

ARC Diffuser

USES

- ◆ Improve tonality & clarity
- ◆ Improve soundstage, air & spatial imaging
- ◆ Control 1st order reflections

ARC Diffusers can easily be mounted on walls or ceilings. They are typically concealed under a stretch fabric system. ARCs are single 2'x2' units to tame first order reflections, or as monolithic coverings to add more aural "openness" to the space.

ARC diffusers can add sonic spaciousness to the room, air around the instruments and accuracy to the timbre. They also improve clarity in speech and in spatial focus without making the room sound too dead.

Most commonly, ARCs are used to enhance surround sound speakers in the rear of the room. They can also be used at reflection points in place of absorption when reverberation times are low.

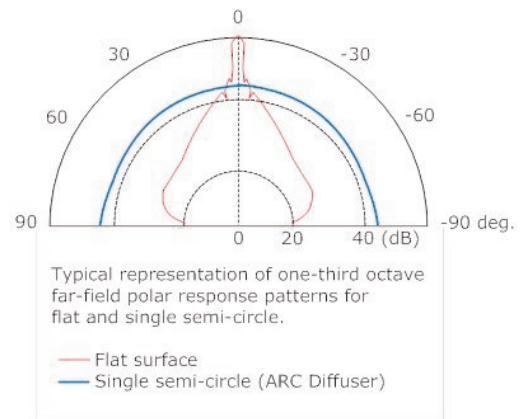


Convex arcs are very effective at dispersing sound. They don't have high frequency or angle of incidence limitations, and down to their low frequency cut-off, their polar plots are very smooth and omnidirectional across the receiver arc.

Kinetics Noise Control's ARC is a matte-grey painted 20 gauge metal diffuser with a damping sheet applied to the back to eliminate resonant ringing. The open sides and unfilled interior mean that it acts purely as a diffuser and does not introduce any appreciable absorption characteristics. A single 2'x2' ARC can be used at a single listener first order reflection point. More ARCs can cover more listeners and/or provide both vertical and horizontal diffusion for hemispherical sound scattering.

Multiple Panels— It is good practice, when using polycylindrical diffusers, to avoid mounting four or more together with the same directional orientation, depth and spacing. Doing so can create repeated constructive and destructive conditions for particular frequencies. Changing the spacing, depths and/or orientations will eliminate such conditions.

- Cost-effective polycylindrical diffuser
- Typically used behind stretch fabric systems
- Adjustable depth of 3"-5" for randomization
- Horizontal or vertical scattering
- No high frequency cut-off. Effective from about 630Hz. and up
- No absorption. The ARC is a pure diffuser



- The ARC Diffuser can be oriented horizontally or vertically, or in combinations to achieve the desired diffusion characteristics.
- Low frequency limit around 630 Hz.
- No high frequency limit even off-axis.
- No theoretical minimum seating distance, as there is no temporal dispersion with polycylindrical diffusers.