METTA – Performance Interface HELP

PERFORMANCE SETUP

There are two ways to present this work. The first is as a stand-alone electronics interface that allows for full control of the work by the percussionist from the on-stage position. In this case the performance interface outputs the LIVE AND PROCESSED SIGNALS (AUDIO SETUP DIALOG ON SCREEN) to DAC OUTPUT 1/2 – PRESS THE APPROPRIATE BUTTON TO THE LEFT IN THE INTERFACE. This will route the live and processed signals to the DAC 1-2 OUTPUTS and mix them automatically with the electroacoustic tape part.

A second and, perhaps more elegant, way to present the work involves an audio technician and a separate mixer located at the front of the performance space – in the "sweet spot" between the stereo speakers. In this case, the audio technician can mix the live and processed signals from the instrument mics with the electroacoustic sounds at the separate mixer and then route them to the loudspeakers after they are mixed in to the L-R stereo pair. For this setup the DAC OUTPUTS 3/4 should be selected. Of course for this setup four cables from the audio interface are required as inputs to the separate mixer. The audio engineer should have a score for the work and be reasonably familiar with the live and electroacoustic aspects to manage a good and "assertive" mix of the audio signals.

In either case, an assertive volume level is desired. However, be mindful to avoid feedback to the microphones and also distortion by over-driving either the Max/MSP patch or the separate mixer, if used.

KEYBOARD COMMANDS

There a few useful keyboard commands associated with the operation of the Max/MSP program. In each case the key commands are lower-case and care should be taken to assure that the caps lock is turned off.

1. "a" - LOAD/START AUDIO – same as pressing the BLUE BAR (button) in the interface
2. "x" - STOP PLAYBACK – same as pressing the lower RED BAR (button) in the interface
3. "s" - STOP AUDIO/CLEAR CUES – same as pressing the upper RED BAR (button in the interface)
4. "p" - PAUSE – stops playback momentarily – useful for rehearsal – also by the Pause: button
5. "r" - RESUME – re-starts playback from the paused location – also by the Resume: button
6. "spacebar" - begins playback of the work from the beginning and to the end – one of the normal ways of starting the work for performance – the onscreen button Play: METTA does the same thing

The rehearsal cues play the four main sections of the piece and allow a means to handle the process of rehearsal. These are not used in the performance of the piece – they are for rehearsal only.

MANUAL SETTINGS

Several settings in the interface must be made manually by the percussionist prior to performance. Some of these are concerned with routing of signals and level settings and others are concerned with setting up for playback start and so on. Other settings for processing and blending of sounds are automated and are taken care of without need for interaction during performance. This is mostly achieved through presets in the Max/MSP program.

The settings for audio setup are as follows:

1) First check that the DSP connections are appropriate for your sound card using AUDIO SETUP in the interface:
    a. Select the appropriate driver for your soundcard
    b. I/O Vector Size 2048
    c. Signal Vector Size 32 (if gapping is heard this value can be increased)
    d. Sampling Rate is 44100
    e. Channel 1 input is MIC – for the saxophone
    f. Channel 2 input is MIC – for percussion
    g. Check to see if phantom power (48v DC) is required by used microphones and supply this powering from your audio interface directly
2) Select output for LIVE AND PROCESSED SOUNDS in the interface by clicking the button on the left for the appropriate channels:
    a. Use channels 1-2 when you wish to blend the signals (mix) within the Max/MSP program interface
    b. Use channels 3-4 when using an external mixer and an audio technician for performance
3) Press the LOAD/START AUDIO button or press the “a” key on the keyboard – this will start the audio engine but will not start playback. The AUDIO led will change from RED to GREEN.
4) Set the levels for the LIVE INPUTS 1-2 – on the top left of the performance interface - LIVE INPUT 1 is the saxophone mic and LIVE INPUT 2 is the percussion mic. These levels should be fairly strong and show good signal levels on the associated signal meters. However, do not allow these signals to go into the “red” too much as distortion will result. Workable values for these levels are between 120 and 140 but this will depend on the kind of mics used, their proximity to the source and so on. Be mindful also of feedback in performance – adjusting these levels will be helpful for solving such problems.
5) Next set the MIX VOLUME – LIVE MIX OUT on the interface. This can be done by typing a value into the box above the slider or by moving the slider. A good starting point for this level setting is 120.
6) Next set the EA VOLUME for the electroacoustic (“tape”) part. This level might be best set at 120 to start.

NOTE: the combined levels for MIX VOLUME LIVE MIX OUT and EA VOLUME are the two primary mix levels for the work in performance – thus their settings are crucial to making a good blend for performance. These levels need to be considered in light of the quality and amount of amplification to the speakers in the performance space and also the relative volumes of the saxophone and percussion instruments as "acoustic" sound sources.

After the settings are completed the playback of the composition can commence with either the "spacebar" or a footswitch that emulates the ASCII code for the "spacebar" (32). Caution should be exercised with starting playback so that the spacebar is not tapped twice by accident! Doing so will restart the playback.

It is recommended that the percussionist practice the technical requirements of the composition just as diligently as the notes on the score page. Doing so will familiarize the performer with the interface quickly and will make it easy to manipulate its operation and sound effectively in live performance.