Poster - Smart Controller

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Abstract

My particular interest lies in spontaneity of music, especially in a concert situation. This paper talks about few ideas of implementing Mini MIDI controller in a live performance. One key limitation with laptop performance is interaction of a computer with a human player or vice versa. In an improvised performance this device would act as a source of communication. between man and a machine. The endless options it gives you by converting voltages into bytes and sending it across to multiple devices, opens up a whole new world of composition process either in a concert situation or in a studio environment.

Introduction

The Mini MIDI Controller is a device used for converting control voltages to definable MIDI messages and visa versa. I believe making use of CV-MIDI Controller could solve some of the limitations, which we encounter in improvised computer performances.

Generating multiple sound sources from a single sound source:

By generating MIDI note values from voltages of a single sound source, these values can be used to generate tones for different instruments. For instance piano sound can be used to generate ambience, bass or percussions when manipulated in applications such as Max/Msp. Hence forming a sense of ensemble from a single player complimenting the music both harmonically and rhythmically.

Visual representation:

Within the area of live improvisation using computers as the medium I am practising how to generate a visual representation of the performance. By converting the final mix of a performance into MIDI values, these bytes could to be used to generate a visual representation of the performance or manipulate projections or still images taken from that space. Hence achieving an audio-visual result, which is truly real time.

Sending Messages:

Open Sound Control is a new protocol for communication among computers, sound synthesizers, and other multimedia devices using modern technologies. It would form a chain between hardware and software devices used in the performance.
It comes with an upgradeable feature of wireless networking via Bluetooth. In other words by making use of "Open Sound Control" I can send and receive messages without being physically connecting the devise.

References

Fraietta, Angelo. *Mini MIDI Controller Manual*. http://www.smartcontroller.com.au/miniMidi/miniMidiController.html (3rd July 2006)

Matthew, Wright and Freed, Adrian. 2006. *Documentation on Open Sound Control.* Center for New Music and Audio Technologies, U.C. Berkeley.