

Voodoo

B O A R D

by Acoustics & Engineering



The Difference is Voodoo...

Let's talk about you for a moment...

If you taking the time to read this then the chances are you are a serious audiophile with an absolute fixation on achieving optimum performance from your audio-visual system. No doubt you have already spent a great deal of money in this endeavour, perhaps to the puzzlement of your Non-Audiophile Friends (NAFs) and the considerable vexation of your spouse.

Well we know exactly where you're coming from. (Aren't you glad somebody does?) So we've developed an ingenious little product that will literally improve the quality of your set-up by an order of magnitude. We call it Voodoo Board because it works, well, a little bit like magic.

"But... it's just a board...!"

Actually it's not. First of all try to pick it up - heavy isn't it? 18 kilos to be precise. That's because there are about 4.5 million tiny little steel bearings inside. (If you don't believe us, you can always try to count them and let us know if we got it wrong.*) These steel shots come in various sizes (all of them really, really small) and lie in unique arrangements and precise measures in compartments of different shapes and volumes. Exactly what arrangements, measures, shapes and volumes? Uh, sorry - that's our little secret!



Yes! Voodoo Board's steel shot really are this small!

What this deceptively simple looking (but very attractive and totally handcrafted!) board does is to help your A/V system achieve the most incredible difference in truly high-end performance quality. You'll be absolutely astounded by the radical contribution Voodoo Board makes to the structural stability and optimisation of your set-up. We promise!

* If you really do manage to count all those steel bearings and they total less than 4.5 million (give or take 10,000) we'll give you a free Voodoo Board. And we'll even throw in a year's membership of a dating agency - you obviously need it.

"How will Voodoo Board change my life?"

Well, to be perfectly frank, Voodoo Board won't actually change your life. But it will help enable your audio-visual system to deliver state-of-the art performance by doing all of the following:



Inconspicuous and classy, Voodoo Board makes complete a truly high end audio-visual system. Realise the Voodoo Difference!

1. Reducing information dropouts caused by offending vibration interference to laser-optic players. (And we all know how offensive vibration interference can be - positively obnoxious!)

2. Radically reducing mechanical stress caused by the over exertion of loudspeaker voice-coils, especially in regard to low frequency negative feedback loops commonly experienced with turntables.

3. Isolating vibration energies between the subwoofer cabinet and the stage platform or A/V rack. This effectively resolves negative feedback problems created by material or hollow stage resonance. (Sadly there is little Voodoo Board can do regarding any negative feedback you get from your customers or friends about the music you plays.)

4. Isolating valve amplifiers from offending low frequency energies, both structural and acoustical, ensuring unsurpassed stability of the vacuum tubes for optimum performance and a longer tube life span.

Remember, in order to achieve high-end A/V performance, all the high-density information stored on your compact disc must be accurately read. It is therefore absolutely vital that disc rotation is completely stable with even the most minute vibrations and resonances eliminated. This is precisely what Voodoo Board does, almost like magic! Er - well, actually, there's quite a bit more to it than that...



Whatever turntable you use, negative 'bowl' is a thing of the past - thanks to Voodoo Board.

Pens at the ready... it's Science Lesson Time!

Despite its name, Voodoo Board was not developed by a witch doctor in Haiti. What Voodoo Board does is to harness fundamental physical principles governing the science of noise and vibration control. Indeed, these principles are so fundamental, science is still discovering new things about them. In other words, we know it works. It's just that we're not quite sure how... (magic - or rather voodoo maybe?)

OK. Let's talk about the science part that we do understand. (The faint hearted among you might want to take a coffee break for this part and join us in the next section.)

First of all you'll notice that Voodoo Board is pretty heavy. And if you've had to lug the darn thing up several flights of stairs, you'll be glad to know that it's heavy for a very good reason:

Part 1: High Mass

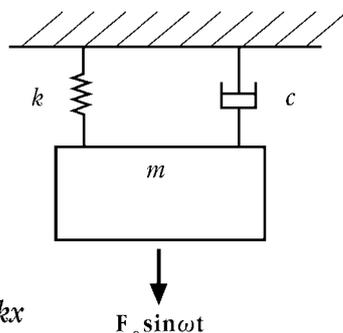
The premise is to consider a spring mass system excited by harmonic force:

$$F \cdot \sin \omega t$$

This will be the equivalent of a bass heavy music environment (and no, we are not talking about an overweight bass player) whereby:

- m = CD Player (which is actually the mass of a CD Player)
- k = constant defining the stiffness of the whole CD Player when subject to vibration and
- c = natural damping (constant) effect of the CD Player.

The differential equation of motion may be represented by: $m\ddot{x} + c\dot{x} + kx = F \cdot \sin \omega t$: meaning that the CD Player is under forced vibration.



Solving this equation:

$$m\ddot{x} = F \cdot \sin \omega t - c\dot{x} - kx$$

$$\ddot{x} = \frac{F \cdot \sin \omega t - c\dot{x} - kx}{m}$$

The objective is to reduce vibration, and since $m \Rightarrow \infty$ and $x \Rightarrow 0$, therefore, by coupling the CD Player to the high mass (all 18 kilos of it) of the Voodoo Board, \ddot{x} (acceleration, vibration) approaches zero. Simple eh? But this merely explains Voodoo Board's high mass. There's more of this stuff to come. (Are you sure you don't want to take that coffee break?)

Part 2: High Loss Impact Damping

Now this is the real secret* behind Voodoo Board. It actually contains its very own internal damping system.

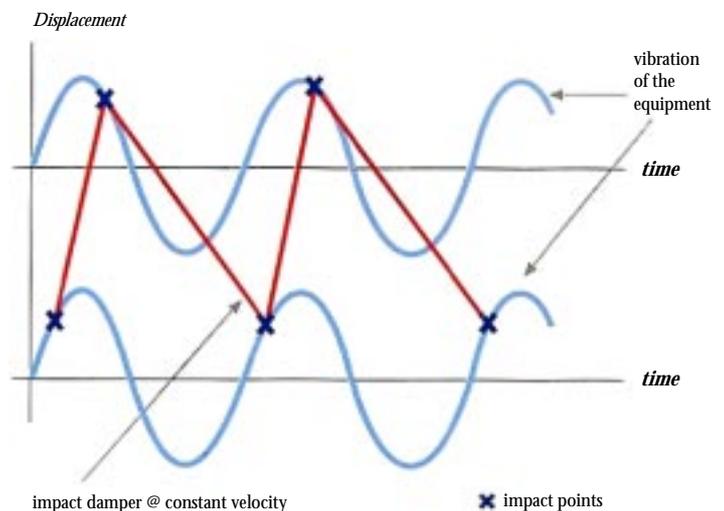
If you take a close look at the squiggly diagram below, you'll see that it represents those steel bearings (or impact dampers - if it sounds more scientific) and how they react when Voodoo Board displaces force vibration.

Notice that they travel at a constant velocity until they impact off each other. This releases energy and forces them to travel in opposite directions, recurrences ad infinitum, effectively muting vibrations.



See for yourself! The Voodoo extreme in action!

Please note that all this happens at an almost molecular level – you won't see or hear steel shot rattling around all over the place. (That would kind of spoil the whole point of Voodoo Board, wouldn't it?)



* Well, to be perfectly truthful, it's not the complete secret - if we told you, we'd have to shoot you afterwards.

Exclusive!

Just a few excerpts from our unpublished and extremely confidential research paper!

(Well... if Kenneth Starr can do it, why not us?)

"As in structural damping, the energy dissipated per cycle of stress is independent of frequency although proportional to the square of the strain amplitude which, in our case, refers to be amplitude of force vibration."

"For the purposes of data analysis, an experiment is conducted simply by placing Voodoo Board on a loudspeaker box surface, where reaction is sought against an onslaught of various frequencies, both narrow and wide Q, and the magnitude of vibration thereof. Results from the preliminary data indicate that the larger the amplitude, the greater the % reduction of vibration."

"Other vibration tests revealed amazing results. Depending on the frequency of excitation, for instance we placed Voodoo Board directly on a vibrating surface, the force vibration – read on the accelerometer – was reduced by as much as 98%!"

You might have noticed that our own excitation at these results showed through a little bit. We just love our work!

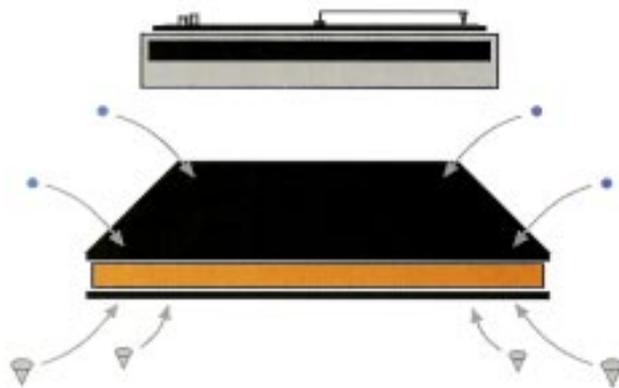
Making Voodoo Board do its magic for you – a user's guide

Actually Voodoo Board is dead simple to use. No nasty electronics. No moving parts. No nasty smells or unsightly hairs all over the place. But to get the maximum voodoo out of your Voodoo Board, you should follow these instructions carefully:

1. Isolate Voodoo Board from the surface upon which it is intended to rest by placing isolator spikes or Blu Tack (scientific eh?) between the surface and Voodoo Board.

2. Next roll 4 pieces of Blu Tack into 4 identical balls and stick these against the soles of the feet of your particular piece of equipment (CD, VCD, LD or DVD player, valve amplifier etc). Then press gently this equipment squarely onto your Voodoo Board. By doing this you will have mechanically coupled the 2 units into one, transferring over the properties of Voodoo Board into your equipment.

Please note that it may not be necessary to Blu Tack the feet of your equipment, if they have been designed with sufficient damping qualities.



3. Now use a water level to ensure that your equipment is precisely flat - at least as far as the Earth's gravitation is concerned. To do this you may have to adjust the relative amount and height of each of the 4 pieces of Blu Tack on which your Voodoo Board rests. (Isn't science wonderful?)

A Cautionary Note: Use Blu Tack only sparingly as too much of it will circumscribe maximum transfer of Voodoo Board properties to your equipment. It could also look really, really messy.

Proper Care and Maintenance of your Voodoo Board

Properly maintained, Voodoo Board will give you a lifetime of pleasure and satisfaction - and it comes with a 20-year warranty. (Now how many people can you say that about?). But there are just 2 little rules you should always bear in mind:

1. Voodoo Board should be located where it will not suffer prolonged exposure to direct sunlight or high humidity levels as these may cause Voodoo Board's natural wood veneer to prematurely age or warp. (Actually this is pretty good advice to follow for your own body - well you should at least use an effective sun block!)
2. It is really not a good idea to drop your Voodoo Board from any kind of height. In the event that you are clumsy enough to do so, you risk the following:
 - a) Broken toes. Remember Voodoo Board weighs 18 kilos.
 - b) If it doesn't have a nice soft landing on your toes, it could end up cracking the tiles on your floor.
 - c) It could also smash open and you'll end up with 4.5 million tiny little steel shot absolutely everywhere. Imagine how pleased your maid will be.
 - d) Even if you get lucky and manage to avoid crushed toes, cracked toes, cracked tiles and an irate maid, the force of the impact may shift the very carefully arranged compartments inside your Voodoo Board and cause it to lose a certain percentage of its wonderful properties.

In other words, **DON'T DROP YOUR VOODOO BOARD!**



Declaration of Scientific Objectivity

The description "Voodoo Board", all technologies and references, whether proprietary to or otherwise associated with it is borne entirely of scientific research and invention and serves absolutely no bearing, meaning, inference and/or significance whatsoever, directly or by association, to what a person would conventionally identify or related to its usage here as having anything to do with the use of or belief in religious witchcraft and black magic.

Voodoo Board's Vital Statistics

Just feast your eyes on these facts and figures!

Dimensions: 484.5mm (W) x 51mm (H) x 403mm (D)

Nett Weight: 18 Kg (So watch those toes and your back!)

Finish: Voodoo Board is available in a number of beautiful real wood veneers including American Cherry, Figure Anegre and Golden Oak. Specially tailored finishes to meet your requirements may also be arranged.

Nothing beats the real thing!

Make sure your Voodoo Board is the real thing! All handcrafted original Voodoo Boards have their very own individual serial number engraved on the Voodoo Board emblem. Watch out for it! (After all, why fake it when you can experience the real thing?)

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by



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