

### S Series, Designed for Power and Flexibility

Bass response is vitally important to all genres of music and Renkus-Heinz delivers superb results with the S Series of subwoofers.

Designed to complement any series of Renkus-Heinz loudspeakers, the S Series deliver deep, tight bass from surprisingly compact cabinets. Custom designed high-excursion woofers are perfectly mated to both the cabinet and the (optional) built-in power amplifier. Whatever the application, there's an S Series subwoofer to meet it.

The SX/SA112 subwoofer provides the power and punch of a 12 inch woofer in a cabinet that is easy to integrate into any project. Large ports insure that this forceful bass is never marred by any chuffing or fluttering noises.

#### Applications

- The SX/SA112 is a high-output, direct radiating subwoofer that is an ideal complement to any Renkus-Heinz full-range loudspeaker system.
- Used singly it adds sub-bass extension or LFE for AV, House-of-Worship and other multi-media applications.
- In multiples, it's deep extension and large cone area provide chest thumping impact for all kinds of musical performance.
- A top-mount pole adapter allows easy, elevated support of a full-range loudspeaker for portable applications.
- Standard recessed handles for portable use are inconspicuous in installs.

### Designed in Power & Flexibility

Sixteen, M10 Universal Mounting Points allow the SX/SA112 to be flown using M10 eyebolts, while the recessed handles top-mounted pole adapter and available casters make portable use easy and practical.

The optional SA2000 power amplifier precisely matches the power needs of the SA112, provides optimal damping of the woofer and has factory optimized, multi-band limiting. The built-in amp eliminates the need for additional rack space and speaker cable runs, making adding a subwoofer to existing installs as simple as plugging it into power and running a signal to it.

Controlled via RHAON II, the SA2000's built-in DSP has eight, fully parametric EQ filters, high and low shelf and high and low pass filters and up to 340 ms. of delay. All easily accessed via a Windows computer running RHAON II.

The SA112-RD add Dante digital signal distribution capability including AES67 compatibility and network redundancy (RD Model.).

## S Series Subwoofers

|                  |                         |
|------------------|-------------------------|
| <b>SX112</b>     | Externally Powered      |
| <b>SA112-RN</b>  | RHAON Empowered         |
| <b>SA112-RD1</b> | RHAON & Dante           |
| <b>SA112-RD</b>  | RHAON & Dante Redundant |

### High Output, Direct Radiating 12 in. Subwoofer



- **High Output**  
Outstanding 126 dB peak SPL performance.
- **Twelve-inch Woofer for Excellent Bass Response**  
Strong performance from 37 Hz to 130 Hz.
- **Versatile**  
Recessed handles, pole adapter and available casters for mobile use.
- **Optimal Subwoofer Fidelity**  
Direct radiating design with large ports assures deep, powerful bass without coloration or port noise.
- **Available SA2000 Amplifier**  
SA2000 amplifier offers high output, full protection limiting, analog, AES and optional Dante inputs.

## SA/SX112 Specifications

|                             | SX112   | SA112-RN, & SA112-RD   |
|-----------------------------|---|--|
| <b>Sensitivity:</b>         | 93 dB (1W/1m, Half-space)                                   | 1.4 volt for rated output, analog  |
| <b>Power Handling:</b>      | 500 watts AES @ 4 ohms                                      | See SA2000 amplifier specs below   |
| <b>Crossover Frequency:</b> | 120 Hz or lower recommended                                 | 100 Hz active  |
| <b>Connector:</b>           | 2 x Speakon® NL4; Four-place terminal strip, all paralleled | 2 x XLR-3, In & Loop-out, Analog and AES<br>2 x RJ45, Ethernet/RHAON/Dante |
| <b>Frequency Response:</b>  |   | 43 Hz to 110 Hz (-3 dB)<br>37 Hz to 130 Hz (-10 dB)                        |
| <b>Max. SPL:</b>            |   | 126 dB (peak, half space)  |
| <b>Transducers:</b>         |   | Woofer: SSL12-27, Recone kit: REC12-27                                     |
| <b>Enclosure:</b>           |   | 3/4 in./19 mm, 11 ply Birch plywood  |
| <b>Grille:</b>              |   | 16 GA powder-coated, plated steel  |
| <b>Finish:</b>              |   | Black (RAL9010) or White (RAL9011) paint, custom color available           |
| <b>Mounting:</b>            |   | 16 x M10 UMH points; 1 x M20 nutplate/pole adaptor                         |
| <b>Dimensions:</b>          |   | 19-1/4" w x 17-1/2" h x 20" d / 489 mm w x 445 mm h x 508 mm d             |

## SA2000 Amplifier Specifications

|                             | SA000-RN  | SA2000-RD1 ( <i>Ultima</i> )   | SA2000-RD ( <i>Brooklyn II</i> )  |
|-----------------------------|---|--|---|
| <b>Audio Connections:</b>   | 2 x XLR-3, In & Loop-out, Analog and AES<br>2 x RJ45 Primary & Looping Ethernet   | 2 x XLR-3, In & Loop-out, Analog and AES<br>2 x RJ45 Ethernet/Dante Primary & Secondary  | 2 x XLR-3, In & Loop-out, Analog and AES<br>2 x RJ45 Ethernet/Dante Primary & Secondary   |
| <b>Latency:</b>             | 6.25 ms   | 6.25 ms Analog & AES<br>6.25 ms + Dante transport latency  | 6.25 ms Analog & AES<br>6.25 ms + Dante transport latency   |
| <b>Max. Input Level:</b>    | +22 dBu, Analog, 0 dBFS digital   | +22 dBu, Analog, 0 dBFS digital  | +22 dBu, Analog, 0 dBFS digital   |
| <b>Network Connections:</b> | 2 x RJ45, Looping Ethernet/RHAON  | 2 x RJ45 Dante & RHAON looping (two-port switch)<br><i>(Note: Dante and RHAON share a single Ethernet network. Redundant networking is not available on RD1 versions.)</i> | 2 x RJ45 Dante Primary & Secondary Ethernet/RHAON<br><i>(Note: Dante and RHAON share a single or redundant Ethernet network.)</i> |
| <b>User DSP:</b>            | Eight fully parametric filters, high and low shelf, high and low pass filters, delay to 340 ms.                             |  |   |
| <b>Software:</b>            | RHAON II  |  |   |
| <b>Power Output:</b>        | LF= 2000 watts, @ 8 oms   |  |   |
| <b>Mains Voltage:</b>       | 100-240 volts, 50/60 Hz auto-switching  |  |   |
| <b>Power Consumption:</b>   | Idle: 200 mW. 1/8 power: 480 W ( <i>onset of limiting</i> ) 1/3 power: 1200 W ( <i>hard limiting</i> )                      |  |   |
| <b>Power Connector:</b>     | Neutrik powerCON TRUE-1   |  |   |
| <b>Temperature Limits</b>   | Max.: 140° F/60° C, with no direct sun exposure; Min.: -22° F/-30° C; leave unit on to keep interior warm below 32° F/0° C. |  |   |

*Note: All analog inputs and outputs comply with AES Standard 48-2005 on interconnecting, grounding and shielding.*

