Alex Christie

For Saxophone and A System

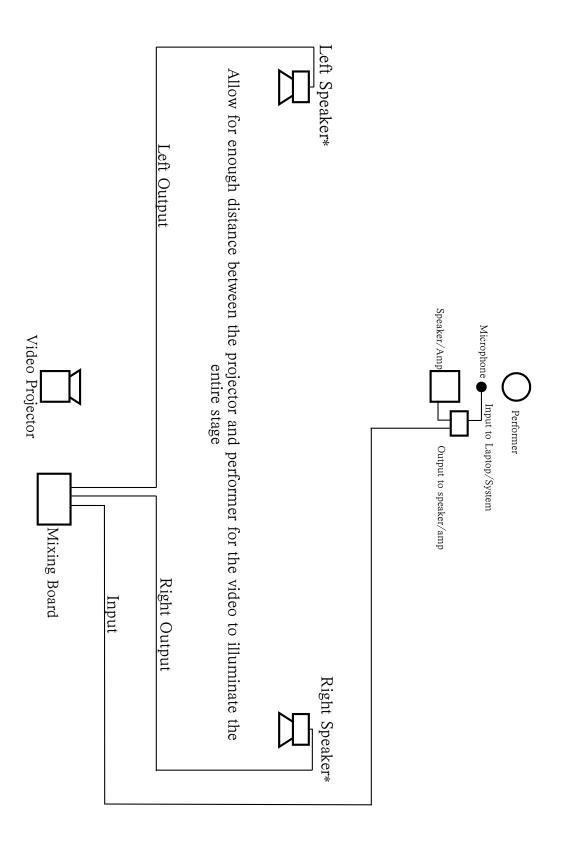
for tenor saxophone, electronics, and video projection

I have been striving to create a software instrument that allows me to simultaneously perform as a laptopist and saxophonist in a natural, flexible, and expressive way. While *For Saxophone and A System* may be only the first step towards fully realizing this goal, it achieves a basic level integration of the two sound worlds and creates a performance setting that allows for sonic exploration and an extension of the saxophone vocabulary.

"The System" is a simple switch-controlled amplification gate. The amplification switches on and off at a rate and progression predetermined by the performer. In the original realization of this piece the rate of on/off accelerates over the course of seven minutes. The projection mirrors the state of the amplification. As the amplification accelerates the system begins to feedback as a result of the close proximity of the microphone to the speaker. The frequency and timbre of the feedback is shaped by the notes fingered on the saxophone, the shape of the players mouth, the acoustic material, and the position of the microphone to the bell of the saxophone. The feedback is an unpredictable yet malleable aspect of the piece. The performer is provided with specific material to play, many of the performance decisions are left to her/his judgement and improvisation.

For Saxophone and A System, utilizes loosely scored extended saxophone techniques idiomatic of free improvisation and the Avant-garde and is an example of my experiments in manipulating the denotative and connotative environment of music. The incorporated electronic feedback suggests installation art or noise music, and the minimal video draws from the world of sound art and flicker films.

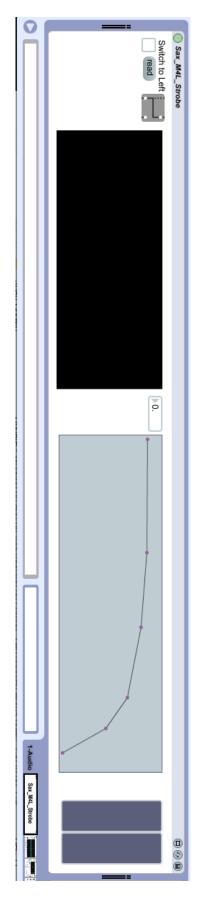
Technical Diagram - For Saxophone and A System



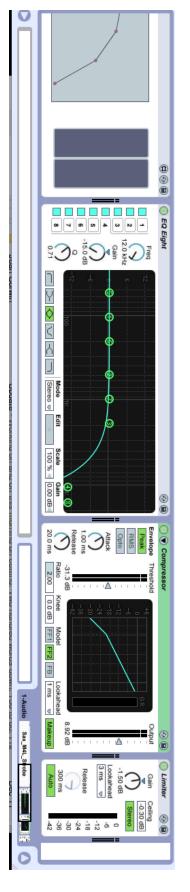
A Brief Explanation of Software

The image below shows the Max/MSP/Jitter/Max for Live interface used to create the feedback network and video projection. The graph to the right of center can be modified to create any curve or change over time. The y-axis represents the rate at which the strobe/ amplification turns on/off and the x-axis represents time. The number box to the upper left of the graph determines the total duration of the curve, and therefore the piece. This graph determines the duration and, essentially, structure of the entire piece.

The left side loads a blank white image to act as a strobe light and initiates the progression specified on the right.



prevent interesting development of the sound. The image below shows the simple EQ, compression, and limiting that is used primarily as a safety precaution to prevent any dangerously loud or uncontrolled feedback. The EQ can also be used to filter out any frequencies that might tend to overtake the feedback timbre or



Performance Notes



Dead Air Finger the specified note and blow air through the saxophone but produce no pitch.



Tongue Ram

Tongue rams can be used as a way of refocusing uncontrolled feedback. A tongue ram on a low Bb will frequently shift the feedback to resonating at the fundamental of the saxophone



Slap Tongue

The strength and pitched quality of the slap tongue is dependent on notated dynamics and accent markings. If no markings are provided, these decisions are left up to the performer.



Flutter Tongue on Dead Air

The technique can be performed either by exhaling or inhaling. The timbre of the two are slightly different and can be used as the performer sees fit.



Unvoiced Note

The notated pitch is the pitch to be fingered except in the case of multiphonics. Multiphonic fingerings are notated above the staff and their approximated sounding pitches are notated with the diamond-style notehead to the left. Unvoiced notes are frequently used to shape the feedback of the electronic system.

Instructions

- -Each section occupies one line of the score. Each section is numbered and provides a set of techniques to be used in that section. *Note: not all sections are the same duration.*
- -Occasionally, there are simple phrases notated in addition to the general set of techniques. These phrases should be treated as motifs that can be fragmented, expanded, etc, in the performance of that section.
- -Any parameters that are not scored are left up to the performer. Improvisation within the set structure and parameters is encouraged.
- -The electronics do not appear in the written score for two reasons:
 - 1) The electronics part is indeterminate and can be vastly different from performance to performance (although the original progression is provided with this score).
 - 2) The performer should resist interacting with the electronics system, in other words, the performer should allow the system to manipulate the acoustic material. The two parts run in parallel and any counterpoint that is produced should be derivative of the electronic system.
- -The video projection acts as a means of illuminating the system's process of amplification. The performer should be centered in the projection.
- -Stereo amplification is not necessary for this piece. In many cases the amp or speaker used for creating the feedback will be sufficient, but if not, additional amplification should be used but does not need to be incorporated into the feedback chain.

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