Subject: RAW Acoustics HT3 - Speaker Kit Review
Posted by E. Jones on Mon, 06 Nov 2006 18:00:40 GMT
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Why HT3's?Up to this point in my DIY loudspeaker building experience I've mostly built kits from Adire/ Exodus. When Al from RAW contacted me about giving his HT3's a go I jumped at the chance. The HT3's use two driver's I'm already very familiar with the WR125 and the Extremis 6.8. What made the the HT3 quite different is the tweeter; Al's own RA104.5 Ribbon. I have had no experience with ribbons so I was eager to hear what Al had cooked up with this design. The HT3 is a slim (only 7" wide x 11" deep) tower that promises "... style with shocking mids,highs lows tuned to 29hz..." RAW webpage.)The KitI received all the parts and information to build the kit in a timely manner.* The kit included everything, even high quality silver wiring. Also helpful is the included MDF front baffles. (The ribbons use a square shaped body and cutting the rabbit could be a little difficult for the inexperienced woodworker.)Cabinet DesignI spent several weeks deciding how I wanted the cabinets to look. Whenever I approach a design I try to set up some goals. The last project I built I explored curves as a theme. This time I wanted to work with angles and edges (but without just building a standard box.) I also wanted to utilize some 30 year old mahogany boards that I had rescued out of a renovation of my house. I didn't have a lot of the mahogany so I decided that I would somehow use it as accent pieces over a painted cabinet. After kicking the idea around in my head and working some sketches this is the design that most intrigued me.The BuildCabinets - The cabinet plans were well laid out and easy to read I had no problems getting all of the parts cut to size. (The plans did not include a panel cut list which I find helpful in checking all my cut parts with to be sure I didn't forget anything. No biggie, just handy if it's available.) After I routered all of the openings (driver, port, input cup) I looked at the size of the crossover boards and decided that it would be a tight fit to get the boards through them. I decided to assemble the cabinets leaving the back off, then assemble the xo's attach them to the inside and then glue up the back. This worked well. I tested the xo's prior to sealing them inside the cabinet.Crossovers- The plans were easy to follow and the crossover (xo) schematics included a photo of assembled boards which I find useful when building the xo's. Al also provided me with the Sonicap upgrade. The xo's have a lot of parts but were no more difficult than other x-o's I've built.FinishingI again called on one of my favorite finishes for the cabinets: Rustoleum Hammered Enamel. I know you're thinking "all that work and you finished them with a cheesy rattle-can." On the contrary the hammered enamel has very nice finished texture (when applied with care) that is durable and professional looking. (I've always planned to invest in a HPLV sprayer but never quite have gotten to it.) Prior to the primer and paint application I masked the areas of the cabinet where the mahogany accents would be attached with glue. Speaking of those parts I stained them with a dark wood stain color in "Ebony" and clear coated them with several layers of semi-gloss lacquer. I applied the accents one piece at at time with wood glue. Which took several days to to my limited number of large clamps.Sound OffHow do they sound? Here's a breakdown. Note: The majority of listening was done in my theater room which is quite large (approx. 18'x25') with a mid-level Denon receiver.Low - The Extremis 6.8 rocks. My theater mains are Exodus 61's which also feature an Extremis and are about half the size of the HT3. The Extremis is impressive in the 61's and is even more impressive in the HT3. Bigger enclosure = more bass. Enough to satisfy most without a separate bass unit.Mid - The WR125 is a capable, clean, sexy looking mid that fills the void exceptionally well.Highs - The RAW Ribbon is smooth and detailed never harsh even at high SPL's. All together with Al's expertly designed x-o's the HT3's sing with ease, each driver handling it's frequency with detailed accuracy and blending together to create a competent

sound-stage. They accomplished this in a room I would consider almost too large for a compact tower. I found them very pleasing playing a variety of music (See *A few songs and comments* below.) Home TheaterAs pleased as I was with the HT3's as a musical speaker I found them even more enjoyable as a theater speaker. I ran them with a phantom center, set to large, with no sub. I watched/listened to a variety of clips. One of those clips was the DTS version of the "Lord of the Rings: Return of the King", chapter: "Pelennor Fields". This is a clip that features a myriad of battle sounds as well as some major bass stomping Elephantes. The HT3's sound-stage really opened in theater use. I was impressed with the high's which have to handle a lot of clanking of swords and armor as well as voices and symphony music. The overall sound was handled with detail and accuracy even at reference level. The bass was just outstanding from a 6" driver. It filled my large room fully. I could tell there was some really low stuff that wasn't being reproduced (my theater sub is a dual 15" IB)but the HT3's never flapped due to being over driven. These are serious HT speakers that could adequately be used minus a sub in the right sized room. I think most average listeners wouldn't ever know that a separate sub is missing. Bassheads will crave more of the kidney shaking stuff.ComparisonJust for fun I had to do some comparisons with the 61's given the similar parts. The 61's had a much brighter sound. (This surprised me because I've always read that Ribbons are prone to being overly hot/bright sounding.) The HT3's filled out mids a bit more (no surprise because of the 3-way opposed to the 2-way) Although I was very impressed that the mids on the 61's were still quite detailed given they don't have a true mid in their 2-way design. At the low end the HT3's push quite a bit deeper bass.*Note - After posting this review Al commented to me about the sound of the RAW ribbon. He explained that the RAW ribbon was designed to eliminate the usual brightness (hot) found in typical ribbons. Given that, I would assume, the difference I heard between the 61's and the HT3's had more to to with the RAW ribbon being exceptionally smooth (for a ribbon) as opposed to the 61's being overly bright. I personally haven't ever thought of the Usher tweeter used in the 61's as being too bright.Music*A few songs and comments*:Sarah McLachlan: "I Love You" - Her voice will kill a harsh tweeter. Sarah's voice was smooth and never harsh, even when pushed to reference volume. This song also has an impressive amount of low end that the HT3 reproduced with fullness and ease. Jars of Clay: "Sunny Days" - Upbeat pop/rock song that sounded terrific. The mid beats were crisp and lively. Clear detail on a male voice that can sound "mushy" on some speakers.Last of the Mohicans - Motion Picture Soundtrack: "Main Title" - one of my all time favorite scores with LOW sweeping bass, lots of horns and strings. The HT3's really showed their stuff here handling all instruments with ease and clarity. The Extremis was pushed hard at reference but came through without flapping. The mids and highs handled the strings and horns with undistorted detail.Blood, Sweat and Tears: (unknown song) - I hauled the HT3's to my friend Brian's were we set them up in his system. His room is about half the size of mine and it has a few odd angle walls (unlike mine which is basically a plain ol' rectangle). Brian is a pro photographer and took the photos of the HT3's you see here. Anyway after hearing the HT3's at my house he was very impressed. He said I have something you have to hear on these. It was a Blood, Sweat and Tears song. It featured a long drum solo and lots of horns. The clarity of those two instruments was smile inducing. The bass was never bloated and the mids/highs reproduced the horns with clean undistorted sound. Brian and I both agreed that the HT3's sounded much fuller and more detailed in his smaller room.Wrap UpIf you're looking for an excellent sounding, full range, slim profile tower, with smooth highs that can really push out the low end and have a small to medium sized room the HT3's should be on your short list.-EJ

Subject: Re: RAW Acoustics HT3 - Speaker Kit Review
Posted by Wayne Parham on Mon, 06 Nov 2006 22:12:58 GMT
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Wow! What an excellent, thoughtful review! Thanks for posting it here!