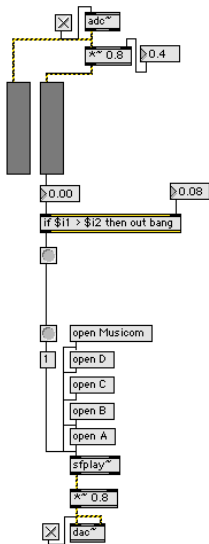


25:251: Composition: Electronic Media II
April 16, 2008
Triggering and Control by Microphone in Max/MSP

1. General considerations on using a microphone to trigger a Max patch:
 - a. Cardioid, directional is better than omni-directional.
 - b. Use the same mic for rehearsal and performances.
 - c. Clip on mic offers the advantage of being in the same position relative to the instrument.
 - d. A mic that is good for amplification is not necessarily good for triggering.
 - e. Have two backup plans:
 - i. MIDI foot pedal onstage.
 - ii. Bang button on the front page of the Max patch.
 - f. Consider eqing to reduce unwanted frequencies
 - g. Devise contingency plan in case the mic accidentally picks up unwanted sound and triggers the patch.
 - h. When composing, use a soundfile recording of the instrument part to test the patch.
2. Some triggering options in Max/MSP:
 - a. Edge~
 - b. Thres~
 - c. Bonk~ (external)
 - d. Fiddle~ (external)
 - e. Meter output method shown below.
3. Plug in a microphone and set up the DSP, as discussed in class.
4. Create the patch shown below:



- a. The output of the meter is patched to a float number box.
 - b. The float box is patched to the left inlet of an “if” object.
 - c. The “if” object says: “if \$i1 > \$i2 then out bang.”
 - d. This means that if the left inlet, representing the float number box patched from the meter, is greater than the right inlet, representing the float box patched into the right inlet, then send a bang message to the bang button patched from the left outlet.
 - e. This bang button triggers one of the soundfiles shown in the patch.
5. Consider the following experiments:
 - a. Use the float output of the meter to control the loudness of a soundfile.
 - b. Use the float output of the meter to control the pitch or playback speed of a soundfile.
 - c. Use the float out of the meter to control the probability of some aspect of a patch.