

## POSITIONING THE TURNTABLE

A turntable's performance can be substantially degraded by improper placement. The folk wisdom has been that a turntable should be placed on a very massive object to isolate it from vibrations, perhaps extending even to a massive isolation base with a compliant coupling below it. THIS IS ABSOLUTELY THE WRONG THING TO DO! A turntable should be placed on a light but firm object, such as a rigid, light coffee table or parson's table. Equipment cabinets loaded with amplifiers and records are far too massive.

The difference that can be obtained by placing the turntable on a light object is startling. It improves every aspect of the sound. There is no advantage, whatsoever, to placing a turntable on a massive object or isolation base. The misconception being that massive objects isolate a turntable from large amplitude vibrations due to their inertia. Although these objects move very small amounts in response to the energy that strikes them, they move at very, very low frequencies, well below the cut-off point of the suspension of any turntable. The result is that you directly couple the turntable to all manner of environmental noise, i.e. traffic outside and footfalls. Light objects do not resonate at these frequencies, and do not couple the turntable at these frequencies. Isolation bases with additional suspensions should be avoided. The additional suspension interacts with the suspension of the turntable, (when one moves, it induces a movement in the other suspension, which moves the first etc.) and the whole thing becomes unstable and begins to oscillate. For the same reason, flimsy, shaky surfaces should be avoided.

The appropriate surface is a rigid, light table. You can use a wall shelf, but it should be light (plywood, not particle board), and it should not be attached to the brackets that support it. Allowing it simply to sit on the brackets decouples it from the huge mass of the wall.

If you must see the turntable on a heavy equipment cabinet, it is possible to build a small light platform with feet about 3 to 4 inches tall to isolate the turntable. This "mini" coffee table on the cabinet works almost as well as a light table on the floor. You must, however, make sure that the equipment cabinet itself is very stable and can not rock back and forth. This usually means that you must either have the cabinet seated firmly on the floor (not on carpet), or braced against the wall.