



# SB28

## HIGH POWER SUBWOOFER

The **SB28** enclosure is a recommended subwoofer companion for the KI, KUDO®, V-DOSC® and ARCS® systems, lowering the combined system operating range down to 25 Hz.

The SB28 contains two 18" direct radiating LF transducers integrated into a bass-reflex tuned enclosure. The specially designed 18" transducers provide an exceptional cone excursion capability combined with low thermal compression even at the very highest operating levels. The bass-reflex vents feature a progressive profile allowing laminar airflow. The association of the modern components with the new vents delivers a greatly improved +5 dB peak SPL output compared to the previous standards.

The control and amplification of the SB28 is managed by the LA8 platform. The DSP filtering encompasses advanced crossover functions, system EQ, and L-DRIVE thermal and over-excursion protection of the transducers. The L-ACOUSTICS® LA8 amplified controller offers the following drive modes:

- The "standard" mode using SB28 as a companion to KI, KUDO®, V-DOSC® and ARCS®, featuring a low-pass filter at 60 Hz ([SB28\_60] preset) or closely coupled to ARCS® with a low-pass filter at 100 Hz ([SB28\_100] preset)
- The "cardioid" mode using SB28 as a companion to KI, KUDO®, V-DOSC®, and ARCS®, featuring a low-pass filter at 60 Hz ([SB28\_60\_C] preset) or closely coupled to ARCS® with a low-pass filter at 100 Hz ([SB28\_100\_C] preset).

The performance of the SB28 enclosure depends upon the choice of preset and physical system configuration.

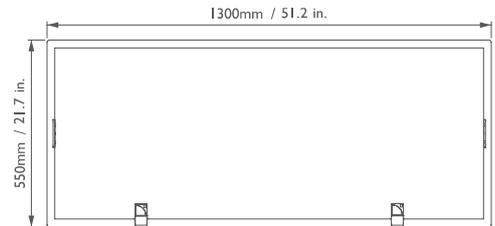
Made of high grade Baltic birch plywood, the cabinet also features industry standard Aeroquip® rails for line array rigging.



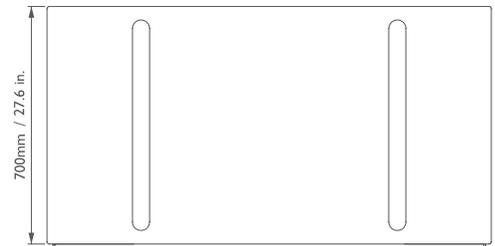
<b>Low frequency limit (-10dB)</b>	25 Hz ([SB28_100] preset)
<b>Maximum SPL<sup>1</sup></b>	140 dB ([SB28_100] preset)
<b>RMS handling capability</b>	1225 W ([SB28_100] preset)
<b>Components</b>	LF: 2 x 18" weather-resistant, (4" coil, aluminium die-cast basket, vented magnet design) Nominal impedance: 4 ohms
<b>Physical data</b>	W x H x D: 1300 x 550 x 700 mm - 51.2 x 21.7 x 27.6 in Weight (net): 93 kg - 205 lbs. Connectors: 1 x 4-pin Speakon® Material: 18 and 24 mm Baltic birch plywood Finish: dark grey brown Pantone® 426C Front: polyester powder-coated steel grill, airnet® acoustically neutral fabric Rigging: integrated rails for flying, stacking runners

<sup>1</sup> Peak level measured at 1m under half space conditions using 10 dB crest factor pink noise with specified preset and corresponding EQ settings.

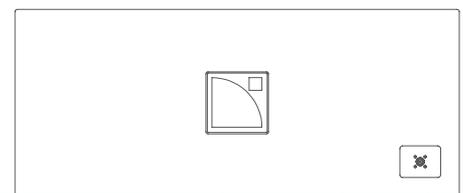
<sup>2</sup> Installation guidelines are specified in the SOUNDVISION software designed to help with L-ACOUSTICS® product implementation.



FRONT



TOP



REAR



# SB18-SB28

## SUBWOOFER SYSTEMS



The SB18 and SB28 subwoofers are the ideal complement of L-ACOUSTICS WST® line sources and coaxial systems for applications requiring an extension of bandwidth. Taking on the latest innovations in electro-acoustics, signal processing and components, SB18 and SB28 deliver an exceptional level of performance while offering the engineer and sound designer numerous modes of operation for rental and fixed installation applications. The main L-ACOUSTICS® system components for LF contour reinforcement are:

- SB18 subwoofer with a low frequency limit of 32 Hz
- SB28 subwoofer with a low frequency limit of 25 Hz
- LA4 and LA8 (LA-RAK) amplified controllers

The 18" transducers specifically designed for SB18 and SB28 combine high excursion capabilities, low thermal compression and reduced distortion. The bass-reflex vents feature a progressive profile allowing laminar airflow and reduced turbulence noise even at the highest operating levels. These combined properties contribute to their sonic qualities in terms of precision and musicality.

The SB18 design is based on a single 18" LF transducer integrated into a dual bass-reflex tuned enclosure to deliver both impact and high sensitivity. Its compact size makes it extremely well suited for compact FOH applications. Therefore, SB18 is particularly recommended for KUDO®, KARA®, KIVA, ARCS® and coaxial LF contour reinforcement in both standard and cardioid modes.

The SB28 contains two 18" direct radiating LF transducers integrated into a bass-reflex tuned enclosure. The exceptional cone excursion capability and use of laminar airflow vents deliver a greatly improved +5 dB peak SPL output compared to the previous generation. The SB28 enclosure is a recommended subwoofer companion (stacked configurations) for the KUDO®, V-DOSC®, ARCS® and K1 systems, lowering the combined system operating range down to the infra region of 25 Hz.

The SB system performance is acoustically optimized thanks to a dedicated preset library specifically engineered for the LA4 (SB18) and LA8 (SB18 and SB28) amplified controllers. Besides delivering award-winning audio quality, the amplified controllers deliver intelligent driver protection and advanced signal processing while offering a wide variety of configurations for the sound designer and engineer. Operation modes include stereo/standard or mono/cardioid and are available with two low-pass filters to accommodate various coupling conditions, footprint constraints and LF contour requirements.

SB configurations can be mechanically studied and modeled using the proprietary SOUNDVISION® 3D simulation software. In addition, setting up complex installations is made possible through the use of an Ethernet-based network which can support up to 253 amplified controllers. The L-ACOUSTICS® LA NETWORK MANAGER allows real-time control and monitoring of the units via an ergonomic and user-friendly graphic interface.



## SUBWOOFER SYSTEM COMPONENTS

### SB28<sup>1</sup>

Reference subwoofer, LF limit 25 Hz.



### SB18<sup>1</sup>

Compact subwoofer, LF limit 32 Hz.



### LA4/LA8/LA-RAK/LA-NETWORK MANAGER<sup>1</sup>

Amplified controllers with DSP library and networking capabilities.  
Touring rack.  
Remote control software.



<sup>1</sup> See product spec sheet for more details.

### M-BUMP/M-BAR

Rigging structure and extension bar for suspending or stacking KARA and/or SB18.

Certified for suspending up to 24 KARA or 16 SB18 or stacking up to 9 KARA.



### KARA-MINIBU/KARA-MINIBUEX

Mini rigging structure for flying/stacking KARA.

Extension for SB18/KARA or SB18.

Certified for 6 KARA and for 2 SB18/6 KARA or 4 SB18 with extension



### M-JACK/KARA-ANGARMEX

Tilt adjustment screw jacks for stacked M-BUMP

KARA angle bar extension



### SOUNDVISION

3D electro-acoustic and mechanical simulation software dedicated to L-ACOUSTICS® products.



## SUBWOOFER SYSTEM CONFIGURATION

Two SB system operation modes are available: “Standard” and “Cardioid.”

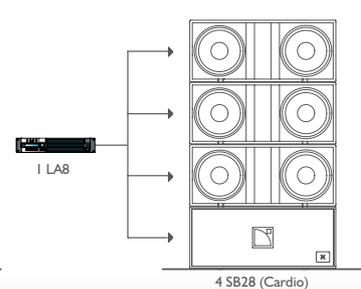
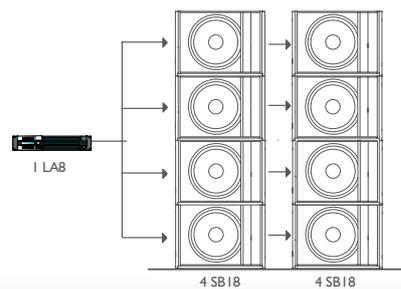
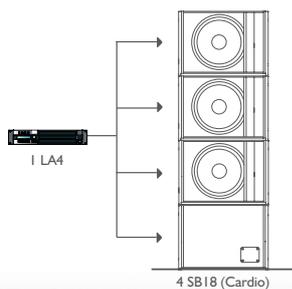
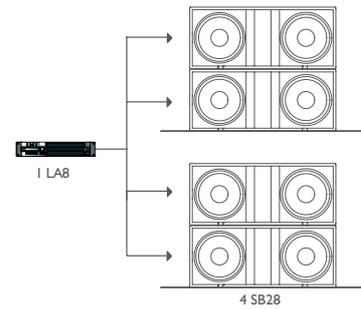
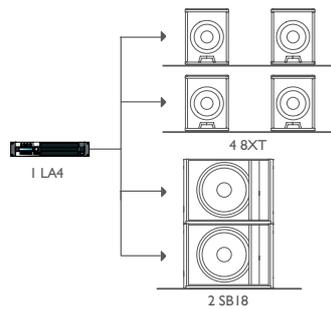
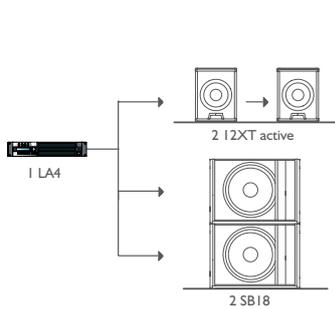
### “STANDARD”

The “standard” mode uses SB18 as companion to KUDO, KARA®, KIVA-KILO, ARCS® with 60 Hz low-pass filter or closely coupled to KARA®, ARCS® and XT with 100 Hz low-pass filter.

Preset [SB18\_60], Preset [SB18\_100]

or SB28 as companion to KI, KUDO®, V-DOSC®, ARCS® with 60 Hz low-pass filter or closely coupled to ARCS® with 100 Hz low-pass filter.

Preset [SB28\_60], Preset [SB28\_100]



### “CARDIOID”

The “cardioid” mode uses SB18 as companion to KUDO, KARA®, KIVA-KILO, ARCS® with 60 Hz low-pass filter or closely coupled to KARA®, ARCS® and XT with 100 Hz low-pass filter.

Preset [SB18\_60\_C], Preset [SB18\_100\_C]

or SB28 as companion to KI, KUDO®, V-DOSC®, ARCS® with 60 Hz low-pass filter or closely coupled to ARCS® with 100 Hz low-pass filter.

Preset [SB28\_60\_C], Preset [SB28\_100\_C]