

GEOMETRY CLASS

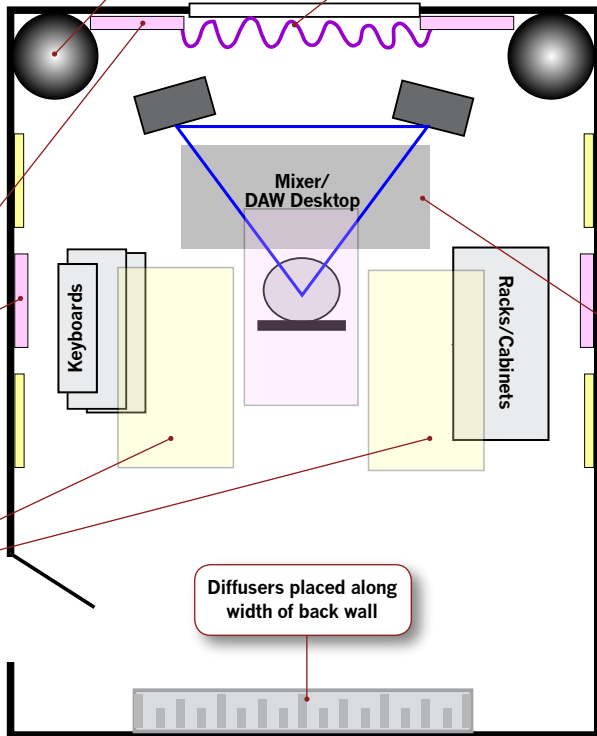
When setting up a studio, most people will be dealing with a standard rectangular room. To create an optimum listening environment, try to arrange your speakers and your listening position in the center of the room. At the very least, you should always try to have some space between the backs of your near-field speakers and the wall behind them.

Midfrequency and high-frequency absorbers hung in alternating pattern around front and side walls

Ceiling-mounted mid, high absorbers over mix position (optional)

Bass traps placed in front corners

Deeply pleated rug hung in front of window



Monitor speakers centered to dividing line along length of room and placed in equilateral triangle to mix position

Diffusers placed along width of back wall

MODULAR DIFFUSER PANELS

Because these will be exposed and on display, use ½-inch-thick stain-grade Russian birch– or maple-veneer plywood. For each diffuser panel, you'll need approximately a 5-by-5-foot section of wood. Your cuts list is the following: two 9-by-35-inch ends; two 9-by-24-inch top and bottom plates; two 1-by-35-inch parts (A and B); two 1.5-by-35-inch parts (C and D); four 8.5-by-35-inch parts (E, F, G and H); one 5.5-by-35-inch part (I); and six 3-by-35-inch parts (J, K, L, M, N and O). Assemble the pieces as shown in the diagram using 1.25-inch brad nails. Use ½-inch-wide iron-on birch- or maple-veneer stripping to cover up all exposed plywood edges; fill nail holes with plastic wood putty; sand; and stain or clear-coat with polyurethane. This builds a 2-by-3-foot-high diffuser panel with chambers 1, 5 and 8 inches deep to handle very low-mid-frequency diffusion with ease. Fasten securely to the studs behind drywall using 2-inch wood screws. The pattern repeats at the ends, so slam as many of these as you like beside each other to cover your back wall, and it will look awesome and totally pro!

