convert 12A

Powered, bi-amplified ultra compact constant curvature line array module





The Convert 12A is a powered, two-way curved source array unit ideal for use in small to medium live events, as well as permanent installation. The latest in Class D power amplification, digital signal processing and optimized D.A.S. components have been combined with enclosures designed for rapid deployment, precise coverage and high acoustic output.

The Convert 12A enclosure is constructed of birch plywood finished with the durable Iso-Flex black paint. The rigging system can be used to form vertical curved source arrays of up to 6 units. The Convert 12A includes a pole mount socket with variable inclination for use as a satellite unit in combination with subwoofers. The two-way 3rd Generation Class D amplifier offers 550 W for the low frequency transducer and 220 W for the high frequency section. The amplifier provides extended bandwidth, improved dynamic range and exceptionally low distortion.

Signal processing is accomplished by way of a powerful 24 bit DSP providing unparalleled control over critical signal parameters. Digital Finite Impulse Response (FIR) filters are used in the signal processing of the Convert 12A.

Technical Specifications

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Low Frequency Power Amplifier	1100 W _{peak} - 550 W _{continuous}
High Frequency Power Amplifier	440 Wpeak - 220 Wcontinuous
Input Type	Balanced Differential Line
Input Impedance	Line: 20 kohms
Sensitivity	Line: 1.95 V (+8 dBu)
On-axis Frequency Range (-10 dB)	63 Hz - 20 kHz
Maximum Peak SPL at 1 meter	131 dB
Nominal -6 dB Beamwidths	90° Horizontal - 15° Vertical
Enclosure Material	Birch Plywood
Finish	Iso-Flex Black Paint
Transducers/Replacement Parts	LF: 1 x 12V4/GM 12P4
	HF: 2 x M-60N/GM M-60
Connectors	INPUT: Female XLR
	LOOP THRU: Male XLR
	AC INPUT: PowerCon NAC 3 FCA
	AC OUTPUT: PowerCon NAC 3 DFCB
AC Power Requirements	1.7 A, 230 V, 50/60 Hz
	3.4 A, 115 V, 50/60 Hz
Dimensions (H x W x D)	32.2 x 57.6 x 41.7 cm
	12.7 x 22.7 x 16.4 in
Weight	27.5 kg (60.5 lb)
Accessories (optional)	AX-convert12
	Pick-UP AX-convert12
	AXS-convert12
	TRD-2
	TBD-6



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Frequency Response

Shows the frequency response at 1 m of a unit radiating to an anechoic environment and driven by a swept sine wave signal (-20 dBu input). Red: array EQ. Green: 1 unit)

Distortion

Shows the Second Harmonic Distortion (grey) and Third Harmonic Distortion (dotted) curves for a unit driven by a swept sine wave signal (-10 dBu input).



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.





-30

-40

- -50 5 Hz

10 k 12

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.



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convert series