Subject: room + corner horn, xmax, Fc answers
Posted by Wayne Parham on Fri, 14 Mar 2003 22:12:08 GMT
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There is no compression and the rear chamber is slightly overdamped, making response

easy to build and service.

ring" in front of the woofer to increase compression above 1:1. The woofer is mounted on the baffle just as the 1:1 configuration, and a compression ring is placed over the woofer and held in place with the same mounting screws. So the throat area is determined by this first orifice.

And a third configuration for the cornerhorn is one that uses reduced size slots to form the actual throat. In this manner, the volume between the woofer and the side slots forms a sizable front volume, which is normally absent on the other two configurations. This allows more tuning paramaters at the expense of necessitating an access panel, making the design harder to build and service. However, some have built this configuration eliminating the slits entirely and used the space between the chamber and the walls as the throat. That gets around the requirement for an access panel.

room's corners, and there are no foldings within the cabinet. The cabinet serves only as the throat and a chamber for the woofer. It is a tuned chamber, so it allows some tuning but the horn flare is formed entirely by the room's corner.

One of my favorite software tools for simulating the cornerhorn or any other horn is McBean's Hornresp program. You will need to enter driver parameters and area expansion as a function of length. The profile is conical, and the area expansion is determined by the formula A=X230.5/4. Please see the post called "Cornerhorns" for more information.