

LEVEL 2 “Line Arrays & Subwoofer Techniques”

This seminar focusses on the “power tools” like line arrays and advanced subwoofer techniques like cardioid configurations and subwoofer arrays. Advanced signal processing like beam-steering with all-pass filters and more will be explored to put the proverbial “icing on the cake”.

- line arrays
 - Harry Olson
 - straight behavior
 - curved behavior
 - wavefronts & curvature
 - spherical
 - cylindrical
 - waveguides
 - radiating surface
 - proportional Q
 - beam narrowing
 - beam spreading
 - determining minimum no. of speakers
 - selecting splay angles
 - level & frequency shading / tapering
 - beam-steering using APF
 - complex slope filters
 - Chebyshev
 - Inverse Chebyshev
 - Elliptical (aka Cauer)
 - all-pass filters
- subwoofer techniques
 - cardioid
 - end-fire
 - gradient in-line
 - inverted stack
 - symmetrical
 - asymmetrical
 - pattern implosion
 - subwoofer arrays
 - curved
 - straight delayed

Recommended participant level:

Advanced engineers with thorough understanding of the basic physical properties of sound.