Active 1,000 Watt Dayton Audio 18" Reference with Dual Passive Radiator Subwoofer Kit

Thank you for purchasing the Active 1,000 Watt Dayton Audio 18" Reference With Dual Passive Radiator Subwoofer Kit. This subwoofer kit was precision cut using CNC machinery for the best possible fit and finish. With a little time and patience, your finished product will provide years of enjoyment. Please follow the following instructions for the best possible results.

Suggested tools and consumables:

Wood glue
Wood clamps (you can never have too many of these)
Sanding block and/or electric finishing sander
#8 x 1" wood screws (for driver and passive radiators)
Scissors
Terminal (binding posts, terminal cup, SpeakOn, etc…)
Rags or paper towels
Drill
5/64" drill bit
Utility knife
Speaker Wire

Package contents:

First, empty the contents of the package and review parts to ensure everything has been included and is in good condition. If any parts are missing or damaged please contact our customer service department at 1-800-338-0531.

Components:

A

B

C

A) Dayton Audio RSS460HO-4 18" Reference HO Subwoofer 4 Ohm
B) 2 x Dayton Audio RSS460-PR 18" Aluminum Cone Passive Radiator
C) Dayton Audio SPA1000 1000W Subwoofer Plate Amplifier

D **E** **F**

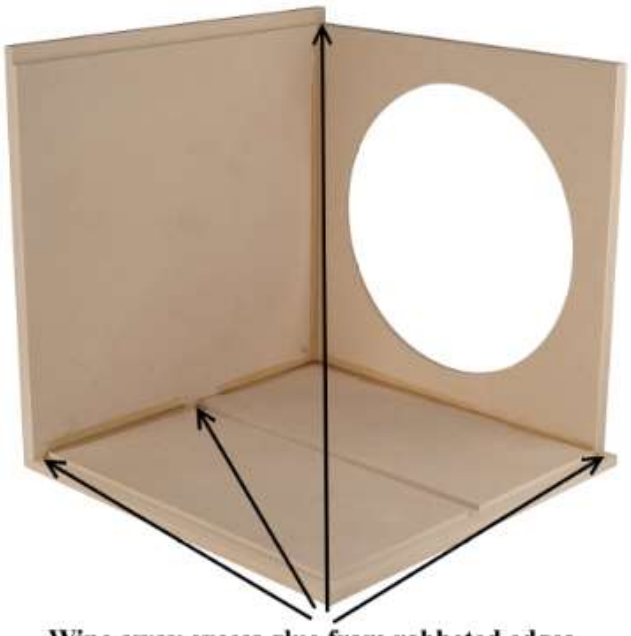
D) 2 x Sonic Barrier 1/2" Acoustic Sound Damping Foam with PSA 18" x 24"
E) #8 x 1" Deep Thread Pan Head Screws Black 100 Pcs
F) Knock Down Enclosure

Enclosure Assembly:

Note: These assembly instructions show the passive version of the knock-down enclosure, your version of this kit will have a cutout for the amplifier in the rear panel.

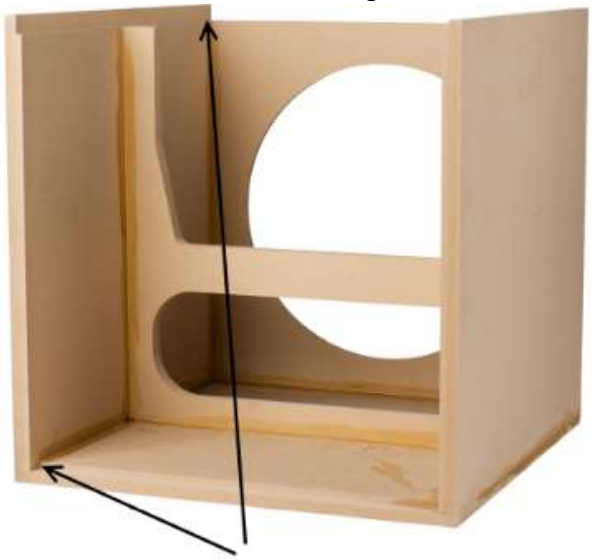
1) First, set the enclosure parts out on a flat level surface and ensure that all pieces are free of dust and debris.

2) With the back panel lying flat, glue all mating surfaces of one side panel and the top panel and secure them to the back panel with clamps so that even pressure is applied to all glued surfaces. Using a damp rag or paper towel wipe away any glue squeeze-out on the outside of the enclosure and inside the rabbeted edges (excess glue on the inside is fine). Allow to dry according to the glue manufacturer's recommendations and remove clamps.



Wipe away excess glue from rabbeted edges

3) Next, glue all mating surfaces of the center brace and the bottom panel and secure them in place with clamps so that even pressure is applied to all glued surfaces. Using a damp rag or paper towel, wipe away any glue squeeze-out on the outside of the enclosure and inside the rabbeted edges (excess glue on the inside is fine). Allow to dry according to the glue manufacturer's recommendations and remove clamps.



Wipe away any excess glue from rabbeted edge

4) Then apply a thin layer of glue to all mating surfaces of the final side and front panel and secure them in place with clamps so that even pressure is applied to all glued surfaces. Using a damp rag or paper towel, wipe away any glue squeeze-out on the outside of the enclosure (excess glue on the inside is fine). Allow to dry according to the glue manufacturer's recommendations, and remove clamps.

5) Finally, apply a thin layer of glue to the front panel of the enclosure and set the front baffle in place. While ensuring all edges are even and square, position clamps to apply even pressure to the baffle. Using a damp rag or paper towel, wipe away any glue squeeze-out on the outside of the enclosure and inside the driver cutout. At this time double check that all edges are even and square (this cannot be adjusted once the glue is dry). Allow to dry according to the glue manufacturer's recommendations and remove clamps.

Tip: Wood glue will act as a lubricant between the 2 panels. If you have difficulty getting the baffle to line up with the rest of the enclosure you can add a little bit of table salt to the wood glue. The salt will help keep the baffle from sliding and dissolve as the glue sets.

6) Sand and finish enclosure to your liking. See our web page for examples.

Acoustic foam application:

7) Using a vacuum, remove any dust and debris from inside the enclosure ensuring you have a smooth and clean surface to adhere the Sonic Barrier acoustic foam.

8) Using scissors or a sharp knife, cut the Sonic Barrier Acoustic Foam (**D**) into 6 pieces at 9" x 20"

9) Peel off the adhesive backing and apply 2 pieces to the back panel on both sides of the center brace. Firmly press the foam sheets into place with your fingers starting at the middle of the panel and working towards the outside edges to force out any trapped air between the foam and enclosure walls. Cut the excess foam away from the amplifier cutout.
Note: Do not fold the Sonic barrier sheets once the backing has been removed, the adhesive is very aggressive and cannot be separated if it adheres to itself.

10) Remove the adhesive backing from the remaining pieces, apply to the top and bottom panel on both sides of the middle brace. Firmly press the foam sheets into place with your fingers starting at the middle of the panel and working towards the outside edges to force out any trapped air between the foam and enclosure walls.

Final Assembly:

11) Prepare the Dayton Audio RSS460-PR 18" passive radiators (**B**) by attaching all 7 included 75 gram disk weights to the threaded post on the back of each passive radiator. Secure the weights in place on each passive radiator using the included lock nuts with nylon insert.

12) Set one Dayton Audio RSS460-PR 18" Aluminum Cone Passive Radiator (**B**) into the opening on one side for the enclosure. Using 8 x #8 x 1" Deep Thread Pan Head Screws (**E**) securely fasten the passive radiator into place (we recommend pre-drilling the screw holes with a 5/64" bit). Tighten each screw just until tight being careful not to strip out the holes. Repeat on the opposite side for the second passive radiator.
Note: A power drill is not recommended for tightening screws in MDF.

13) Prepare the Dayton Audio SPA1000 1000W Subwoofer Plate Amplifier (**C**) by cutting the solderless disconnect terminals off the ends of the red and black wires. Strip ½" of insulation for the end of the red and black speaker wires.

14) Set the Dayton Audio SPA1000 1000W Subwoofer Plate Amplifier (**C**) into the cutout in the back of the enclosure and secure with 8 of #8 x 1" Deep Thread Pan Head Screws (**E**). Tighten each screw just until tight, being careful not to strip out the holes.

15) Set the Dayton Audio RSS460HO-4 18" Reference HO (**A**) Subwoofer near the opening in the front of the enclosure. Make sure the wires from the amplifier is routed so that it will not come into contact with any moving part of the driver or passive radiators. Connect the red wire to the red (+) spring loaded terminal and the black wire to the black (-) spring loaded terminal. Carefully set the Dayton Audio RSS460HO-4 18" Reference HO Subwoofer into its cutout. Using 8 of #8 x 1" Deep Thread Pan Head Screws (**E**) securely fasten the driver into place (we recommend pre-drilling the screw holes with a 5/64" bit). Tighten each screw just until tight, being careful not to strip out the holes. **Note:** A power drill is not recommended for tightening screws in MDF.

16) You are now ready to enjoy your finished Active 1,000 Watt Dayton Audio Reference 18" With Dual Passive Radiator Subwoofer Kit.