cheat codes

> docs [v2.0]

cheat codes

> loops
levels
pans
filters
delays
timing
euclid
arp
rnd

loops

[overview]

only the freshest ingredients

good to know:
- there are three banks (a, b, c) of 16 pads (a1-a16, etc)
- you can record Live audio or load pre-recorded Clips
- there are three Live segments and three Clip segments
- each pad in each bank can be set to any segment

what the [loops] menu controls:
- loop points + looping
- syncing BPM to loop points
- speed, direction, rate slewing
- semitone shifting
- loading samples
- recording live input

general navigation:

K3: switch between global + local layers

- K1: alt encoder controls
- K2: alt K3 action
- E1: navigate across

global layer: controls all pads

local layer: controls displayed pad

- K1: zoom waveform
- K2: alt encoder controls
- E's: various functions

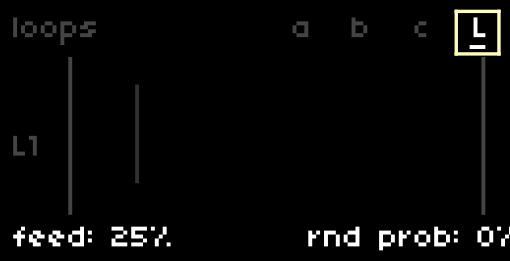
loops

[Live]

LIVE: up to 32 seconds of live input recording

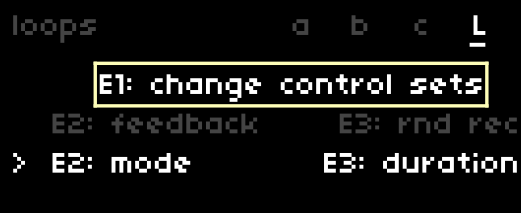
global layer controls:

use E1 to navigate to 'L'



K2 hold + K3: toggle recording

K1 hold + E1: switch encoder params



encoder parameters:

- feedback: presence of previous material
- random: random recording probability
- mode: loop or 1-shot
- total duration: 8, 16, or 32 seconds

local layer controls:

use encoders to adjust loop points

(K2 hold + K3: toggle recording)

K1 hold: zoom waveform

+ E2 / E3: fine-tune adjust
+ E1: switch buffer
+ K2: erase section

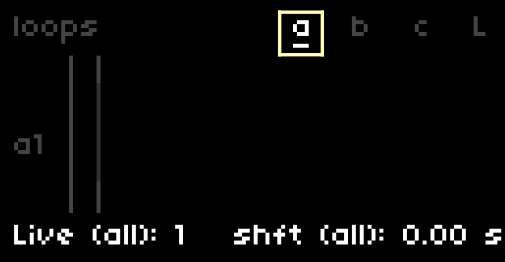
loops

[Clip]

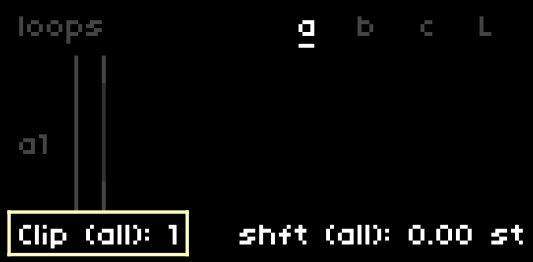
CLIP: up to 30 seconds of sample import

load the same sample for an entire bank:

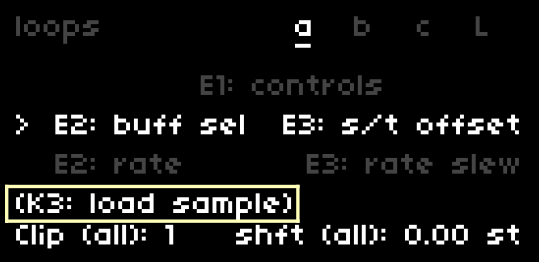
use E1 to select a bank



use E2 to set bank to a Clip segment



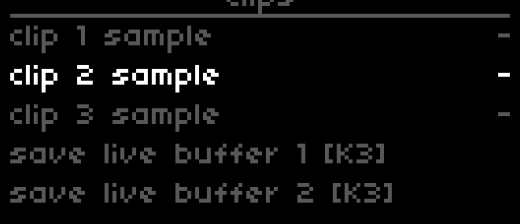
hold K1 + press K3 to load sample



load samples independent of bank:

navigate to PARAMS

load sample into desired segment



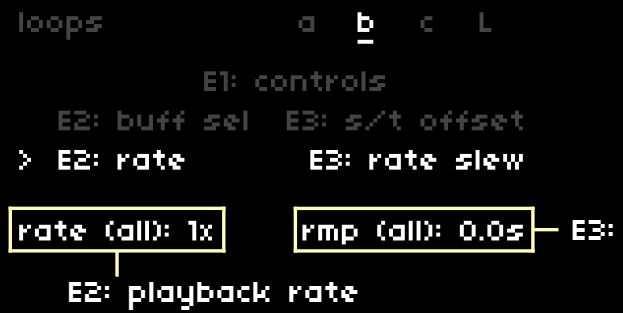
loops

[bank + pad controls]

global layer controls:

E2 + E3 control bottom parameters for the entire bank

K1 hold + E1: switch encoder params

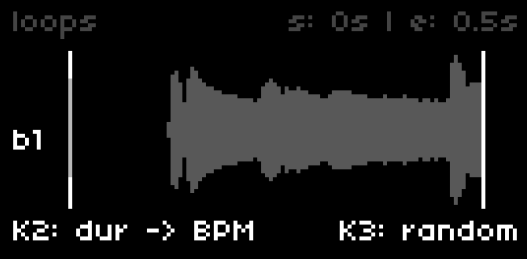


K2 hold + K3: toggle looping for all pads in the bank

local layer controls:

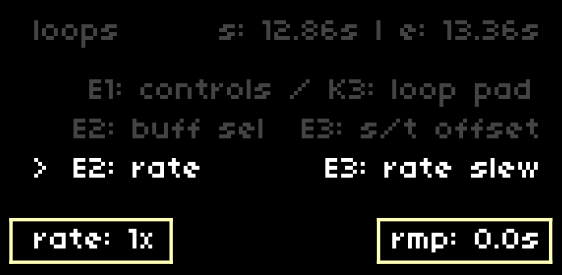
all three encoders affect specified pad

K1 hold unlocks special controls:



K1 hold: zooms into waveform
+ E2: fine-tune start point
+ E3: fine-tune end point
+ E1: change pad
+ K2: set global BPM from pad's loop duration
+ K3: randomize loop location (retains duration)

K2 hold reveals encoder params for specified pad



+ E1: switch between encoder parameters
+ K3: toggle looping on specified pad only
+ K1 (when buffer is Clip): load sample into segment

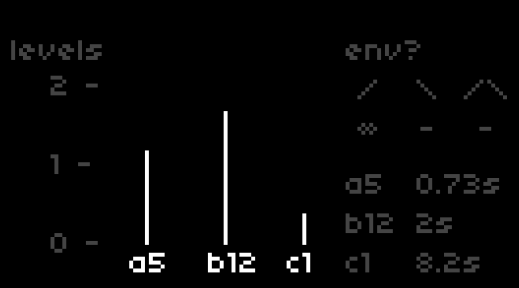
cheat codes

loops	filters	euclid
> levels	delays	arp
pans	timing	rnd

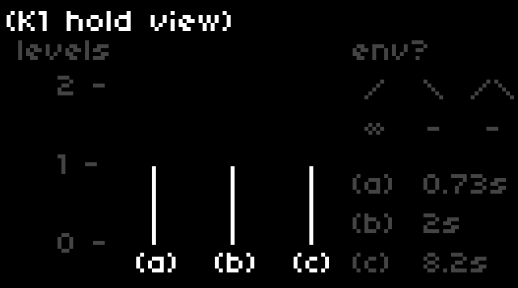
levels

louder, softer, fade it in, fade it out, do it again

K3: switch between highlighted sections
encoders: 1=a, 2=b, 3=c (one per bank)



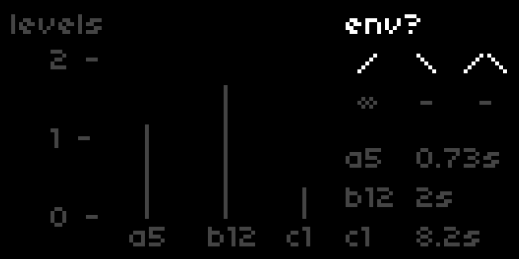
(K1 hold view)



overall level = pad level multiplied by the bank level

---

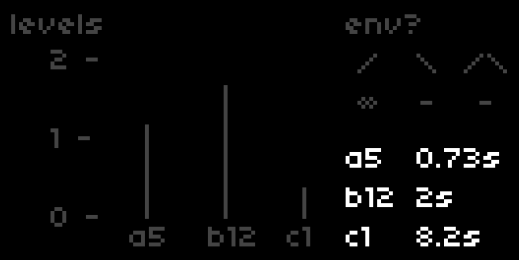
encoders: change displayed pad's level
K1 hold + encoders: change bank's level
* useful for fading in a bank without changing pad levels



three envelope shapes: falling, rising, rise/fall
optional cycling mode available

---

encoders: adjust envelope for displayed pad
K1 hold + encoders: adjust envelope for all pads in the bank



adjust duration of specified envelope
for rise/fall, specifies total duration (vs. single stage)

---

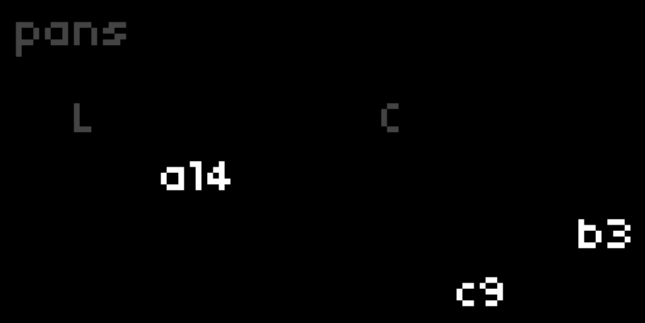
encoders: adjust envelope duration for displayed pad
K1 hold + encoders: adjust envelope duration for all pads in the bank

cheat codes

loops	filters	euclid
levels	delays	arp
> pons	timing	rnd

pans

location, location, location



encoders:
change displayed pad's
panning position

(K1 hold view)

K1 hold + encoders:
change corresponding
bank's panning position

note: bank-wide changes are applied additively,
where "two to the right" is uniformly added
to every pad's current position.

cheat codes

loops	> filters	euclid
levels	delays	arp
pans	timing	rnd

filters

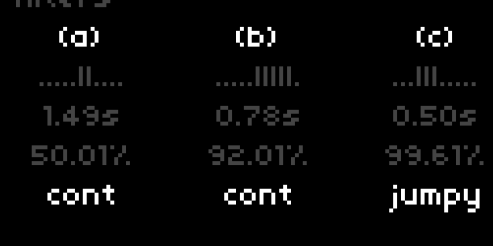
sonic sculpting

K3: switch between parameters
encoders: 1=a, 2=b, 3=c (one per bank)
default controls change entire bank (vs. current pad)

encoders: filter cutoff
IIIIII..... : LP
.....I..... : neutral
.....IIIIII : HP

encoders: slew duration
(time it takes to go from
one cutoff value
to another)

encoders: q
(controls peak resonance,
higher is more resonant)



encoders: slew behavior
cont: slew to new cutoff
jump: snap to new cutoff

(K1 hold view)

K1 hold:
toggle controls between
entire bank and current pad

cheat codes

loops	filters	euclid
levels	> delays	arp
pans	timing	rnd

delays

[navigation]

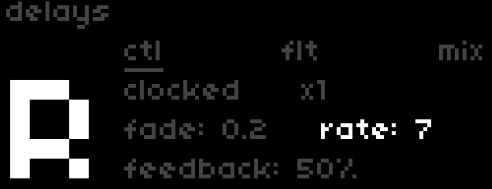
where the sauce meets the cheese

E1: switch between L and R

K3: switch between menu layers

E2: navigate selected menu layer

E3: adjust selected parameter



delays

[ctl]

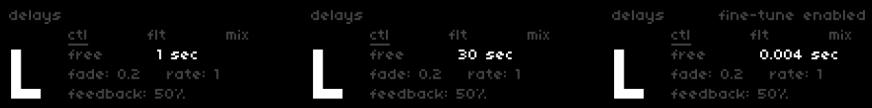
TIMEBASE

clocked mode: delay length is equal to x number of beats at current bpm

delay length can range from 16 beats to 1/4 beat (with 98 steps between)

free mode: delay length is freely definable with 1/1000 resolution

(K1 hold = fine)



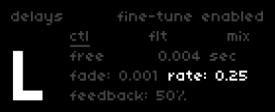
delay length can range from 0 seconds to 30 seconds

fade time needs to be less than free time!

hold K1 for fine-tune adjustments

RATE

(K1 hold = fine)



playback rate can range from 1/4x to 24x with 1/100 resolution

with short length + fade, rate affects aliasing depth

FEEDBACK

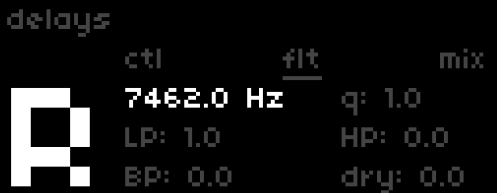
(K1 hold = jump)

feedback amount can range from 0% to 100%

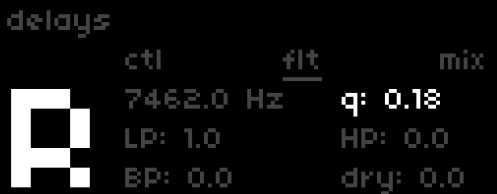
hold K1 on feedback to jump (x>0 jumps to 0, x=0 jumps to 100)

delays

[flt]

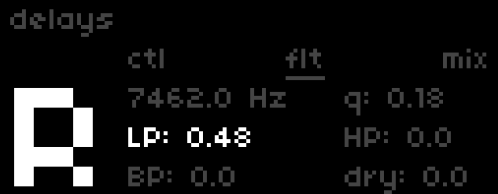


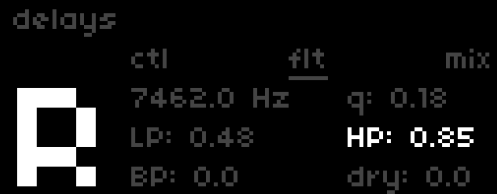
each delay line has a set of 3 linked filters with a single cutoff frequency control

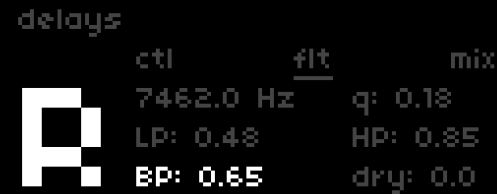


the q value determines the shape of the filter peak (0 = oscillating, 8 = gentle)

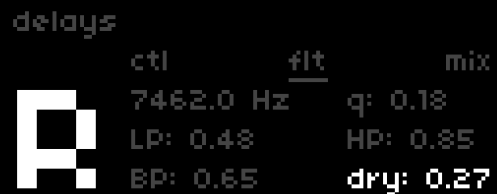
the presence of each filter in the mix can be adjusted to taste (0 = no presence, 1 = full presence)







the dry signal can also be re-introduced

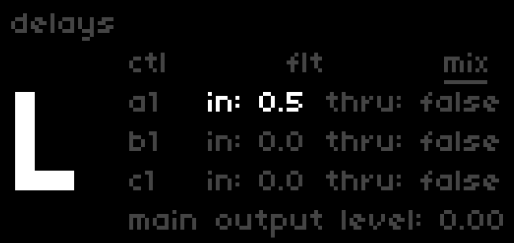


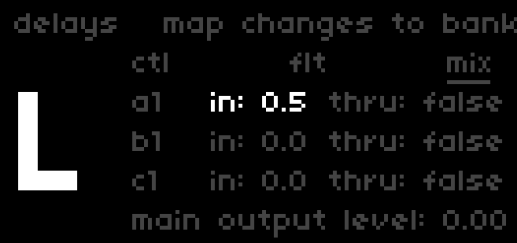
delays

[mix]

every pad can have its own delay input level

hold K1 to set the input level for all pads in the bank





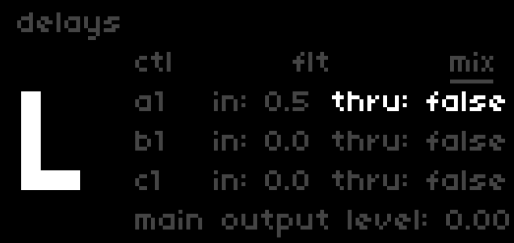
if thru = false...

a pad's presence in the delay line = input value multiplied by the pad level

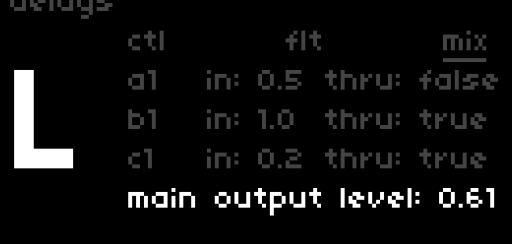
if thru = true...

a pad's presence in the delay line = input value only

* so a triggered pad can be sent to the delay line without being heard in the main mix



(hold K1 to set thru for all pads in the bank)



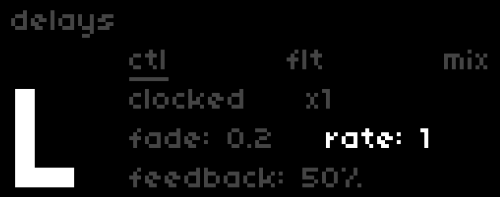
each delay line has its own main output level

delays

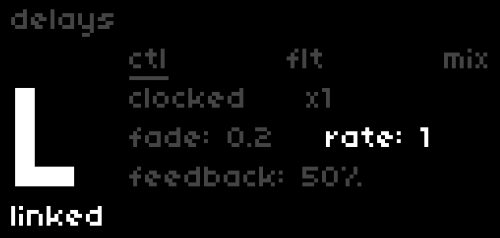
linking

to control a parameter across both delay lines
at the same time, link them together

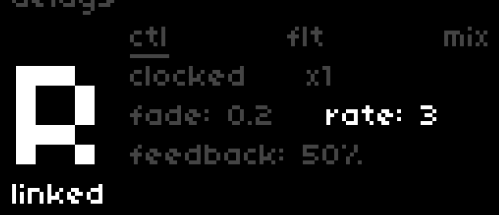
select a parameter



hold K1 and press K3



changes to that parameter on either delay will map to the other



cheat codes

loops	filters	euclid
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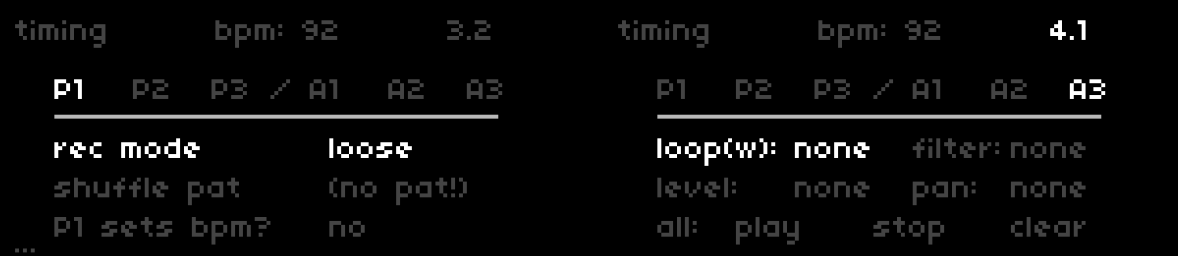
pans	> timing	rnd

timing

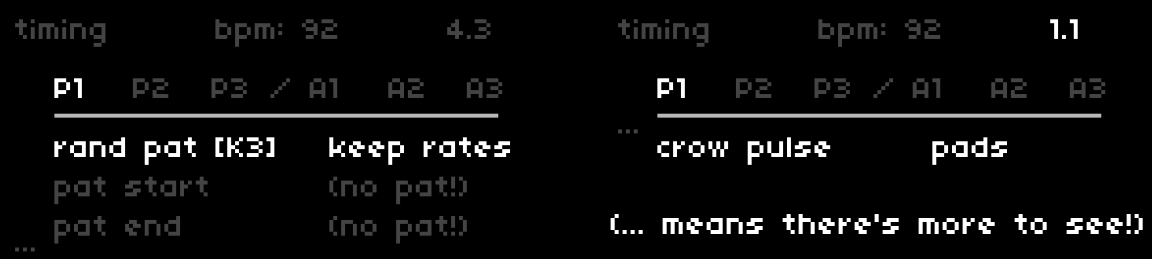
peaceful co-habitation of order and chaos

[navigation]

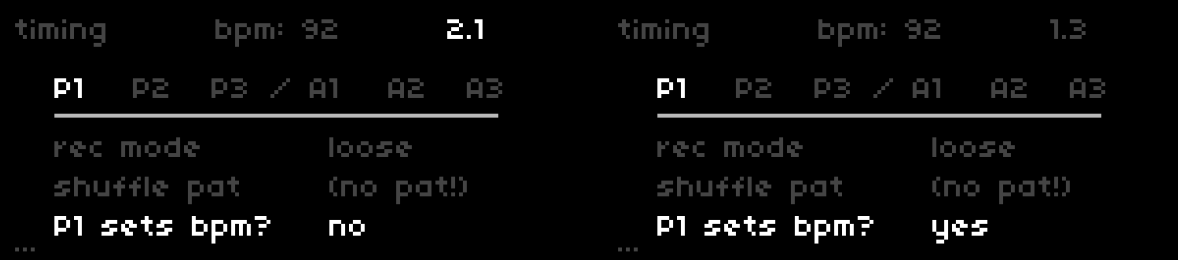
E1: switch between each bank pattern, then between each arc pattern



E2: scroll through the selected pattern's parameters



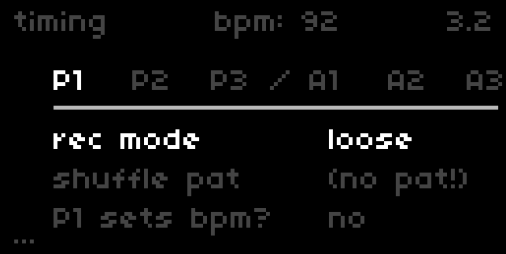
E3: adjust the selected parameter



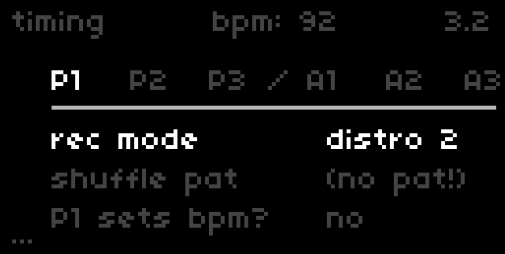
timing

[pad pattern recording]

there are two different pad pattern recording modes:



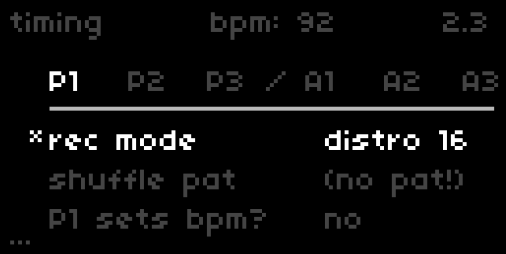
loose:
- completely un-clocked
- starts when a pad is pressed

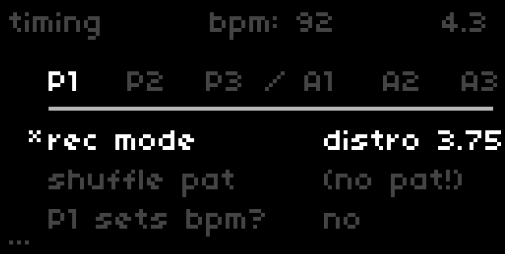


distro:
- pattern length is synced to clock
- starts on "1" beat

loose patterns can set the session bpm

hold K1 and turn E2 on distro to adjust pattern length in bars





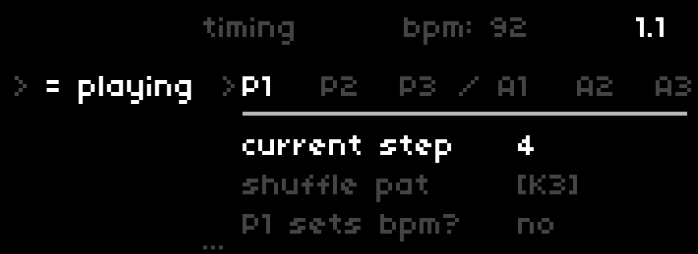
press K3 on 'rec mode' to start recording:

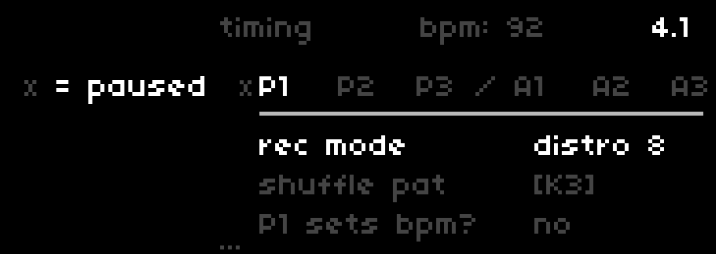
<--- since distro recording starts on "1" beat, a countdown is displayed

timing

[pad pattern playback]

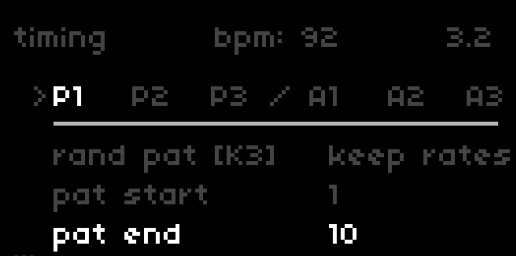
hold K1 to pause a playing pattern, or play a paused pattern





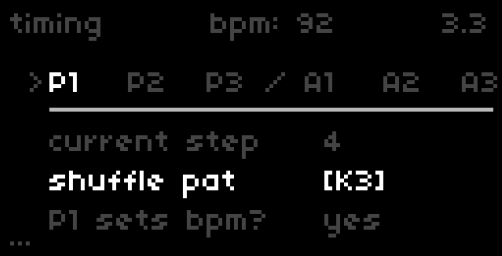
- hold K1 and press K3 to clear a pattern
- press K2 on a playing pattern to overdub

adjust pattern start and end points



note: if in distro mode, pattern will still reset to 'pat start' after 'distro x' bars

press K3 on 'shuffle pat' to jumble a recorded pattern



pattern quantization:

- navigate to PARAMS > grid/arc pattern params
- here, you can set quantization state for each pattern
- you can also set 'pat launch quant' which determines whether a distro pattern will re-launch on the next bar or the next beat

timing

[random patterns]

press K3 on 'rand pat' to create a random pattern (best in distro mode)

```
timing      bpm: 92      2.2
  P1   P2   P3 / A1   A2   A3
  rand pat [K3]   keep rates
  pat start       (no pat!)
  pat end         (no pat!)
...
```

note: if in distro mode, random patterns are guaranteed to be at least 'distro x' bars in length

use E3 CCW to select a random pitching mode

```
timing      bpm: 92      2.1
  P1   P2   P3 / A1   A2   A3
  rand pat [K3]   mid rates
  pat start       (no pat!)
  pat end         (no pat!)
...
```

random pitching options:
- 'keep rates' (default): retains each pad's current rate
- 'full range': 0.125x -> 4x (with reverse)
- 'hi rates': 2x + 4x (with reverse)
- 'mid rates': 0.5x -> 2x (with reverse)
- 'lo rates': 0.125x -> 0.5x (with reverse)

change random pattern style and note lengths in PARAMS > grid/arc pattern params > random patterns

```
      random patterns
rand pat 1 style          rand
rand pat 2 style      h.snake
rand pat 3 style      vertical
rand pat 1 note length    1/16
rand pat 2 note length    rand
```

style:
- 'rand': pads are selected at random
- all other options are various snake movements across the 16 pads

note length:
- rand: the interval between pad movements will be randomly generated (1/16,1/8,1/4,1/2,1)
- all other options are uniformly clocked

timing

[arc patterns]

note: if no arc is connected, this section will not render

E2: switch between parameters

E3 on loop: switch between window, start and end

K3: toggle record mode (K1 hold + K3: clear pattern)

use the 'all' section to manage the state of all recordings at once:

cheat codes

loops	filters	> euclid
levels	delays	arp
pans	timing	rnd

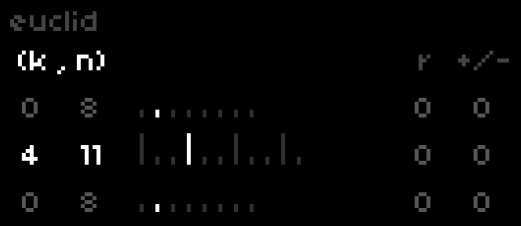
euclid

quick + easy rhythm generation

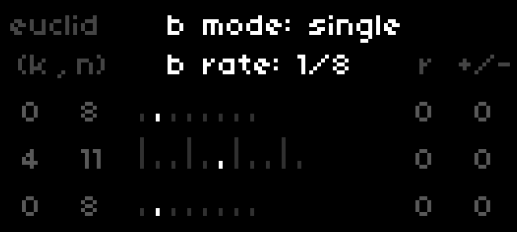
E1: navigate vertically

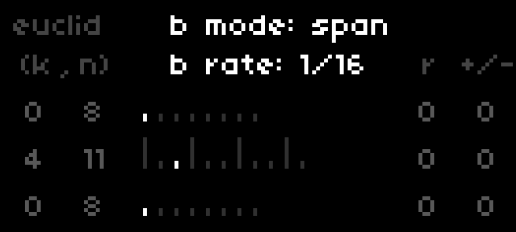
E2 = number of pulses
E3 = time interval

default is every
pulse will re-trigger
current pad



hold K1 to adjust
default values





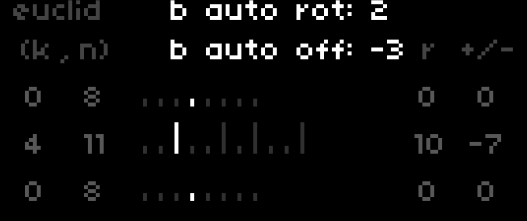
E2 = mode
- 'single' re-triggers current
- 'span' travels across pads

E3 = rate
- sets speed (1/16 to 1 bar)

K3: jump columns

E2 = rotate pattern
E3 = offset pad ID

hold K1 to add
auto advancement
E2 = auto-rotate
E3 = auto-offset



K1 hold + K2: reset all lanes
K1 hold + K3: reset selected


cheat codes
loops
filters
euclid
levels
delays
> arp
pans
timing
rnd

arp

in-the-moment sequencing with grid + MIDI

E1: change banks / E2: navigate vertically / E3: adjust selected parameter / K3: hold/release current arp

(MIDI: when a note is received on a different channel, view will automatically switch to the corresponding bank)

clock division: rate of arpeggiation

direction: fwd/bkwd/pend/rnd

s + e: start + end points

(K1 hold: set rate for current pad)

see PARAMS > patterns + arps > arps (grid only):

- we can adjust the 'hold style' of each arp
- 'last pressed' is default behavior
- 'additive' adds each pressed pad to the arp, similar to a sequencer

retrig: when an arp is 'additive', this parameter determines whether sequential repeated grid entries re-trigger or hold the step

cheat codes

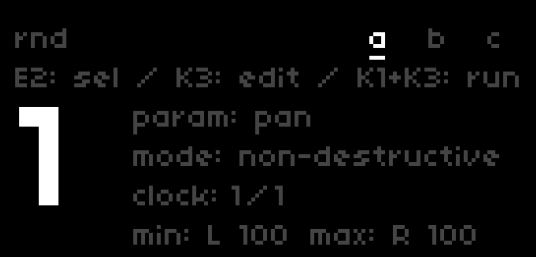
loops	filters	euclid
levels	delays	arp
pans	timing	> rnd

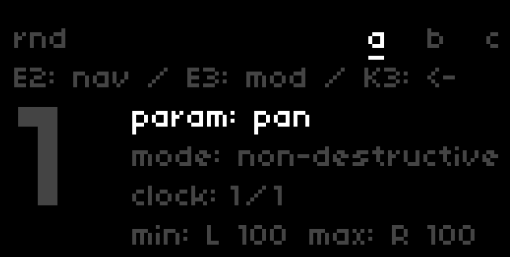
rnd

the melt stage: random value generators for creative chaos

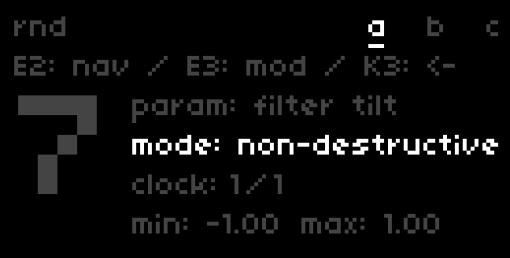
E1: change banks

K3: switch between generators and parameters





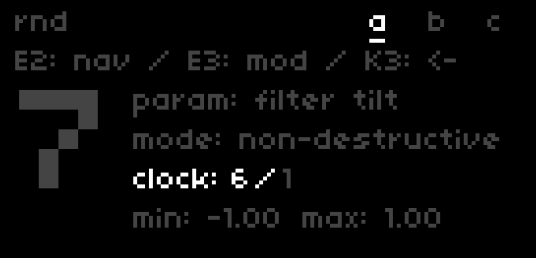
E2: select generator or navigate parameters



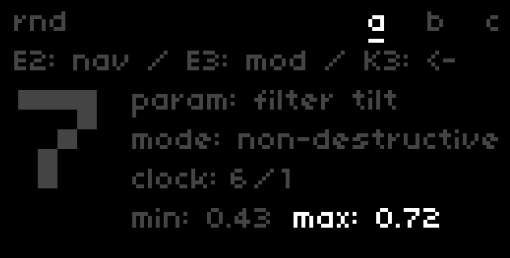
E3: modify selected parameter

mode: destructive overwrites pad values,
non-destructive adjusts until pad
is re-triggered

clock: re-spawn after x beats
(whole or fraction)



min/max: lower and upper bounds



K1 hold + K3: start/stop generator

current library: pan, rate, rate slew, delay send, loop, semitone offset, filter tilt

nb. destructive filter tilt can cause zippering if changing pads rapidly (best as non-destructive)

cheat codes

> collections

collections

[overview]

save, load, overwrite, delete

to manage your cheat codes sessions, use PARAMS > collections

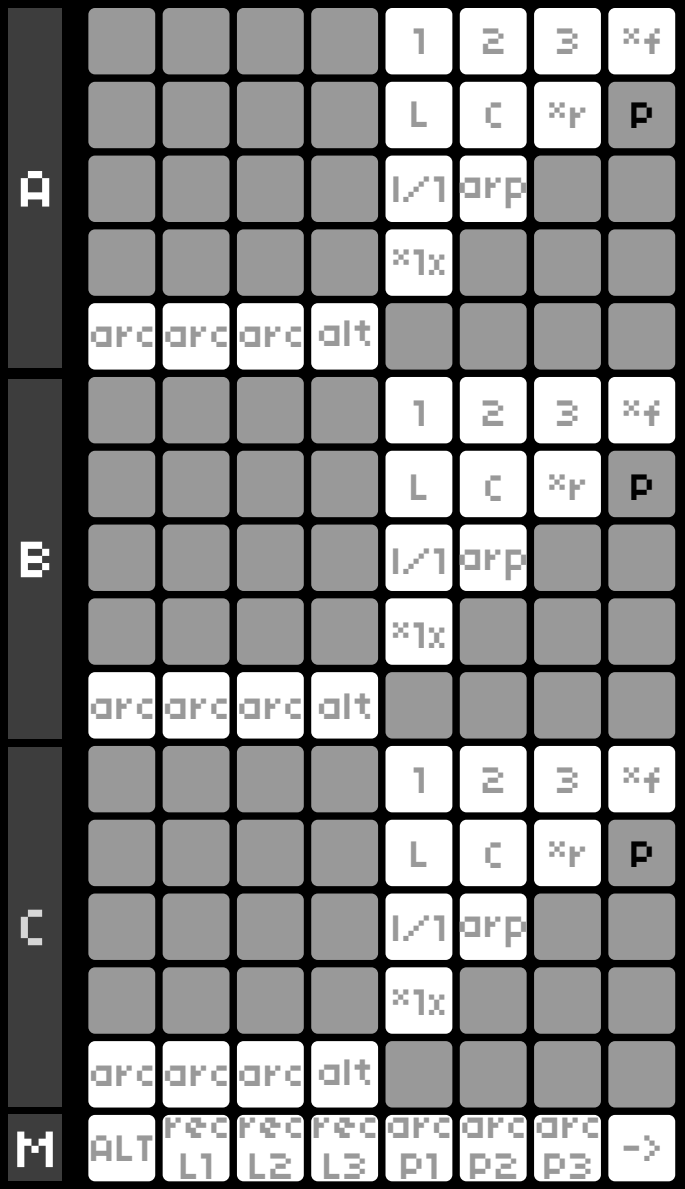
nb. since cheat codes generates so much data, the standard PSETs system will not save / restore effectively.
please *only* use collections.

cheat codes

> grid

grid

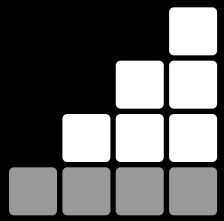
[performance page]



nb. see PARAMS > GRID to change brightness (default: 16-step varibright)

grid

[zilchmos]



zilchmo row 4

loop point controls:

set pad's start point to min

auto-chop start/end point

1/16th length pads (bpm-synced)

set pad's end point to max

random start point

random end point

random window (keeps distance)

double loop length

halve loop length

rate controls:

double current rate (4x max)

halve current rate (0.125x min)

reverse rate

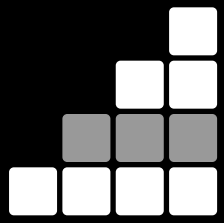
raise rate by a fifth (1.5x)

add 0.1s rate slew time

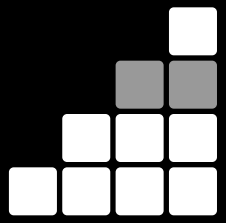
remove all rate slew

grid

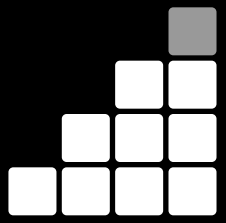
[zilchmos]



zilchmo row 3



zilchmo row 2



zilchmo row 1

panning controls:

hard left

center

hard right

nudge left

nudge right

reverse pan

random pan

level controls:

nudge lower

nudge higher

mute / pause

pattern controls:

no pattern

blinking = pattern rec

brighter = pattern playing

brightest = pattern overdubbing

neutral = pattern paused

grid

[ALT and alt]

ALT and alt function very similarly:
- they each unlock special functions
- they each apply pad changes to the entire bank,
  eg. hold ALT / alt and press C to assign all pads in that bank to use the Clip buffer, then press 3 to assign all pads in that bank to the third Clip

ALT / alt + ×f enables pad focus mode:
- selecting a pad will not trigger sound
- you can modify the pad's parameters while another pad plays

ALT / alt + ×r creates a random pad pattern:
- patterns are generated based on [timing] page settings

ALT / alt + ×1x returns all pads to 1x rate

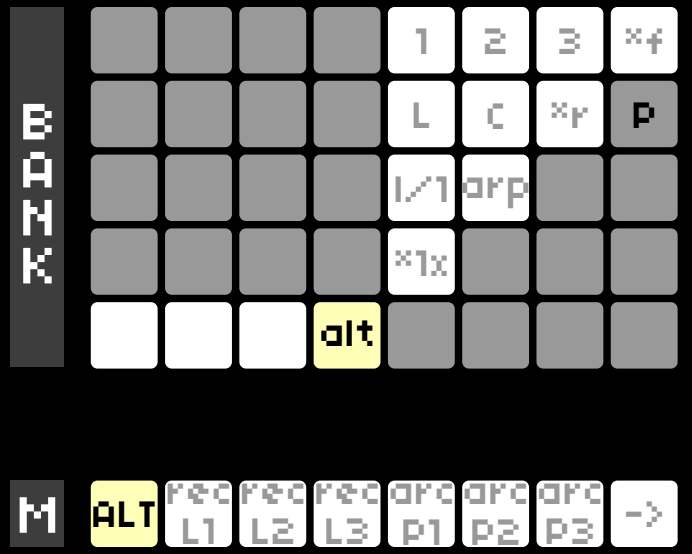
ALT / alt + arp clears a held arp pattern

ALT + P clears a stored pad pattern
alt + P toggles pad pattern overdub (when playing)

ALT / alt + rec L1 / L2 / L3 erases audio between the specified Live segment's loop points

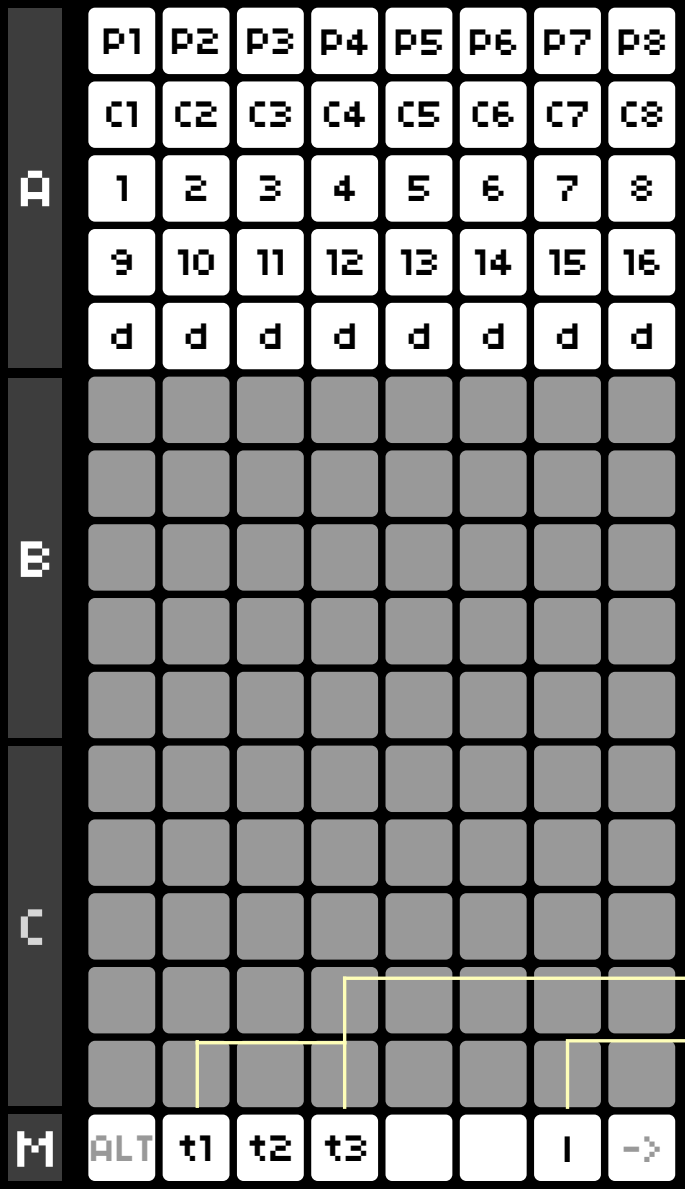
ALT / alt + arc P1 / P2 / P3 erases a stored arc pattern

ALT + -> cycles to the previous page



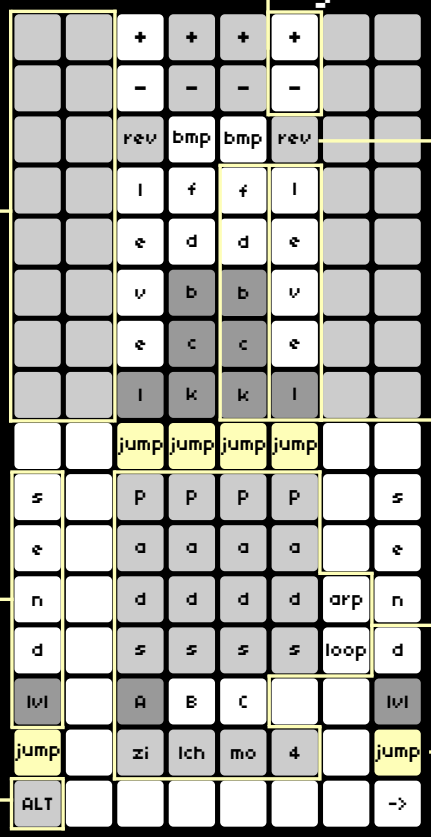
grid

[pattern seq]



grid

[delays page]



length
base length multiplied by:
16, 8, 4, 2, x1, 0.5, 0.25, 0.125

rate +/-
base rate multiplied by:
16, 8, 4, 2, x1, 0.5, 0.25
rev
reverse at current rate
bmp
see PARAMS > delays > rate bump

save slots
- press + hold any slot to store current delay config
- press stored slot to recall

feedback + level
top to bottom:
100%, 75%, 50%, 25%, 0%

send level (per pad)
top to bottom:
100%, 75%, 50%, 25%, 0%

pads, banks, zilchmo 4, arp + loop
after your pads are set up, you can live on this page forever

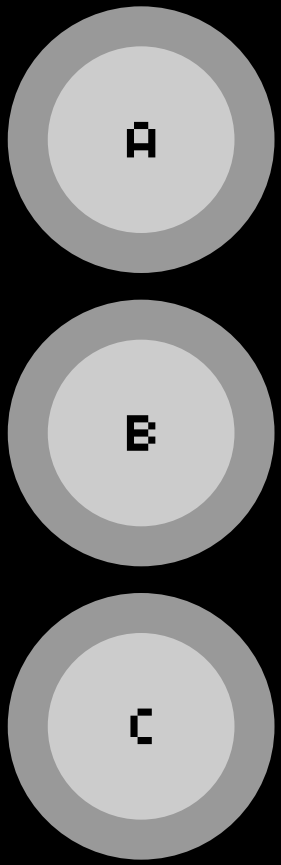
ALT + send level: set level for entire bank
+ feedback jump: clear delay buffer

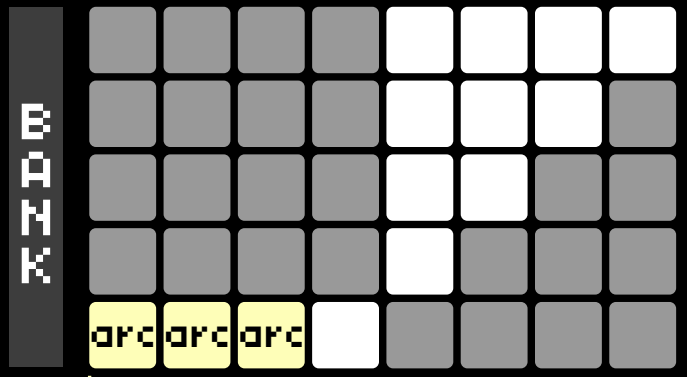
jump buttons:
- performance key to quickly invert a parameter
- if parameter == 0%, jumps to 100%
- if parameter > 0%, jumps to 0%

cheat codes

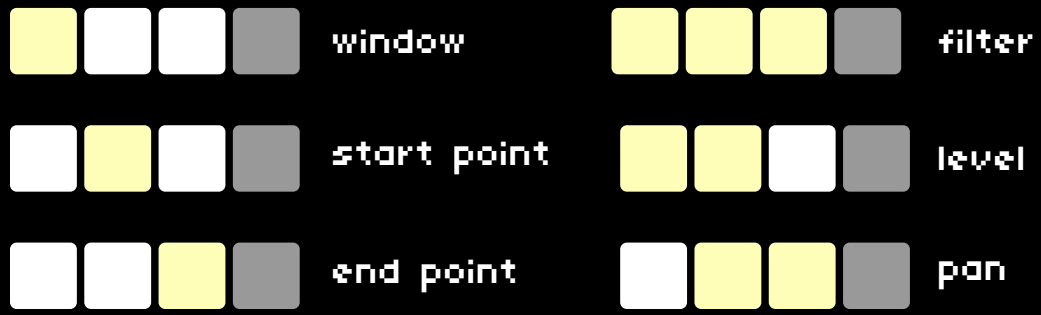
> arc

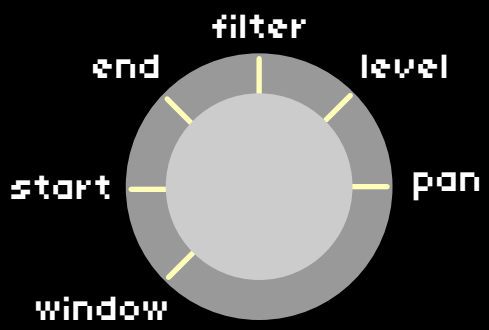
arc





multi-finger gestures
on arc pads focus bank
encoder on one parameter





fourth encoder focuses
all encoders on one parameter

cheat codes

> midi + OP-Z

midi + OP-Z

[setup]

all pads can be called via MIDI notes
from an attached keyboard, sequencer, or OP-Z

navigate to PARAMS

```
delays >
OSC setup >
MIDI note/OP-Z setup >
MIDI encoder setup >
```

enable MIDI control

```
PARAMETERS / MIDI note/OP-Z

enable MIDI control?      yes
MIDI control device     port 1
enable MIDI echo?         no
          channel
```

specify port
(see PARAMS > DEVICES > MIDI)

```
enable MIDI control?      yes
MIDI control device     port 3
enable MIDI echo?         no
          channel
bank (a) pad channel:       1
```

a successful connection:

```
cheat codes   (AKM320)

> loops     filters     euclid
  levels    delays      arp
  pans      timing      rnd
```

an unsuccessful connection:

```
cheat codes   (no midi device!)

> loops     filters     euclid
  levels    delays      arp
  pans      timing      rnd
```

defaults:
- bank (a): channel 1
- bank (b): channel 2
- bank (c): channel 3
- pads start at note 53 (chromatic)
  eg. F3 = pad 1, D4 = pad 11
- edit in PARARMS > MIDI note/OP-Z setup

if using an OP-Z, you can control + display pad values via the OP-Z's on-board encoders:
- PARAMS > MIDI note/OP-Z setup > enable MIDI echo?: yes
- enc 1: start point
- enc 2: end point
- enc 3: filter cutoff
- enc 4: level

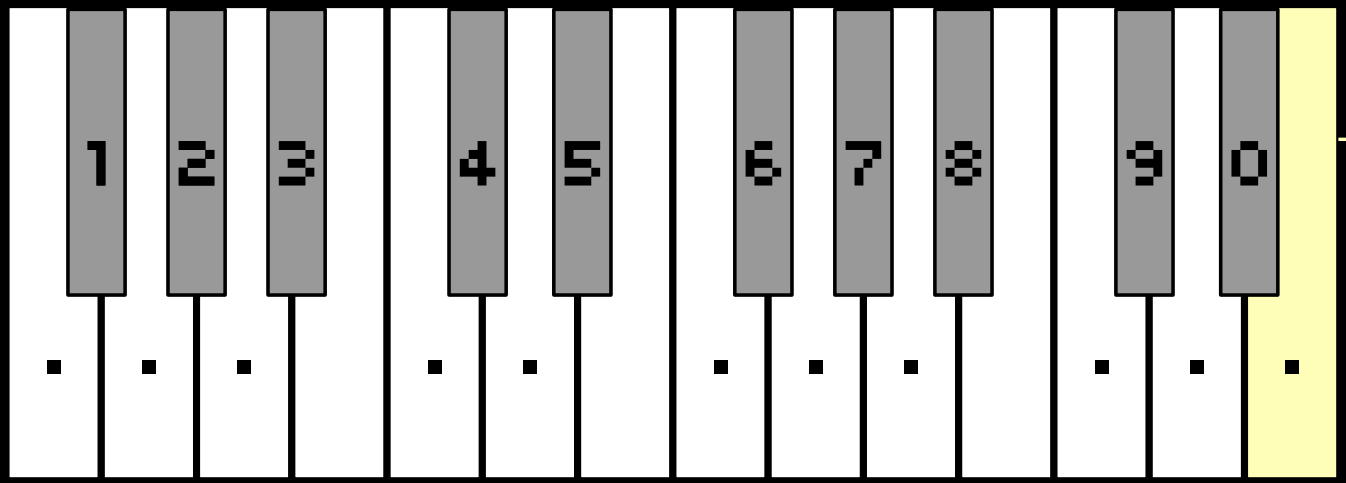
nb. this will affect synth parameters on the OP-Z

midi + OP-Z

[overview]

special mod key + MIDI note combos perform zilchmos, globally and locally

(numbers + dots reflect OP-Z layout)



1: halve playback rate
2: reverse playback rate
3: double playback rate

4: toggle pad looping on/off
5: toggle recording on/off (or trigger recording if in 1-shot mode)

6: random pad start point
7: random pad window (distance between start and end points remains constant)
8: random pad end point

9: auto-chop to 1/16th total buffer length
0: clear the live audio between the recording buffer's start/end points

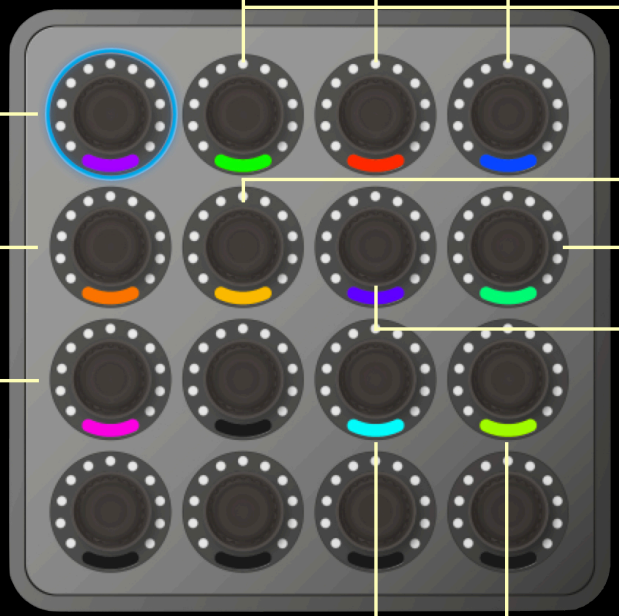
cheat codes

> Midi Fighter Twister

midi fighter twister

[setup]

a special template, just for MFT



loop end point

loop start point

loop window

(press for fine-tune)

pad selector (press for focus hold)

pad level (press for fine-tune)

pad pan (press for bank)

bank level (press for fine-tune)

pad rate (press for bank)

semitone offset (press for bank)

filter q

bank filter cutoff (press for pad)

a successful connection:

cheat codes

> loops filters euclid
levels delays arp
pans timing rnd
(MFT)

left side-buttons 1,2,3 correspond to banks a,b,c
purple: a, pink: b, blue: c

nb. if you aren't seeing MFT or need to reset it, head to PARAMS > MIDI encoder setup > refresh for MFT (K3)

cheat codes

> osc

osc

[setup]

all pads can be called via OSC commands, in addition to meta controls:

control	command	arguments
select a pad in a bank	/pad_sel_X Y	X: bank, Y: pad
set rate of current pad	/pad_rate_X Y	X: bank, Y: rate
reverse current pad	/pad_rev_X	X: bank
set rate for entire bank	/bank_rate_X Y	X: bank, Y: rate
reverse entire bank	/bank_rev_X	X: bank
random rates for entire bank	/bank_rand_rate_X	X: bank
auto-chop bank (even slices)	/chop_X	X: bank
set length of all loops = 1/16	/sixteenths_X	X: bank
randomize all loop points	/rand_loop_points_X	X: bank
random parameters + pattern	/randomize_this_bank_X	X: bank

to connect norns to an OSC source,
enter the norns IP in your OSC client

a successful connection should
auto-fill PARAMS > OSC setup:

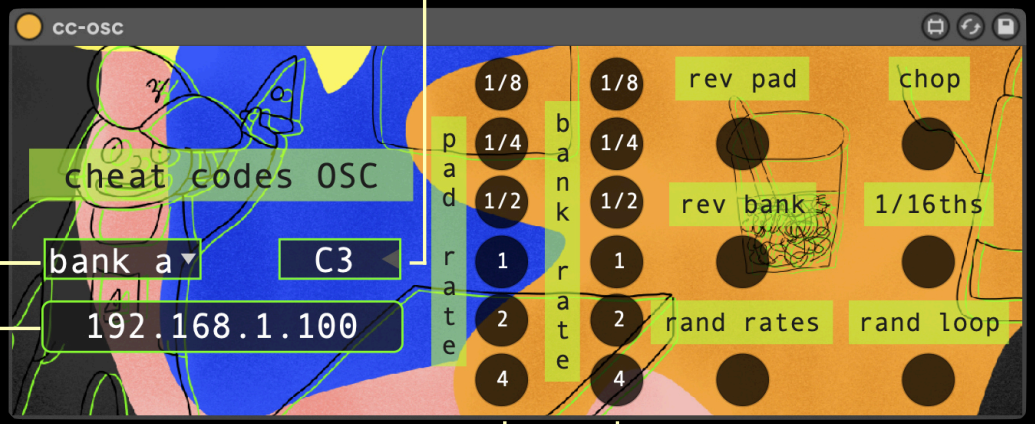
cheat codes

> m4l

max for live

[setup]

cheat codes can be wirelessly controlled from Ableton Live
via a computer on the same network:



use multiples to control each bank from different MIDI tracks in Live!
very fun to use while clock source is set to Link, for total synced control!

cheat codes

> more: l.lllllll.co/cheat-codes-2