



RS-10

REGA

RS-10 loudspeaker system

The RS-10 loudspeaker uses a BMR (Balance Mode Radiator) to handle the majority of the audible music spectrum. The BMR design concept was conceived as a full range driver handling all musical frequencies from bass through to treble with a single driver and no crossover. This concept works remarkably well and produces a musical transparency normally associated with electrostatic loudspeakers. However no concept is perfect and a single BMR can only produce limited bass output and some people may prefer more precise musical images. Most loudspeaker systems have a crossover point for the mid range driver and tweeter between 2 KHz and 3 KHz. This can upset the vocal region



with distortion and phase shift. It is also where the human ear is most sensitive. Therefore with use of the BMR unit, Rega has been able to design a crossover point above the most critical range. The high frequency capability of the BMR, has allowed the two units to integrate to 6 KHz. This gives massive improvements in sound quality with greater clarity and detail in the music. Rega has pioneered the integration of a BMR with the unique Rega dual driver bass system and a completely new and unique Rega designed and UK manufactured tweeter.

The high frequency sound of a BMR is so good that the quality level of any normal tweeter will not combine with it. This is why Rega felt compelled to design a new and unique tweeter that would complement the BMR unit. This new tweeter the ZRR-10 uses Rega's ZRR (Zero Rear Reflection) technology combined with an unparalleled production technique that allows the silk dome to be assembled directly onto the front plate thus eliminating a major source of unwanted vibration. Each tweeter is meticulously hand assembled at Rega's factory in the UK and incorporates a copper Faraday ring which extends the frequency response of the tweeter up to 23KHz by lowering inductance of the voice coil.



For bass frequencies the RS-10 uses two separate bass drivers connected in parallel. The drivers are different sizes, have different resonant frequencies and operate with individually separate cabinet loading: A 200mm driver with a lightweight paper cone, 8 layer voice coil and a resonant frequency of 40Hz operates in a transmission line with port output extending below audibility coupled with a 125mm driver also with a lightweight paper cone, 8 layer voice coil and resonant frequency of 75Hz which is loaded by a small sealed cabinet. This system eliminates the normal single bass resonance by spreading smaller



resonances across the entire bass frequency band and incorporates a degree of self damping due to the parallel connection with the amplifier. The result is a much tighter and more tuneful bass register which can be adjusted in level to suit room characteristics. The loudspeaker can also be moved closer to or further from a wall resulting in an increase or decrease of low frequency to suit personal preference.



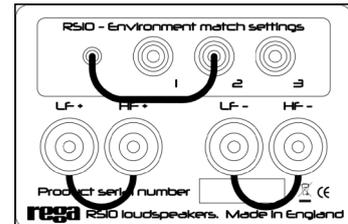
Design

The Rega RS-10 loudspeaker system has been designed to complement our reference range by providing the perfect partner for the Isis CD player and Osiris amplifier. A flexible loudspeaker that will integrate into any system which offers the user the ability to adjust its performance to suit different locations via our 'environment match' adjustment feature.



The EMS (Environment Match Settings) allow the user to adjust the loudspeakers to suit a room. Altering these settings changes the balance between the lower and higher frequencies. Simply adjusting the positions between the three available settings on the rear of the speaker gives you maximum flexibility in the most awkward of rooms.

We have pioneered the integration of the BMR unit with the unique Rega dual driver bass system and a completely new and exclusive Rega designed tweeter to create a very special and unique loudspeaker system which offers unparalleled levels of control balance and dynamics.



Technical specifications

Crossover :

Multiple high voltage parallel polypropylene capacitors with iron dust and air core inductors.
Average impedance 6 Ohms

Crossover frequencies:

Bass to Mid 300Hz
Mid to High Frequency 6KHz
ZRR-10 tweeter unit sensitivity 88dB
8 layer 125mm bass drive unit - 75Hz
8 layer 200mm bass drive unit - 40Hz
Bi-wireable / Bi-ampable - Yes

Cabinet construction and finish

Available in High gloss Cherry or Walnut
25mm thick high density cabinet
1/4 wave transmission line design

Cabinet dimensions:

Height 1005mm
Depth 440mm
Width 200mm
(300 mm foot print)

Weight per speaker 38Kg

