sidbang

- *SPACE* starts/stops playing
- *ENTER* sets playhead to start
- all interaction with mouse on the buttons sliders, number dialers, dropdown lists, etc.

project
- files are stored in the bng subfolder
- export is still experimental, will print the tables to stdout

patch select
- each instrument has 16 independant patches
- the selected patch is set in the pattern editor on click

ADSRH setting
- H > 0 set gate release time in ticks instead of 1/16 note trigger from the sequencer
- 2nd row sets the osc-patch for each phase of the ADSR

osc-patch select
- each instrument patch has 4 independant osc-patches

osc-patch settings
osc-waveform / frequency / ticks / ratio / sound parameter
- **osc-waveform** : triangle / rect / saw / inverse saw / sinus
- **frequency** : in Hz -> maps to ticks
- **ticks** : 1 tick happens 16 times per 50 Hz frame -> maps to frequency
- **ratio** : effective for rect and triangle
sound parameter
oscillation happens between the left and right parameter
- **base-frequency** : transpose or replace input note
- **vibrato** : 0 - 100 %
- **sid-waveform** : bits 3-0
- **pulsewidth** : for the sid-rect waveform (0100)

song settings
- bpm mapped to player ticks per 1/16th note
- loop- / song-mode

pattern select
- each pattern (0-63) carries the sequence setting below
- in song-mode selected patterns are played sequentially

pattern sequence editor
- 3 channels with independant instrument per channel
- 32 patterns each for notes and patches
- gate is triggered on a set 1/16 note and released on empty 1/16 note (for instruments with H == 0)
- instrument patch is toggled by patch pattern, default patch is 0
- use *SHIFT + click* to set or clear all equal cells left from the selected cell at once

instrument note select
- the note is feed into the instrument input
- the selected note is set in the pattern editor on click

waveform preview
- displays the sid output of the instrument for 4/16 note length

sh4ke | LOAD | SAVE | EXPORT

sidbang v0.5 (alpha 1) / (c) goarana 2020

Patch:

A: 00 D: 08 S: 11 R: 00 H: 00049
0   0   0   0

saw	f: 009 . 901	t: 081	r: 0.50	rep	C- 4	rep	C- 2
rct	f: 050 . 124	t: 016	r: 0.66	v: 0.85			
rct	f: 050 . 124	t: 016	r: 0.71				
isw	f: 024 . 302	t: 033	r: 0.58	pw1: 0.31		pw2: 0.59	

BPM:: 171 . 8   16th:: 070 . 00   Loop

Pattern:

Note: C-0