

FEATURES

- Dual 3.5" voice coils / annular diaphragms
- Perfect acoustical coupling
- Extremely high efficiency
- Exceptionally high power handling of 400 W (AES)
- Provides 6 dB more sound pressure than a comparable single voice coil driver
- Ultra low distortion
- Specially designed for extreme high output applications
- Neodymium Magnet Assembly
- Ultra light weight and small size
- 2x 8 Ohm or 2x 16 Ohm

The BMS 4599ND dual diaphragm driver incorporates two identical 3.5" concentric annular ring diaphragms, connected to a common 2" throat, providing extremely high acoustical output.

The patented design of the BMS 4599ND is a result of extensive dedicated research and development, providing dramatic improvement in efficiency, power handling, dynamic response and clarity.

In fact the double voice coil/diaphragm assembly provides 6 dB higher maximal SPL compared to an equal single voice coil driver.

Two large annular diaphragms cover the frequency range 200 Hz to 9000 Hz with a smooth, linear response.

The high diaphragm excursion of maximal +/- 0.8 mm results in high output and increased power handling up to 2600 W peak.

The unique voice coil technology employs a high purity copper wire wound inside and outside of the Kapton™ former to improve the heat dissipation, dramatically increasing the acoustic output and reliability of the driver, while minimizing the power compression.

The voice coils may be driven in parallel, serial or separately for optimal amplifier loading, allowing a single channel of 4, 8, 16 or 32 Ohm as well as double channel of 2x 8 Ohm or 2x 16 Ohm. The use of high grade neodymium magnets provides improved performance while significantly reducing transducer weight.

APPLICATIONS

The 4599ND has two most outstanding features:

- It is the loudest audio transducer ever made
- The frequency range is optimized for human voice

Those capabilities make it best suited for:

- Communication devices for long distances
- Security systems
- Emergency devices
- Mass notification systems
- Systems for scattering birds from airports
- Marine applications
- Military and police communication systems
- Noise cancelation systems
- High End Audio Loudspeakers





4599ND 2" Dual Diaphragm Driver

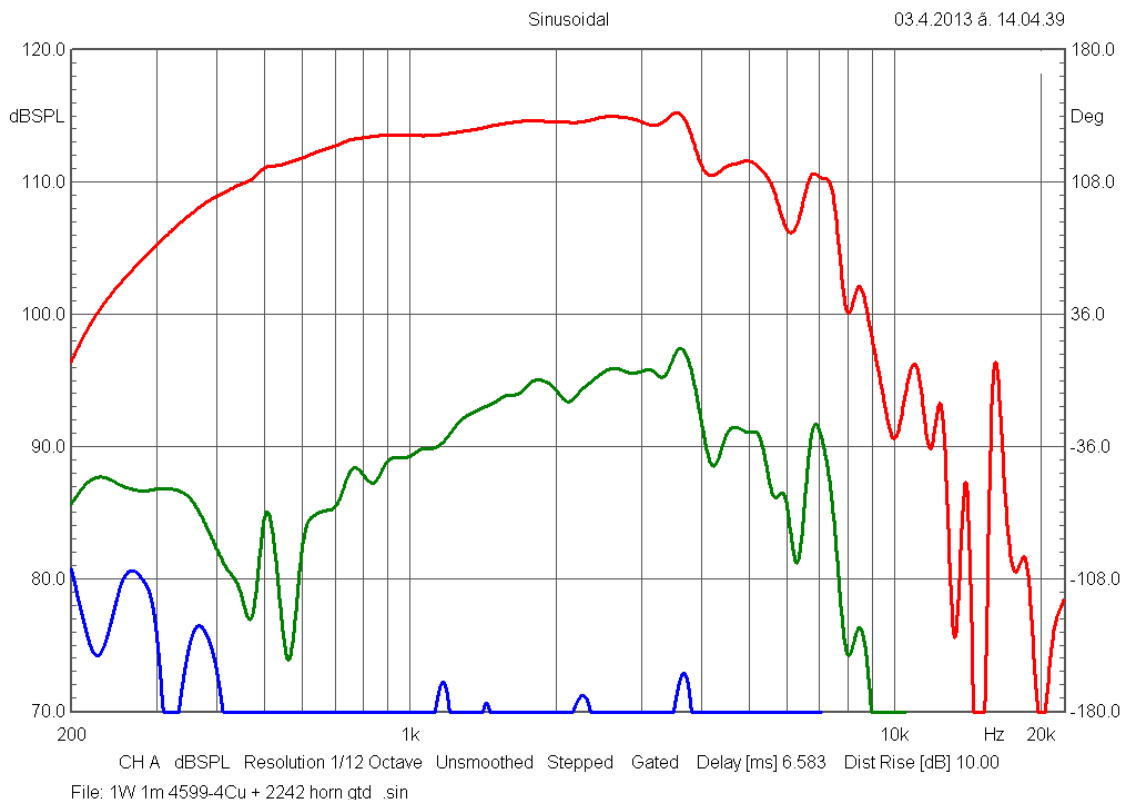
SPECIFICATIONS 4599ND

Throat	2" (50.8mm)
Nominal impedance	2x 8 or 2x 16 Ohm
Power capacity (AES)	400 W (2 x 200 W above 300 Hz)
Peak power	2000 W (2 x 1000 W above 400 Hz)
Sensitivity 2x1W/1m	123 dB on a 40° x 20° waveguide
Frequency range	200 - 9000 Hz
Recommended crossover	250 Hz
Voice coil	2 x 3.5 " (2 x 90 mm)
Magnet material	Neodymium
Flux density mid-range	1.95 T
Voice coil material	Copper (2 layers Inside and outside of the VC)
Voice coil former	Kapton
Diaphragm material	Polyester

MOUNTING INFORMATION

Overall Diameter	133 (+/- 0.3 mm)
Depth	98 mm
Net weight	3.1 kg
4x M6 holes 90° on 101.6 mm, 4" Diameter	

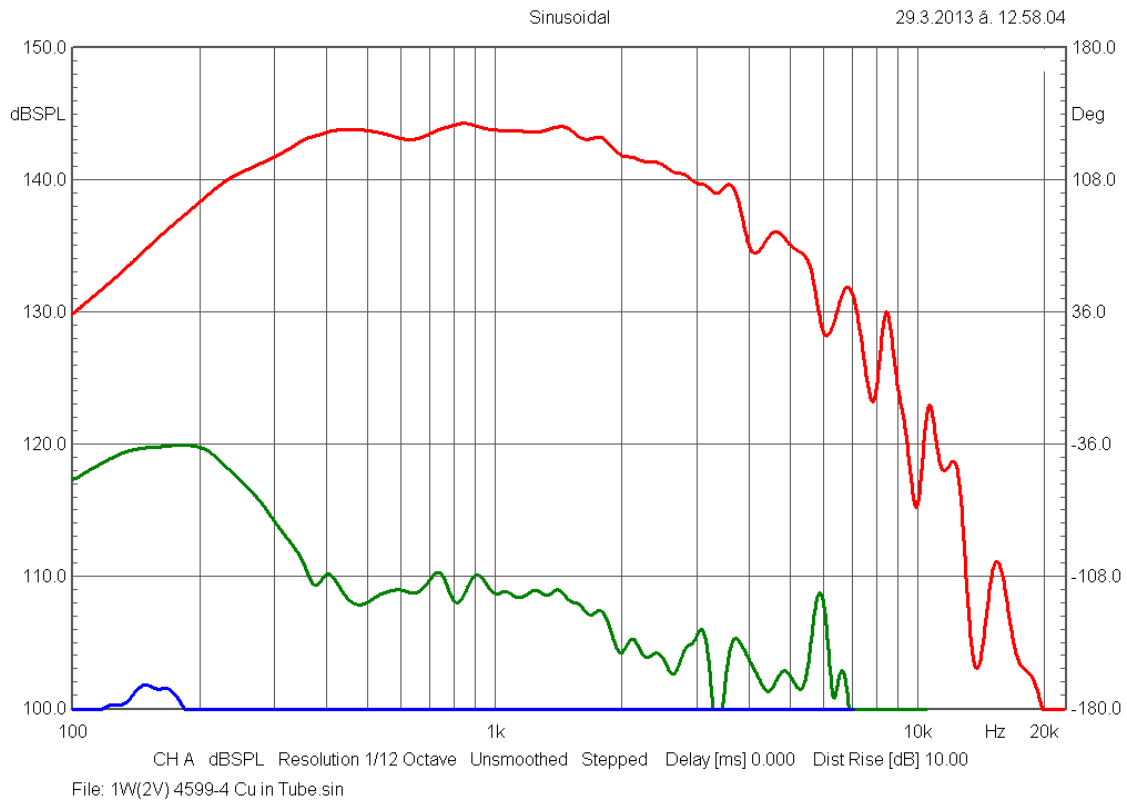
BMS 4599ND-4, 40°x20° CD horn, 2nd and 3rd harmonic distortion raised 10 dB, SPL 1 W / 1 m



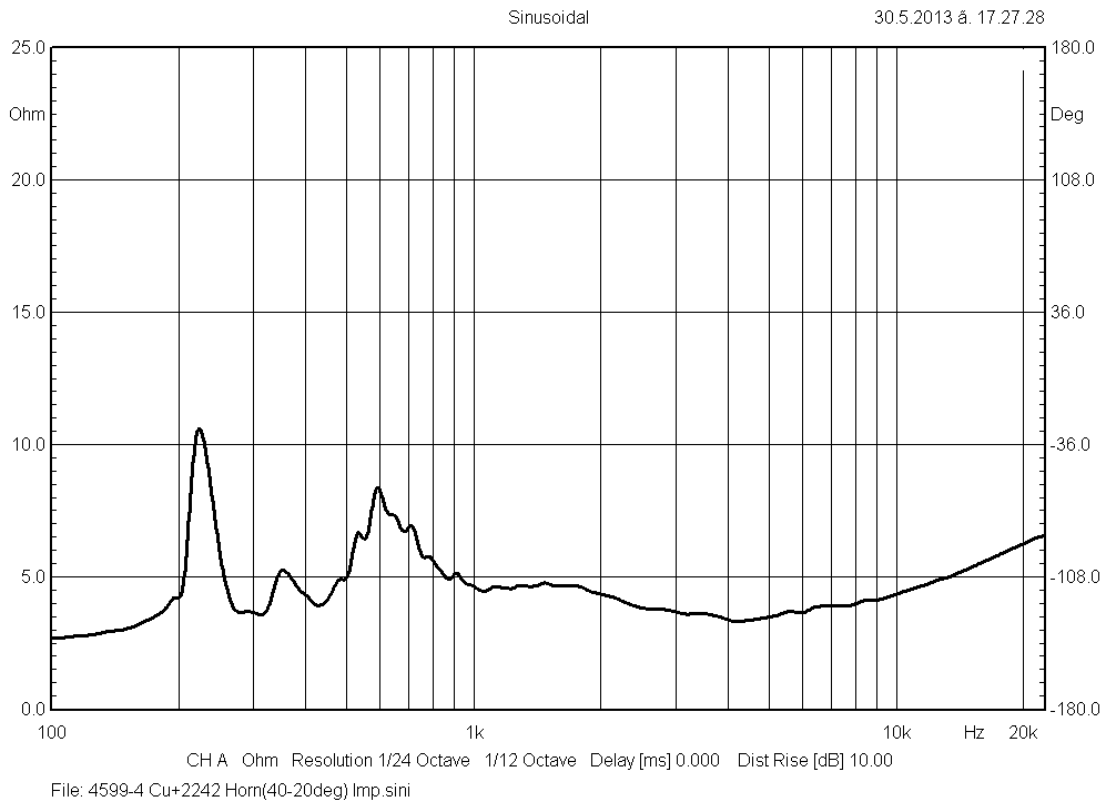


4599ND 2" Dual Diaphragm Driver

BMS 4599ND-4, in plane wave tube, 2nd and 3rd harmonic distortion raised 10 dB,
SPL 1 W / 1 m



BMS 4599ND-4, Impedance in 40°x20° CD horn





4599ND 2" Dual Diaphragm Driver

BMS 4599ND-4, Impedance in plane wave tube

