Audience 1+1 V5 Loudspeaker Design Features

Unique Full Range Drivers

The A3S2-16 driver used in the 1+1 V5 is a proprietary Audience design that has undergone numerous refinements over the years. The A3S2-16 has a patented dual gap motor and basket structure with a 1-inch-wide voice coil which is unusually large for a driver of its size. The total moving mass of the curvilinear titanium cone and voice coil is 2.5 grams. The driver has a total excursion of 11mm (5.5mm in each direction), a piston excursion normally found in larger woofers. The driver also has a relatively large spider and patented surround design supporting its long linear excursion. The neodymium magnet structure is highly vented to aid the dispersion of voice coil heat. Power handling of the A3S2-16 is 40 watts per driver/80 watts per speaker. All this adds up to an exceptionally fast and powerful motor, capable of delivering ultra-high resolution, extremely realistic timbre with powerful dynamics.

No Ordinary Box

The 1+1 V5 enclosure has several unique features. The front and rear baffles are non-parallel reducing the negative effect of internal standing waves. The enclosure also utilizes proprietary damping material that further reduces the effects of standing waves and internal reflections. The configuration of the 1+1 V5 has two active drivers set on opposite ends of the enclosure wired in-phase. This setup provides active vibration cancellation to minimize energy that would otherwise be transferred to the enclosure by the moving force of the drivers.

Internal High-Pass Filter

The 1+1 V5 has a 40 Hz High-pass filter that reduces excessive excursion at infrasonic frequencies that cause distortion and potential damage to the drivers.

Voicing Circuit

The 1+1 V5 has a voicing circuit that provides baffle step compensation resulting in a very smooth frequency response. The proprietary circuit uses the highest quality parts. One of the main components being an Audience Auri-Cap XO film capacitor.

Bi-Pole Radiation System

The 1+1 V5 is a bi-pole loudspeaker. Using two full-range drivers wired inphase on opposite ends of the enclosure results in a bi-pole radiation pattern. This bi-pole pattern results in an expansive, realistic, threedimensional sound field. Using two identical drivers in phase increases power handling and sensitivity.

High Quality Signal Path

The 1+1 V5 uses an ultra-low mass 5-way binding post made by KLEI. All internal wiring is done with highly regarded Audience mono-crystal speaker wire. The voice coil and tensile wire are also made with high purity monocrystal wire providing, in total, a low mass unobstructed path for optimal signal transmission.

- <u>1+1 V5 Measurements</u>
- <u>Specifications</u>