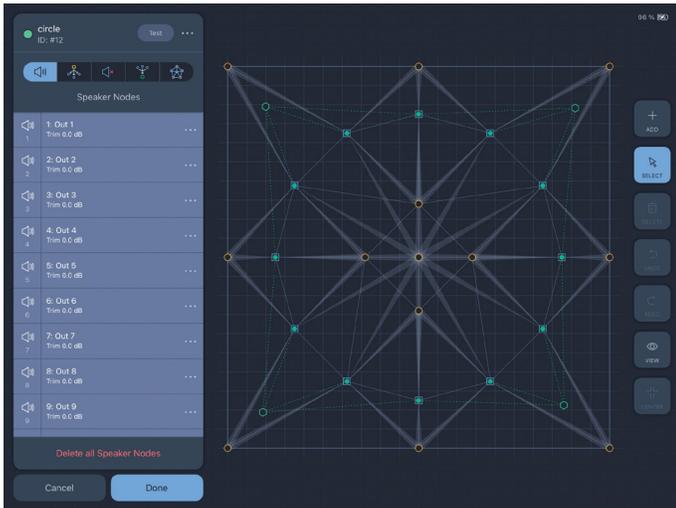
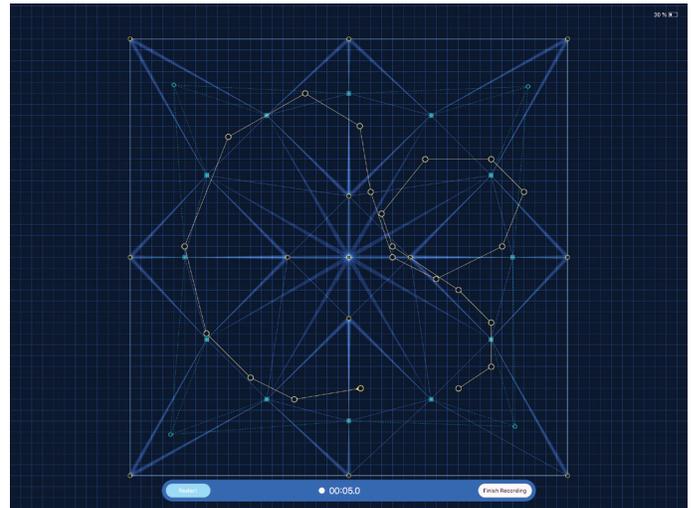


Spacemap Go Spatial Sound Design and Mixing



Spacemap Creation



Creating a Trajectory

Spacemap® Go iPadOS Application

Spacemap Go is a spatial sound design and mixing tool that leverages the audio processing capability of Meyer Sound’s Galileo® GALAXY Network Platform to help sound artists create immersive audio experiences. Spacemap technology powers the world’s most sophisticated sound productions; now those same creative capabilities are available to a broad range of audio professionals in an intuitive iPad application.

What are Spacemaps?

Spacemaps are two-dimensional graphic layouts that enable complex spatial sound distribution with easy-to-use controls. Trajectories are programmable sound paths applied to Spacemaps to dynamically change the output mix. Trajectories, which can be recorded, edited, reshaped, and even manipulated while playing, automate the movement of the Spacemap position, creating the illusion of sound movement. Two basic elements are key to building Spacemaps: nodes and trisets.

NODES AND TRISSETS

Nodes represent loudspeakers (Speaker Nodes), groups of loudspeakers (Virtual Nodes) or silence (Silent Nodes) and are arranged in groups of three as trisets. These trisets provide the fundamental panning elements of the Spacemap and guarantee smooth crossfades. As the channel’s Spacemap position moves closer to a node, more of the signal mixes to that node and less to the other two in the triset. Multiple adjacent trisets make up a Spacemap, creating customizable spatial contours. Audio from a specified set of Speaker Nodes can be automatically sent to designated outputs using Derived Nodes (for example, to send sound to subwoofers or an under-balcony loudspeaker).

3D Sound Control

Spacemap Go has a two-dimensional interface that supports three-dimensional sound control. Sound can be distributed proportionally between loudspeakers on different physical levels using two Spacemaps for each channel, or by combining overhead loudspeaker locations with lateral or surround speaker locations in a single Spacemap. Sound can be smoothly

crossfaded for the same position from one Spacemap to the other for the desired spatial mix.

Spacemap Go includes a library of example Spacemaps and trajectories to assist users when starting, or users can create their own custom Spacemaps and trajectories.

System Requirements and Control

Spacemap systems use multiple Galileo GALAXY processors for signal processing, and require an Ethernet network, loudspeakers, and at least one iPad running the Spacemap Go application. Using the Virtual GALAXY feature in Compass® control software to emulate GALAXY processors in Spacemap Mode, Spacemap Go can be used to configure and program a virtual (off-line) system. An Avnu-certified AVB switch is required to configure systems with more than one GALAXY processor.

Multiple iPads running Spacemap Go at the same time may be used to enable designer collaboration, allow a system operator to monitor different application views, or for instances when control and cue recall need to happen simultaneously.

SPACEMAP SYSTEM INPUTS AND OUTPUT

Spacemap systems support up to 32 inputs. These system inputs can be sourced from Milan AVB devices, or provided by the physical analog or AES3 inputs of up to 8 GALAXY processors within the Spacemap system.

Spacemap systems support all of the available GALAXY processor outputs, up to 16 processors or 256 outputs.

Spacemap Go Application Interface

Spacemap Go guides users through the process of configuring the system inputs, including Milan AVB. Projects contain all the parameters associated with a Spacemap system including the system configuration, as well as all system parameter snapshots. Control information is organized into a set of views: Mix, Channel, Setlist, Create, and Settings. Additional system controls are available along the top of the screen.

PROJECTS

Projects can be saved in the GALAXY processor, to the iPad, or shared via email, AirDrop, or Messages. Spacemaps and trajectories can also be imported into Projects.

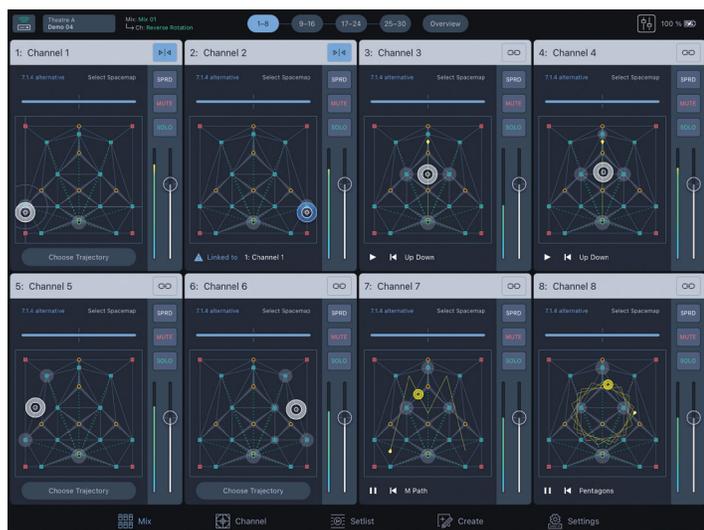
SNAPSHOTS

Spacemap system parameters, organized and saved within the Project as snapshots, include:

- System Snapshots - GALAXY processor input and output processing settings, delay matrix values edited by Compass or Compass Go, and output channel gains
- Mix Snapshots - parameters of all Spacemap Go channels, plus mix level and mute
- Channel Snapshots - parameters of one or more Spacemap Go channels

Mix View

The Mix view presents an Overview and channel controls for eight channels at a time. The Overview provides the big picture by showing the panning positions of all channels simultaneously. Buttons and swipe gestures at the top of the page simplify navigation.



Mix View

CHANNEL VIEW

Each input of a Spacemap System is represented by a channel. The Channel View provides all of the controls for one input channel. The routing of the channel to one or many outputs can be accomplished three different ways:

- The matrix levels associated with the channel can be adjusted directly when precise control is required.
- If one or two Spacemaps are assigned to the channel, a static spatial mix can be made by setting the position within the Spacemap with the touch of a finger and crossfading between the two Spacemaps with a slider.
- Trajectories can be assigned and scaled (changing speed, direction, rotation, size and position) using multi-touch

gestures or dedicated controls to create dynamic spatial movement.

If desired, selected channels may be locked out from user control on the iPad.



Channel View

SETLIST VIEW

The Setlist view is used to store and recall Mix and Channel Snapshots. Mix Snapshots save the entire spatial mix for all channels and may be used to store the mix for a song, a band, or a scene in a play. Channel Snapshots are contained within Mix Snapshots and allow changes within sections of a performance, such as a guitar solo or an individual sound effect. The channel mix is stored automatically as either a set of matrix levels, a static position within a Spacemap, or a trajectory moving within a Spacemap. Smooth crossfades between channel mixes of any type provide ease of use for nuanced spatial orchestration.

CREATE VIEW

The Create view is used to create, edit, and test Spacemaps and trajectories. Example Spacemaps include common surround layouts as well as grids and lines of loudspeakers. Spacemaps and trajectories can also be created from the ground up. Nodes are added and linked with simple touch gestures, and trisets may be created manually or automatically. Trajectories may be recorded by touching discrete points or moving continuously; the precise timing of segments within the trajectory may be edited and scaled after the recording is complete. Two-finger pinch and open gestures allow scaling of views.

Additional Features

- The application supports General Purpose OSC mapping protocols for integration with QLab and DAWs including Ableton Live, Pro Tools, Digital Performer, Reaper, and Logic Pro.
- The RTTrPM tracking protocol enables integration with real-time tracking systems including BlackTrax and others.

For detailed descriptions and support resources, please visit spacemap-go-help.meyersound.com.