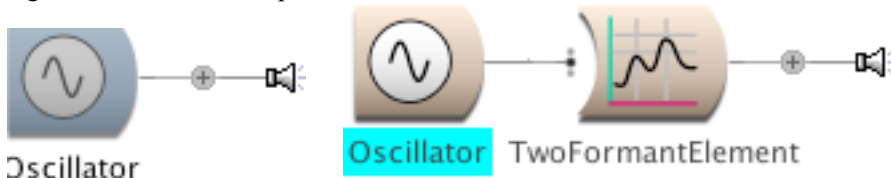


Composition: Electronic Media II

Jan. 25, 2006

Placing Sounds in Kyma

1. Review of Sound File, Propotype, Sound.
2. Consider the following ways of placing Sounds in Kyma:
 - a. Drag a Prototype into a Sound File window, as discussed in class.
 - b. Change the size of the icon in Edit>Prferences>Appearance.
 - c. Better, use Edit>Zoom In and Edit>Zoom Out.
 - d. Copy a Sound in the Sound File window. This is useful when the edit parameters contain complex information.
 - e. Drop a Prototype or a Sound onto a line of the flow chart. This works for flowcharts that have a signal > modifier > output structure, as shown below:

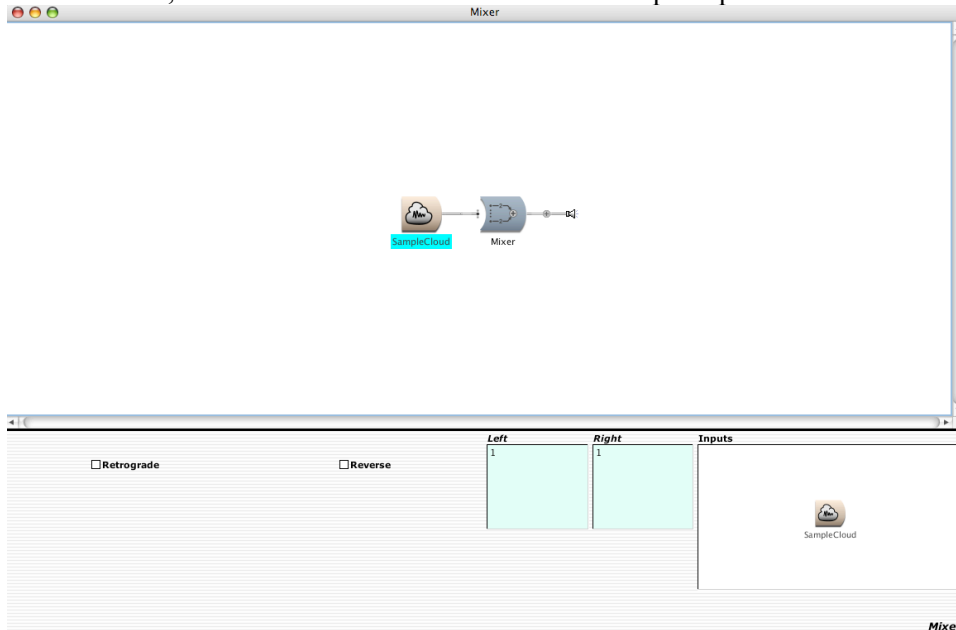


Note: Select by highlighting a Sound from which to compile. Sounds to the right of the selected sound will not be compiled. This is a useful troubleshooting function.

- f. Some Sounds have tails. Clicking on a tail will reveal inputs to the Sound. Clicking again on the tail will hide the inputs, as shown below:

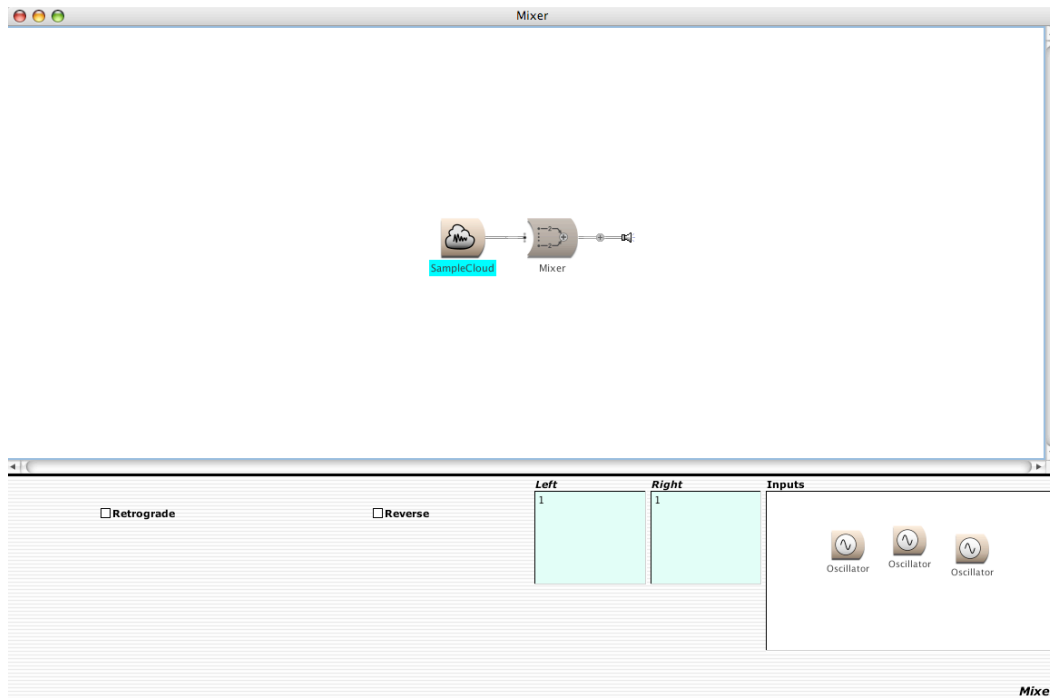


- g. Some Sounds, like the Mixer shown below allow multiple inputs.

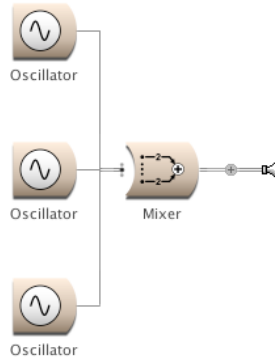


Note the following:

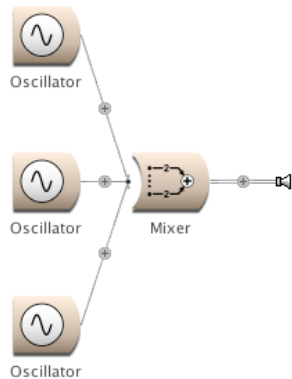
- i. the Mixer Prototype has a built-in input, functioning as a place-holder.
- ii. the Sample Cloud, shown above, can be deleted, then replaced by 3 oscillators using drag and drop or copy and paster techniques. The result is shown below:



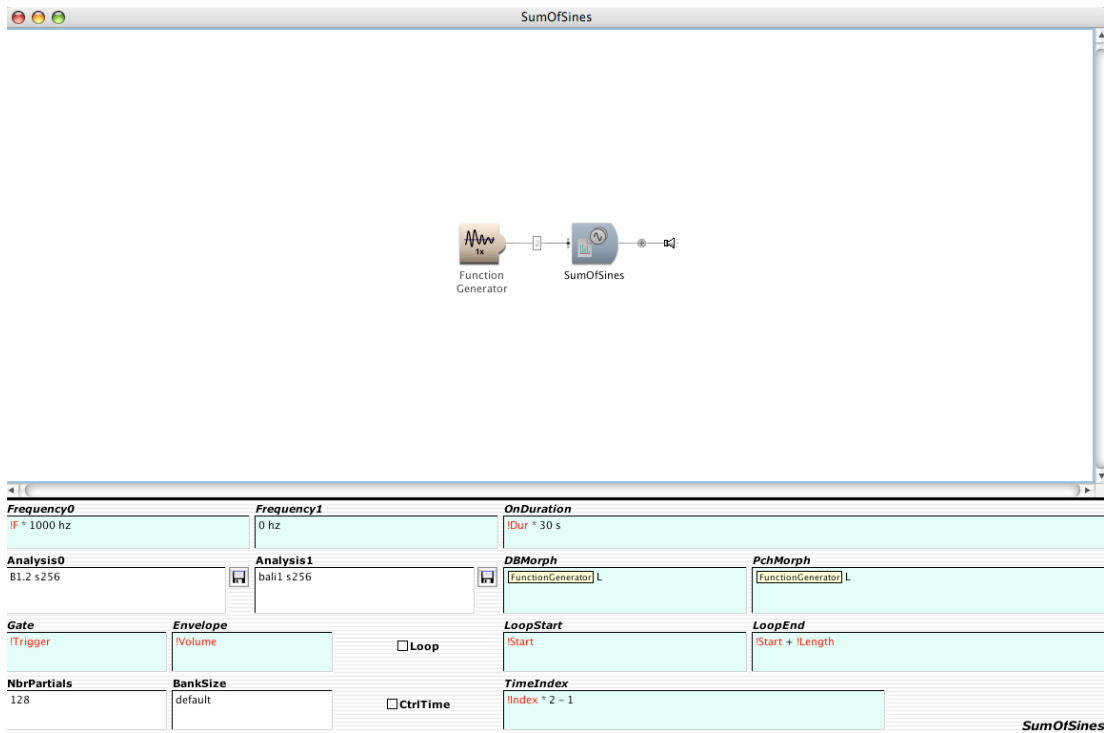
Note that the white space, where the flowchart resides does not yet reflect the changes made to the inputs. To update, click on the white space and the new inputs will appear in the flowchart, as shown, below:



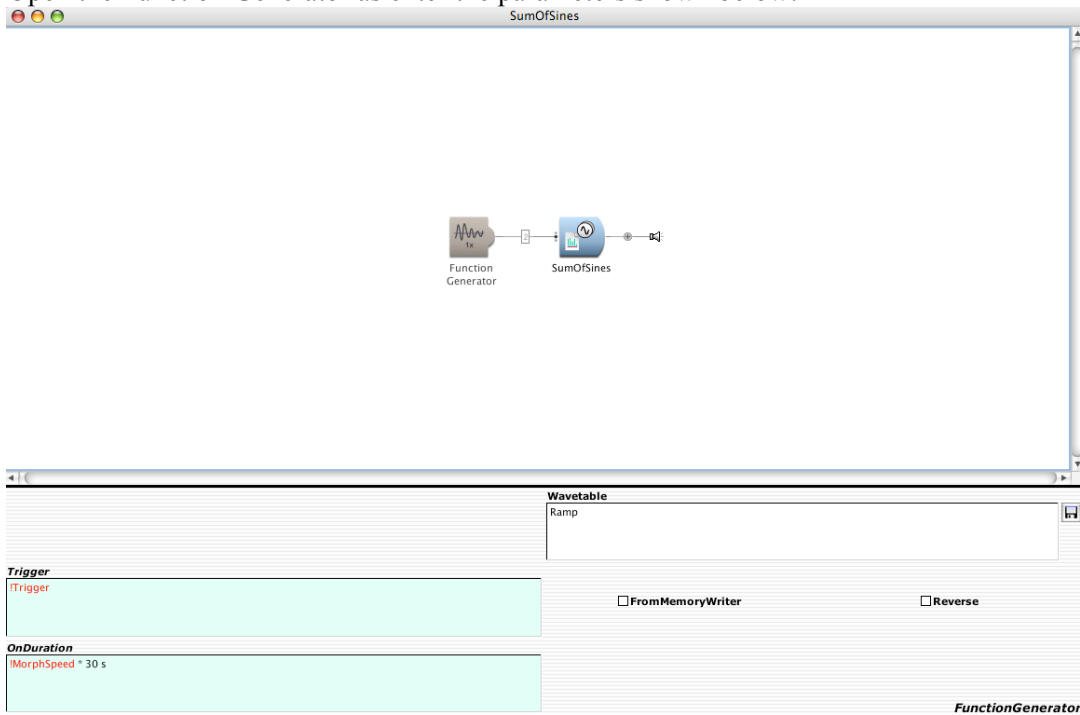
Note the lines can be change from right-angle to radial, by selecting Edit>View>Radial, as shown below:



3. Discussion on pasting Prototypes or Sounds into a parameter field.
 - a. Create a Sum of Sines Sounds, as discussed in class.
 - b. Find the Prototype "Function Generator." Copy it, then paste it into the DBMorph and PCH Morph fields, then click on the white space to update, as shown below:



c. Open the Function Generator as enter the parameters shown below:



Note: Don't forget to compile from the Sound on the right..

4. Project. Build an additive synthesizer to the following specifications:
 - a. Use ten oscillators, having frequencies that are harmonics of middle C, 261.65 hz.
 - b. The amplitude of each oscillator should have a volume faders in the Virtual Control Surface.
 - c. The Oscillators should be feed into a Mixer.
 - d. The Mixer should be feed into an Oscilloscope Display
 - e. The Oscilloscope should be feed into a Spectrum Analyzer.