Subject: Re: H290C Horn/Waveguide
Posted by Wayne Parham on Thu, 21 Mar 2013 20:28:22 GMT
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compresion driver. Alternately, there is a position on the board for this resistor so you can install it there if you want instead of hanging it across the driver terminals. The Rs position on the board is right beside C1.

Here are some additional comments by Bill Epstein, followed by waveguide design philosophy information:
An amazing listening session with the H290CThe finish of production waveguides is satin. There are actually samples of many different ABS blends shown earlier in this thread, and that's why it's hard to tell what the finish is. There was a glossy blend I tried early on, and another blend that was a little less glossy but still shinier than what we eventually settled on. The final ABS blend I

loudspeaker with H290C waveguide:

As an aside, I chose the ABS mixture largely for its dimensional stability and consistency. The mold shop gave me samples of waveguides using several different mixtures to evaluate, some that were really shiny, some that were more dull. Some held dimensions well, others less so. I placed a priority on dimensional stability, and the ABS blend that is most consistent tends to be less shiny, more of a satin finish.

ABS plastic is a mix of three substances, styrene, acrylonitrile and butadiene. The proportions can vary from 15% to 35% acrylonitrile, 5% to 30% butadiene and 40% to 60% styrene. By varying the mixture, you can achieve different properties. Higher styrene tends to make a shinier finish, but we found a little bit less tends to make the device more dimensionally stable, more uniform through the hold and cooldown cycles of the molding process. Since we prioritize dimensional consistency over finish, that sets the material to one with a surface that I would characterize as being satin black.

If you want a different finish, the waveguides can be painted. Enamel adheres very well to these waveguides, so you can spray paint them to be glossy, flat or even a different color.