

Music for 15 Oscillators

for 15 audio oscillators (2019)

This music takes the form of a single chord or scale, instantiated and then dissolved in gradual steps. Partial stack up until there is a complex acoustic and psychoacoustic modulation matrix, and then each element slowly takes its leave. There are many paths into and out of the piece, and its apparent destination recedes in exact proportion to one's proximity to it.

First you should gather frequencies, like stones or flowers or snippets of conversation. You might go about this work somewhere nearby where the performance is to take place, either geographically or temporally. Your frequencies should form groups, within which audible beating occurs. (For example 200hz, 195hz, and 200.1hz could be a group.) These groups can be close to each other or distant; they can be tuned to specific ratios or not. Since there are 15 oscillators in total, there are many options for how to structure these groups.

Examples of potential oscillator groupings:

$a_1 a_2 b_1 b_2 c_1 c_2 d_1 d_2 e_1 e_2 f_1 f_2 g_1 g_2 g_3$

$a_1 a_2 a_3 b_1 b_2 b_3 d_1 d_2 d_3 e_1 e_2 e_3 f_1 f_2 f_3$

$a_1 a_2 b_1 b_2 c_1 c_2 d_1 d_2 d_3 e_1 e_2 e_3 e_4 e_5 e_6$

Before the performance takes place, you should decide by chance means the order in which the frequencies will be brought into and out of the space.

For the performance, slowly bring in each frequency at regular intervals, following the predetermined order. You can use a timer, or automate this action. The important thing is regularity. When the chord is assembled, it ought to sit for a while.

Finally, you can remove each frequency, at regular intervals, following the predetermined order. The performance is over when the room is quiet.

If you would like to perform this piece, please send me an [email](#) and I can share a Max patch with you that is set up for it!