Welcome to our first MAME cabinet project. We decided on an upright model with some of our own modifications thrown in. Doing a simple search you can find a huge variation of designs out there and you can easily make one of your own or you can just use out as a starting point.

A great book that helped us a lot with this project is “Project Arcade” by John St. Clair it is an excellent resource for every aspect of making your own cabinet from scratch.

Let’s start with the tools you will need.

Circular saw
I recommend a 7 ¼” model that is a plug in style. You will get much better cuts and less power problems than with a cordless model. I also suggest 45-80 tooth blades. Any less and you could get chipping and any higher and you could get burning.

Jig saw
Once again I recommend a plug in model for power problems and cost reasons.

Clamps
You can never have enough but 4 36” models and 4 24” models is a good starting point.

Counter sink bit
Since we are using #8 screws you will only need a #8 counter sink bit but you can find sets for around $30.00. This will help set the screw heads behind the surface of the wood. Once your ready just fill in the holes with wood putty and you would ever notice where you were screwing around.

Saw horses
Once again you can never have too many but we used 2 of them and did ok. I wish we had 4 at some points so that we did not need to keep moving work around while we were building.

#8 1 ¼” Wood Screws
We went through about 200 screws total but would doesn’t needs some spares sitting around.

4” Casters
We used 2 fixed casters for the back and two spinners for the front. This allows us to steer it around but it won’t slide while were playing it.

¼”x 1 ½” bolts and nuts plus washers.
What can I say we used 16 of them to bolt on the wheels? Oh yeah, wood screws are not a good idea or they might snap off.

4x8 ¾" MDF board
Medium Density Fiber Board is good for speaker enclosures and arcade cabinets. I would avoid particle board unless you like the look of chipped corners and t-molding falling out all over the place. It is pretty heavy so ask a buddy to help you carry it and cut it.

Table saw will help
10" model would be nice but not required. You can do all the cuts with a circular saw but it is nice to rip the large boards quickly but it depends on your budget.

Wood putty
Good to fill in the screw holes unless you like holes as a design element.

Bondo
To um-err add design elements or to fill in for you bad cuts.

Sander
A belt sander or orbital sanders are good choices. Start with an 80 grit to do the rough work and finish with 200 to make it all beautiful and ready for paint.

Router
Once again the plug in model is my personal choice. Be aware that the have shaft sizes and you need to match the shaft size to your router bits. The 2 most common options out there are ¼" and ½" and some model routers can handle both sizes.

Slot cutter and T-Molding
We got ours from www.t-molding.com. Since we used ¾" MDF we went with ¾" smooth black t-molding. The size of the molding dictates to size of the slot cutter we needed which was a 1/16" slot cutter and arbor.

Drill
Unless you like to manually screw in tons of screws or just have a death wish I recommend an electric screw gun. This is the one time I like cordless but I would recommend anything less than 14 volt models 18 volt is best and 24 is just over kill in my opinion. Look for a quick change chuck for easy changes.

T-Square
To quote Huey Louis "It's hip to be square"

Carpenters pencils
Unless you can super impose measurements in your mind it might be a good idea to mark where you want to cut.

The construction is really an exercise in discovery and problem solving so I would recommend start with making the base and then the sides. After that the rest of the pieces will fall into place.

The base for ours was 34 ½” by 34 ½” and then boxed in around the base to create a skirt to hide the wheels. There is also two support braces inset 9 inches and this will also box in the wheels. When placing the braces make sure the wheels have enough room to spin and move around.

The place to spend most of your time is doing the profile layout so be sure to keep checking your measurements since once you cut it out everything else will be based off of it. After you cut out one side you can trace it onto another board and copy it. To cut it out use the circular saw to do the straight cuts and the jig saw to finish off the inside cuts and any round parts that you want. After cutting both pieces it is a good idea to clamp the pieces together and sand them even.

Next screw the side panels to the base and put in a few support ribs to hold the structure in placed while you make the rest of the panels.

We put in screw strips around the perimeter so that we could attach the panels to the side pieces. The strips were made by taking the scraps for our other cuts and ripping them down to 2” wide strips. Placing the strips recessed ¾” around the side panels except for the access panel on the back. For the access panel we placed a 1” high strip flush along the bottom and then left a ¾” wide gap with a additional strip behind that. This will allow for us to set in the panel and lock it into place at the top.

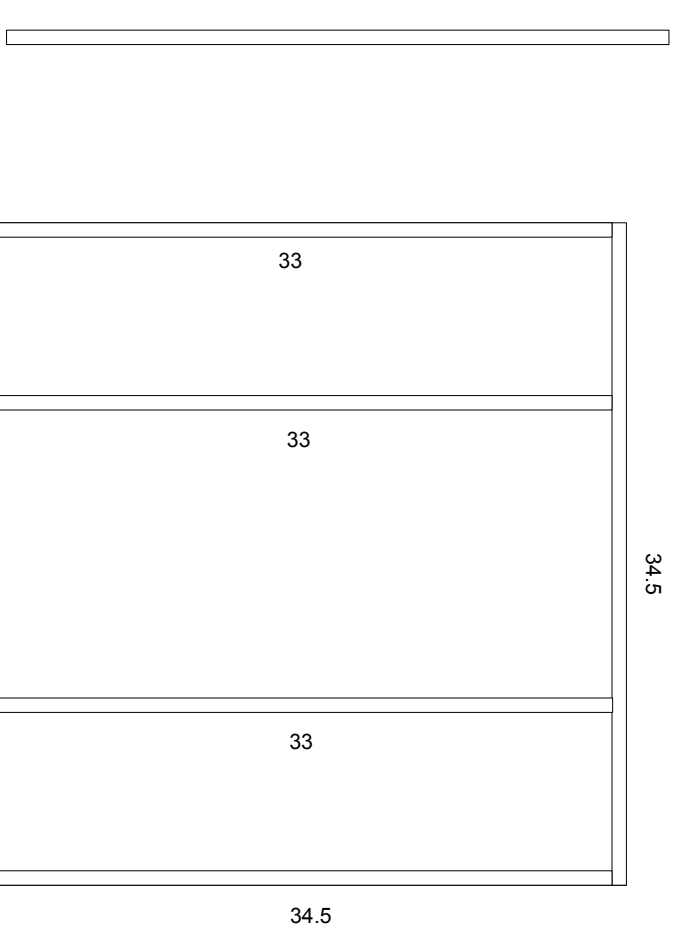
Work your way around the cabinet and measure and cut each panel to fit the hole.

Once all the panels are in place you can go around and fill in all the holes with wood putty and correct and errors or gaps with the bondo. After that dries it is time to do a rough sanding using an 80 grit and then finish with a 200 grit for that smooth finish.

Finally take your router and adjust it with the slot cutter to get the grove centered on the edge of the cabinet with a scrap piece of wood. Once you get the slot cut you can tap in the molding with a soft mallet to complete the look.

In the next part we will mount the monitor, speakers and cut out our vent holes and speaker holes.

34.5 Ribs x 3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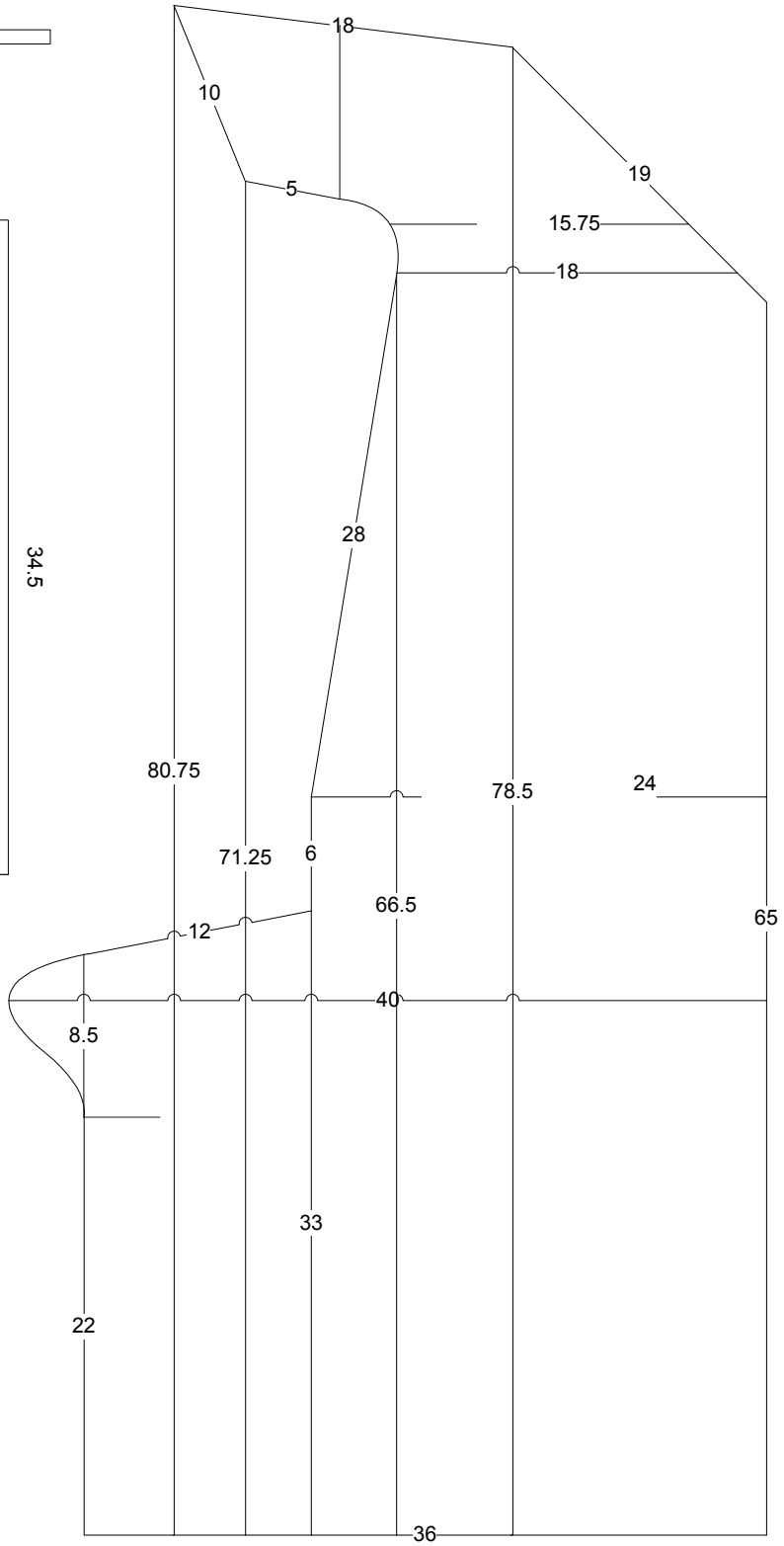
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