

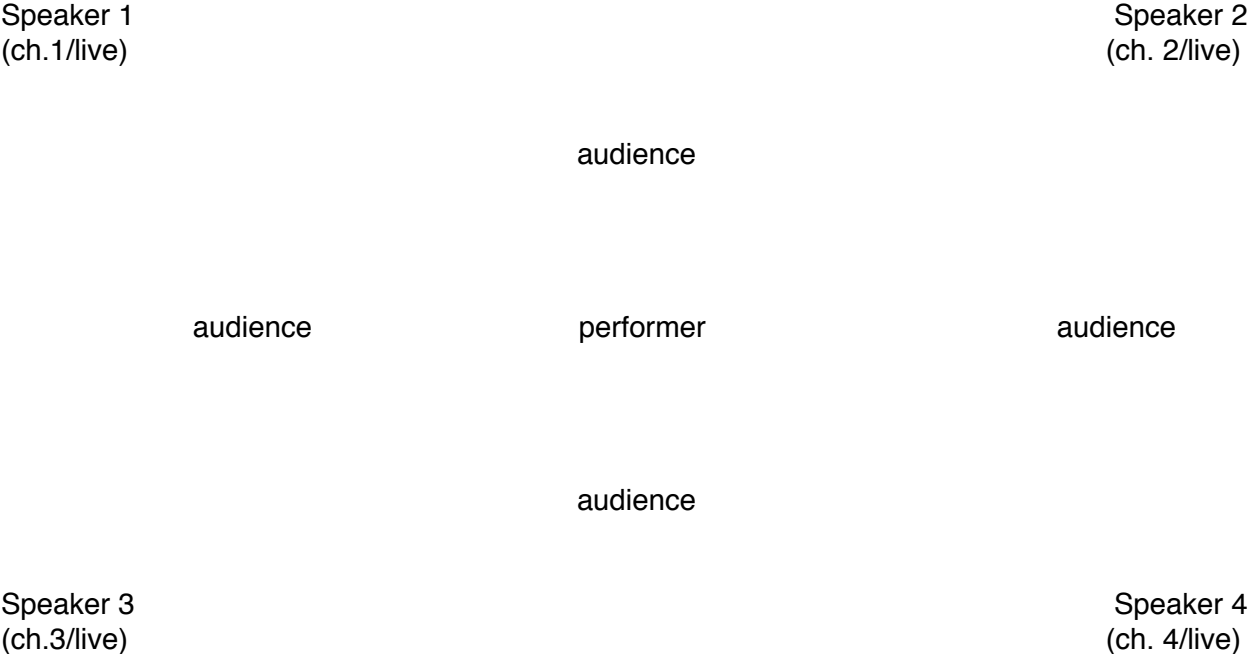
Saxophony for Soprano Saxophone and iPhone

Over the duration of the composition, the performer samples a selection of saxophone sounds (breaths, key clicks, timbre trills, slap tongues, multiphonics, etc.). Each sound is added to a four-channel probabilistic playback system. The system not only records the sound itself, but also the location of the instrument in space at the time of the recording (via accelerometer and compass data sent wirelessly to the computer from an iPhone attached to the instrument). The playback system continuously references spatial information to control probability: the probability of playback of a particular sample is greatest when the instrument returns to the space at which the computer recorded the sample. As a result, the performer can build and move about a two-dimensional sound space of accompanying material while playing similar or contrasting material, and/or recording new sounds at additional locations. Furthermore, the performer can control the speed and direction of the sound file playback by twisting the instrument clockwise for increasingly fast forward playback, or counterclockwise for increasingly fast reverse playback. The sonic effect is a cacophonous surround sound montage of saxophone sounds: Saxophony.

Technical Setup:

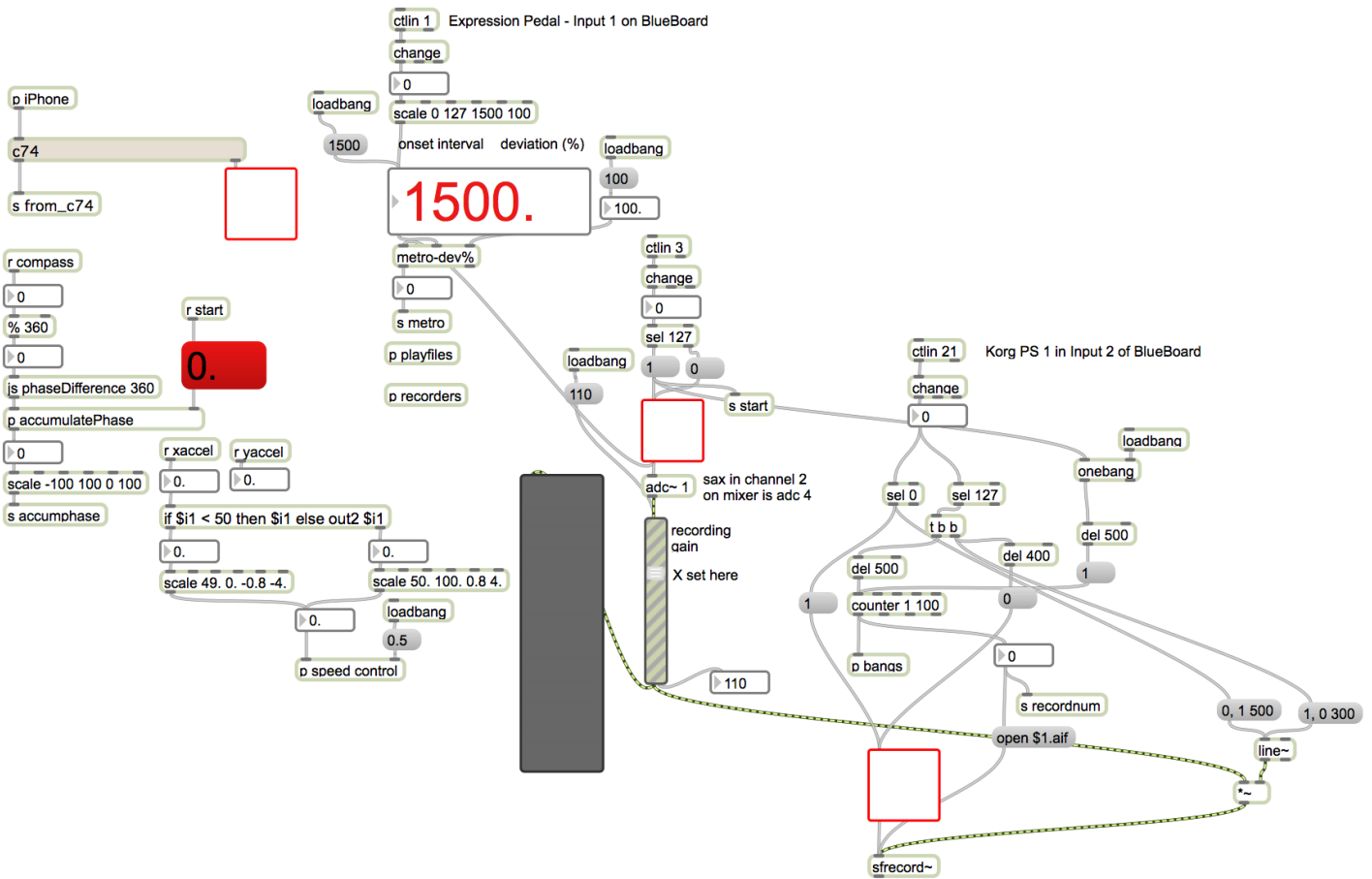
Send five channels out from computer (live sax, front left, front right, back left, back right) to house system (quad), hard panning the four audio playback channels to each of the four speakers and the live sax sound to all four (the live player and audio playback should be equal loudness at the center of the hall).

Hall Setup (performer in center):



Main patch:
Input:

- iPhone y axis accelerometer tilt mapped to y axis of location record/probability sub patch
- iPhone compass mapped to x axis of location record/probability sub patch
- iPhone x axis accelerometer tilt mapped to playback sub patch speed/direction controls
- Expression pedal mapped to interval onset time of sample playback
- Krog pedal mapped to record on/off



Instrument location record/probability sub patch:

