# BUTTERFLY C.D.H. 483

DESCRIPTION

The C.D.H. 483 Hi-Pack is the Butterfly system's element for mid-low, mid and high frequency reproduction. Weighing just 34 kg. the cabinet has an unmistakable shape which brings to mind the butterfly from which it takes its name, thanks to the triangular opening in the upper and lower "sides". This original design solution favours the optimum coupling of array elements up to the highest frequencies, keeping the distance between the sources as short as possible and at the same time providing them with a continuous loading 'baffle'.

The high frequency section of the Butterfly system is equipped with a 3" (1.41" throat) compression driver coupled with a D.P.R.W.G. (Double Parabolic Reflective Wave Guide) device geometrically based entirely on precise mathematic calculations to take a circular planar (flat) wavefront emitted by the source at its input (e.g. that of a compression driver) and transforming it into a rectangular planar wavefront at its output, keeping signal paths identical from every emission point of the source. The rectangular planar wavefront thus obtained can be loaded by an appropriate horn or waveguide to ensure the necessary coverage.

Four high-efficiency 8" mid woofers: two band-pass loaded (110 ÷ 400Hz) and two reflex high-pass (110 ÷1250Hz) loaded by the sides of a waveguide with a 90° dispersion angle are connected in parallel without any type of passive crossover, so can both be powered using one amplifier.
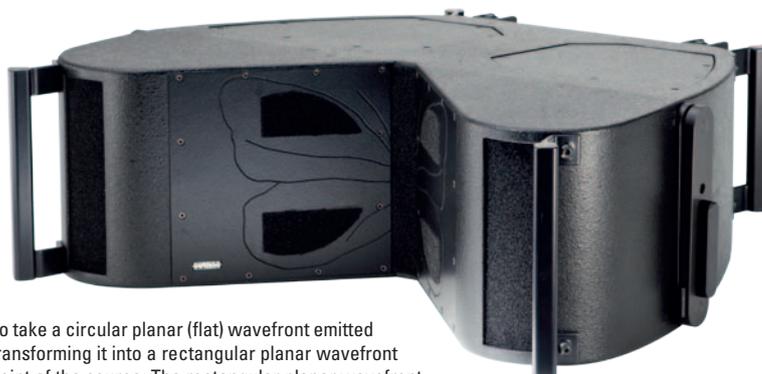
BUILT-IN HARDWARE

Butterfly Hi-Pack is equipped with built-in flying hardware enabling to adjust the angle between the elements with minimum increments of as little as 0.25 degrees. Its hardware has been certified according to the strictest international norms and allows for flying an array of up to 32 C.D.H. 483 Hi-Packs.

OPENARRAY 3D SIMULATION SOFTWARE

OPENARRAY is the avant-garde control and 3D simulation software, written by Outline's R&D team.

It's a three dimensional software program that can predict the results expected from either a live performance or an installation of a wide range of Outline products, including all the Line Arrays and subwoofers models as well Outline's most popular point source systems. The result is a 'tool' able to guide PA system engineers through correct set-up procedure from an acoustic and mechanical point of view while fully respecting safety norms.

OPENARRAY greatly facilitates installation, setting and aiming of Line Array elements: the risk of poor results is thus drastically reduced. The technology behind OPENARRAY is based on a GL platform and features incredibly fast rendering time from input of data to final design. OPENARRAY also has the ability to import DXF files, thus giving engineers a head start to final deployment of the intended system. This, and many other features, makes OPENARRAY one of the most exclusive product on the international scenario.

TECHNICAL SPECIFICATIONS:

| FREQUENCY RESPONSE | (-10 dB) | 80 Hz ÷ 18 kHz |
| | (±3 dB) | 110 Hz ÷ 18 kHz |

AVERAGE DISPERSION	
Horizontal	90°
Vertical	Depending on array height and curvature

IMPEDANCE (Ω)	
Low/Mid	4 Ω (min. 3.5)
High	8 Ω (min. 8.3)

POWER - WATT AES	Cont.	Peak
High-pass filtered Low/Mid	800	3200
High	120	480

MAX SPL @ 1 m (calculated) (Single Unit - full space)	Cont.	Peak
Low/Mid	128.5	138.5
High	131	141

Min box array (4 units)	Cont.	Peak
Low/Mid	140.6	150.6
High	143	153

CONNECTORS	2 x NL4 Speakon in parallel
Low/Mid	Pin 1+ pos ; Pin 1- neg
High	Pin 2+ pos ; Pin 2- neg

LOUDSPEAKERS AND LOADING	
Low	2 x 8" NdFeB bandpass loaded woofers
Mid	2 x 8" NdFeB partially horn-loaded mid woofers
High	1 x 3" Diaphragm NdFeB, D.P.R.W.G. loaded compression driver

	Single unit	Shipping (2 units)
WEIGHT	34 kg (75 lb)	75 kg (165.3 lb)
DIMENSIONS		
Height	24 cm (9.4'')	59 cm (23.2'')
Width	75.2 cm (29.6'')	81 cm (31.9'')
Depth	60 cm (23.6'')	73 cm (28.7'')