

# Powered Ultimax 8" Mini Subwoofer Kit

Thank you for purchasing the Powered Dayton Audio Ultimax 8" mini subwoofer kit. The enclosure for this speaker kit was precision cut using CNC machinery for a tight fit to make it easy to finish. With a little time and patience, your finished product will provide years of enjoyment. Please follow these instructions for the best possible results.

## **Suggested tools and consumables:**

|                                                    |                                  |
|----------------------------------------------------|----------------------------------|
| Drill                                              | Rag or paper towels              |
| Screwdriver                                        | Solder                           |
| Wood clamps (you can never have too many of these) | Wire stripper/crimper            |
| Sanding block and/or electric finishing sander     | #8 Wood Screws                   |
| Wood glue                                          | Polyurethane glue (Gorilla Glue) |

## **Package contents:**

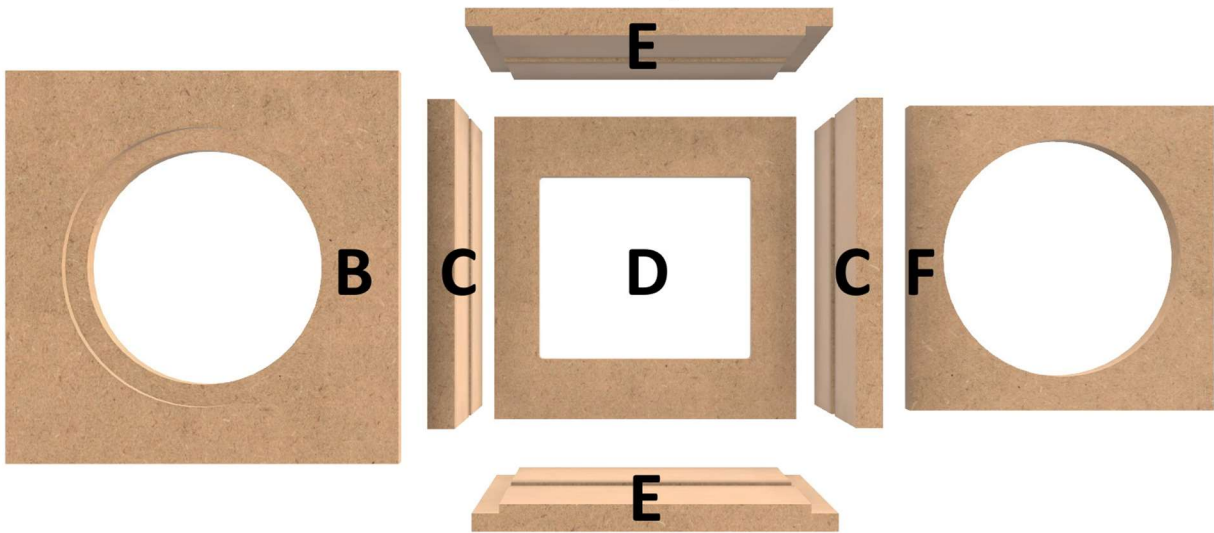
First, empty the contents of the package and review parts to ensure everything has been included and is in good condition. If any parts are missing or damaged, please contact our customer service department at 1-800-338-0531.

### **Driver:**



**A) Dayton Audio UM8-22 8" Ultimax DVC Subwoofer 2 Ohms Per Coil**

### Enclosure Components:



- B) Baffle
- C) 2 x Side Panel
- D) Back Panel
- E) 2 x Top/Bottom Panel
- F) Brace

**Note:** The packaged enclosure will also include a back panel without the amplifier cutout. This panel is **not** used in this Powered Ultimax 8" Micro Subwoofer Kit.

### Plate Amplifier:

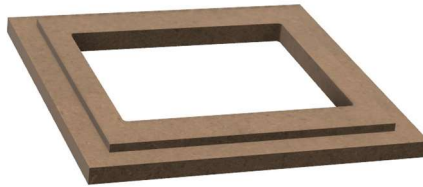


G

G) Dayton Audio SPA300-D 300 Watt Class-D Subwoofer Plate Amplifier

## Enclosure Assembly:

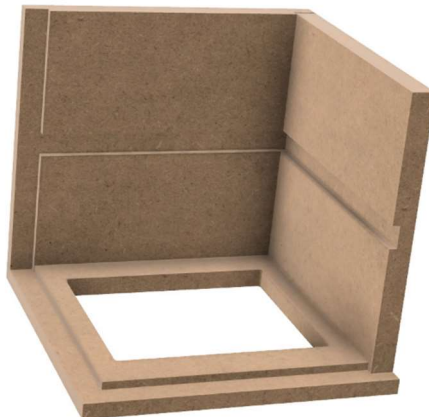
- 1) First, before gluing anything, do a dry fit of the enclosure to familiarize yourself with the parts and assembly. This will also give you a chance to ensure that all pieces have been cut properly.
- 2) Next, set the enclosure parts out on a flat level surface and ensure that all pieces are free of dust and debris.
- 3) Start with the **Back Panel (B)** lying flat with the rabbeted side up, as shown.



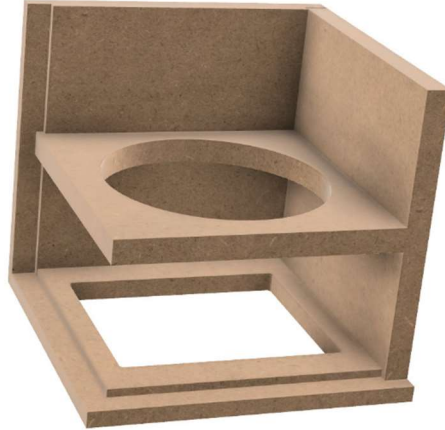
- 4) Apply a small bead of glue to the inside of all joining surfaces of the **Back Panel (B)** and one **Top/Bottom panel (E)**. Then set in place applying enough pressure to ensure glue is spread through each joint (some glue squeeze-out can be expected).



- 5) Apply a small bead of glue to the inside of all joining surfaces of one **Side Panel (F)** and the back and top/bottom panel assembly. Then set in place applying enough pressure to ensure glue is spread through each joint (some glue squeeze-out can be expected).



6) Apply a small bead of glue to the inside of all joining surfaces of the **Brace (E)** and the back, top/bottom, and side panel assembly. Then slide in place applying enough pressure to ensure glue is spread through each joint (some glue squeeze-out can be expected).



7) Apply a small bead of glue to the inside of all joining surfaces of the other **Side Panel (F)** and the enclosure assembly. Then set in place applying enough pressure to ensure glue is spread through each joint (some glue squeeze-out can be expected).



8) Apply a small bead of glue to the inside of all joining surfaces of the other **Top/Bottom Panel (E)** and the enclosure assembly. Then set in place applying enough pressure to ensure glue is spread through each joint (some glue squeeze-out can be expected).



9) Apply a small bead of glue to the inside of all joining surfaces of the **Baffle (E)** and the enclosure assembly. Then set in place applying enough pressure to ensure glue is spread through each joint (some glue squeeze-out can be expected).



10) Make sure that all edges are flush and securely apply clamps from side to side, top to bottom, and front to back. Apply ample pressure to ensure glue is spread evenly through each joint (some glue squeeze-out can be expected). Visually inspect all seams to make sure they are all closed tightly, you may need to relocate clamps (or add more clamps) to get a perfect fit. In most cases only 6 clamps will be needed for an enclosure this size.

11) Wipe away any glue squeeze-out on the outside of the enclosure with a damp rag or paper towel (excess glue on the inside is fine). Allow to dry according to the glue manufacturer's recommendations and remove clamps.

12) Finally, fill any open seams with wood filler or a mixture of sawdust and wood glue. Then sand all surfaces and seams until smooth. Finish enclosure to your liking. See our web page for ideas and examples.



### Final Assembly:

13) Carefully set the **Dayton Audio SPA300-D Subwoofer Plate Amplifier (G)** into the opening in the back panel and secure with the included screws. During installation ensure that no wires are pinched between the frame and the enclosure.

14) Connect the speaker wires to the appropriate terminals on the **Dayton Audio UM8-22 8" Ultimax DVC Subwoofer (A)**.

**Note:** The Ultimax 8" is a dual voice coil driver with 2 ohm voice coils and the SPA300-D amplifier can handle a minimal 4 ohm load. Wire the voice coils in series before connecting the amplifier, as shown below:



15) Carefully set the driver into the cutout and secure using the fasteners of your choice.

**You are now ready to enjoy your finished Powered Ultimax 8" Mini Subwoofer!**