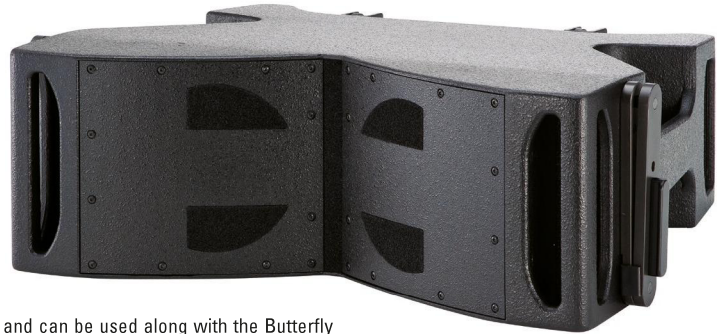# MANTAS

DESCRIPTION

MANTAS is one of the most recent VLA element designed by Outline. Thanks to the great experience accumulated with Butterfly - the Outline system with the same fundamental components and characteristics - MANTAS offers leading edge performance from a cabinet that is extraordinarily compact and light-weight. Its top-grade components - two 8-inch mid-woofers with Neodymium magnets and a 3-inch compression driver loaded with the well-known D.P.R.W.G. - ensure absolutely insignificant distortion levels and greater reliability. MANTAS is a reference point in its category (compact VLA) for medium-sized applications, but it was not only conceived as an object in its own right: it has the great advantage of being compatible with Butterfly. In fact, it has the same flying points and can be used along with the Butterfly system (flown below it) as an element able to give wider horizontal coverage (120°) for FRONT-FILL and DOWN-FILL applications. Numerous rental companies worldwide benefit from the "Butterfly-Mantas" combination to ensure even sound distribution for their audiences, no matter how large they are. The HF section is entrusted to a compression driver with a 3" diaphragm loaded with a D.P.R.W.G., already used successfully on the Butterfly system. MANTAS weighs just 24 kilograms (52.9 pounds) and measures 24 x 75.2 x 52.1 cm (9.4 x 29.6 x 20.5 inches), i.e. the same footprint as a Butterfly system (including hardware). MANTAS is used in biamp format. The channels of the amplifiers will power the 8-inch mid woofer (LF-MF section) and the 3-inch compression driver (HF section) separately. MANTAS clearly has a good COST:EFFICIENCY RATIO. With just four amplifiers, twelve elements (6+6 in stereo) can be correctly powered: this type of set-up ensures exciting SPL for a large audience. Outline recommends the use of its "T Five" amplifiers and iP24 processors (or units with similar characteristics).

ON-BOARD PRECISION HARDWARE

The mechanics of the MANTAS flying system is identical to that of the BUTTERFLY system and offers the necessary precision for the adjustments foreseen with a resolution of 0.25° per step between the elements, in spite of the capacity being over-sized compared to the load handled. VLA set-up in the field is a job that takes just a few minutes and does not require any physical strain. The system's main frame was also designed for "stacked" use: this practical function is useful in all cases in which it is decided to install the VLA on the floor (e.g. on stages) rather then fly it. Using the V616 stabilizer feet, it is also possible to aim the stacked VLA at the audience with the necessary inclination.

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. 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	(±3 dB)	90 Hz ÷ 18 kHz
AVERAGE DISPERSION		
Horizontal	120°	
Vertical	Depending on array height and curvature	
IMPEDANCE (Ω)		
Low/Mid	8 Ω (min. 6.4)	
High	8 Ω (min. 8.4)	
POWER - WATT AES	Cont.	Peak
Low/Mid	400	1600
High	110	440
MAX SHORT-TERM SPL @ 1 m, free-field*	139 dB SPL	

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/Mid	2 x 8" NdFeB bandpass loaded woofers	
High	1 x 3" Diaphragm NdFeB, D.P.R.W.G. loaded compression driver	
	Single unit	*Shipping (2 units)*
WEIGHT	24 kg (52.9 lb)	54 kg (119 lb)
DIMENSIONS		
Height	240 mm (9.45")	560 mm (22")
Width	752 mm (29.6")	810 mm (31.9")
Depth	521 mm (20.5")	580 mm (22.8")

* calculated using +10 dB crest-factor signal

LINE ARRAY FAMILY