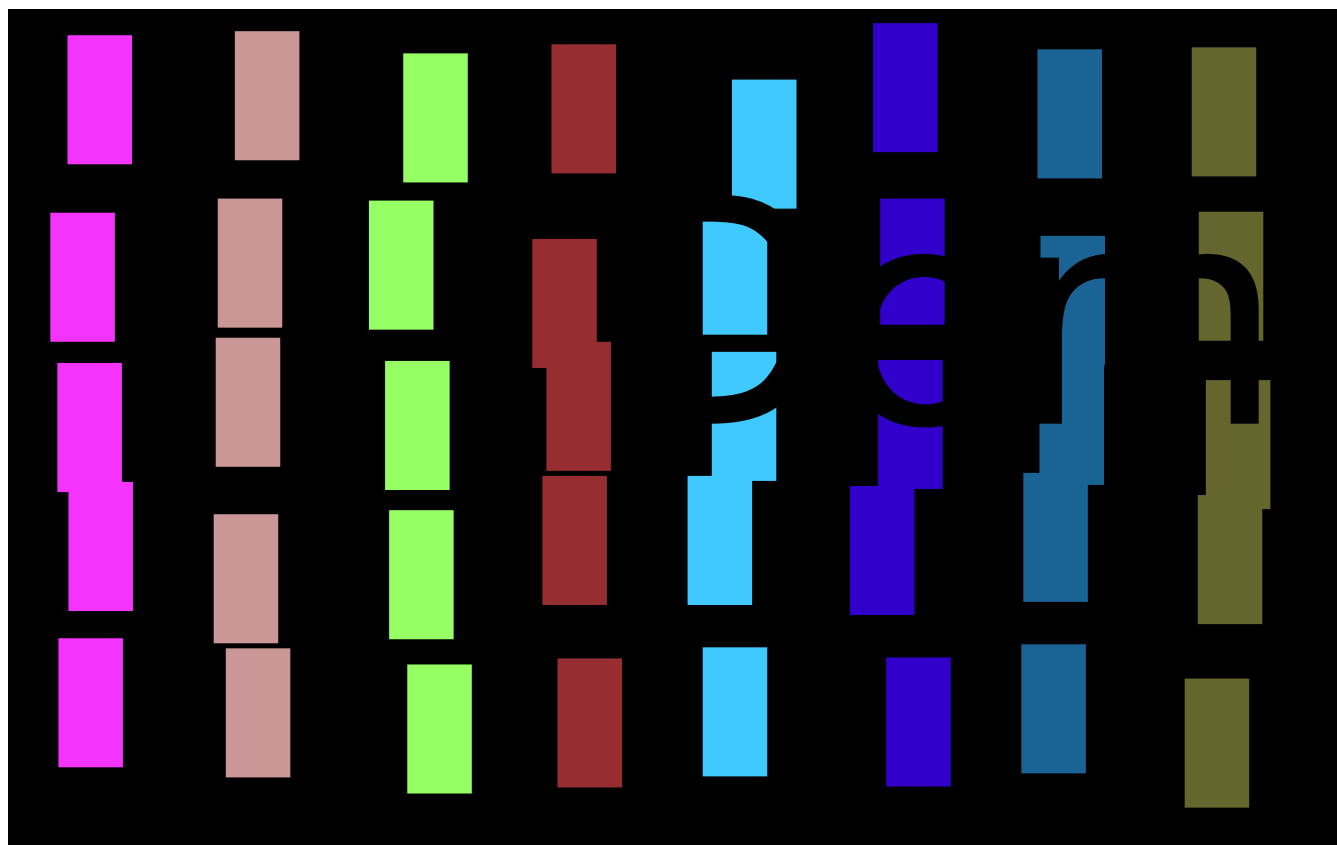


Toggle Dance Pulse Dance

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

Toggle Dance Pulse Dance

for Solo Eb Clarinet, Live Electronics and Optional Video

by Rob Godman

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, focusing attention on the ambient 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 where played making 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).

Software for running Toggle Dance and Pulse Dance

Audio Input V2

open

VST

plug

linear_tester

Find VST

Toggle Del

Toggle PS

Pulse MXR Delay

Eb Rev

-inf dB

Direct Eb

-inf dB

1

pitch presets

5

7

12

24

Pitch Semitone

1.33

0.67

0.5

0.25

transposition ratio

Pitch 1

Pitch 2

Pitch 3

Pitch 4

-inf dB

-inf dB

-inf dB

-inf dB

Toggle Dance

Pitch Shift

Toggle Dance active - Red; Pulse Dance active - Green (press t on the USB keyboard)

Pad1 H/L

Pad2 H/L

Pad3 H/L

-inf dB

-inf dB

-inf dB

Toggle Dance

Sample Player

WET

0

DEL PRE

del MS

del MS

del MS

del MS

REGEN

0

Toggle Pulse Feed

-inf dB

MXR Emulator

MXR Carbon Copy Analog Delay

Pulse Dance Sample Player

Outs

00:00

Pad1

-inf dB

Toggle Dance : Pulse Dance

for Eb Clarinet, Live Electronics and Optional Video

Rob Godman

© Rob Godman January 2026

Version 2.2 221225

LaunchControl_Layout

Novation LaunchControl XL

Program

Launch Control XL

MIDI Device (select)

--Toggle--

Wet

PS

MXR

Pulse

In Rev

0

0

0

0

0

Del T

Pre

Del T

S14

S15

S16

0

0

0

REGEN

REGEN

1-4

2-3

Master

0

0

87

91

68

TDel In

TPS In

PXR In

Direct

Presonus 26c Mixer

62

signals

396

function

48000

sr

open wave

Int8

sfrecord~ 2

Router800

peakreset

7

%

open

X

113

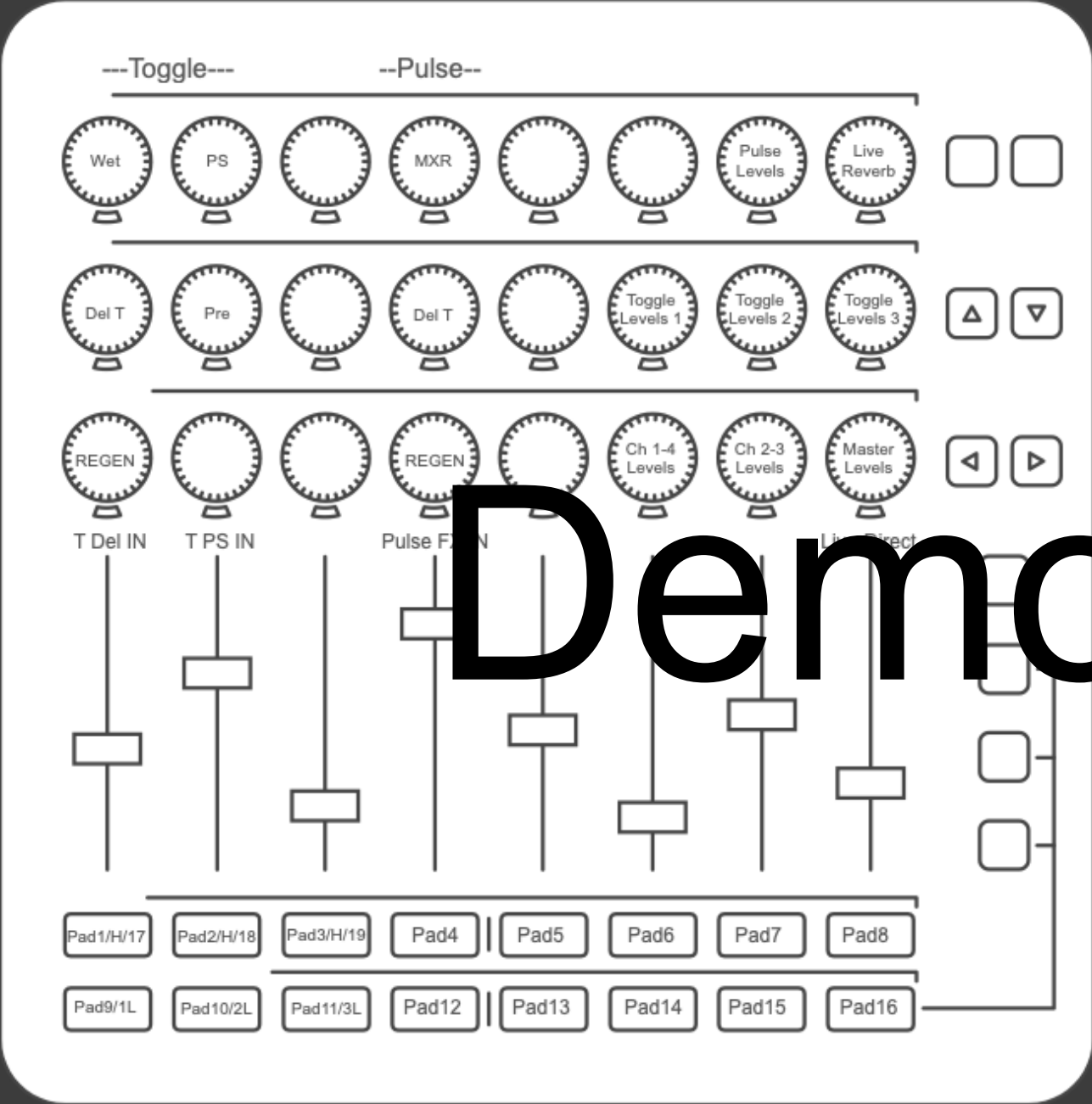
108

108

113

84

MIDI configuration for Toggle Dance and Pulse Dance



Novation Launch Control XL Default Settings

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

Pads

- Pad1/H/17 - MIDI Pitch 41
- Pad2/H/18 - MIDI Pitch 42
- Pad3/H/19 - MIDI Pitch 43
- Pad4 - MIDI Pitch 44
- Pad5 - MIDI Pitch 57
- Pad6 - MIDI Pitch 58
- Pad7 - MIDI Pitch 59
- Pad8 - MIDI Pitch 60
- Pad9/1L - MIDI Pitch 61
- Pad10/2L - MIDI Pitch 72
- Pad11/3L - MIDI Pitch 73
- Pad12 - MIDI Pitch 74
- Pad13 - MIDI Pitch 75
- Pad14 - MIDI Pitch 90
- Pad15 - MIDI Pitch 91
- Pad16 - MIDI Pitch 92

Faders

- Fader 1 (Toggle Delay Feed In) - Controller 77
- Fader 2 (Toggle Pitch Shift In) - Controller 78
- Fader 4 (Pulse FX In) - Controller 80
- Fader 8 (Live Clarinet In) - Controller 84

Dials

- Send A1 (Toggle Wet) - Controller 13
- Send B1 (Toggle Del T) - Controller 29
- Send C1 (Toggle REGEN) - Controller 49
- Send A2 (Toggle PS) - Controller 14
- Send B2 (Pulse MXR) - Controller 30
- Send A4 (Toggle Wet) - Controller 16
- Send B4 (Pulse Del T) - Controller 32
- Send C4 (Pulse REGEN) - Controller 52
- Send A7 (Pulse Levels) - Controller 19
- Send A8 (Live Reverb) - Controller 20
- Send B6 (Toggle Levels 1) - Controller 34
- Send B7 (Toggle Levels 2) - Controller 35
- Send B8 (Toggle Levels 3) - Controller 36
- Send C6 (Ch 1-4 Levels) - Controller 54
- Send C7 (Ch 2-3 Levels) - Controller 55
- Send C8 (Master Levels) - Controller 56

All outputs are on MIDI Channel 9

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

In Memoriam Vera Molnár

Vera Molnar (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 SPM 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

Toggle Dance

for Solo Eb Clarinet, Live Electronics and Optional Video

In Memoriam Javier Álvarez and Vera Molnar

for Kate Romano

by Rob Godman

System 1:

Eb Clarinet: $\text{♩} = 88$. Synchronise with pulse of sample. *p*

Electronics: (Random accents). *(x6) wait for EA rhythm to 'blur'*. PS 1 ON (+5, -7, -12, -24). Time signatures: 4/4, 1/4, 2/4, 3/4, 4/4, 3/8.

System 2:

Eb Clarinet: 11. *p*, *f*, *p*, *f*, *p*. Time signatures: 3/8, 4/4, 2/4, 3/4, 2/4, 3/4, 1/4, 3/8.

Electronics: ----- -> (sample continue).

System 3:

Eb Clarinet: 22. Silent. *f*. Synchronise with pulse of sample. *(x4) wait for EA slow gliss.* *p*, *f*, *p*, *f*. Time signatures: 3/8, 4/4, 4/4, 3/8, 2/4.

Electronics: Sample 1 STOP. (Random accents). Sample 2 ON ----- ->. PS CHANGE 2 ON (-12, +12, +17, -12).

30

Eb Clar.

3/4 2/4 3/4 f p f mf f mf

Electronics

3/4 16

39

Eb Clar.

3/16 ff 1/4 fff p 4/4 p > p > Sim.

Electronics

3/16 1/4 4/4

57

Eb Clar.

2/4 mp 3/4 2/4 3/4 3/8 f 2/4 mp 3/4 1/4

Electronics

2/4 3/4 2/4 3/4 3/8 2/4 3/4 1/4

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

68

Eb Clar.

pp f ff p

Electronics

3/16 1/4 2/16 3/16 1/4

Demo Only

Pulse Dance

for Solo Eb Clarinet Live Electronics and Optional Video

for Kate Romano

by Rob Godman

0'00" **A**

(♩ = 92 freely) ♩ = 60

Eb Clarinet

pp *mp* *fp* *ppp* *fp* *fp* *mp*

4/4 2/4 4/4

Electronics

PAD 1
(Clock starts)

Demo Only

0'36" (♩ = 20)

Eb Clar.

p *f* *mp*

2/4 11/8 5/16

Electronics

PAD 2

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

Eb Clar.

20 25 30 35

16/16 5/16

Electronics

1'25" ♩ = 60 (maintain tempo)

E♭ Clar. 40 45 50

3 16 8 *mf*

Electronics PAD 3

Live treatment OFF, fade out with dial

E♭ Clar. 55 60 65 70 1'43"

Electronics Preset 2 PAD 4 (Higher sound)

E♭ Clar. *mf*

Electronics

2'01" B ♩ = 60 85

tr *fp* *fp* *fp* *p* *f* *mp*

4 4 *fp* *ppp* 2 4 13 8 5 16

Electronics PAD 5 PAD 6

Clarinet treatment ON (delay 625/500/375/250ms)

Eb Clar. 95 100 105

Electronics

Eb Clar. 110 115 120 125

Electronics 2 16 5 16 3 16

Eb Clar. 3'10" ♩ = 60 (maintain tempo) 130 135

Electronics 3 16 2 8 7

Live treatment OFF

Prese


Eb Clar. 140 145 150

Electronics 3'28" PAD 8 (Higher sound) mf

Eb Clar. 155 160


Electronics

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


E♭ Clar. 

Electronics **PAD 9** (New sound - no cue / pad required) (New sound)

5'01" 5'05" **D** ♩ = 80 A Tempo

E♭ Clar. 

Electronics **PAD 10** (New Sound) Clarinet treatment ON (delay 625/500/375/250ms and Pitch Shift -12 7 12 -12) 5'41" 170 175 180

E♭ Clar. 

Electronics **PAD 11** Preset 4 (Higher sound)

6'00"

E♭ Clar. 

Electronics **PAD 12** Clarinet treatment ON (delay 625/500/375/250ms and Pitch Shift -12 7 12 -24)