## HÖRMANN

## Warning and Information

Electronic Siren ECN 3000-D



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## Sound Propagation by the ECN Siren Horn

The ECN siren horn is a specific development with exponential increase of the horn's cross sectional surface, to propagate siren signals with high sound intensity.

This special horn design assures optimum propagation of the sound wave within the horn, is widely in use, thoroughly tested and has proven to generate signals with high intensity.


The siren horn's omnidirectional propagation of the sound wave in horizontal plane is based on the "Huygens principle".

This physical guideline explains the diffraction of a sound wave at a single slit. Diffraction of sound results in a circular sound wave of omnidirectional characteristic, which leads to $360^{\circ}$ sound propagation.

## Propagation of Sound Pressure Level (SPL)



