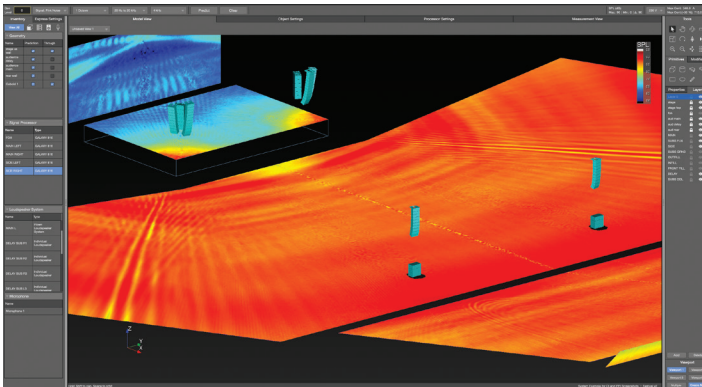
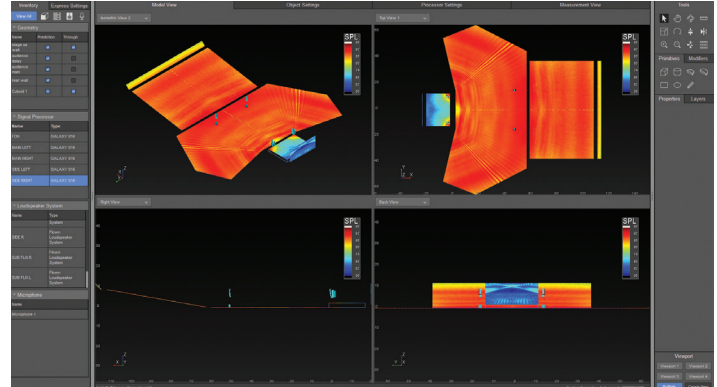


MAPP 3D™ System Design and Prediction Tool



Model View—Single Viewport



Model View—Multiple Viewports

MAPP 3D

Meyer Sound’s new user-friendly MAPP 3D software is a powerful multipurpose sound system design tool that delivers precise, high-resolution predictions of sound energy distribution in a three-dimensional sound field. MAPP 3D offers complete integration with the Galileo® GALAXY Network Platform and Compass® Control Software for a seamless workflow from initial system design and prediction through optimization and control.

MAPP 3D provides a streamlined interface with the abilities to:

- Create full system layouts with multiple views to define audience areas even within complex architecture
- Build and refine three-dimensional designs with a sophisticated suite of design tools, including a built-in drawing program and a collection of design objects that represent a range of traditional stage shapes
- Import SketchUp (.SKP) and AutoCAD (.DXF) files containing detailed venue information to act as an anchor model to the prediction surfaces and as a visual aid to facilitate prediction data interpretation
- Use a built-in snap-to tool to quickly create prediction planes from imported drawings and linear or angular extrusion tools to efficiently create symmetrical sections in large venues
- Optimize comprehensive performance parameters for complex systems within the MAPP 3D predictions, with the ability to load resultant EQ and filter settings directly into multiple GALAXY processors
- Synchronize GALAXY processor output channel settings in real time with virtual or real GALAXY units, allowing in-the-field changes to be predicted during system alignments
- Change output processing using either MAPP 3D or Compass—enabling real time verification
- Tie predictions and system tuning together in the same workflow

The key to the accuracy of MAPP 3D’s predictions is Meyer Sound’s exhaustive database of loudspeaker measurements. Performance predictions for each loudspeaker are based on 3-dimensional, 65,000+ 1/48th-octave-band measurements taken in the Meyer Sound anechoic chamber. The extraordinary consistency between Meyer Sound loudspeakers—manufactured to extremely tight tolerances for uniformity of performance—guarantees that predictions from MAPP 3D will precisely match their actual performance.

MAPP 3D also leverages the inherent advantages of working with loudspeakers that are self-powered, which eliminates variables associated with external powering. These variables include amplifier type, amplifier output configuration and loudspeaker cable length, all of which add complexity and introduce a potential for error in other proprietary prediction tools.

Among the new capabilities in MAPP 3D are gradient subwoofer array configuration, auto-splay, evaluation options (Measurement View), test signal support (M-noise), and more.

Gradient Subwoofer Array Configuration Tool

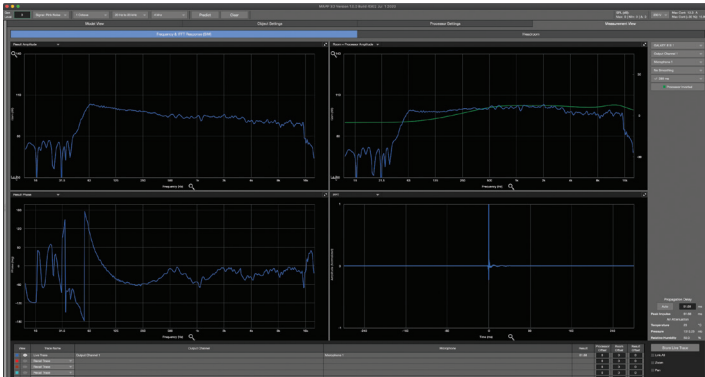
Directional arrays are achieved by placing a mix of low frequency units coplanar to each other (in either a ground stacked or flown array) with some units facing the opposite direction. The output of the reversed loudspeakers cancels the output of the other loudspeakers that is normally present behind the units, while also increasing the SPL directed forward. The MAPP 3D gradient array configuration tool allows for creation of a gradient subwoofer array object that automatically assigns the correct delay for the reversed loudspeakers. Once inserted into the sound field, these loudspeakers can remain a gradient subwoofer array object or the object can be converted to a flown loudspeaker system.

Multi-Level Auto-Splay for Flown Loudspeaker Systems

The Auto-Splay feature provides even distance coverage splay angles for flown loudspeaker systems. It provides a starting point for splay angle decisions, with the ability to later fine tune using additional configuration parameters. Within the Auto-Splay window, the user can reposition the array and perform predictions, facilitating system design. It also includes the ability to calculate splay angles across multiple prediction planes from a single array.

Measurement View

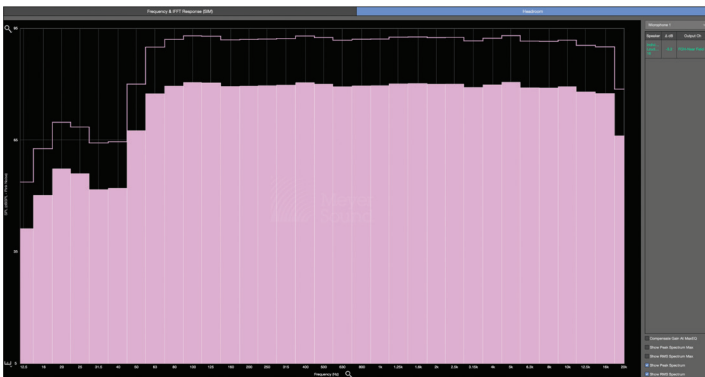
The MAPP 3D Measurement View feature makes use of the placement of virtual microphones in strategic locations in order to evaluate a design's broadband response and maximum acoustic output. The default view displays four charts. These include transfer functions for four measurements: result amplitude (between processor input and microphone), result phase (between processor input and microphone), room and processor amplitude (between processor input and microphone and between processor output and microphone displayed in the same plot), and the IFFT (signal generator and microphone difference).



Measurement View—IFFT and Frequency Response

M-Noise Test Signal Support

In addition to traditional test signals, MAPP 3D supports M-Noise, the emerging industry standard for measuring a loudspeaker's maximum linear SPL for music. A mathematically derived test signal that effectively emulates the dynamic characteristics of music, M-noise enables a far more precise measurement of maximum linear peak SPL than any other existing method. To better reveal the headroom capabilities of loudspeakers, MAPP 3D's Headroom Measurement View displays information about headroom using both M-noise and B-noise. Accurate headroom predictions alleviate any tendency to over design systems, saving cost. The ability to store and recall these traces further supports system design verification.



Measurement View—Headroom

Additional Features

Additional features and capabilities include:

- Offline prediction in response to user community requests (no Internet connection required for prediction)
- Real-world maximum SPL or attenuation predictions
- Calculation of maximum electrical consumption
- Adjustable generator gain and signal types
- Improved editing speed of loudspeakers, processors, and geometry
- High-resolution graphics with layers that can be turned on and off to speed workflow
- PDF outputs of loudspeaker system reports and inventories for convenient review
- Compatibility with current versions of both MacOS and Windows operating systems

For a full list of features and Meyer Sound loudspeaker products, please visit the [Meyer Sound website](#).