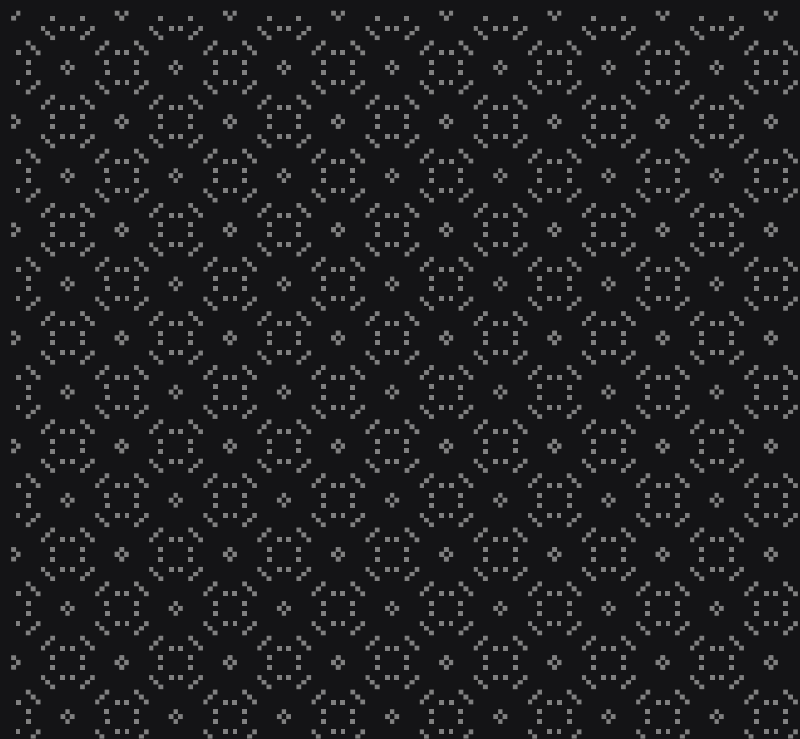


# GFX

## SEQUENCER

• • • • •

MANUAL



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

# HELLO!

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

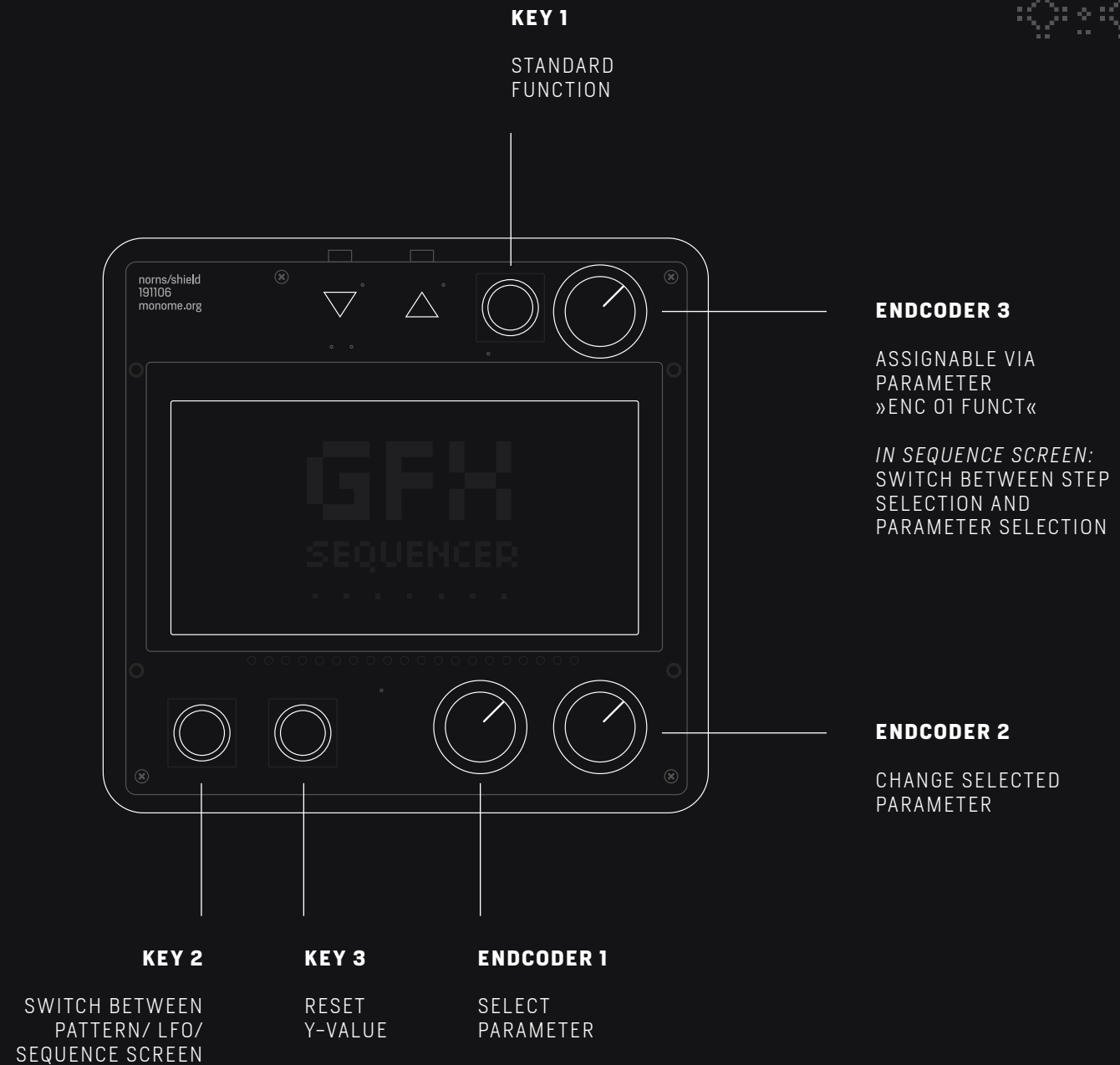
IT CONSISTS OF TWO MODES: **»MUSICBOX«** WHERE THE PATTERNS ARE MOVING CONSTANTLY UPWARDS ON THE Y AXIS AND THE TOP LINE WILL BE CONVERTED INTO NOTES. SINCE THE DISPLAY OF A NORNS IS 128X64 PIXELS THE X-AXIS MATCHES THE AVAILABLE NOTES IN MIDI RANGE: 0-127. EVERY **BRIGHT** PIXEL ON THAT AXIS WILL BE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



## PARAMETERS

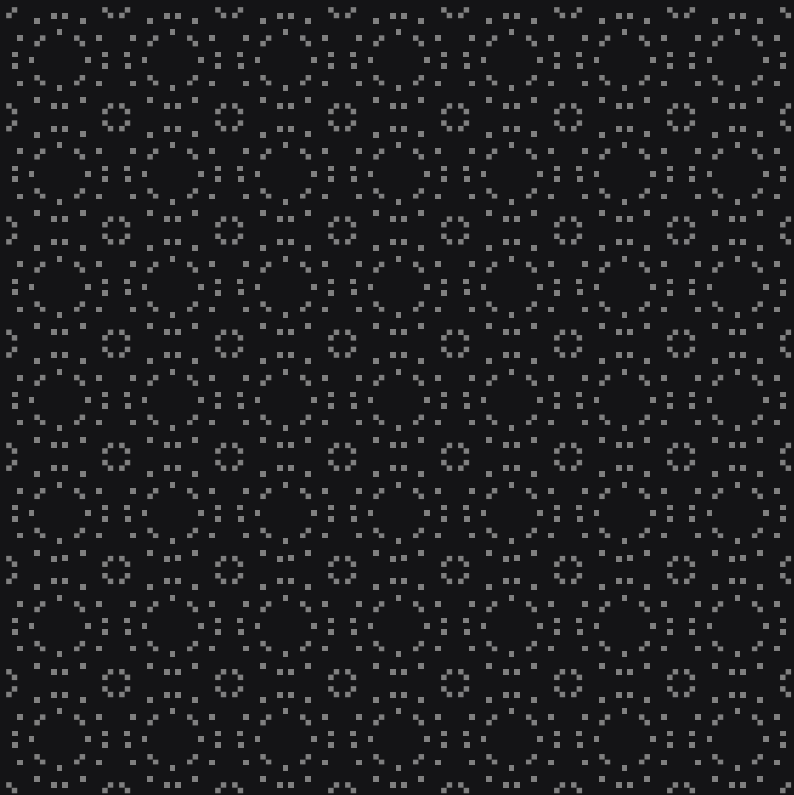


<b>PATTERN</b>	CHANGES THE BASIC PATTERN. THE LOWER THE NUMBER THE HIGHER THE DENSITY OF THE PATTERN	<b>PLAY EVERY NTH NOTE</b>	VALUE OF »1« MEANS EVERY NOTE IS PLAYED. »2« MEANS EVERY SECOND NOTE IS PLAYED. »3« EVERY THIRD AND SO ON
<b>MODIFY</b>	MODIFY CURRENT PATTERN	<b>GFX MODE</b>	CHOOSE ONE OF TWENTY ALGORITHMS TO GENERATE PATTERNS
<b>SCALING</b>	SCALE CURRENT PATTERN. SCALING IS A BIT ROUGH DUE TO THE ALGORITHMS STRUCTURE	<b>SEND VIA OSC</b>	ACTIVATE SENDING NOTES VIA OSC. FOR SETTING UP THE RECEIVER ADDRESS SEE LATER IN THIS DOCUMENT
<b>X-OFFSET</b>	MOVES THE PATTERN TO LEFT OR RIGHT	<b>ROOT</b>	SETS THE ROOT NOTE FOR A SCALE ALL NOTES WILL BE CONVERTED TO
<b>SCAN ROW</b>	IN MUSICBOX MODE THIS PARAMETER DEFINES WHICH LINE WILL BE CONVERTED INTO NOTES	<b>SCALE</b>	CHOOSE A SCALE
<b>MIN NOTE</b>	DEFINES THE MINIMUM NOTE THAT WILL BE PLAYED. ALL NOTES WILL BE MAPPED TO THE RANGE OF THE PARAMETERS MIN NOTE, MAX NOTE	<b>SCALE ACTIVE</b>	ACTIVATE OR DEACTIVATE NOTE SCALING
<b>MAX NOTE</b>	DEFINES THE MAXIMUM NOTE THAT WILL BE PLAYED. ALL NOTES WILL BE MAPPED TO THE RANGE OF THE PARAMETERS MIN NOTE, MAX NOTE	<b>LFO 1 TARGET</b>	SETS LFO 1 TARGET
<b>NOTE LOSS CHANCE</b>	SETS THE PROBABILITY THAT A NOTE WILL NOT BE PLAYED. RANGES FROM 0% - 100%	<b>LFO 1 AMOUNT</b>	SETS LFO 1 AMOUNT 0-100%
<b>SPEED</b>	SETS THE GLOBAL SPEED. THE HIGHER THE VALUE THE SLOWER SPEED WILL BE	<b>LFO 2 TARGET</b>	SETS LFO 2 TARGET
		<b>LFO 2 AMOUNT</b>	SETS LFO 2 AMOUNT 0-100%
		<b>SEND MIDI</b>	ACTIVATE OR DEACTIVATE SENDING VIA MIDI
		<b>MIDI SLEEP</b>	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 PRODUCE 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.



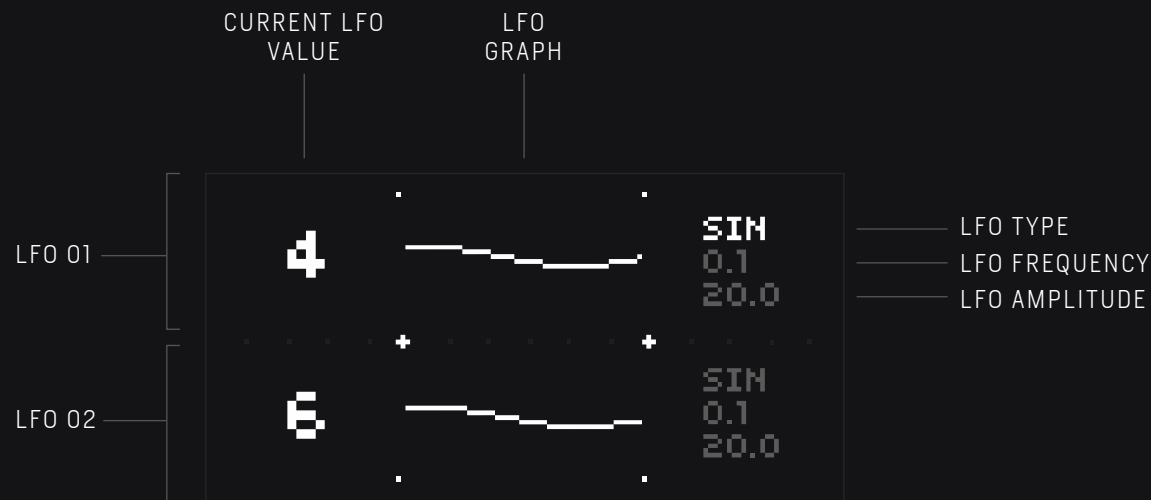
:: PATTERN 16 ::: MODIFY 1 ::: SCALE 5 :::: GFXMODE 1 :::: 16151...::

## PARAMETERS



<b>WIDTH</b>	REDUCES THE WIDTH OF THE GRAPHICAL PATTERN. PIXELS OUTSIDE THE WIDTH WILL NOT BE CONSIDERED FOR NOTE GENERATION AND ARE TURNED OFF
<b>WIDTH OFFSET</b>	OFFSETS THE WIDTH OF PATTERN REDUCTION
<b>ENC 01 FUNCTION</b>	DEFINES WHICH FUNCTION IS SET ON ENCODER 01
<b>SCAN DIRECTION</b>	SETS THE DIRECTION PATTERNS ARE READ (ONLY AVAILABLE IN »GRID« MODE)
<b>Y-HEIGHT</b>	HEIGHT OF THE PATTERN (ONLY AVAILABLE IN »GRID« MODE)
<b>MODE</b>	CHANGE BETWEEN »MUSICBOX« MODE OR »GRID« MODE
<b>ENGINE</b>	ACTIVATE POLYPERC ENGINE TO PLAY THE NOTES CREATED BY GFX-SEQ
<b>ENGINE RELEASE</b>	RELEASE TIME FOR NOTES
<b>ENGINE PW</b>	ENGINE PULSEWIDTH

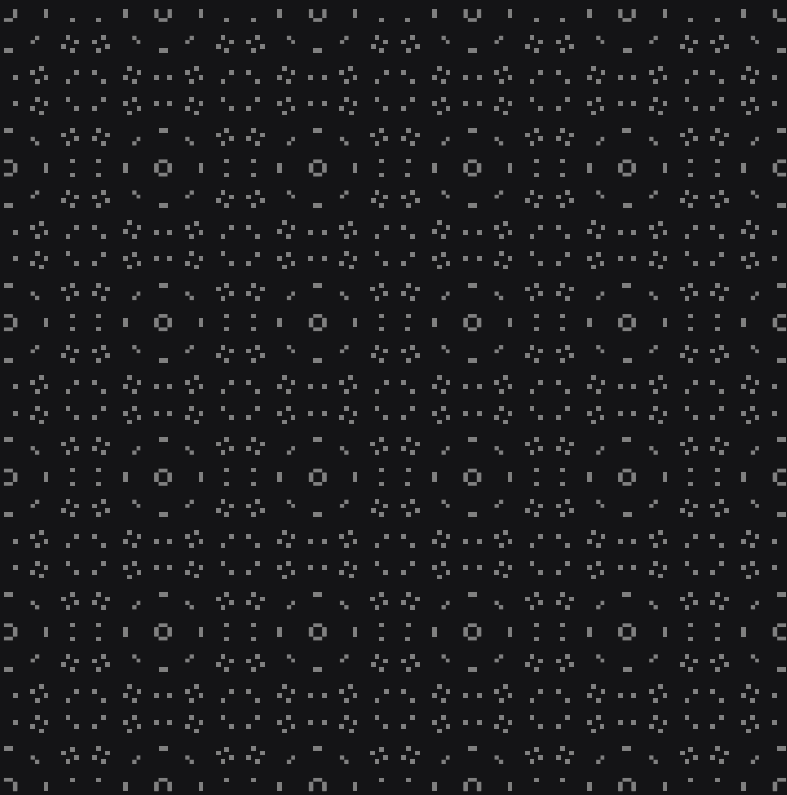
LFO SCREEN



**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 BEING 100%

**LFO AMPLITUDE** SETS THE AMPLITUDE OF THE LFO



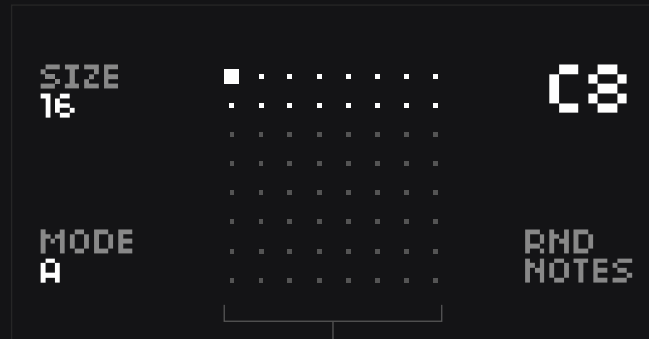
:: PATTERN 9 :: MODIFY 9 :: SCALE 4 ::: GFXMODE 11 ::: 9941]...:

## SEQUENCE SCREEN



SEQUENCER STEPS

SEQUENCER MODE



CURRENT STEP NOTE  
USE ENCODER 3 TO  
CHANGE

FILL ALL SEQUENCER  
STEPS WITH RANDOM  
NOTES

ACTIVE STEPS ARE BRIGHT  
SELECTED STEP IS A BIGGER  
SQUARE

**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** YOU CAN SELECT THE MIDI DEVICE YOU WANT SEND MIDI DATA TO IN THE »EDIT« MENU. ALSO YOU CAN CHOOSE WHICH MIDI CHANNEL YOU WANT TO SEND ON.

PARAMETERS

EDIT >  
PSET >  
MAP >



CLOCK >

MIDI SETUP

midi target            port 4: OP-1  
send on midi channel    1.0

Mode                    MUSICBOX

**OSC** TO SEND DATA VIA OSC YOU NEED TO SPECIFY A RECEIVER IP ADDRESS. SINCE I HAVEN'T FOUND A CONVENIENT SOLUTION TO INPUT THIS YOU HAVE TO DO THIS MANUALLY. OPEN THE SCRIPT IN MAIDEN AND GO TO LINE 34 AND ENTER THE IP ADDRESS 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

```



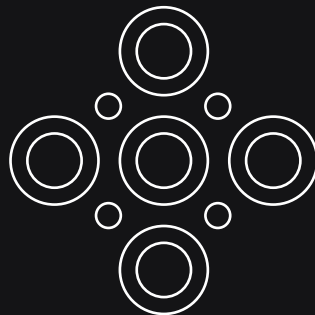


# HAVE FUN!

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/](https://github.com/deeg-deeg-deeg/)



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