SXCF118

Compact Cardioid Flown Subwoofer

Features

- Compact, cardioid flown subwoofer
- Front facing 18” (460mm)/4” (100mm) voice coil driver
- Rear facing 14” (356mm)/3.5” (88mm) voice coil driver
- Cardioid dispersion pattern
- 28dB rear rejection at 75Hz
- High output capability
- Tour-grade plywood enclosure

Applications

- Live sound reinforcement
- Fixed installations
- Theatre sound
- Corporate AV events

The SXCF118 is a compact, high performance cardioid subwoofer. The flown version of the SXC118, it is the ideal partner for flown WPS or TORUS T12 arrays — combining maximum low frequency output with pattern control. It features an 18” (460mm) forward facing driver and a 14” (356mm) rear facing driver, each driven independently by separate amplifier channels and DSP. Each driver has its own chamber with optimised bass reflex porting.

This arrangement produces a cardioid dispersion pattern which maximises the front radiation and reduces unwanted radiation behind the subwoofer. The recommended iK42 amplifier optimises the DSP parameters for front and rear drivers to maximise the rear rejection — from 21dB at 43Hz to 28dB at 75Hz. This keeps low frequencies away from stages and walls as well as reducing reverberant energy in the room — greatly improving low frequency response accuracy and impact.

In front of the enclosure, the output from the two drivers is additive, giving an extra 2dB of output when compared with a conventional 1 x 18” subwoofer.

The enclosure is constructed from tour-grade plywood and finished with a hard-wearing textured polyurea coating. It is equipped with four grab handles and foam-backed perforated steel grilles protect the front and rear drivers. Integral flying hardware, coupled with the WPSGRIDT, allows the SXCF118 to be incorporated at the top of a WPS or TORUS T12 array, or flown as a separate array alongside. Interlocking skids prevent movement when stacked and a threaded plate in the top surface facilitates pole-mounting of up to 4 WPM enclosures or a single point source enclosure.

The addition of the input cover accessory makes the SXCF118 weather resistant and suitable for outdoor usage.

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Compact Cardioid Flown Subwoofer

Technical Specifications

TYPE	Compact, cardioid subwoofer
FREQUENCY RESPONSE (1)	43Hz – 150Hz ±3dB, -10dB @ 34Hz
DRIVERS	18" (460mm)/4" (100mm) voice coil, long excursion, ferrite magnet, waterproof cone
	14" (356mm)/3.5" (88mm) voice coil, long excursion, neodymium magnet, waterproof cone
RATED POWER (2)	18": 1000W AES, 4000W peak
	14": 800W AES, 3200W peak
SYSTEM AMPLIFIER	iKON iK42
SENSITIVITY (10)	104dB
MAXIMUM SPL(9)	140dB peak
NOMINAL IMPEDANCE	18": 8 ohms, 14": 8 ohms
DISPERSION	Cardioid
ENCLOSURE	Multi-laminate birch ply
FINISH	Textured black polyurea
PROTECTIVE GRILLE	Black HEX perforated steel
CONNECTOR	2 x NL4
PIN CONNECTIONS (INPUT)	18": +1, -1; 14": +2, -2
PIN CONNECTIONS (LINK)	18": +1, -1; 14": +2, -2
FITTINGS	Two skids on base, with mating channels on top
	M20 top-mounted thread plate for pole mounting
	Two bar handles on each side
	Four fittings for optional transit cover
DIMENSIONS (INCL SKIDS)	(W) 650mm x (H) 611mm x (D) 812mm (940mm incl castors)
	(W) 25.6in x (H) 24.1in x (D) 32.0in (37.0in incl castors)
WEIGHT	75kg (165lbs), 78kg (172 lbs) incl castors
ACCESSORIES	Transit cover

Architectural Specifications

The loudspeaker shall be a compact cardioid subwoofer capable of being ground-stacked or flown. It shall consist of an 18" reflex-loaded transducer radiating to the front of the enclosure and a 14" reflex-loaded transducer radiating to the rear. The transducers shall be driven independently by separate channels of a dedicated controller amplifier.

Power handling of the 18" transducer shall be 1000W AES, 4000W peak and power handling of the 14" transducer shall be 800W AES, 3200W peak. Rated impedance of each transducer shall be 8 ohms. The on-axis frequency response shall be 43Hz-150kHz +/- 3dB and the loudspeaker shall produce a maximum SPL of 140dB peak calculated at 1 metre.

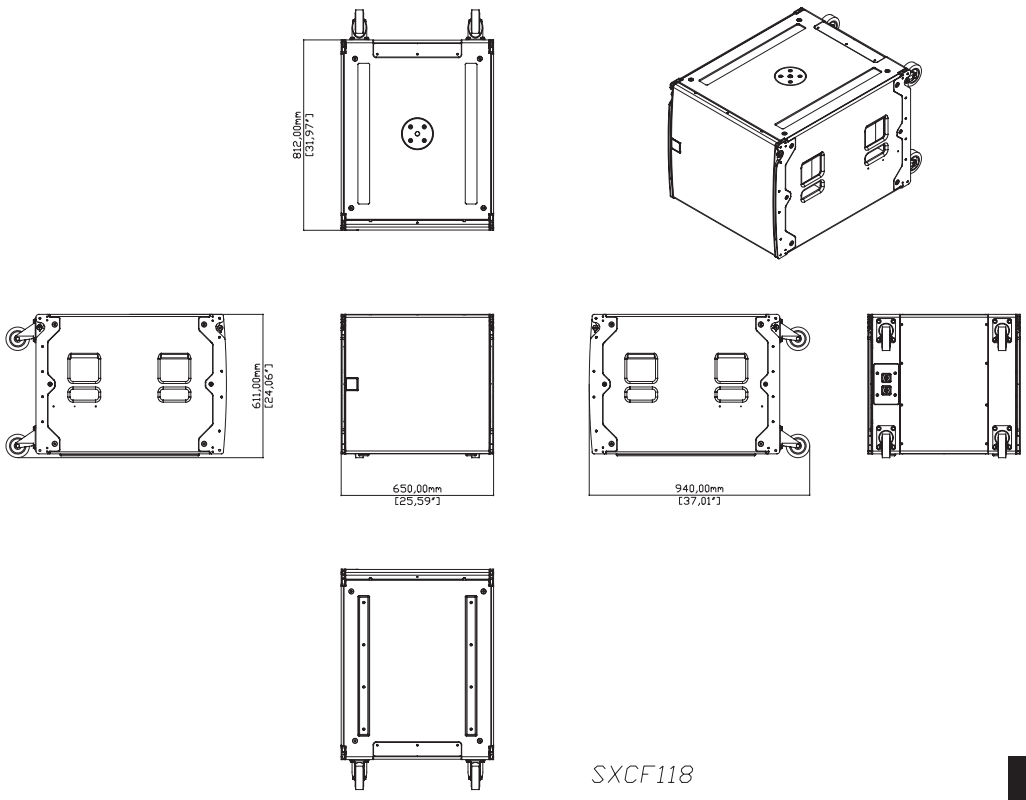
The loudspeaker enclosure shall be constructed from multi-laminate birch ply with a textured polyurea coating. The rear connector panel shall be fitted with two NL4 type connectors. The drivers shall be protected by a perforated steel grille and the enclosure shall incorporate an integral rigging system to assemble an array of up to 16 enclosures suspended from a dedicated flying frame. The enclosure shall also be fitted with a threaded pole-mount plate, bar handles and skids.

Dimensions including skids and castors (W x H x D) shall be 650mm x 611mm x 940mm (25.6in x 24.1in x 37.0in). Weight including castors shall be 78kg / 172lbs.

The loudspeaker shall be the Martin Audio SXCF118.

Notes

(1) Measured on-axis in half (2pi) space at 2 metres, then referred to 1 metre.
(2) AES Standard ANSI S4.26-1984.
(3) Measured in half (2pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
(4) Measured in half (2pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
(5) Measured on-axis in open (4pi) space at 2 metres, then referred to 1 metre.
(6) Measured in open (4pi) space at 2 metres with 1 watt input, using band limited pink noise, then referred to 1 metre.
(7) Measured in open (4pi) space at 2 metres using band limited pink noise, then referred to 1 metre.
(8) Measured in open (4pi) space at 2 metres with 2.83v input, using band limited pink noise, then referred to 1 metre.
(9) Calculated at 1 metre.
(10) Measured in half (2pi) space at 2 metres with 2.83V input, using band limited pink noise, then referred to 1 metre.



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