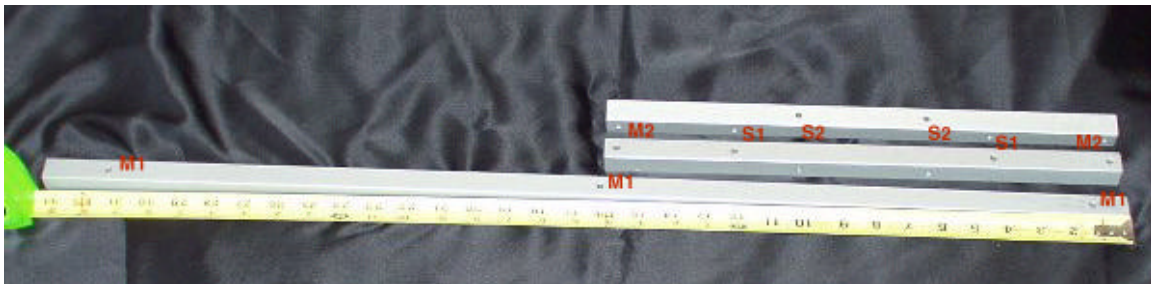


First you will need 3/4" stock aluminum. Have it cut into 2 different lengths: 16 inch and 34 inch. You can vary these slightly. You will need 2 of the long lengths at each end and 3 of the short lengths. For the middle braces (my unit has 2 mid braces) you will need 2 long lengths and 6 short lengths.

You will need machine allen keyed bolts. I recommend the hardened steal ones black anodized. You will need 2 1/2"(6 per mid section) and 1 3/4" (6 per end piece = 12 total). You will need nuts for all of these and washers (optional-but recommended). I think I used #10 8/32 for all of these—but really can't remember. You will also need wood screws that can fit through the holes drilled in the aluminum. They need to be 1 1/4 " long. I used black anodized sheet rock screws. They are not supporting any weight, so you really don't need a heavy duty screw.

On the long poles you will need to drill 3 holes. They should be centered and should be spaced at: 1 1/8", 15 5/8" and 30 1/8" (as measured from the top). These holes will be called M1. These holes should be large enough for the bolts and screws to go through. Half of the long pieces of aluminum will be for the front, the other half for the back. Take the ones you will use for the back and drill another series of holes, these will be perpendicular to the first ones you drilled. There should be four additional holes. They should be at approximately 7", 9", 21", and 22". The first two will be called B1, and the second two B2.

On the short poles drill 4 holes, 2) 3/8 inches from each end (called M2), 2) 3 1/2 inches from each end (S1). Then drill 2 more holes 4 1/2 inches from each end perpendicular to the first 4 holes (S2). You now have 6 holes in each small section.



Now you will need some wood. You will need hardwood (you pick the type) 10" wide boards 3/4 inch thick. First determine how long your unit is going to be "T". Get one board for the top that spans that whole length. Now determine how many sections you are going to have. I wouldn't recommend anything over about 2 1/2 feet, or it will sag. Less than 2 feet is pretty safe. Take the number of sections "N" and calculate the length of wood for each shelf (S) with the following formula:

$$S = T / N + 3/4 \text{ inches } *(N+1)$$

Cut 2 boards per section this length. These will be labeled S

You will also need the side brace boards. These should be 29 3/4 inches long also 10 inch boards. There should be one board for each mid brace and one for each end, or N+1 boards. These will be labeled M.

Lastly you will need two boards 3 inches wide that runs the whole length of T. These boards will be labeled B.

Time to build: First build the side pieces. Take 3 short aluminum pieces, one long front, one long back. Bolt the aluminum pieces together using the 1 3/4 inch bolts through holes M1 and M2. You will need 6 screws and nuts. Arrange the unit so that it is square. Then get one board, M, and

screw it to the short pieces through holes S1. Be sure the top piece of wood is lined up with the top aluminum brace (the short piece). It should be $\frac{3}{4}$ inch below the top of the long piece of aluminum. It should also be centered. Now build the other side, but be sure it is symmetrical, so that if you place the two pieces together with wood touching the backs are on the same side.

Now build the mid sections. They are the same, except now you have to bolt short pieces of aluminum on either side of the wood. To do this, just put the wood in the center. Bolt the aluminum together, now using the 2 $\frac{1}{2}$ inch bolts, loosely. Then align the wood, and screw it in. Use every other screw hole on one side, and the other screw hole on the other. There will be 6 wood screws used (that covers $\frac{1}{2}$ the holes). This is so the screws don't go through and hit each other. You can use all holes by going to shorter screws.



Now you can add the shelves and top. I did the shelves first. Turn the supports upside down. Be sure you pick a front and back, and make sure the long pieces that are backs, are just that and are in the back. Now attach the shelves with wood screws through holes S2. Continue by adding sections until you have reached the other end piece. Once that is done you are ready to add the top. If all of your measurements were correct it should fit on flush with the wood of each end piece at the outside. Again it is attached with screws through S2 holes.

Lastly is the back brace, which serves two functions. It stabilizes the unit and insures records don't fall out the back side. To do this use the 2 3 inch wide and full length boards. These go on the back and are attached inside the long braces of aluminum through holes B1 and B2. Use the wood screws to attach the back brace.

Rives Audio, Inc.
8301 Patuxent Range Road
Jessup, MD 20794
800-959-6553
www.rivesaudio.com