

## SA Series Amplifiers

Designed and built in the USA, Renkus-Heinz SA Series represents a new and powerful technology designed to unify all Renkus-Heinz loudspeakers across connectivity and control platforms.

Renkus-Heinz SA Series Amplifiers are designed to provide the cleanest possible sound quality and performance, even with the most complex audio signals. Renkus-Heinz SA Amplifiers enable all Renkus-Heinz loudspeaker models to be freely combined. Offering full networking capabilities, RHAON II control and monitoring, connection via a choice of Analog, AES/EBU, or Dante™ input.

Renkus-Heinz SA Series Amplifiers are available in three models. The SA-625 amplifier outputs 500W + 125W; the SA-1250 outputs 1000W + 250W in two-way configuration or 500W + 500W + 250W in three-way mode; and the SA-2000 can be configured for single channel with 2000W into 4 ohm, or 2 channels of 1000W each into 8 ohm or 3 channels with 1000W, 500W and 250W.

With power to spare, SA-625 Amplifiers deliver enough power to drive two 6" or 8" C or T loudspeakers, substantially lowering system cost.

All SA Series Amplifiers are equipped with native DSP, including delay, equalization and nine available preset memories. Standard inputs are Analog and AES, with single and redundant Dante™ optional, as are Fiber Optic inputs Ethernet connectivity and control is standard with RHAON II.



### Key Features

- High performance Class D technology
- Integrated multi-channel DSP
- Volume, Mute, up to 340ms Delay, 8 band PEQ
- RHAON II Control and monitoring
- Multi-band thermal and peak protection
- Flexible input options
  - “A” Analog Only
  - “RN” Analog and AES/EBU with Ethernet and RHAON
  - “RD” Dante™ with redundant Dante network
  - “RD1” Dante™ with single Dante network
  - Optional Optical Fiber connections

### Proprietary Features

- Nine user presets (Three factory presets)
- Enhanced S/N with automatic Mute on program pause
- Instant fail-over (2ms) from Dante to Analog



## SA Amplifier Specifications

	<b>SA-625</b>	<b>SA-1250</b>	<b>SA-2000</b>
<b>Total Power (Watts):</b>	625W	1250W	2000W
<b>Channel Configuration:</b>	500W + 125W @ 8Ω	<b>Two Channel Model</b> 1000W + 250W @ 8Ω <b>Three Channel Model</b> 500W, 4Ω+ 500W,4Ω + 250W,8Ω	<b>Two Channel Model</b> 1000W + 1000W @ 8Ω <b>Three Channel Model</b> 1000W, 8Ω+ 500W,4Ω + 250W,8Ω
<b>Frequency Response:</b>	20 Hz to 20 kHz, +/-0.5 dB	20 Hz to 20 kHz, +/-0.5 dB	20 Hz to 20 kHz, +/-0.5 dB
<b>THD Distortion + Noise:</b>	< 0.5%	< 0.5%	< 0.5%
<b>CMRR:</b>	65 dB	65 dB	65 dB
<b>Output Stage Topology:</b>	Class D, Zero Feedback	Class D, Zero Feedback	Class D, Zero Feedback
<b>Input impedance:</b>	20k Ohm Balanced differential	20k Ohm Balanced differential	20k Ohm Balanced differential
<b>Analog Input Sensitivity:</b>	1.4 V for RPO	1.4 V for RPO	1.4 V for RPO
<b>Max Analog Input Level:</b>	+21 dBu	+21 dBu	+21 dBu
<b>Latency:</b>	6.68 ms Analog In 6.125 ms AES/EBU In 6.25 ms Dante In	6.68 ms Analog In 6.125 ms AES/EBU In 6.25 ms Dante In	6.68 ms Analog In 6.125 ms AES/EBU In 6.25 ms Dante In
<b>Power Connector:</b>	powerCON TRUE1 inlet connector	powerCON TRUE1 inlet-outlet combination connector	powerCON TRUE1 inlet-outlet combination connector
<b>Operating Voltage Range:</b>	100-240V AC (50/60 Hz)	100-240V AC (50/60 Hz)	100-240V AC (50/60 Hz)
<b>Operating Temperature Range:</b> <i>When left on and protected from direct sunlight.</i>	-22° to 140° F -30° to 60° C	-22° to 140° F -30° to 60° C	-22° to 140° F -30° to 60° C
<b>Current Draw</b>			
<b>Idle Current:</b>	20 mA @ 110v 15 mA @ 220v	30 mA @ 110v 20 mA @ 220v	30 mA @ 110v 20 mA @ 220v
<b>1/8 Maximum Output Power:</b>	1.0 A @ 110v 0.5 A @ 220v	2.0 A @ 110v 1.0 A @ 220v	2.0 A @ 110v 1.0 A @ 220v
<b>1/3 Power:</b>	2.0 A @ 110v 1.0 A @ 220v	4.0 A @ 110v 2.0 A @ 220v	4.0 A @ 110v 2.0 A @ 220v
<b>Max Inrush Current (Soft Start):</b>	1.0 A @ 110v 0.5 A @ 220v	2.0 A @ 110v 1.0 A @ 220v	2.0 A @ 110v 1.0 A @ 220v
<b>Thermal Dissipation</b>			
<b>Idle:</b>	58 BTU/hr or 15 kcal/hr	78 BTU/hr or 20 kcal/hr	78 BTU/hr or 20 kcal/hr
<b>1/8 Power:</b>	304 BTU/hr or 77 kcal/hr	607 BTU/hr or 153 kcal/hr	1215 BTU/hr or 306 kcal/hr
<b>1/3 Power:</b>	713 BTU/hr or 180 kcal/hr	1426 BTU/hr or 359 kcal/hr	2853 BTU/hr or 719 kcal/hr
<b>Inputs / Connectors</b>			
<b>Analog/AES3</b>	XLR-3, Looping	XLR-3, Looping	XLR-3, Looping
<b>Control (RHAON)</b>	etherCON RJ45	etherCON RJ45	etherCON RJ45
<b>Dante™ (Optional)</b>	etherCON RJ45	etherCON RJ45	etherCON RJ45
<b>Dante™ Dual Redundant (Optional)</b>	etherCON RJ45	etherCON RJ45	etherCON RJ45
<b>Controls, Back Panel</b>	Input Select, Preset Select, Volume	Input Select, Preset Select, Volume	Input Select, Preset Select, Volume
<b>RHAON Control</b>	Input Select, Preset Select, Volume, Mute, Delay up to 340 ms, 8 band EQ, HP, LP, High & Low Shelf	Input Select, Preset Select, Volume, Mute, Delay up to 340 ms, 8 band EQ, HP, LP, High & Low Shelf	Input Select, Preset Select, Volume, Mute, Delay up to 340 ms, 8 band EQ, HP, LP, High & Low Shelf
<b>Status Indicator LEDs</b>	Signal Present, Fault	Signal Present, Fault	Signal Present, Fault
<b>Driver Protection</b>	Multi-band thermal and peak driver protection limiting on all channels	Multi-band thermal and peak driver protection limiting on all channels	Multi-band thermal and peak driver protection limiting on all channels

Specifications subject to change without notice