

RS-8.1 SUBWOOFER

FEATURES

Aura Patented transducer technology provides the excursion of two standard 18" transducers 800 WRMS power handling

25 hertz low frequency usable response

Reduced Velocity Port™ (RVP) for reduced power compression and low distortion

The Aura model RS-8.1 is a high quality subwoofer system designed for high output and low distortion in critical sound reinforcement applications demanding usable output to 20 hertz. The RS-8.1 features the Aura 1808 18 inch low frequency transducer in a unique enclosure designed to minimize port power compression and distortion.

TRANSDUCER

The RS-8.1 features the Aura 1808 18 inch subwoofer driver. The 1808 is capable of two inches of peak to peak travel and 1.5 inches of total linear excursion - twice other 18 inch transducers. The patented Neo-Radial Technology (NRT) employed in the magnetic structure is the heart of the 1808. NRT is based upon high energy Neodymium magnets arranged in a radial configuration, placing the entire voice coil in a linear magnetic gap. The voice coil is a one inch long edgewound ribbon design and is mated to a rugged dual spider suspension. The NRT geometry increases power handling, lowers distortion and, as an added benefit, provides complete magnetic shielding.

ENCLOSURE

Most of the output of a vented subwoofer is generated by the port. The Aura 1808 transducer can generate twice the volume of displaced air due to its large excursion capabilities - and this volume of displaced air must be handled by the port. Ports with small areas can "seal up" at high air volume velocities causing power compression, reduced output and distortion. The RS-8.1 enclosure features a Reduced Velocity Port™ (RVP) to ensure free flowing air velocity and maximum output at the highest sound pressure levels. Additionally, the port is flared at both ends to reduce port turbulence - and as a result, lower distortion. The physical location of the port at one end of the enclosure allows arrays of subwoofers to be arranged so adjacent ports can be closely coupled.

The enclosure itself is constructed of rugged Baltic birch and covered in industry standard carpet. Handles are installed on two sides for easy of handling.

The enclosure features a split grille design so the port grille can be removed for maximum port output. Two 4-pin SpeakOn connectors are standard, but can be exchanged for 2 Canon EP connectors.



RS-8.1 SPECIFICATIONS

(preliminary specifications)

Rated Impedance: 8 ohms

Minimum Impedance: 8 ohms

> **Power Handling:** Continuous Pink Noise: 800 watts Peak Power: 3200 watts

> > Sensitivity: 98 dB 1W/1m

Array Size:	1 RS-8.1	2 RS-8.1	4 RS-8.1
Half Space Reference Efficiency:	3.7%	7.4%	14.8%
Max Continuous Acoustical Power Output:	29.6 W	118.4 W	473.6 W
Maximum Continuous SPL:	127 dB	133 dB	139 dB

Frequency Response: 25 - 125 hertz

Recommend Low Pass Crossover Frequency: 63 - 125 hertz

> **Recommended High Pass Filter:** 20 - 25 hertz

Enclosure Tuning Frequency: 25 hertz

> **Net Enclosure Volume:** 225 liters (8 cu. ft.)

Dimensions (H x W x D): 915 x 572 x 762 mm 36 x 22 1/2 x 30 in.

Input Connectors: 4 pin SpeakOn (2 wired in parallel)

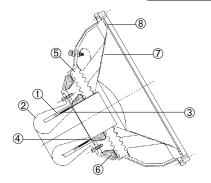
Input Terminals: pins 1+, 1-

System Polarity: EIA, positive voltage to pin 1+ produces forward cone motion

Net System Weight: 63.6 kg (140 lbs)

Shipping Weight: 70.5 kg (150 lbs)

Aura 1808 with NRT™



- High Temperature Neodymium
 Ring Magnet
- 2 .L ow Carbon Steel "Tear Drop" Return Structure
- 3. Edge wound Anodized Aluminum Voice Coil
- 4.Thermoset Composite & Nomex Former
- 5. Diameter Dual Spider 6. Forced Air Cooling
- 7. Fiberglass reinforced ribbed paper cone
- 8. High Excursion cloth surround

