Subject: 6 vs 7 vs 8?
Posted by Rick B on Fri, 05 Mar 2010 01:17:46 GMT
View Forum Message <> Reply to Message

Wayne, could you explain the basic differences to me between the 6,7 and 8 horns?

What's the midrange like on the 8's?

What's the top range of the #12 sub?

Could I get plans for the #7 and the #8 to compare the build difficulty please?

TIA

Rick

Posted by Wayne Parham on Fri, 05 Mar 2010 02:59:35 GMT
View Forum Message <> Reply to Message

cornerhorns are exactly the same in every respect except their woofers. Also, don't forget that

Sometimes when I tell this to people, I sense that they mentally minimize the significance of this. Don't. The woofer is where it's all at, or at least a lot of it, where sound quality is concerned. Not to say the tweeter isn't important, but the woofer is the foundation, and more than just bass, it is

cornerhorns, with their large midhorns pushed as low as they could possibly go, the woofer still runs up beyond middle C. That's a pretty big part of the fundamentals of many instruments and

the overtone region, in addition to the bass.

What I'm trying to say is the woofer is responsible, to a large degree, for a good portion of the sonic character of all my speakers. This is true of most loudspeakers, for that matter. You really want a driver that has a motor capable, doesn't become non-linear at moderate power levels and has good thermal qualities. Equally important, it should have a cone/suspension that is well damped, free of upper-frequency resonances that introduce breakup. This is what separates the good from the bad, and the great from the good. It really is the heart of the loudspeaker, and many times I see people glaze over it. All the work in crossover design and horn pattern control is lost if you use a crummy woofer. Well, maybe not all, but you get the idea. I've put a lot of effort into making these things perfect, so I like to see them implemented with the best parts.

Speakers history.

For years, I've had only the small two-ways, the larger controlled-directivity two-ways and the

woofers, respectively. The larger two-ways offered horns with uniform-directivity, being the three

midrange and tweeter subsystems were similar, although the model number was tied to woofer size. That's just how it has always been.

The thing is, for all of the 1980's and most of the 1990's, the cornerhorns were three way speakers with direct-radiating midrange. The idea was that the corner would provide the directivity for the midrange, just like it did for the woofer, at least from the Schroeder frequency (about 100Hz to 150Hz or so) upwards. I made them two-ways for a few years, as an experiment, but the point is that in each case, where there was a midrange driver or drivers, it was usually 5"

and 5" midrange made sense.

In 2003, when I started making the current models with large midhorns, I decided rather than

---

Posted by Rick B on Fri, 05 Mar 2010 03:34:11 GMT
View Forum Message <> Reply to Message

Wayne, thanks for the detailed response.

Could I get plans for the 7 & the 8 so I can decide which would be best for my room?

TIA

Rick

Posted by Wayne Parham on Fri, 05 Mar 2010 05:36:14 GMT
View Forum Message <> Reply to Message

I sent them. Did you not receive the plans?

Posted by Rick B on Fri, 05 Mar 2010 14:08:01 GMT
View Forum Message <> Reply to Message

Thanks Wayne.

But I requested the wrong sub, I think it's the ported #3 sub that I'm actually interested in.

Also, could a person place the mid & tweet horn atop the #3 sub? Does it go high enough? I'm asking in case I don't use the #7 in a corner. Just wanting to know what's possible.

Thanks again.

Rick

Posted by Wayne Parham on Fri, 05 Mar 2010 14:52:09 GMT
View Forum Message <> Reply to Message

City today.

Good choice, adding subs, by the way. Really helps smooth room modes, in addition to extending the bass response.

I wouldn't suggest replacing the woofers from the mains with woofers from the subs though. Remember what I said about the quality of the (mid)woofer, how it runs into the midrange. That's reason enough to keep woofers in the mains that play nice through the mids. The other reason is it makes sense to leave the mains alone, keep the woofers in them as they are, and add subs, placing them around the room to smooth room modes.