



## Genesis Horn - A New Beginning in Loudspeaker Designs

Danley Sound Labs has been asked for several years to come out with our version of the ever popular line array loudspeaker. Tom Danley chief design engineer and co-founder of Danley Sound Labs had in fact developed line source designs several years before they became popular in the industry and was well aware of the severe limitations encountered with them.

The biggest enemy of the line array is the very thing that makes it work, self interference. The mixed blessing of self interference is you not only get some constructive interference but also destructive interference. Evidence that the manufacturers understand this problem is seen by the fact that even those that claim high resolution data is essential, never publish impulse measurements of these systems. Why? Because the data look so bad, no one wants to admit it.

Another huge limitation of the line array is pattern control and the smaller units just lose pattern control at a higher frequency. This means the array not only doesn't supply even coverage, it sends the uneven energy to places you don't want.

On a positive note, line arrays do go up easy and can help with sight line issues.

So if the line array isn't the answer what is? The Genesis Horn!



The Genesis Horn incorporates three of Danley Sound Labs patent pending technologies, Synergy Horn, Paraline, and Shaded Amplitude Lens. These core technologies yield one of the most significant paradigm shifts in loudspeaker history.

The benefits are:

**Synergy Horn technology** - Introduced by Danley Sound Labs three years ago, the Synergy Horn enabled the flagship SH50 to have previously unheard of frequency and phase response and consistent rave reviews as being the best loudspeaker many had ever heard regardless of price or category. The Genesis Horn incorporating the Synergy Horn technology produces a true three way full range horn (50-60Hz depending on array configuration) incorporating 18 drivers positioned to be less than a  $\frac{1}{4}$  wave length away from the adjacent drivers as well as the drivers covering the adjacent pass band providing seamless combining and proper horn loading in a single large format horn that sounds incredible.



**Paraline Technology** - enables multiple high frequency devices to sum together free of interference even at the extreme upper frequencies while properly loading the horn. As more output is needed additional Paraline lenses can be added.

**Shaded Amplitude Lens Technology** produces a heretofore unheard of output of as much as 20 dB of gain out of a single cabinet! Compare that to the 6 dB of gain out of other discrete cabinet designs. Outdoor measurements confirm that a single cabinet with 20 degrees of down angle built into the horn and flown 25' in the air can supply even coverage from 15' in front of the array and out to 90-100'. The down angle allows the array to supply great coverage to 100' and then actually taper off before hitting a back wall.

Take the same box up to 40' or use a model with less down angle and distances of hundreds of feet can be covered with vastly superior horizontal and vertical pattern control. The ability to contain the energy to the desired listening plane and away from areas that don't wish to be covered is a huge benefit in outdoor concerts or festivals where noise ordinances are a concern.

A Genesis array will rig faster than a line array as it uses far fewer cabinets to get the desired SPL and it actually takes up less vertical space than a comparable line array, making sight line issues even better for all.

Listen to a Danley Genesis Horn; compare it to anything on the market. We think you'll say as was said in the beginning, it is good, very good!

