

Kaleidoscope for Laptop Ensemble

Installation

1. Install Processing 2.2.1 (Download from <http://processing.org>)
2. Install dependencies: The Midibus, oscP5, OCD Library

A. To install the Midibus and oscP5 libraries:

- In Processing, go to "Sketch" Menu > Import Library... > Add Library
- Type the first few letters of the library name into the search box and click the "Install" button next to its name in the list

B. Next, to install OCD:

1. Unzip the file called "ocd.zip" and copy the "ocd" folder into Documents/Processing/Libraries on your hard disk.
2. Restart Processing if currently open.
3. Import the "OCD" library using the above procedure.

Setup

Follow these steps on each performer's machine:

1. Open the file named "Kaleidoscope_2015_v1.pde" in Processing.
2. Modify the following variables under the "General Setup," "Network Setup" and "Module Setup" sections:

- numPerformers
- ipAddress
- serverIPAddress
- currentModule

Set *numPerformers* to the number of performers in the ensemble.

Set *ipAddress* to your own IP Address.

Set *serverIPAddress* to the server's IP Address.

(Note: At least one machine must be a server, i.e. *serverIPAddress* and *ipAddress* are the same.)

3. Select a module.

Modify the *currentModule* variable to one of the following values:

VISUALIZER (Server Default), NOTE_GATHERER, ARPEGGIATOR,
PARAM_CONTROLLER, OSTINATO, POLYPHONIC

(Note: The ensemble can consist of any combination of modules, except it must contain at least one VISUALIZER and NOTE_GATHERER. See the "Description.pdf" file for a complete list and detailed explanation of each of the modules.)

4. Setup the Network Connections

- A. If this machine is the server, go to System Preferences > Sharing and turn File Sharing on.
- B. Otherwise, go to the Finder > Go menu > "Connect to Server" and click "Browse," then select the server's computer name

Running the Software

1. Run the code by going to "Sketch" Menu > Run.
 - First run the software on the server machine, then on each of the other machines (clients). The program will try to connect with the server automatically.
2. Once all performers are connected, press SPACEBAR on the server machine to start.
 - If nothing is happening or there was an error, type SHIFT + C on each of the client machines to manually connect.
3. Refer to the following Key Commands chart to use the software.

Stopping the Software

When ready to stop the piece, press SHIFT + \ on the server machine to stop generating notes and visuals.