



# Flexy Table +

## The Ultimate Hifi Equipment Rack



### Introduction

After spending all my time on loudspeakers it was time for something completely different. My attention has been going towards building even better loudspeakers but of course there is more to a hi-fi system than those good old boxes. Until now my hi-fi equipment has been stacked on top of each other in two neat piles of each three components. On top of one stack stood the turntable, on top of the other stood the TG84 tube-amp. Not very audiophile!

I wanted to make an extremely rigid and solid platform to stand the equipment on, something that would also give me a neutral base to experiment on later with isolation platforms, blocks, etc. Even more importantly, I wanted the ability to make adjustments any time in the future should I acquire new or different-shaped equipment or just feel the need for a change, and being one of those Audio-Nuts this is a serious issue. Most of the pre-built equipment racks have all the shelf heights either predetermined or fixed. I also wanted to have enough extra space to be able to expand my system in the future. At this moment I need space for six components but for example I may change my integrated amp for a separate pre-amp and power-amp. I decided to make space for eight standard size components with enough height to be able to add isolation platforms under the components and some sort of weight on top.

On the Internet there are many designs to be found on this topic. One of my favourites is the TNT-Audio Flexy Table. What I like about this design is that it is beautiful because of its simplicity (I like things that are good and simple). It is also easy to make and very flexible to use (as it's name states). The original design does lack one thing and that is mass. Taking the original Flexy Table as a starting point I decided to go a step further and build something a little more sturdy, you will read more about the total weight of my rack further on in this article. So I called it the Flexy Table + (the "+" stands for the extra mass).



*A double-width rack based on the original TNT Flexy Table design.*



*A detail of my four shelved double width Flexy Table Plus.*

### **The construction**

This rack consists of in total four double-width shelves of 1100x450mm. Each shelf is built up from three layers of 18mm mdf making the total thickness of each shelf 54mm. The middle layer has two sections cut out which will be filled with fine dry sand. This filling procedure is a tedious job that will take a couple of hours to do properly. The important thing is to make sure there will be no cavities in the sand later on. Therefore the sand must be compacted extremely well. I can't stress this enough, the idea being that the top and bottom of the three mdf layers must at all times make contact with the sand inside so that vibrations are absorbed in the sand. I found the best way to fill the shelves is to drop them on their edges on the floor and then top them up again with more sand. Keep repeating this until the sand stops disappearing out of sight. It is a bit noisy and if you have downstairs neighbours you must do it when they are not at home but I found that you can get much more sand into the shelves this way than by just tapping them with a rubber hammer or something.



*Filling the shelves with sand.*

To make each shelf look less massive I used a router to angle all the edges of each piece of mdf. When you glue the three pieces together you end-up with two V-shaped grooves down each side of each shelf. If you want to build a single-width version you can build it based on the same principles but with just one middle cutout section.



*The materials. The cutouts and angles have been made in the mdf sheets.*

Six 890mm long M24 all-thread metal rods support the shelves. An all-thread is a long piece of round metal with a continuous thread running its entire length. They are available in standard lengths of 1000mm and 2000mm, I shortened them to 890mm to suite the proportions of the final rack (the designer eye also needs to be satisfied). The use of this continuously threaded rod makes it very easy to adjust shelf placement any way you want. Each shelf is damped between two M24 nuts with corresponding

