

Pd

IN OUT

pulse-grain-generator.pd* - /Users/hans/Desktop/grainticle

PULSEGRAIN GENERATOR

----- This is a simple pulse grain generator Based on Curtis Raods SC PulsarGenerator and ideas in his Microsound book

Target <- Start Here

grainticle

unpack f f

abs

pack f f

pulsar 0 10 pulsar

pulsar 1 10 pulsar

pulsar 2 10 pulsar

pulsar 3 10 pulsar

pulsar 4 10 pulsar

pulsar 5 10 pulsar

stop

metro 1000

2

+

1

% 80

+ 10

/ 100

88

Pulsar(1)-Properties

pl-spacing spacing of grains 1-200 hz

pl-pitch grain source pitch 1hz-20 khz

pl-window-length controls size of window per grain

pl-pan train pan left to right

Train-cycle-speed

bang bang bang bang <-- try some presets

pd presets

382 87 900 90

382 90

/ 1000

0.09

s readspeed 1hz cycle for the whole train

Try different phasor speeds for the cycle.. below about 20hz you can hear the grains as individual elements. Above this the train becomes more of a tone and exhibits various AM/ringmod style sounds

Output-Peeker-(left)

windowed-output

catch- pulsar-l

catch- pulsar-r

unmute

mute

0.2

0

bang <--- click to see the train output

metro 300

bang

tabwrite- windowed-output

Grain-Envelope

The grain envelope array represents an entire period of a grain. You can compress this envelope using the window-length property. Different envelope shapes effect the sound. NOTE: if the window-length is larger than the grain spacing then the envelope will be clipped by itself creating saw style envelopes and distortion

window

grainticle.pd* - /Users/hans/Desktop/grainticle

<- Start Here

pop 0 1

#1 initialize the population

#2 Set the Target

#3 Initialize the PSO

#4 Start iterating

dimension, and neighborhood size 2

#5 Stop iterating

8 9

Route Particle positions

Particle_1

Particle_2

Particle_3

Particle_4

Particle_5

Particle_6

Particle_6

Particle_6

Particle_7

Particle_8

Particle_9