

T-stick Performance Software Procedure

The following steps illustrate the performance software procedure (i.e., launching and initialising software components) for compositions using the soprano t-stick and kinect input devices. This procedure requires [Max](#), Apple's [Logic Pro](#), [Synapse](#), the [Digital Orchestra Toolbox](#) and [libmapper](#) mapping components. [Additional software components](#) (including the Digital Orchestra Toolbox) are available from D. Andrew Stewart.

1. Turn on computer and audio card/interface and connect to audio system.
2. Deactivate System Preferences: Screen Saver and Energy Saver.
3. Verify computer and audio interface communication, as well as computer audio output to audio system.
4. Set virtual mixer settings. For example, MOTU units have associated mixer software called CueMix FX, which permits standard processes (e.g., equaliser, compression, reverb, etc.). I use all of these, instead of loading down computer CPU – and will adjust (e.g., reverb) depending on both acoustical properties of venue and the composition being performed.
5. Connect kinect unit.
6. Connect t-stick.
7. Launch Logic Pro (Do not launch Logic project, yet).
8. Verify that Logic Pro is using the correct audio interface (i.e., Output and Input Device).
9. Activate Logic's Low Latency Mode.
10. Launch Logic project that corresponds to t-stick composition. All of my projects are set to output on channels 3 and 4 (for stereo works) because of the manner in which I use my audio interface (MOTU UltraLite).

NOTE: Adjust Logic project outputs to correspond to your intended output channels.

11. Launch Synapse.app. At this time, do not calibrate body position within Synapse.
12. Launch Max (Do not launch Max patch, yet).
13. Verify that Max is using the correct audio interface (i.e., Output and Input Device). This step may be skipped if you are not using Max to generate audio – and only using Max to generate MIDI messages.

14. Launch [mapperGUI 2.6.1.app](#). This step can be skipped if you do not intend to make/adjust mapping connections. Generally speaking, I have noticed that it is best to launch mapperGUI 'before' launching a Max patch that contains libmapper mapping components.

NOTE: mapperGUI may take up to 60 seconds to appear. Allow mapperGUI to appear before going to the next step.

15. Launch t-stick performance patch. Allow another 45 to 60 seconds for initialisation. Wait for initialisation to conclude before going to the next step.

/MaxComponents/performance/tstick_performance.maxpat

16. In upper righthand corner of patch, click on SCORE. A blank music score window opens.
17. Along the bottom of the performance patch, click on the umenu object and select the composition you intend to perform (e.g., with_winds, hart_packinglunch). This step will create the appropriate mapping connections and additional initialisation steps for the composition. A red LED object to the left of the umenu object will blink, signalling this step. Wait for the blinking to stop before going to the next step.
18. Calibrate body position within Synapse.
19. With Max in the foreground, type Shift-p to activate t-stick. Type Shift-p again to deactivate.
20. With Max in the foreground, type s to activate timeline for composition and automatic scrolling of music score. Type s again to deactivate.

NOTE: To go to a specific point in the score, use the number boxes for entering a page number or time in minutes and seconds (e.g., 12.35 equals 12 minutes and 35 seconds). Alternatively, use the slider object to manually scroll through the score. Typing s again will restart the timeline and automatic scrolling from the beginning of the composition or at a point specified by the page number or start time number boxes.

21. The remaining steps entail learning the 'actual' performance techniques of the t-stick.