Zaph Audio ZRT 2-Way Kit Instructions

Please completely read through these instructions before starting!

- 1. Take your time, and think about every step before taking action. It is a good idea to clear your workspace of all non kit related parts, and lay everything out prior to beginning. These directions reflect the way we assemble this kit when using the MD38T cabinets and pre-cut baffles. You may have your own techniques that suit your style or experience. Go with what you are most comfortable with.
- 2. Remove front baffle from cabinet with a Phillips head screwdriver. Keep the screws and washers close by, you will need these again. You will not need this baffle again.
- 3. Locate the pre-cut baffle. Apply a thin layer of Goop around the inside of the port hole that is cut in the baffle. Press fit the larger outside flare into this hole. It should now be flush with the baffle. Set baffle aside face down or propped up as to not pop out the just mounted flare.
- 4. Remove the solid brace by sliding out towards you. Remaining will be two more braces in the cabinet that are not solid. Either discard the solid brace, or make a series of cuts to allow free air flow like the two other braces.
- 5. *** See crossover hook up sheet *** Cut wires to proper length. You should use ~ 12" x 2 for input cup to crossover, ~ 40" for the woofer, and ~ 50" for the tweeter. Strip ends ~ 3/8", tin the stripped ends and solder to the crossover boards as indicated in the hook up sheet. Observe polarity. Mark the ends of both the input and output set of tweeter and woofer wires with a marker or tape for easy identification later.
- 6. With all wires now attached to the crossovers, remove double sided tape strip from the bottom of the crossover board and press the woofer crossover firmly to the bottom of cabinet. Place the tweeter crossover on the rear wall above the input cup cut out. For best results, get this right the first time. We have also included some 6PAN3/4" screws that you may use to further solidify the crossover mounting. Make certain to mount the crossover board so that the input wires are close to the back side of the cabinet. This will allow easier access to the input cup cutout in the cabinet.
- 7. From the back side of the cabinet, pull the input wires through the input cup cutout. Solder the wires to the input cup, low pass input wires to the bottom set of binding posts and high pass (tweeter) input wires to the top set of binding posts. Mount input cup into cabinet with the provided OX Oval 6x34"screws. Leave the gold jumpers connecting the top and bottom sets of binding posts in place, unless of course you bi-wire or bi-amp these speakers.
- 8. Cut the provided foam sheet into appropriate sized pieces to line the top, back and side walls. Apply Goop to cabinet walls and the cut foam sheets, wait a minute, and press onto appropriate walls. It is not essential to cover every square inch of the internal cabinet walls. It is also not necessary to cover the walls for the lower 1/3rd of the cabinet. A double layer may be used on the rear wall behind the woofer.

- 9. Take provided Acousta-Stuf and split in half, one half for each speaker cabinet. This will leave you 1.25 pounds for each speaker. Fluff up by pulling apart in all directions, and do this multiple times. Fill the entire bottom of the cabinet underneath the port tube area with about 1 pound of the Acousta-Stuf. Do not hard pack it into the cabinet, just fill it and press it in firmly. Make sure that the Acousta-Stuf does not impede the airflow of the port once it is installed. The remainder of the Acousta-Stuf can be placed behind the woofer. You do not need to use all of the provided Acousta-Stuf and the cabinet should not be filled with it. The only critical issue is ensuring the bottom of the cabinet completely full.
- 10. Apply foam gasket tape to the internal perimeter of the cabinet, where the front baffle will eventually rest. The purpose of this step is to ensure an airtight seal between the baffle and cabinet. Some customers prefer to use their own alternate sealer product, removable or permanent.
- 11. Assemble the remainder of the flared port. Be careful not to pop the installed flare out of the baffle during this step. Take a collar and press it onto the back side of the already installed flare. Now press the inside flare into this collar. Although not 100% necessary, you may want to apply a small amount of Goop to the inside of the port collar prior to pressing these parts together. This will achieve the recommended tuning of 30Hz. See the ZRT page on Zaph Audio for other tuning options: http://www.zaphaudio.com/ZRT-2way-vented.pdf
- 12. Properly mount the pre-cut baffle into the cabinet with the screws and washers from step 2. The tweeter hole should be on the opposite end as the already installed input cup. Do not over tighten the screws when mounting the baffle. Rather give them a turn every day or so until the gasket has fully compressed. The baffle is now correctly installed.
- 13. Pull the remaining wires through the appropriate cutout holes in the baffle. You have marked the wires with a marker or tape in step 5. At this point, take a look at how the internal wire has arranged itself inside the cabinet. A small amount of left over Acousta-Stuf or some that is accessible in the cabinet may be used to ensure the wire will not rest, rub or tap against any hard surfaces or other drivers in the cabinet.
- 14. Carefully solder the leads to each driver. Observe polarity. (If you are questioning your soldering skills, we have provided quick connects to make this step a little easier. Once you crimp the quick connects on the stripped ends of the wire, press them onto the appropriate tabs of the input cup and each driver. We highly recommend that you make this connection permanent by soldering the quick connects to the driver tabs at this time.)
- 15. Take note of how you want the screw alignment to look when the drivers are mounted in the cabinet. Line up the drivers according to your preference in the baffle recess and drill pilot holes with a small drill bit. Now mount the drivers into the cabinets with the provided #8 screws. We have provided you with your choice of Phillips head or Socket head screws. Note: Bring the screw head just short of contact with the driver flange, and then tighten each screw slowly allowing the gasket to compress and the driver to become flush with the baffle.
- 16. Your ZRT 2-Way kit is now complete.
- 17. Plug, play and enjoy!

Detailed information on this kit is available at $\underline{www.madisound.com}$ and $\underline{www.zaphaudio.com}$