RENKUS-HEINZ

# P Series

## P3-12-RN RHAON Empowered
## P3-12-RD RHAON & Dante Redundant

# 12" LF + CoEntrant® Mid-High Three-way, Loudspeaker

**"No Compromises" Performance, Built-to-Order**

Drawing from years of experience and industry leading technologies like Complex Conic waveguides, P Series loudspeakers are designed to meet the needs of today's AV professionals, with a broad range of systems to provide effective solutions for every sound reinforcement challenge.

P Series loudspeakers incorporate the newest generation of Complex Conic horns, with the latest drivers to provide clean, natural sound and tight pattern control. Unlike conventional loudspeaker designs, Complex Conic horns provide consistent beamwidth over a wider frequency range, with the natural, transparent sound that Renkus-Heinz is known for.

The P3-12 offers the sonic and performance advantages of a three-way loudspeaker in a cabinet the size of most two-ways. The CoEntrant CDT3 mid-high driver allows the use of a single, optimally sized Complex Conic horn. Not only does this insure consistent directivity through crossover, but also allows the horn to be ideally sized for consistent directivity through the low-mid crossover as well. Only Renkus-Heinz can combine this level of performance, fidelity and power in such a compact, easy to install or transport, loudspeaker.

**Applications**

- Clubs, small theaters, bars or any other performance space needing high output and stellar fidelity from a compact loudspeaker.
- HOW applications where consistent directivity and superb sonics are necessary for intelligibility and even coverage to every seat.
- Production and rental applications where the ultimate performance is needed in a compact, easy to transport package.

To insure consistent, unparalleled performance all P Series loudspeakers are self-powered with SA Series amplifiers, insuring no compromises in sonics, output or protection.

The integrated multi-channel SA1250 amplifier precisely matches the power demands of the transducers, while providing all the necessary crossover, protection, and monitoring needed for long term reliability and confident use day in, day out, show after show.

Made in the USA and fully customizable with the options you've come to expect from Renkus-Heinz including multiple horn dispersions, mounting and mobile options, custom color and weather resistance.

- **High Output**

  Outstanding, full-range 55 Hz to 20 kHz performance in compact, three-way design.

- **Premium Woofer for High Output and Tight, Extended Bass**

  Peak output of 125 dB and horizontal directivity controlled to below 500 Hz.

- **CoEntrant® Mid-High Driver on a Rotatable Complex Conic Horn**

  Provides smooth, low distortion performance to 20 kHz with perfect alignment and no pattern distortion through crossover. The horn is rotatable for horizontal applications.

- **SA1250 Tri-Amplifier**

  SA1250 amplifier offers high output, full protection limiting, analog, AES and optional Dante inputs.

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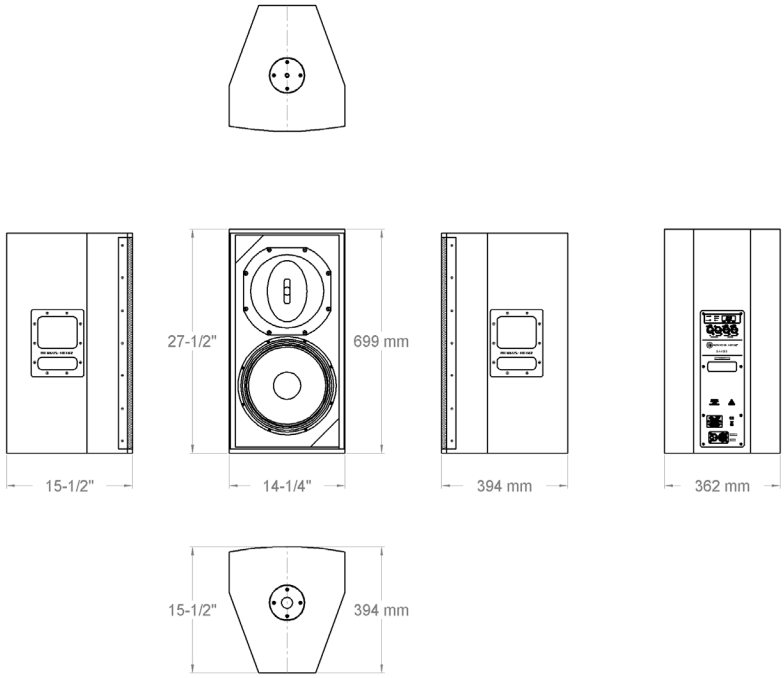
## P3-12 Specifications

| | P3-12-RN & P3-12-RD |
|---|---|
| **Connector:** | 2 x XLR-3, In & Loop-out, Analog and AES<br>2 x RJ45, primary & secondary |
| **Frequency Response:** | 65 Hz to 20 kHz (- 3dB)<br>55 Hz to 20 kHz (-10 dB) |
| **Sensitivity:** | 1.4 volt for rated output, analog |
| **Calculated Max. SPL:** | 125 dB (peak, whole space) |
| **Dispersion:** | 90 h x 40 v (Optional 60 h x 40 v) |
| **Power Handling:** | *See SA1250 amplifier specs below* |
| **Transducers:** | Woofer: SSL12-17; Mid-High Frequency Driver: CDT-3-4B; Replacement HF Diaphragm CDT-3-TN |
| **Crossover Frequency:** | 480 Hz & 2.5 kHz active electronic |
| **Enclosure:** | 3/4 in./19 mm, 11 ply Lite-Ply® plywood |
| **Grille:** | 16 GA powder-coated, plated steel |
| **Finish:** | Black (RAL9010) or White (RAL9011) paint, standard. Custom colors optional. |
| **Mounting:** | 12 x M6 UMH points, 35 mm tripod socket, UBRKT/CT121 (U-Bracket adapter plate included with u-bracket) |
| **Dimensions:** | 14-1/4" w x 27-1/2" h x 15-1/2" d<br>3620 mm w x 699 mm h x 394 mm d |

## SA1250 Amplifier Specifications

| | SA1250-RN | SA1250-RD *(Brooklyn II)* |
|---|---|---|
| **Audio Connections:** | 2 x XLR-3, In & Loop-out, Analog and AES | 2 x XLR-3, In & Loop-out, Analog and AES<br>2 x RJ45 Dante Primary & Secondary Ethernet |
| **Latency:** | 6.25 ms | 6.25 ms Analog & AES<br>6.25 ms + Dante transport latency |
| **Max. Input Level:** | +22 dBu, Analog, 0 dBFS digital | +22 dBu, Analog, 0 dBFS digital |
| **Network Connections:** | 2 x RJ45, Looping Ethernet/RHAON | 2 x RJ45 Dante Primary & Secondary Ethernet/RHAON *(Note: Dante and RHAON share a single or redundant Ethernet network.)* |
| **User DSP:** | Eight fully parametric filters, high and low shelf, high and low pass filters, delay to 340 ms. | |
| **Software:** | RHAON II | |
| **Power Output:** | LF= 500 watts, @ 4 ohms / MF = 500 watts @ 4 ohms, HF = 250 watts @ 8 ohms. Multi-band peak and thermal limiting on all channels protects the drivers. | |
| **Mains Voltage:** | 100-240 volts, 50/60 Hz auto-switching | |
| **Power Consumption:** | Idle: 200 mW. 1/8 power: 240 W *(onset of limiting)* 1/3 power: 550 W *(hard limiting)* | |
| **Power Connector:** | Neutrik powerCON TRUE-1 | |
| **Temperature Limits:** | 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.* | | |

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