
Subject: Is this horn flare suitable for PSD2002?

Posted by [hjeon](#) on Fri, 28 Dec 2001 06:56:49 GMT

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Hi Wayne...I bought a horn flare made by Sammi here in South Korea. It resembles CH-3 but a little bigger. Mouth size is 15 x 5 inches and depth is 7 inches. so the mouth area is 75 square inches. So the horn cut off frequency is a little lower than either CH-3 or H290 since the mouth area is bigger. It is a bi-radial with diffraction slot at the end. Do you think this is suitable for the PSD2002 on theater 4 pi? Or should I buy another horn flare? What effect can we expect by using bigger (lower cut off) than normal horn flares? Sammi make sh-350 which is similar to h290 by look and spec. They also make sh-360 which is similar to ch-3. If I have to buy another horn which one do you think is better? Thanks in advance Hunmoo

Subject: Re: Is this horn flare suitable for PSD2002?

Posted by [Wayne Parham](#) on Fri, 28 Dec 2001 07:32:48 GMT

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Is it basically a 2370 copy? If it has a similar radiation pattern and response curve, it should work just fine. If you use it, please let us know how it sounds.

Subject: Re: Is this horn flare suitable for PSD2002?

Posted by [Super_BQ](#) on Fri, 28 Dec 2001 09:08:54 GMT

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I've looked at the Sammi line of horn flares then found that they are a little different than the CH-3, 2370, or H-290 flares. The Sammi SH350 is a bolt on exponential horn similar to what is required

what effect would using the SH350 wide dispersion have over the typical 2370 size horn flare for the Theater 4 Pi?

Subject: Re: Is this horn flare suitable for PSD2002?

Posted by [Wayne Parham](#) on Fri, 28 Dec 2001 16:20:51 GMT

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If I were planning to use a tweeter horn with a different pattern, I'd crossover at a different frequency to maintain DI matching. If the tweeter horn pattern is more narrow, crossover higher; If wider, crossover lower. The idea is to crossover in the frequency range where the direct radiating midwoofer pattern has narrowed to the same angle as the tweeter pattern in the horizontal. That way the sound is uniform throughout the room, within the vertical arc of the horn's pattern. Tweeter horns with asymmetrical patterns usually narrow more in the vertical than the horizontal, which is a good thing in my opinion so it doesn't waste energy on the ceiling and the floor. You want the midwoofer pattern to match the tweeter's horizontal, because that makes off-axis response as smooth as on-axis response, which also creates a uniform reverberent field.