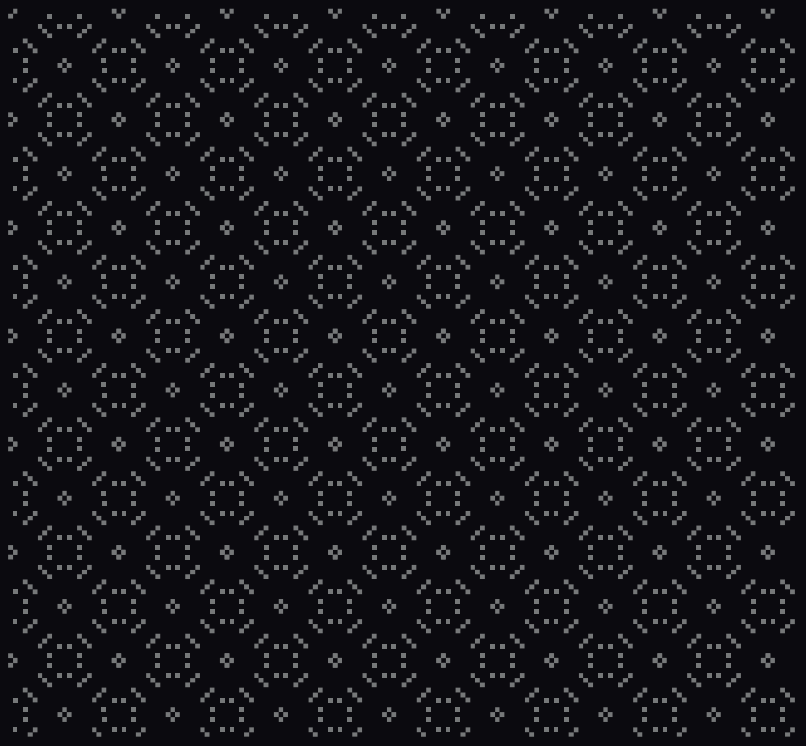
GFX SEQUENCER

MANUAL

:: PATTERN 34 :...: MODIFY 1 ..:: SCALE 1 ::.... GFXMODE 1 ..:..3411..:.



:: PATTERN 22 :..: MODIFY 1 ..:: SCALE 1 ::..: GFXMODE 1 ..:: 22111..:.

HELLO!

GFX-SEQUENCER IS A PATTERN BASED SEQUENCER FOR THE NORNS ENVIRONMENT.

IT CONSISTS OF TWO MODES: »MUSICBOX« WHERE THE PATTERNS ARE MOVING CONSTANTLY UPWARDS ON THE Y AXIS AND THE TOP LINE WILL BE CONVERTED INTO NOTES. SINCE THE DISPLAY OF A NORNS IS 128X64 PIXELS THE X-AXIS MATCHES THE AVAILABLE NOTES IN MIDI RANGE: 0-127. EVERY **BRIGHT** PIXEL ON THAT AXIS WILL BE CONVERTED INTO ITS CORRESPONDING MIDI NOTE.

IN THE SECOND MODE CALLED »GRID« A 64X64 GRID IS CREATED WHICH WILL BE READ FROM LEFT TO RIGHT OR TOP TO BOTTOM. NOTES ARE DEFINED VIA AN EDITABLE SEQUENCE (8-64 STEPS).
THIS MODE HAS TWO SUB-MODES. *SUB-MODE A*: IN WHICH THE NEXT NOTE OF THE SEQUENCE WILL BE PLAYED EVERYTIME A BRIGHT PIXEL IS READ FROM THE PATTERN. THIS WAY PATTERNS DEFINE THE TIMING OF THE STEPS.
SUB-MODE B WHERE THE SEQUENCE WILL BE REPEATED OVER EVERY PIXEL OF THE LENGTH OF THE 64X64 PATTERN. THIS MEANS IN A 8 STEP SEQUENCE PIXELS 1-8 ARE STEP 1-8 AND PIXELS 9-16 AGAIN ARE STEP 1-8. IF A PIXEL IS BRIGHT THE CORRESPONDING NOTE OF THE STEP SEQUENCE IS PLAYED. THEREFORE IN THIS SUB-MODE PATTERNS DEFINE WHICH NOTES OF A SEQUENCE ARE SKIPPED OR PLAYED.

BUTTON LAYOUT

KEY 1

STANDARD
FUNCTION

ENDCODER 3

ASSIGNABLE VIA
PARAMETER
»ENC 01 FUNCT«

IN SEQUENCE SCREEN:
SWITCH BETWEEN STEP
SELECTION AND
PARAMETER SELECTION

ENDCODER 2

CHANGE SELECTED
PARAMETER

KEY 2

SWITCH BETWEEN
PATTERN/ LFO/
SEQUENCE SCREEN

KEY 3

RESET
Y-VALUE

ENDCODER 1

SELECT
PARAMETER

PARAMETERS

PATTERN CHANGES THE BASIC PATTERN. THE LOWER THE NUMBER THE HIGHER THE DENSITY OF THE PATTERN

MODIFY MODIFY CURRENT PATTERN

SCALING SCALE CURRENT PATTERN. SCALING IS A BIT ROUGH DUE TO THE ALLGORITHMS STRUCTURE

X-OFFSET MOVES THE PATTERN TO LEFT OR RIGHT

SCAN ROW IN MUSICBOX MODE THIS PARAMTER DEFINES WHICH LINE WILL BE CONVERTED INTO NOTES

MIN NOTE DEFINES THE MINIMUM NOTE THAT WILL BE PLAYED. ALL NOTES WILL BE MAPPED TO THE RANGE OF THE PARAMETERS MIN NOTE, MAX NOTE

MAX NOTE DEFINES THE MAXIMUM NOTE THAT WILL BE PLAYED. ALL NOTES WILL BE MAPPED TO THE RANGE OF THE PARAMETERS MIN NOTE, MAX NOTE

NOTE LOSS CHANCE SETS THE PROBABILITY THAT A NOTE WILL NOT BE PLAYED. RANGES FROM 0% – 100%

SPEED SETS THE GLOBAL SPEED. THE HIGHER THE VALUE THE SLOWER SPEED WILL BE

PLAY EVERY NTH NOTE VALUE OF »1« MEANS EVERY NOTE IS PLAYED. »2« MEANS EVERY SECOND NOTE IS PLAYED. »3« EVERY THIRD AND SO ON

GFX MODE CHOOSE ONE OF TWENTY ALGORITHMS TO GENERATE PATTERNS

SEND VIA OSC ACTIVATE SENDING NOTES VIA OSC. FOR SETTING UP THE RECEIVER ADRESS SEE LATER IN THIS DOCUMENT

ROOT SETS THE ROOT NOTE FOR A SCALE ALL NOTES WILL BE CONVERTED TO

SCALE CHOOSE A SCALE

SCALE ACTIVE ACTIVATE OR DEACTIVATE NOTE SCALING

LFO 1 TARGET SETS LFO 1 TARGET

LFO 1 AMOUNT SETS LFO 1 AMOUNT 0-100%

LFO 2 TARGET SETS LFO 2 TARGET

LFO 2 AMOUNT SETS LFO 2 AMOUNT 0-100%

SEND MIDI ACTIVATE OR DEACTIVATE SENDING VIA MIDI

MIDI SLEEP AFTER EVERY MIDI NOTE THERE IS A FIXED PAUSE OF 0.01 SECONDS TO SEND A NOTE OFF SIGNAL TO THE MIDI DEVICE. THIS PAUSE CAN BE SCALED UP WITH THIS PARAMETER

PLEASE NOTE:

DUE TO THE ALGORITHMS STRUCTURE SOME SETTINGS DO NOT YIELD RESULTS AND PRODDUCE A BLACK SCREEN. DON'T BE AFRAID THIS IS NOT AN ERROR.

ALSO SOME PATTERNS WILL DEGRADE OVER TIME OR END. TO RESET A PATTERN PRESS KEY 3 TO RESET IT TO ITS ORIGINAL Y VALUE.

:: PATTERN 16 :..: MODIFY 1 ..:: SCALE 5 ::..: GFXMODE 1 .::. 16151..:.

PARAMETERS

WIDTH REDUCES THE WIDTH OF THE GRAPHICAL PATTERN. PIXELS OUTSIDE THE WIDTH WILL NOT BE CONSIDERED FOR NOTE GENERATION AND ARE TURNED OFF

WIDTH OFFSET OFFSETS THE WIDTH OF PATTERN REDUCTION

ENC 01 FUNCTION DEFINES WHICH FUNCTION IS SET ON ENCODER 01

SCAN DIRECTION SETS THE DIRECTION PATTERNS ARE READ (ONLY AVAILABLE IN »GRID« MODE)

Y-HEIGHT HEIGHT OF THE PATTERN (ONLY AVAILABLE IN »GRID« MODE)

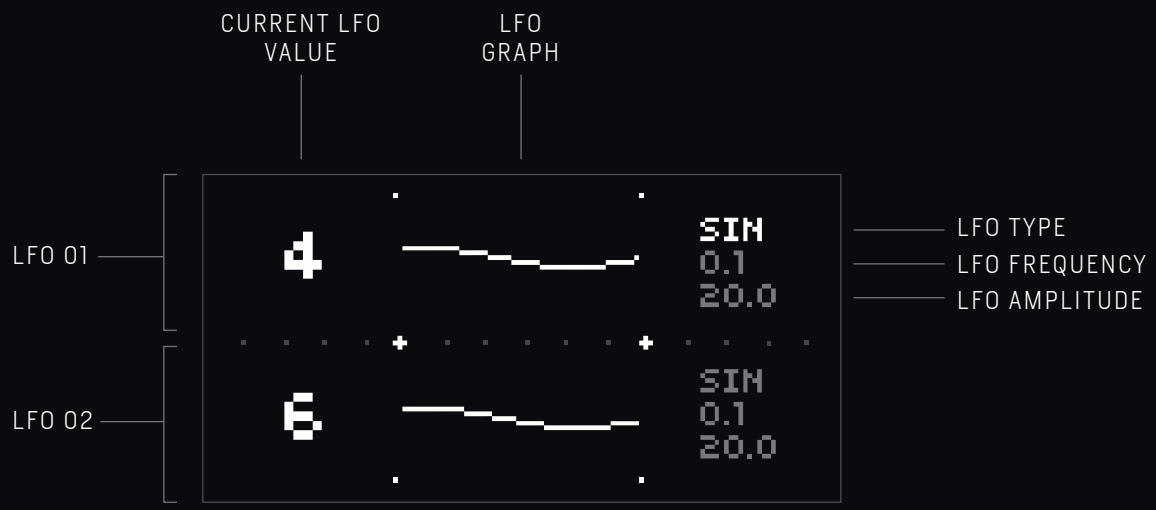
MODE CHANGE BETWEEN »MUSICBOX« MODE OR »GRID« MODE

ENGINE ACTIVATE POLYPERC ENGINE TO PLAY THE NOTES CREATED BY GFX-SEQ

ENGINE RELEASE RELEASE TIME FOR NOTES

ENGINE PW ENGINE PULSEWIDTH

LFO SCCREEN



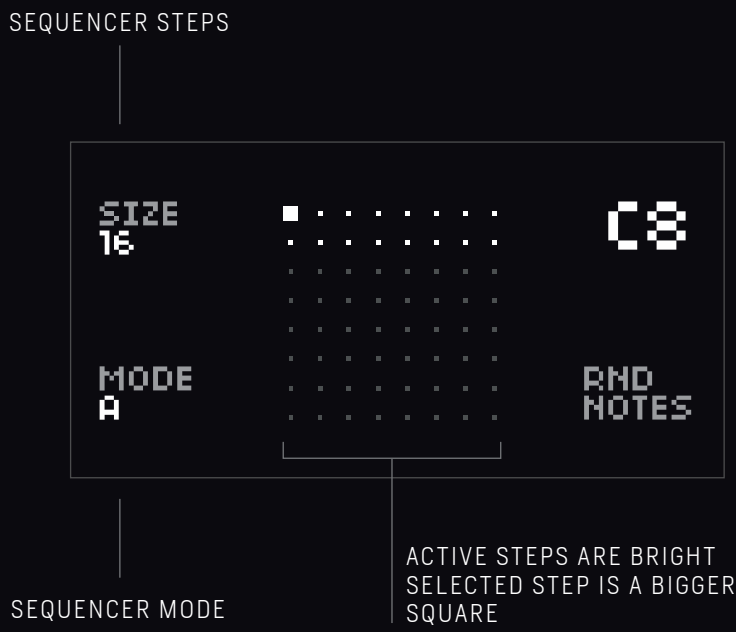
LFO TYPE SELECT LFO TYPE. THE FOLLOWING ARE AVAILABLE:
SINUS
TRIANGLE
SQUARE
SAMPLE&HOLD
TANGENS *(EXPERIMENTAL)*

LFO FREQUENCY SETS FREQUENCY OF THE LFO. WHEN SAMPLE&HOLD (S&H) IS SELECTED THIS VALUE SETS THE PROBABILITY OF A CHANGE OF VALUE. 10 BEEING 100%

LFO AMPLITUDE SETS THE AMPLITUDE OF THE LFO

:: PATTERN 7 :..: MODIFY 3 ..:: SCALE 15 ::..: GFXMODE 7 .:: 73157..:.

SEQUENCE SCREEN



RND NOTES TO FILL ALL SLOTS WITH RANDOM NOTES SELECT »RND NOTES« WITH ENCODER 2 AND THEN WIGGLE ENCODER 3

! TO CHANGE BETWEEN THE SEQUENCE GRID AND THE SURROUNDING PARAMETERS USE ENCODER 1

MIDI / OSC

MIDI GFX-SEQUENCER BY DEFAULT SENDS MIDI TO MIDI DEVICE 1 AS LISTED UNDER »SYSTEM/DEVICES/MIDI«

IF FOR ANY REASONS THIS IS UNCONVIENIENT FOR YOU YOU HAVE TO CHANGE THE SCRIPTS CODE AT LINE 33 TO THE NUMBER YOU NEED

```
25  include "gfx-seq/lib/deeg_utils"
26  include "gfx-seq/lib/deeg_lfo"
27
28  MusicUtil = require("musicutil")
29  engine.name = 'PolyPerc'
30
31  --////// MIDI / OSC SETUP /////
32
33  m = midi.connect(1)
34  osc_dest =  {"192.168.1.3",9001}
35
36  --////// MIDI / OSC SETUP /////
37
38
39  -- VARIABLES --
40
41  gfx = {}
42
```

OSC TO SEND DATA VIA OSC YOU NEED TO SPECIFY A RECEIVER IP ADRESS. SINCE I HAVEN'T FOUND A CONVIENIENT SOLUTION TO INPUT THIS YOU HAVE TO DO THIS MANUALLY. OPEN THE SCRIPT IN MAIDEN AND GO TO LINE 34 AND ENTER THE IP ADRESS YOU WANT TO SEND TO. (DON'T DELETE THE QUOTATION MARKS).

BY DEFAULT RECEIVER PORT IS 9001. YOU CAN CHANGE THIS HERE TOO IF YOU WANT.

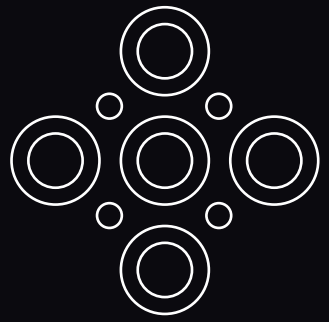
IF YOU WANT TO RECEIVE OSC IN ABLETON LIVE I HAVE MADE A MAX4LIVE DEVICE YOU CAN DOWNLOAD ON MY GITHUB PAGE.

```
24  include "gfx-seq/lib/gfx"
25  include "gfx-seq/lib/deeg_utils"
26  include "gfx-seq/lib/deeg_lfo"
27
28  MusicUtil = require("musicutil")
29  engine.name = 'PolyPerc'
30
31  --////// MIDI / OSC SETUP /////
32
33  m = midi.connect(1)
34  osc_dest =  {"192.168.1.3",9001}
35
36  --////// MIDI / OSC SETUP /////
37
38
39  -- VARIABLES --
40
41  gfx = {}
42
43   for x=0,127 do
44     gfx[x] = {}
45      for y=0,64 do
46       gfx[x][y] = 0
47      end
```

HAVE FUN!

I HOPE YOU HAVE FUN WITH THIS SCRIPT
AND ENJOY USING IT! HOPEFULLY IT
BRINGS YOU INSPIRATION AND GOOD
TIMES CREATING BEAUTIFUL SOUNDS!
CHEERS!

@deeg_deeg_deeg
github.com/deeg-deeg-deeg/



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