

# SONASPHERE

A KINETICALLY DRIVEN  
INTERACTIVE MUSIC ENVIRONMENT

In SONASPHERE, functional units, such as sound samples, effects and mixers, are represented as small spherical 'Objects' floating within 3D Space. Connections are made between these objects, using simple mouse interaction, to establish signal stream networks.

A **Sample Object** playing a sound sample file, is connected to an **Effect Object**, which is then connected to a **Mixer Object**. The signal flows from the sample object into the effect object, where the sample file can be processed by any AU effects. Then from the effect object the sound passes through the mixer/output object, and automatically on to the hidden SONASPHERE master mixer object and master output object. The hidden objects are part of the SONASPHERE architecture and generate the final sound we hear.

Parameters of these objects can be assigned to 3D coordinates of other objects within the 3D Environment. For example, the cutoff frequency of a lowpass filter can be controlled through the altitude of a corresponding effect object. The distance between the sample file object and the mixer object, represents the mixer's input gain.

In addition, objects subject forces upon one another; creating simulated 'Electric Charges' and 'Spring'. This interaction leads to complex behaviour which drives object movement and dynamic changes in the structure of the signal network. The end result of this complex and sometimes chaotic environment, are interesting and unique sound effects.

SONASPHERE brings physicality and a generative approach to software-based sound performance. Enabling users to intuitively control sample playback, effect parameters and mixing, to produce a highly original end result.

