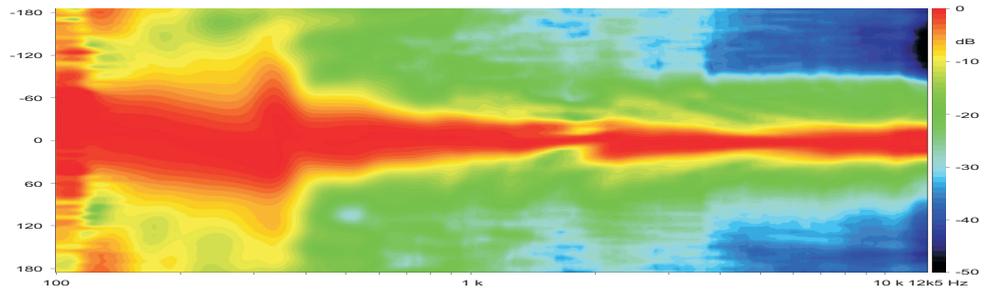
Horizontal Directivity

Shows normalized horizontal isobar plot.



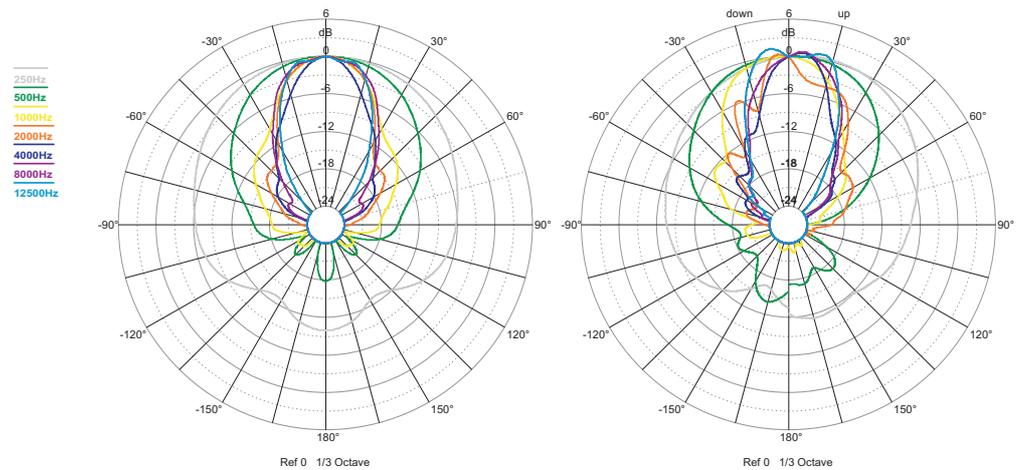
Vertical Directivity

Shows normalized vertical isobar plot.



Polar Response

Shows the 1/3 octave band horizontal (left) and vertical (right) polars for the indicated frequencies. Full scale is 30 dB, 6 dB per division.



NOTES. 1.Frequency response: referred to 1 m; low end obtained through the use of near field techniques; one-third octave smoothed for correlation with human hearing. 5.Polars were acquired by placing the unit on a computer controlled turntable inside our anechoic chamber. Measurement distance was 4 m.

Product improvement through research and development is a continuous process at D.A.S. Audio. All specifications subject to change without notice.