

diamond rotations sound setup:

Supplies: 6-7 laptop computers (If using 6, then one of the laptops will run the control program and the performance program. In a pinch, 4 laptops can work where two laptops will show/play two parts.).

1. Make sure all computers are on the same wifi network.
2. Download SuperCollider on each computer and install (<https://supercollider.github.io/download>)
3. Download and unzip materials here:
https://github.com/john422e/diamond_rotations/archive/main.zip
4. Get hostname for all 6 computers (instructions here on how to do this on windows, linux, and mac: <https://computing.cs.cmu.edu/help-support/find-hostname>). On mac, just open a terminal and type "hostname". On windows, start a command shell and type "ipconfig /all".
5. Open diamond_rotations-main -> diamonds_package and open "control6.scd" for a 6 laptop setup or "control4.scd" for a 4 laptop setup (a SuperCollider window will open). Go to lines 59-64 in the program where six hostnames are listed. Replace "computer.local" on each line with one of the 4 or 6 hostnames. Make sure there are " " around each name. If there is a computer that will be running the control and performance program, you can just fill it in with "127.0.0.1". For the 4 laptop setup, look at the computer numbers on the right in each line. The doubling computers must be "computer 2" and "computer 4", which means that the hostname for each computer will be copied on two lines instead of one.
6. Now on each performer computer open "performerStation.scd" (or, if using 4 laptops, "doublePerformerStation.scd" on 2 of the laptops) and a SuperCollider window will open. Click down anywhere in the program (below line 1 and above line 93) and hit Command-Return (on mac) or Shift-Enter on windows (*I think*) or go to the Language menu at the top and select "Evaluate Selection, Line, or Region". You should hear a beeping sound followed by a steady tone and see a new window on the screen (keep this window in front). The "doublePerformerStation.scd" program will open two windows, but you will need to manually move the "Left" one to the left side and the "Right" one to the right so that both are fully visible.
7. On the control computer, open "control6.scd" for a 6 laptop setup or "control4.scd" for a 4 laptop setup and click anywhere down within the program (below line 1 and above line 118) and evaluate like above (Command-Return, etc.). You should see a small window appear. If running the control and performer programs on the same computer, make sure the control window ("diamonds controller") is always the selected, active window. The performer window should be visible, but not active. Press spacebar once to initialize the program. You are ready to begin!
8. For performance, spacebar must be pressed on the control program to initiate every change in the cycle. So, if this is one of the performance computers, the performer currently at that station must press spacebar when everyone has arrived at their second station and had enough time to play there and tune. If there is no change in pitches, this means it is the end of a sequence. At this point the piece can either end, or spacebar can be pressed again to start a new sequence).