Performance Guide

The overall theme of the piece is the sonification of a puzzle state. It is written for: 3 laptop musicians, 3 puzzle solvers, 1 conductor, 1 mix-controller and 3 acoustic musicians (originally 1 trumpet, 1 sax and 1 euphonium). A predefined piece of music is related to the state of the puzzle, so that as the puzzle is solved different elements and sections of the music will be revealed.

Laptop Musicians:
The laptop musicians work in Max MS. The state of the puzzle is read and midi messages are sent to each player, which are used to trigger samples and VSTs. Throughout the piece the conductor will send cues and a value indicating the relative 'intensity' of that cue. For example, one such is cue is 'Pitchedness'. A low value for this parameter means that the players should adjust their output to more percussive and less pitched. The players may change any parameter they see fit in order to achieve this; the mix between different VST instruments/samples, VST plugin settings etc. In this way each player should arrive at a slightly different sound which meets the constraints.

Puzzle Players:
The puzzle players must move the blocks to collaboratively solve the puzzle. They can do this by dragging, adding or removing blocks. To toggle between “add/remove block” and “move block” press the '*s*' key.

Instrumentalists:
The instrumentalists are given a initially blank score in standard notation consisting of a short 10-beat phrase. A visual reference of the current tempo and beat number are given. When the blocks corresponding to a particular phrase for that musician are in the correct place a musical fragment will be revealed which the musician should play.

Mixer:
The mixer controls the overall and relative loudness of the laptop musicians. The specifics of how the piece should evolve are open to interpretation but a loose idea is that of a gradual, linear crescendo throughout the whole piece culminating in a climax of the instrumentalists playing the final revealed musical phrase in unison.

Conductor:
The conductor is responsible for guiding the overall timbre of the piece by sending cues to the laptop musicians. Initially the laptop-generated parts will be short and rhythmic. As the pieces progresses the conductor must send cues indicating increasing levels of pitched and more open/reverberant sounds. The conductor patch can send two types of cues: discrete and continuous. A discrete cue can be used to tell the performers what aspect to change, for example the relative amounts of pitched/unpitched sound. A continuous cue sends a level between 0-127 indicating the relative strength of that cue. For example, if the musicians receive a continuous cue of 65 this can be interpreted as roughly half-way between fully rhythmic and fully pitched sounds. This can be represented in the laptop musicians interface sign a simple slider as a quick visual reference.

Overall Structure:

- Initially the state of the puzzle is blank.
- The puzzle players will reveal blocks by clicking in the blank cells. Initially these block are not in the correct order.

- When the pieces are out-of-order, the musical fragments corresponding to each block is played automatically by the laptop players.
- The puzzle solvers will keep revealing and moving blocks in an attempt to complete the puzzle.
- When a block is in the correct position, the corresponding musical fragment will be played by one of the instrumentalists.
- The timbral qualities of the laptop generated parts should change gradually from rhythmic sounds to more open pitched sounds. Each laptop player should control these parameters according to the cues sent by the conductor.
- Eventually the laptop musicians will stop playing, leaving only the instrumentalists playing the melody.
- Throughout, the mixer should control the dynamics of the overall piece by adjusting player volume.