

The XSL-SUB subwoofer



The XSL-SUB is the cardioid subwoofer for the XSL system. It can be used to supplement XSL8 and XSL12 cabinets, either flown or ground stacked.

When the Z5770 XSL Flying frame set is used, XSL-SUB cabinets can be flown as separate SUB columns or in mixed arrays together with XSL TOP cabinets using the additional Z5783 XSL-SUB Adapter frame.

The cabinet is an actively driven, 2-way bass-reflex design housing two long excursion neodymium drivers. One 18" driver radiates towards the front while one 12" driver radiates towards the rear of the cabinet.

The front and rear drivers are driven by separate amplifier channels and operate in independent bass reflex chambers. Through its cardioid dispersion pattern, this setup avoids unwanted energy behind the system and greatly reduces the reverberant field at low frequencies providing highest accuracy in low frequency reproduction. The frequency response extends from 37 Hz to 110 Hz (35 Hz to 85 Hz - INFRA mode).

The cabinet enclosures are constructed from marine plywood and have an impact and weather protected 2K finish. The front and rear of the cabinets are protected by a rigid metal grill backed by an acoustically transparent and water repellent fabric. Each side panel incorporates two handles and mounted on the rear panel are four heavy duty wheels.

On the bottom panel two runners extend from the rear to the front panel protecting the bottom panel against scratching.

Two correspondingly shaped recesses are incorporated in the top panel to accept these runners and prevent cabinet movement when stacking.

An M20 threaded flange in the top panel accepts a corresponding pole for the deployment of TOP cabinets.

d&b amplifiers

The d&b audiotechnik loudspeaker range is designed exclusively for operation with d&b amplifiers. These provide power as well as comprehensive control and protection functions tailored to achieve the performance, reliability and longevity associated with the d&b system approach.

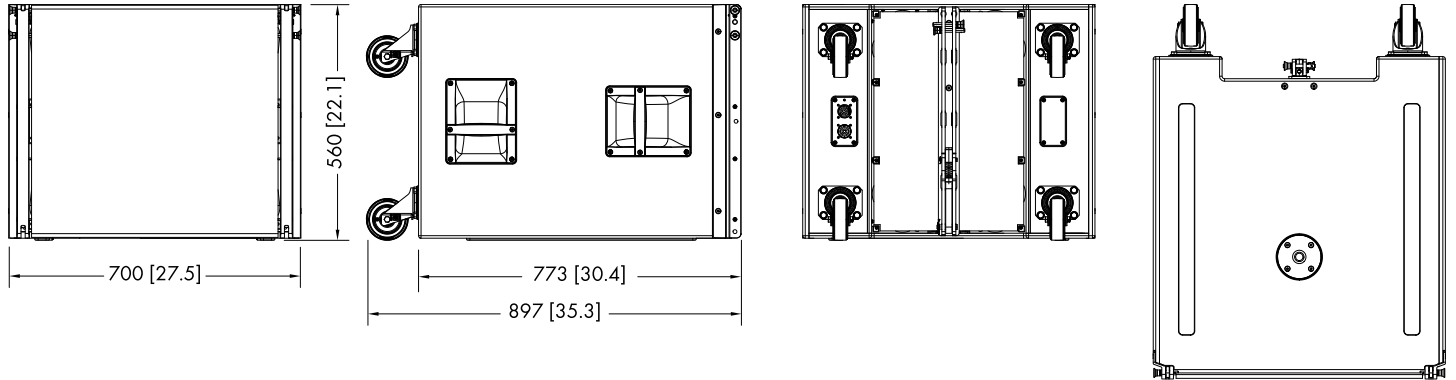
System data

Standard setup	
Frequency response (-5 dB Standard)	37 Hz - 110 Hz
Frequency response (-5 dB INFRA)	35 Hz - 85 Hz
Frequency response (-10 dB standard, IEC60268)	34 Hz - 140 Hz
Frequency response (-10 dB INFRA mode, IEC60268)	32 Hz - 95 Hz
Flt setup	
Frequency response (-5 dB Standard)	40 Hz - 125 Hz
Frequency response (-5 dB 100 Hz)	37 Hz - 85 Hz
Max. sound pressure (1 m, free field, broadband signal IEC60268)	
with D90/D80/D40/40D	137 dB

Loudspeaker data

Nominal impedance front/rear	8/16 ohms
Power handling capacity front (RMS/peak 10 ms)	700/1500 W
Power handling capacity rear (RMS/peak 10 ms)	400/800 W
Components	1 x 18" driver front/1 x 12" driver rear
Connections	1x NLT4 F/M
Pin assignment	1+: Front+/1 -: Front- /2+: Rear+/2 -: Rear-
Optional front splay	0° or 2.5°
Weight	66 kg (146 lb)

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XSL-SUB cabinet dimensions in mm [inch]

Architectural specifications

The subwoofer system shall be a 2-way bass-reflex design housing two long excursion neodymium drivers. One 18" driver radiates towards the front while one 12" driver radiates towards rear to produce a cardioid dispersion pattern. The front and rear drivers of the subwoofer shall be driven by separate channels of a dedicated and compatible amplifier, containing loudspeaker specific configurations and algorithms to provide cardioid behavior. The subwoofer shall exhibit extremely low power compression using very large vents.

The enclosure shall be constructed from marine plywood with an impact resistant and weather protecting PCP (Polyurea Cabinet Protection) finish. The cabinet front shall be protected by a perforated steel grill backed with an acoustically transparent foam.

On the bottom panel two runners shall extend from the rear to the front panel of the cabinet protecting the bottom panel against scratching. Two correspondingly shaped recesses shall be incorporated in the top panel of each cabinet to accept these runners and prevent cabinet movement when stacking. The cabinet shall incorporate a three point rigging and shall be capable of suspending the subwoofer as pure SUB column or in mixed arrays with dedicated TOP cabinets below the SUB cabinets.

A vertical splay of 2.5° between the front of adjacent SUB cabinets shall be mechanically adjustable.

Each side panel shall incorporate two handles while on the rear panel four heavy duty wheels shall be provided.

The power handling of the forward driver shall be 700/1500 W while the power handling of rear facing driver shall be 400/800 W (RMS/peak 10 ms).

The frequency response (-5 dB) measured on axis shall extend from 37 Hz - 110 Hz in standard mode and from 35 Hz - 85 Hz in INFRA mode with a maximum sound pressure level (SPLmax peak/1 m) of at least 137 dB.

The connection panel on the back shall be recessed and fitted with a speakON NLT4 F/M connector plate.

The dimensions (W x H x D) shall not exceed 700 x 560 x 897 mm (27.5" x 22.1" x 35.3") and shall weigh no more than 66 kg (146 lb).

The loudspeaker shall be the XSL-SUB by:
d&b audiotechnik GmbH & Co. KG.