## CXH64 2-Way Mid/High Speaker





- Point source, long throw performance
- 2" horn loaded coaxial design
- Perfect Dispersion Control
- Low distortion, very high SPL
- Extremelly smooth and natural response

## OVERVIEW

The CXH64 incorporates a unique driver, patent pending technology, to radiate a coherent single point source, perfectly time aligned, without the associated problems of multi source interference. This is a huge advantage over the traditional solution of an HF compression driver and a separate midrange compression driver, each with its own horn, where invariably there are phase problems between the midrange and high frequency at the crossover region, resulting in uneven off axis performance.

This mid/high frequency two-way Neodymium driver unit uses two concentric annular ring diaphragms. The larger of the two has a 5" composite cone which offers superior damping properties and reproduces frequencies from 400Hz to 8kHz. Another major advantage here is that there is no crossover anywhere near the vocal region ensuring the most natural and phase coherent reproduction at this critical area. The annular HF diaphragm takes over at 8 kHz to 20 kHz by way of a passive crossover. The external casting features extensive heatsinking ensuring good heat transfer for high power handling and very low power compression.

The perfectly combined high and mid frequencies energy, generated by the two-way driver, feeds a complex, large and proprietary designed, 60°H by 40°V waveguide that uses our Optimized Coupling Technology for improved driver-to-horn transition, providing a single point source wavefront, perfectly coherent across its frequency range, with very low levels of distortion, specially the annoying third harmonic.

The waveguide contour is free from the use of the common diffraction techniques and the consequent internal interferences, associated to the traditional "Horn-Honk" sound. Being without diffraction slots, the CXH64 waveguide is also free from problems with apparent apex. The novel feature of this new waveguide is that its

apparent apex for the horizontal and vertical planes are in the same physical location making it perfectly arrayable as needed for public address purposes.

The CXH64 achieves an optimum balance of extremely well controlled coverage, high sensitivity, smooth frequency response, and very natural sound character with exceptional clarity in the vocal range.

## **TECHNICAL SPECIFICATIONS**

Technical Data	
Speaker Type:	2-Way Point Source Horn-Loaded Speaker
Acoustical Data	
Frequency Response (-6dB):	350Hz - 17000Hz
Low Frequency Extension (-10dB):	320Hz
Sensitivity (1W@1m):	113.5dB (Full-Space)
Calculated Max. SPL (Cont/Peak):	135.5dB/141.5dB (Full-Space)
Coverage Angle -6dB (HxV):	60 <sup>a</sup> x 40°
Drivers	
Mid/High Frequency:	1 x 2" (50mm) two-way custom coaxial driver
Electrical Data	
Program/Peak Power:	160W/320W
Nominal Impedance:	8
Recommended Amplifier:	MA900
Crossover frequency/Type (MF to HF):	8000Hz/asymmetrical (internal)
Recommended High-Pass Filter:	400Hz/24dB/oct active (external)
Connectors:	2 x Neutrik NL4 parallel wired
Enclosure	
Construction:	Braced 15mm multi-laminate birch ply
Finish:	Textured black semi-matte coating
Protective grill:	Black perforated steel
Fittings:	Embedded rigging/tilt system (-15°, -10°, -5°, 0°, +5°, +10°)
Handles:	1 on each side
Dimensions (WxHxD):	654 x 483 x 662 mm
Net Weight:	36 kg