

B.A.S.S. TRAPS



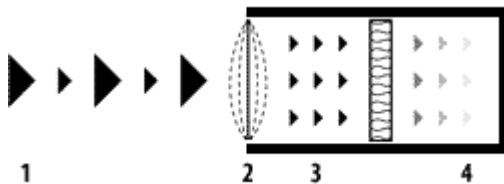
- Small rooms often exhibit poor low frequency response with significant emphasis at modal resonances. They also have limited space to make acoustical improvements.
- Porous surface absorption is ineffective at these modal frequencies, because the air motion near walls and in corners is essentially zero for these long wavelengths.
- The problem is solved by this unique membrane system that converts the high sound pressure fluctuations typically found in corners into selective absorption in the modal frequency range.

Problem

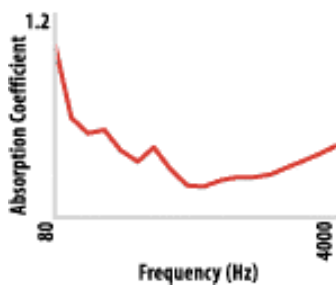
Small rooms like Project Studios often suffer from low frequency modal problems. Absorption at these frequencies requires a high absorption efficiency and significant surface area. Since small rooms do not offer the needed space, the absorption efficiency must be optimized.

Solution

This product solves the problem by optimizing the absorption efficiency using a unique internally damped membrane absorber that provides ideal absorption in the modal frequency range.



Sound (1) strikes the membrane (2) which sympathetically vibrates, converting the sound pressure to air (3) motion. The air loses velocity (4) as it moves through the internal absorber and air cavity. Now you absorb more bass in less space!



Absorption

Surface or corner applied porous materials lose efficiency at low frequencies, because the particle velocity or air movement associated with long wavelengths is low. The sound pressure, conversely, is at its maximum. The internally damped membrane in the Corner Bass Trap exploits this high pressure by converting the pressure fluctuations into air motion. As the membrane sympathetically vibrates over a selective low frequency range, determined by its mass and stiffness, it pushes air through an internal porous layer producing low frequency absorption. This innovative approach makes it possible for the Corner Bass Trap to absorb the fundamental and higher harmonic modes that are often problematic in small rooms.



Installation

The Corner Bass Trap can be mounted in any 90° corner between two walls or a wall and a ceiling. It can be attached directly to the surfaces using the supplied hook and loop or metal screw fasteners. If there is no 90° corner available, or if the corner is not suitable, the Corner Bass Trap can be stacked in a free standing configuration.