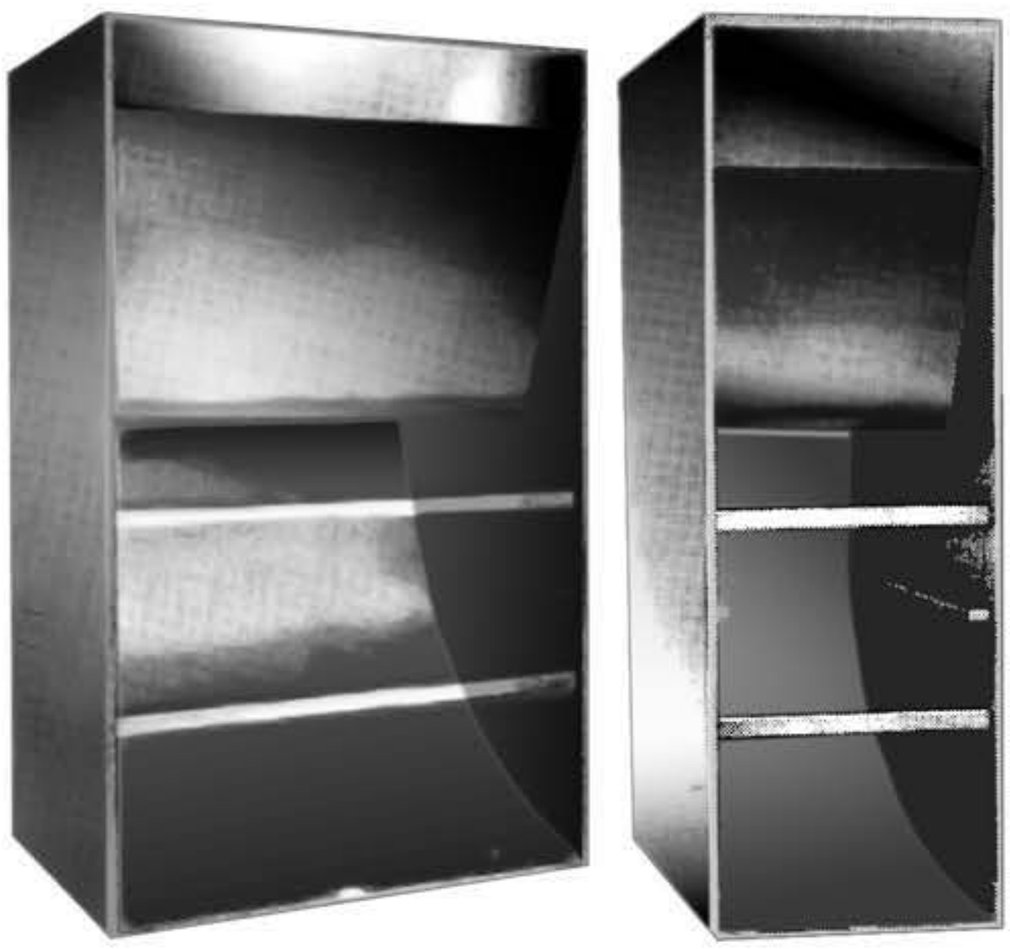
# Sub-Woofer Systems
# SB-200-LC, SB-500-LC, SB-335-LR, SB-600-LC, BH-400-LR, and BH-880-LR



The EAW Sub-Woofer Series is designed as a solution to the problem of providing deep bass in all existing systems including sound reinforcement, high level playback, motion picture and disco applications. The use of the EAW sub-woofer system can extend the usable response of any system and faithfully repro- duce the lowest fundamentals in music without com- promising definition or flat response. This new level of performance can add dramatically to the impres- sion of any performance.

EAW's vast experience in designing and constructing loudspeaker systems on the leading edge of technol- ogy has ena.bled us to develop this advanced line of sub-woofer systems. This is just the latest step in a long list of firsts that make EAW the world's largest supplier of professional specialty loudspeaker systems, including the first single box, flying, horn loaded, concert touring loudspeaker system and the first truly mathematically correct bass horn (BH-212-CT).

Our new series of sub-woofer systems is the direct result of the commitment of Kenton Forsythe, EAW's Director of Engineering, who has spent years of re- search and field testing in supplying custom designed systems for over 100 clubs, theaters and discos.

This extensive field experience affords EA W the engineering capability to plug real world problems into our design equations, including the effects of low tun- ing frequencies on driver reliability and the effects that multiple system arrays have on output performance.

EAW's impressive engineering capabilities are matched with our unique ability to turn complex con- cepts into reality with unsurpassed consistency and durability. The net result is a comprehensive range of sub-woofer loudspeakers designed to add dramati- cally to any performance.

These six different sub-woofer systems are each designed to fulfill your specific requirements in terms of output capabilities and cost. There is one system designed to do exactly what you are looking for if true deep bass is your objective.

_____ SB-200-LC ____ --,-_

The SB-200-LC is designed for medium output, nearfield applications including studio monitoring, club reinforcement, high fi playback, motion picture theatre sound, and disco applications where flat response down to 29 Hz is required. The SB-200-LC comes equipped with the new SB-384 high definition reference series 15 inch driver. It will function well up

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to 400 Hz ma~ing it very versatile for a number of uses. The sma:ll size and flat response make it ideal for use in installations requiring unobtrusive loud- speakers. The SB-200-LC is intended for permanent installation applications and is finished in black lacquer paint, with a black cloth grill assembly.

## SB-335-LR

The SB-335-LR is designed for medium output, portable, nearfield applications like the SB-200-LC except that t.hecross-grain-laminated birch hardwood construction, catalyzed polyurathane finish and steel hardware and speaker grill make it indestructable in road use. The SB-335-LR is loaded with the low distor- tion EAW/RCF LF-443-R driver for solid response to 30 Hz.

## SB-500-LC

The SB-500-L.C is a high output, nearfield subwoofer system for applications requiring a combination of response down to 25 Hz and high output capabilities for large disco and theater applications. It is supplied with two EAW reference series SB-384 drivers for low distortion -and high definition. The SB-500-LC is intended for permanent installation applications and due to. this the enclosure is made of high density korpine for its low resonance prnpertie$. Perforated steel grills and recessed input plate are standard.

## SB-600-LC

The SB-600-LC is sonically identical to the SB-500-LC system, with the addition of road packaging. This includes hardwood skids, rattle free recessed handles, and all cross-grain-laminated birch construction. This system is designed for portable applications where reproduction of the lowest fundamentals in music is critical and concert sound pressure levels are required.

## BH-880-LR and BH-440-LR

The BH-880-LR & BH-440-LR horn loaded sub-woofer systems are designed for applications requiring long throw bass to fill a large room or outdoor area. The horn loading serves to dramatically increase the out- put and directivity enabling the coverage of large areas with high level and intelligibility. The driver of both units, the EAW/RCF LF-440~R, is capable of handling the power and excursions required in this true horn loaded application; The basic design of these horns achieves maximum efficiency, but sacri- fices high frequency bandwith to do so. The result is a very sharp cutoff above 150 Hz requiring a low cross- over frequency. Additionally due to the large mouth area required to reproduce flat bass to the 30 Hz region, we suggest the use of multiple horns for applications requiring extraordinary· bass response. This is due in part to the unusually low flare rate incorpor- ated in these horns and to take full. advantage of this feature a quad array must be used. When these units are used singly the output capabilities are excellent but some shelving of the bass response is expected in the 35 to 50"Hz region. Due to their large size, these units afe only available in a permanently inst.ailed configuration. The catalyzed polyurethane finish makes them usable in fixed outdoor applications.

## Specifications

| | | SB-200-LR | SB-335-LR | SB-500-LR | SB-600-LR | BH-440-LR | BH-880-LR |
|---|---|---|---|---|---|---|---|
| Type: | | Single 15" Vented | Single 18" Vented | Dual 15" Vented | Dual 15" Vented | Single 18" Horn loaded | Dual 18" Horn loaded |
| Sensitivity 1w @ 1m: | | 95 dB SPL | 96 dB SPL | 100 dB SPL | 100 dB SPL | 107 dB SPL | 110 dB SPL |
| Reference Efficiency: | | 2.2% | 2.3% | 4.4% | 4.4% | na | na |
| Recommended Operating Range: | | 30 to 400 Hz | 25 to 250 Hz | 20 to 200 Hz | 20 to 200 Hz | 45 to 250 Hz | 38 to 150 Hz |
| Low Frequency Response | | | | | | | |
| – 3 dB: | | 33 Hz | 31 Hz | 30 Hz | 28 Hz | 50 Hz | 47 Hz |
| – 10 dB: | | 28 Hz | 24 Hz | 22 Hz | 22 Hz | 39 Hz | 32 Hz |
| Recommended Crossover Frequency: | | 400 Hz | 250 Hz | 200 Hz | 200 Hz | 250 Hz | 150 Hz |
| Slope (db/oct): | | 12 or 18 | 12 or 18 | 12 or 18 | 12 or 18 | 18 | 18 |
| Power Handling | | | | | | | |
| Nominal Continuous Sine Wave: | | 250 w RMS | 200 w RMS | 500 w RMS | 500 w RMS | 200 w RMS | 400 w RMS |
| Program: | | 400 w | 300 w | 800 w | 800 w | 300 w | 600 w |
| Driver Included: | | SB-384-R | LF-443-R | SB-384-R (2) | SLF-440-R | LF-440-R (2) | |
| Maximum Output (with rated nominal input measured at 1 meter): | | 117 dB SPL | 118 dB SPL | 126 dB SPL | 126 dB SPL | 128.5 SPL | 134.5 dB SPL |
| Dimensions | Height: | 36" | $42^{5}/_{16}$" | $23^{3}/_{4}$" | $30^{7}/_{16}$" | 24" | 42" |
| | Width: | 24" | $29^{13}/_{16}$" | $32^{3}/_{4}$" | $59^{3}/_{4}$" | 72" | 72" |
| | Depth: | $17^{1}/_{8}$" | $19^{3}/_{4}$" | $47^{3}/_{4}$" | $23^{3}/_{4}$" | 36" | 36" |

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