ALF100SM HIGH PERFORMANCE DISCREET SUBWOOFER DATASHEET Rev. 1.6 | 9-02-2023 | E&OE



Product Description

Amina's most powerful discreet passive subwoofer to date, the ALF100SM can deliver 110dB SPL @ 1m (RMS) down to 30Hz, pairing exceptionally well with all Amina loudspeakers and providing performance levels suitable for media/cinema room applications, and high pressure stereo systems in large rooms.

The ALF100SM easily blends into any room by mounting between studs or joists in walls and ceilings with the subwoofers front flange fixing directly to the face of studs or joists on 400mm (16") centres, effectively replacing a section of 12.5mm (^{1/2}") plasterboard /drywall while **only** requiring 89mm (3 ^{1/2}") of cavity depth. The tapered edges of the faceplate allow the subwoofer to be plastered up-to and feathered in or fully plastered over before decorating as normal. The subwoofer vents into the room via a discrete slot which is often located above, or inset in baseboards or disguised in HVAC vents. The port vent should never be obstructed as this will affect performance. For full installation details, please refer to the installation guide.

DSP Optimisation

Specifications

The ALF100SM gives exceptional performance with only a high pass filter at 25Hz (48dB/Oct. slope) and a low pass filter at (or below) 160Hz, and the amplifier powering the subwoofer must be power limited to 200W RMS (@4 Ohms) for protection. A DSP optimisation file is available for download which includes the HPF and LPF as well as 5 bands of PEQ for optimisation of direct sound. Some room correction may also be desirable depending on the acoustic environment.

Frequency Response (without optimisation applied)

dB 100									-
100									
95									-
90 •	 	• • • • • • • • • • • • • • •		• • • • • • • •		• • • • • • •	• • • • •		Sensitivity
85									
o.,	 					• • • • • • •			• - 6dB
80	 							د	- 10dB
									TOGD
75									-
70									
65									-
60	30	40 !	i	0	70	80	90 1	00 19	OHz



Specifications	ALFIUUSM
Nominal impedance	4 Ohms
Power handling	200W continuous
Sensitivity	90dB @ 1m/2.83Vrms (half space)
Frequency response	30Hz - 160Hz (- 6db)
Max SPL	110dB RMS @ 1m (half space)
Electrical connection	Push button spring terminals
Dimensions	99mm x 409mm x 1066mm (3 ^{7/8} " x 16 ^{1/8} " x 41 ^{15/16} ")
Product weight	20kg (44lb 2oz)
Port locations	Front, 20mm (^{13/16} ") from short edge.
Port dimensions	20mm (^{13/16''}) x 307mm (12 $^{1/16''})$ corners R10mm (^3/8'')
Minimum cavity depth requirement	89mm (3 ^{1/2} ")
Manufacturer Limited Warranty	3 years

ALEIOOSM

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Dimensions



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