

The R12 thrives on reinforcement of classical & jazz music and speech & vocals in live theater, opera house and (television) studio, but is also very suitable for use as recording studio monitor and/or reference loudspeaker.

The uncompromisingly Quint Audio designed high end converters, DSP hardware and DSP software work perfectly together with the built in high end amplifiers and power supplies. A combination of minimum phase and complementary filtering coupled to the uncompromising physical design, takes care of a linearity of the R12 in both dynamics, dispersion, frequency and phase which is unseen in the PA industry before.

The Quint Audio R12 is a 12"ND/5"ND AMT biamped self powered full-range reference speaker system with unprecedented dynamic range and sonic performance.

The R12 cabinet is built of birch plywood and equipped with a wear-, tear- and impact-resistant environmental friendly hybrid coating. Various internal bracings and separation panels are applied in order to increase the rigidity and acoustic neutrality of the design.

Inside the R12 no less than five different damping materials are being used in order to minimize cabinet reflections. The damping material is partly made of keratin, a natural source that not only provides a balanced acoustic damping but is also known for its fine moisture regulating effects. This will minimize condensation inside the speaker.

The 12-inch high air volume displacement neodymium woofer in the R12 features a 100 mm voice-coil. The internal cooling system of the magnet system provides a minimum power compression.

The 5-inch Air Motion Transformer (AMT) high frequency driver is applied for the high frequencies. The AMT moves air in an augmented, semi-perpendicular motion using a folded kapton sheet, structured around a series of aluminum struts positioned in a high-intensity magnetic field. This ensures distortionfree transduction of high frequencies far beyond 20kHz.

While the acoustically separated AMT produces a merely planar wavefront, a Quint Audio designed wavefront transformer is being applied, in order to fold the planar wavefront open in the vertical and thus get control over the vertical dispersion of the R12. This principle is new to planar wavefrontshaping. The dedicated acoustic lens is not making use of deflection or reflection, but accurately calculated and rendered path length differences, so undisturbed air flow with almost absolute phase purity appears on the mouth of the R12 high frequency horn.

The R12's dedicated alucast horn works perfectly together with the R12 lens and is designed for a very accurate high frequency dispersion of 80°x40° hvx. The cross over point between the AMT and woofer adds perfectly up for both frequency and directivity. For minimum obstruction of high frequencies, the R12 features an acoustically transparent front.

The R12 features both analog and digital inputs. A network audio interface is additional. The R12 is equipped with dedicated tool-free rigging hardware.



model	R12
type	12"ND/5"ND AMT biamplified system
filter	digital FIR/IIR
program SPL	124 dB 1m
frequency range	35 -20.000 Hz
dispersion	80°x40° hvx
weight	35 kg
size (wxhxd)	360 x 690 x 450 mm

