

R Diffuser

The R-Diffuser is a 24" x 48" x 8" (61cm x 122cm x 20.3cm) quadratic residue diffuser (QRD) that will effectively break up standing waves and directional reflections to provide a sense of air and increased space in any room. Ideally suited for recording studios, theaters and critical listening environments, the R-Diffuser features a series of 17 wells of varying depth that combine to effectively scatter frequencies as low as 400Hz.

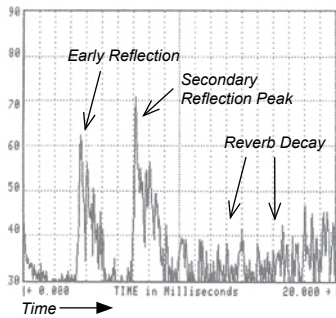
The R-Diffuser is constructed using a combination of furniture-grade plywood for durability, and medium density fiberboard slats for increased rigidity and mass. Ships fully assembled in an attractive black finish.



ORDER NUMBER	Z840-2400-00
FRAME MATERIAL	Baltic Birch outer frame, MDF inner
DIMENSIONS	24" (610mm) x 48" (1219mm) x 8" (203mm)
WEIGHT	75.1 lbs (34.0 kg)
COLOR	Black, paintable

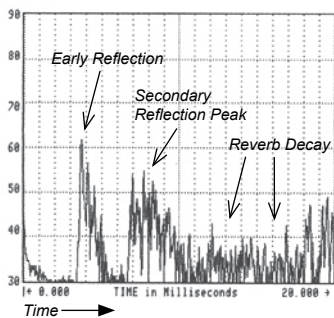
IMPULSE RESPONSE TEST:

Graph-1: No Diffusion

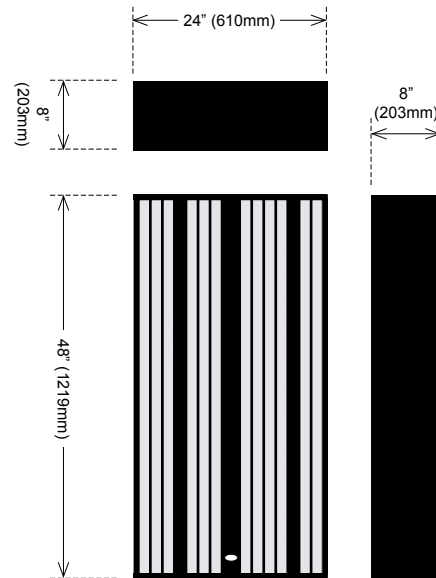


Graph 1: Room without Diffusion
 The first spike represents the room's early or primary reflections. The second spike indicates the secondary reflections or room ambience. The secondary is a full 10dB louder than the early reflections and most of the energy is bunched up at one point in time showing a peak.

Graph-2: Razorblade Quadratic Diffusion



Graph 2: Room with Diffusion
 Diffusion works by dispersing peak acoustic energy and spreading these spikes over a broader time span, creating secondary reflections that decay gradually and evenly. Diffusion is perceived as a natural wash of reverberation.



APPLICATIONS:

Diffusers on the rear wall span the width of the listening position and break up front-to-back waves.

