

Anthology write up;

## **Main / Design Goals**

**Jim:** The design goal I established for this project was to come as close as possible to the full sized Statements II in overall performance but lower costs and offer a different driver configuration that would allow a less imposing cabinet for better WAF. I had no interest in designing yet another Statements variation but rather establish a new design that offers top notch performance through careful driver selection with low distortion, excellent midrange for all types of music and exceptional dynamic range for home theater use.

## **Driver Selection**

Midrange purity is a top priority in the Anthology's. Curt and I tested several drivers in the price range we were shooting for and settled on SB Acoustics SB15 coated paper drivers as the best candidate for the job. They are ultra-low distortion and rival much more expensive 5" drivers for sound quality.

I'm a ribbon lover but only when they can be used in the appropriate application. The SB15's will cross high enough to integrate well with a 3/4" tweeter which offers the off axis dispersion we were aiming for. The Seas 22TFF was the winning candidate for the job. It offers flat response, spectacular off axis dispersion with extremely low distortion at a very affordable price.

The woofers are the tried and true Dayton RS225-8's. They are low distortion with an F/3 in the low 30's and affordable. You simply have to spend several times their cost to equal or exceed their performance.

## **Enclosure Design**

**Jim:** My goal for the enclosure was to reduce the overall height to equal a monitor sized MTM on a stand. I also wanted a simple to build cabinet that would not be too complicated for builder's new to DIY to tackle. Another goal was to use 6" PVC for the mid tunnel to take advantage of simplicity of construction.

The cabinet measures 48"H x 11 1/2"W x 15 1/2"D with a 1 1/2" thick front baffle and a several horizontal window pane brace to add extra stiffness to the cabinet. I also added PVC support baffles to hold the PVC tubes in place while adding extra stiffness to the top half of the cabinet. The cabinet is constructed entirely of 3/4" MDF and the woofer compartment is lined with 2" wedge foam everywhere you can see when looking into the cabinet through the woofer cutouts.

I mounted the PVC mid tunnels by cutting a front and back piece of 3/4" MDF 18" x 10" with a 6 5/8" cutout to hold the PVC rigidly in place both front and rear with the support adding to the cabinet stiffness by increasing the back half of the cabinet to 1 1/2" thick and the front half to 2 1/4" thick. The PVC butts tightly against both front and back for additional stiffness. I did a 3/4" round over to the inside of the front baffle for a smooth transition and to eliminate any chance of "tunnel effect" on the driver. The PVC I used is the thick walled variety that measures 6 5/8" OD and 6" ID. I cut the mid tunnel PVC to 13 1/4" long. The mid tunnels are lined with 1" flat foam that extends from the rear magnet edge of the driver to the rear of the cabinet. I also use a 45 degree angle cut on the driver end of the foam for a smoother transition of the rear sound wave. We used a 3" Precision Port with inner and outer flares. The actual tube length is 5" plus flares for an F/3 of around 32 Hz.

**Imaging & Presentation:**

**Jim:** The Anthology's offer the same huge atmospheric soundstage and layered depth the Statements/Finalists are known for. Depending on the recording the performers begin at the rear of the speakers and are layered to the rear and sides with the soundstage extending well beyond the width of the speakers if recorded that way for a realistic recreation of the original performance. The speakers disappear leaving only the performance and performers in front of you with a realistic and normal presentation.

**Treble:**

**Jim:** Cymbals sound like cymbals and the sound of triangles float in the air. The highs are open and airy with great off axis dispersion. The 22TFF has excellent sound quality that realistically reproduces the original performance. It greatly exceeded my expectations for an affordably priced tweeter.

**Mid-Range:**

**Jim:** The SB15's offer great detail with an open natural sound. Everything from the performer licking their lips to shifts in where they're standing are audible as they should be. Tonal balance is excellent. When comparing to other reference speakers that far exceed the Anthology's price point, it was difficult to determine which speaker was playing with very few exceptions and only on stellar vocal recordings. This is a very nice driver! Voicing matches the Statements, Finalists and the corresponding center channels. I found the Finalist center to be a perfect match to the Anthology's for home theater.

**Vocals:**

**Jim:** Vocal recordings are excellent and are very realistic and natural sounding. They have the smoothness associated with a paper driver but still have the bite and detail required for realistic reproduction with no listener fatigue.

**Bass:**

**Jim:** The bass capability of a RS225 in a well-tuned ported enclosure is well known. Very deep, tight, clean bass is what you hear. F3 came out about 32 Hz so there nothing missing in the music I listen to.

**Dynamics:**

**Jim:** The dynamics are exceptional with just the right amount of impact and bite to add to the realism. The Anthology's handle home theater dynamics without breaking a sweat that extend well beyond sane volumes.

**Summary:**

**Jim:** If you are in love with detail, realism and a big realistic soundstage like I am, the Anthology's won't disappoint you. They're smooth, detailed and dynamic with the right amount of bite to realistically recreate the performance you're listening to.

The Anthology's will be compared to the various Statements and the Finalists since they are all open back designs. The Anthology's are not designed to replace any of them but rather to offer an additional lower cost and smaller profile option with big dynamic performance and a stellar midrange. Their reduced height offers WAF benefits that make it easier to build just one more speaker! Take your pick and enjoy!