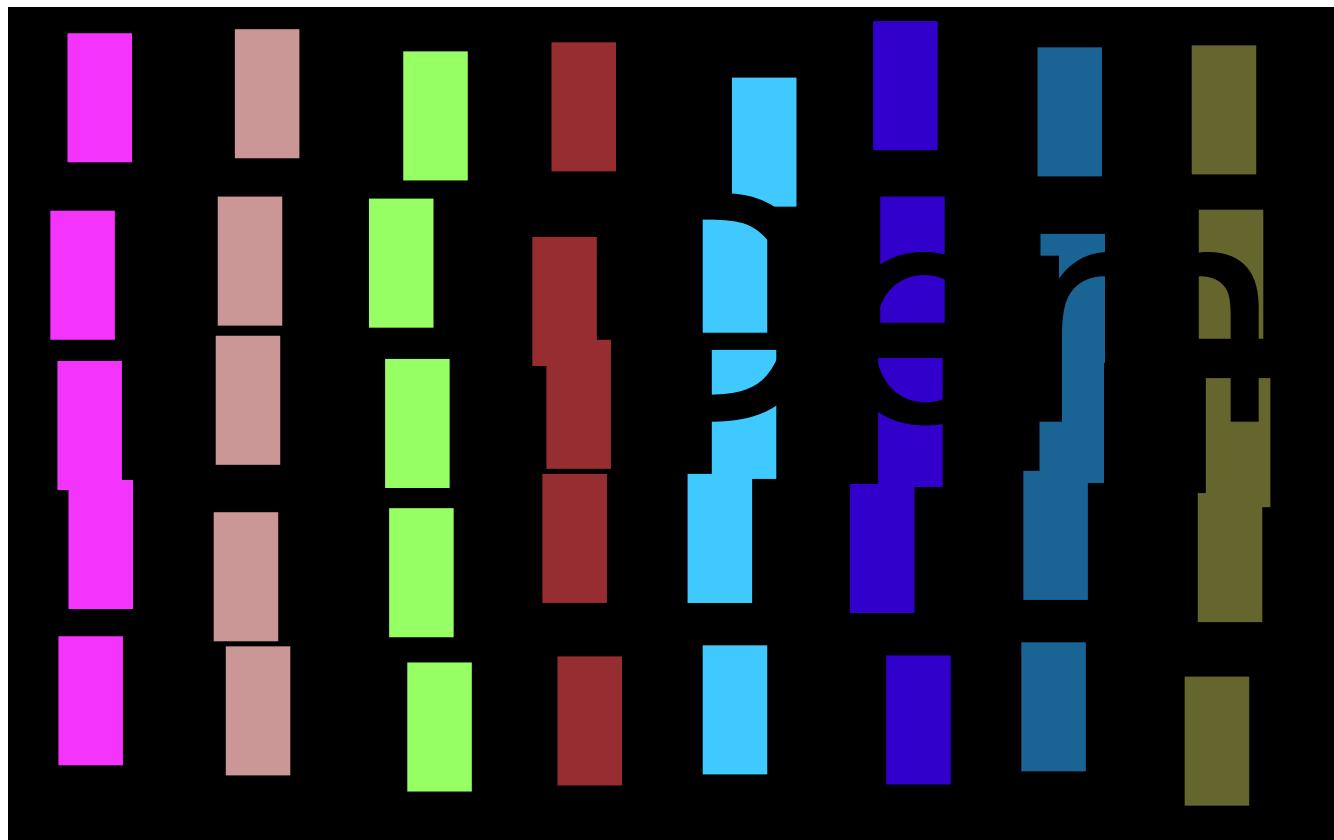


Toggle Dance Pulse Dance

for Solo Eb Clarinet, Live Electronics and Optional Video



Only

by Rob Godman

In Memoriam Javier Álvarez and Vera Molnár

For Kate Romano

Demo Only

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Duration:

Toggle Dance - 6 minutes
Pulse Dance - 10 minutes

Clarinet is notated in Eb

Toggle Dance and Pulse Dance for Solo Eb Clarinet, Live Electronics and Optional Video are companion pieces to works by William O Smith, first presented at a concert given by Kate Romano and Rob Godman at Stapleford Granary October 2023, and later as a recording. They use audio technology, or digital interpretations of the technology, O Smith used in the 1970's and early 1980's – MXR Analogue Delay and Pitch Shifter. Our software versions use the same parameters as these devices and are diffused over a four-speaker discrete system.

Music

Toggle Dance and Pulse Dance form part of a series of works exploring different aspects of musical and naturally occurring experimental rhythm, an area of research carried out by the composer over the past few years. This includes his research project (*Pulse*) at St Bartholomew's Hospital, London in collaboration with Dr. Giampaolo Martinelli, Consultant Cardiothoracic Anaesthetist. A series of high resolution unedited real-time audio recordings of various cardiac procedures have been created for use in the artwork. Sound - room tone and associated noise, surgical paraphernalia and human interaction found within an operating theatre.

Toggle Dance makes use of extended variations of toggle rhythms, drum patterns when played shaking, use of the alternating hands method, analogous to the call-and-response technique of singing found in sub-Saharan Africa. Canonic, polyrhythmic patterns are formed through the use of synchronised delay systems. The composer is indebted to the work of Godfried T. Toussaint in this area. *Pulse Dance* is also polyrhythmic with asynchronous loops of clarinet samples phasing over time forming complex rhythmic patterns in multiple tempi. Rhythmic irregularities in *Pulse Dance* are analogous to heart arrhythmia, normally requiring VT ablation surgical procedures to correct the condition.

Video

The premise behind the video component for **Toggle Dance and Pulse Dance** is indebted to the work of Vera Molnár - a Hungarian artist who lived and worked in Paris, France. She was widely considered to have been a pioneer of generative art creating algorithmic paintings based on simple geometric shapes. Whilst having no direct contact with O Smith, the pair independently explored early electronic technology as a means of creating abstract imagery and sound. Here, rectangles perform simple variations of movement analogous to Molnár's *800 Rectangles*.

Data Sheet

4-channel discrete playback system (4-channel soundcard to 4 loudspeakers) operating at 96kHz

Mac laptop running Max9

Novation Launchpad XL MIDI controller (other hardware can be used - see *MIDI configuration for Toggle Dance and Pulse Dance*)

Microphone for clarinet (clip-on DPA recommended)

VST Reverb (hosted within software): a small amount of reverb should be applied to the direct feed of the clarinet throughout. This will place the clarinet in the same acoustic space as the loudspeakers

Key

Toggle Dance – Pad1H/Pad1L to Pad3H/Pad3L for playback of pre-rendered audio files. See *MIDI configuration for Toggle Dance and Pulse Dance* (LaunchControl_Layout).

Toggle Dance - PS: Pitch Shift. Numbers indicate semitones up or down (i.e. _2, -3 means 2 semitones up and 3 semitones down) - presets from Novation Launchpad XL MIDI controller

Toggle Dance - Delay 1-7: creating polyrhythms and, in the case of 3-4, polyrhythms with descending pitch shift - presets from Novation Launchpad XL MIDI controller

Pulse Dance – PADs 1 to 18 for playback of pre-rendered audio files. See *MIDI configuration for Toggle Dance and Pulse Dance* (LaunchControl_Layout).

Demo Only

Software for running Toggle Dance and Pulse Dance

Audio Input V2

open VST
linear_tester
plug
Find VST

Toggle Del Toggle PS
Pulse MXR Delay
Direct Eb
-inf dB

Toggle Dance

pitch presets
5 7 12 24
1.33 0.67 0.5 0.25
Pitch 1 Pitch 2 Pitch 3 Pitch 4
-inf dB -inf dB -inf dB -inf dB

Novation LaunchControl XL

Program
Launch Control XL
MIDI Device (select)

--Toggle-- -Pulse-
Wet PS MXR
Del T Pre Del T
REGEN REGEN
1-4 2-3 Master
87 91 68

Pulse Dance Sample Player

00:00
Pad1
-inf dB

Toggle Dance : Pulse Dance

MXR Emulator
WET 0
DEL PRE 0
REGEN 0
Toggle Pulse Feed
Toggle Dance Sample Player
-inf dB

Presonus 26c Mixer

62 signals
396 function
48000 sr
open wave
int8 sfrecord~ 2
Router800
peakreset 7 %

Demonly

for Eb Clarinet, Live Electronics and Optional Video

Rob Godman

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Version 2.2 221225

p LaunchControl_Layout

MIDI configuration for Toggle Dance and Pulse Dance

---Toggle---

--Pulse--

Novation Launch Control XL Default Settings

These default MIDI settings are provided should the software be ported over to different MIDI hardware

Pads	Faders	Dials
Pad1/H/17 - MIDI Pitch 41	Fader 1 (Toggle Delay Feed In) - Controller 77	Send A1 (Toggle Wet) - Controller 13
Pad2/H/18 - MIDI Pitch 42	Fader 2 (Toggle Pitch Shift In) - Controller 78	Send B1 (Toggle Del T) - Controller 29
Pad3/H/19 - MIDI Pitch 43	Fader 4 (Pulse FX In) - Controller 80	Send C1 (Toggle RGEN) - Controller 49
Pad4 - MIDI Pitch 44	Fader 8 (Live Clarinet In) - Controller 84	Send A2 (Toggle PS) - Controller 14
Pad5 - MIDI Pitch 57		Send B2 (Pulse MXR) - Controller 30
Pad6 - MIDI Pitch 58		Send A4 (Toggle Wet) - Controller 16
Pad7 - MIDI Pitch 59		Send B4 (Pulse Del T) - Controller 32
Pad8 - MIDI Pitch 60		Send C4 (Pulse RGEN) - Controller 52
Pad9/1L - MIDI Pitch 7		
Pad10/2L - MIDI Pitch 7		
Pad11/3L - MIDI Pitch 75		
Pad12 - MIDI Pitch 76		
Pad13 - MIDI Pitch 76		
Pad14 - MIDI Pitch 90		
Pad15 - MIDI Pitch 91		
Pad16 - MIDI Pitch 92		

All outputs are on MIDI Channel 9

<https://robgodman.co.uk/music-for-clarinet-and-electronics/>

In Memoriam Vera Molnár

Vera Molnár (1924–2023) was a pioneering Hungarian artist known for her algorithmic paintings and abstract geometrical and systematically determined paintings. From 1959, Molnár started making combinatorial images by implementing simple algorithmic programs by hand, a method referred to as her 'machine imaginaire'. This aided her in progressing systematically through all of the conceivable permutations of a series while adhering to a set of instructions and self-imposed constraints. She was given the opportunity to work with a real computer in 1968.

'I use simple shapes because they allow me step by step control over how I create the image arrangement. Thus, I can try to identify the exact moment when the evidence of art becomes visible. In order to guarantee the systematic nature of this research, I use a computer.'

In Memoriam Javier Álvarez

Javier Álvarez Fuentes (8 May 1956 – 23 May 2023) was a Mexican composer known for compositions that combined a variety of musical styles with strong rhythmic forms, often utilizing unusual instruments and electronics. A clarinettist as well as a composer, Javier worked for the SPNM and SAN in the early 1990's and was hugely influential on young composers at the time. When I began working at the University of Hertfordshire, I was very much in awe of having Javier as a colleague. He was a super guy and a great composer! - Rob

Demo Only

Toggle Dance

for Solo Eb Clarinet, Live Electronics and Optional Video

In Memoriam Javier Álvarez and Vera Molnar

for Kate Romano

by Rob Godman

22

Eb Clar.

Silent **A**

Synchronise with pulse of sample

(x4) wait for EA slow gliss.

3/4 4/4 (Random accents) 4/4

Electronics

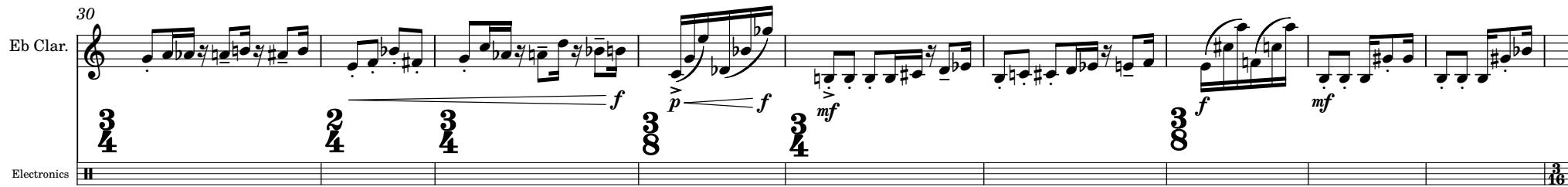
Sample 1 STOP

Sample 2 ON ----- ->

PS CHANGE 2 ON (-12, +12, +17, -12)

3/4 2/4

30

Eb Clar. 

Electronics

3 2 3 8 3 3 8 16

39

Eb Clar. 

Electronics

3/16 ff 1/4 fff 4/4

Dem^o Only

PS 2 OFF
Rhythm 2 ON form
polyrhythms 2/4's
Rhythm 50%

(allow delay to fade naturally)

57

Eb Clar. 

Electronics

2 3 2 3 8 2 3 1

PS CHANGE 3 ON (+12, +5, -12, -24)
Delay OFF

68

Eb Clar. 

Electronics

pp f ff 3 16 1 2 16 3 16 1 p

Demo Only

Pulse Dance

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0'00" A

(♩ = 92 freely) ♩ = 60

Eb Clarinet

pp mp $\frac{4}{4}$ fp mp fp $\frac{2}{4}$ $\frac{4}{4}$ mp

Electronics PAD 1 (Clock starts)

Demo Only

Clarinet treatment ON, fade in with dial (delay 625/500ms)

1'25" $\text{♩} = 60$ (maintain tempo)

Eb Clar. 40 45 50
 Electronics

$\frac{3}{16}$ $\frac{2}{8}$ **mf** **PAD 3**
 Live treatment OFF, fade out with dial

Eb Clar. 55 60 65 70
 Electronics

1'43"

Demo Only

Eb Clar. 60
 Electronics

Preset 2 **PAD 4**
 (Higher sound)

2'01" **B** $\text{♩} = 60$ **2'19"** $\text{♩} = 120$

Eb Clar. 85 90
 Electronics

4 **fp** **ppp** **2** **13** **5** **16** **PAD 6**
 Clarinet treatment ON (delay 625/500/375/250ms)

95 100 105

Eb Clar. Electronics

110 115 120 125

Eb Clar.

2 16 5 16 3 16

Electronics

3'10" ♩ = 60 (maintain tempo)

Live treatment OFF

Prese

3'28"

PA 8
(Higher sound)

(Higher sound)

155

Eb Clar. Electronics

160

3'46" **C** **♩ = X (Senza Tempo)** **4'07"** **4'47"**

Eb Clar.



Electronics

PAD 9

(New sound - no cue / pad required)

(New sound)

Dem¹⁷⁰on On^{5'41"}IV

A musical score for Preset 4. The top staff is labeled 'Electronics' and shows a single note on the first line. The bottom staff is labeled 'PAD 11 (Higher sound)' in a large, bold, black font. The text '(Higher sound)' is in parentheses below 'PAD 11'.

6'00"

Eb Clar.

185

190

2/4

Electronics

PAID 12