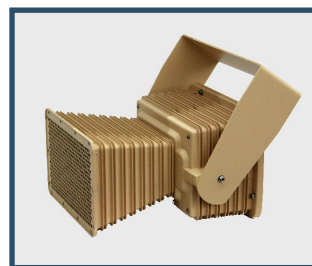
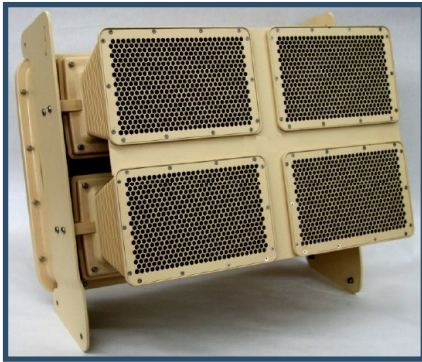
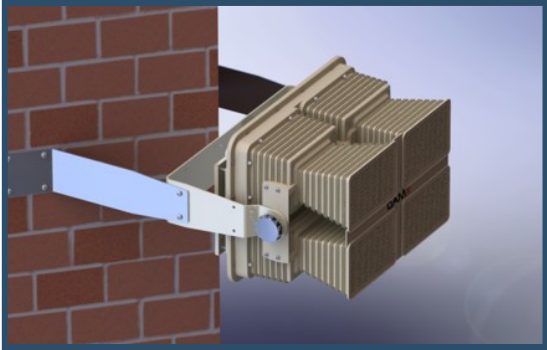


CLEAR VOICE™

WHEN INTELIGIBILITY IS ESSENTIAL

“IS THE CLEAR CHOICE”



CLEAR VOICE™

SPEAKER FAMILY

Clear Voice is a family of magnetic planar speakers designed specifically for highly intelligible, long throw speech transmission. Configured with a frequency response that is perfectly matched for the voice range, Clear Voice systems have been shown to transmit a live or pre-recorded spoken message with perfect articulation (1).

The secret to the Clear Voice speakers superior performance is in the *magnetic planar driver*. This highly efficient, **full range** speaker has a frequency response that extends far beyond the voice range. As a true planar speaker, the diaphragm has an extremely low mass that results in a lighting **fast transient response**. These two characteristics provide every Clear Voice system with exceptional vocal clarity and intelligibility.

Clear Voice has developed several models ranging from a single driver unit to an incredibly powerful speaker array systems. As multiple drivers are assembled into a Clear Voice system, two significant performance characteristics occur. First, the **speaker gets louder** and second, the dispersion pattern tapers down into a smaller, tighter area. With a tighter pattern and more power, the **speaker can throw sound farther** while remaining articulate and clear. The acoustic results become progressively more powerful as listening distances get extended to beyond a mile.

Another characteristic of a magnetic planar driver is that the output volume, when using 3 or more transducers, attenuates over distances at a much lower rate than conventional speakers, typically 3dB for each doubling of the distance as compared to 6 dB for conventional speakers. This means that the vocal message coming from a Clear Voice speaker can be heard at distances which cannot be matched by any other product or transducer technology.

The following chart illustrates the useful working distances for each model. Actual distances and SPL performance may vary based on the existing environment/atmospheric conditions.

Speaker Model	Number of Drivers	Useful Working Distance	Nominal Dispersion Angle
1MN	1	200 METERS	30 Degrees H x 20 Degrees V
2MN	2	300 METERS	20 Degrees H x 20 Degrees V
4MN	4	500 METERS	15 Degrees H x 15 Degrees V

Clear Voice speakers that are configured in arrays, deliver enhanced performance and provide useful working distances that can exceed 2000 meters. Mounting accessories are available for installations on walls and poles. Clear Voice speakers can also be mounted in a 360° configuration to suit specific applications.

Note: (1) In 2007, an independent testing laboratory performed articulation tests on the Clear Voice speakers where they achieved a 100% perfect score on the CIS word intelligibility test.