

cheat codes

> loops

levels

pans

filters

delays

timing

euclid

arp

rnd

loops

only the freshest ingredients

good to know:

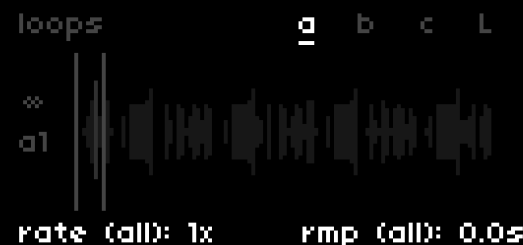
- there are three banks (a, b, c) of 16 pads (a1-a16, etc)
- you can record Live audio or load pre-recorded Clips
- there are three Live segments and three Clip segments
- each pad in each bank can be set to any segment

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

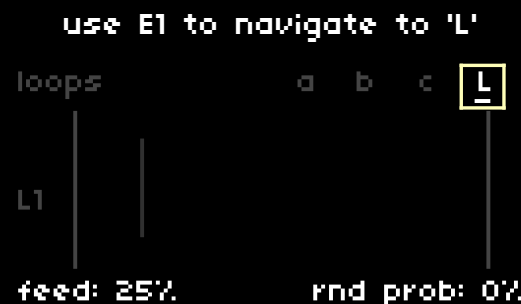
[overview]

loops

[Live]

LIVE: up to 32 seconds of live input recording

global layer controls:



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



K1 hold: zoom waveform



loops

[Clip]

CLIP: up to 30 seconds of sample import

load the same sample for an entire bank:

use E1 to select a bank

```
loops      a b c L
|           |
a1          |
Live (all): 1  shift (all): 0.00 st
```

use E2 to set bank to a Clip segment

```
loops      a b c L
|           |
a1          |
Clip (all): 1  shift (all): 0.00 st
```

hold K1 + press K3 to load sample

```
loops      a b c L
|           |
a1          |
E1: controls
> E2: buff sel  E3: s/t offset
E2: rate        E3: rate slew
(K3: load sample)
Clip (all): 1  shift (all): 0.00 st
```

```
alright/      ✓
andrew/        ✓
and zach/      ✓
arcologies/    ✓
aalto2.wav     0:00:18
aalto.wav      0:00:08
Anaphora gitar.wav 0:00:19
AT_LOOP_Space baby.... 0:00:33
```

```
loops      a b c L
|           |
a1          |
Clip (all): 1  shift (all): 0.00 st
```

load samples independent of bank:

navigate to PARAMS

```
cheat codes params
collections >
loops + buffers >
patterns + arps >
manual control >
delays >
```

load sample into desired segment

```
clips
clip 1 sample -
clip 2 sample -
clip 3 sample -
save live buffer 1 [K3]
save live buffer 2 [K3]
```

loops

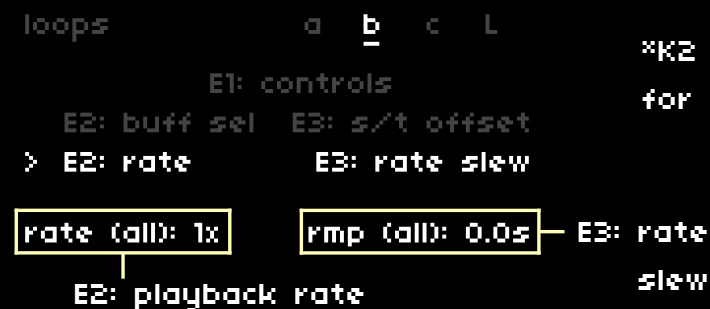
[bank + pad controls]

global layer controls:

E2 + E3 control bottom parameters
for the entire bank



K1 hold + E1: switch encoder params



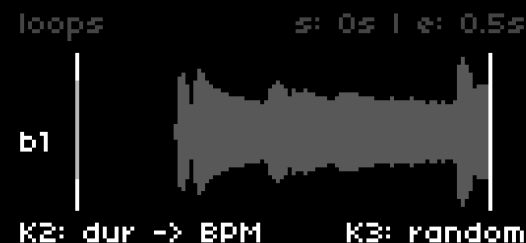
K2 hold + K3: toggle looping
for all pads in the bank

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

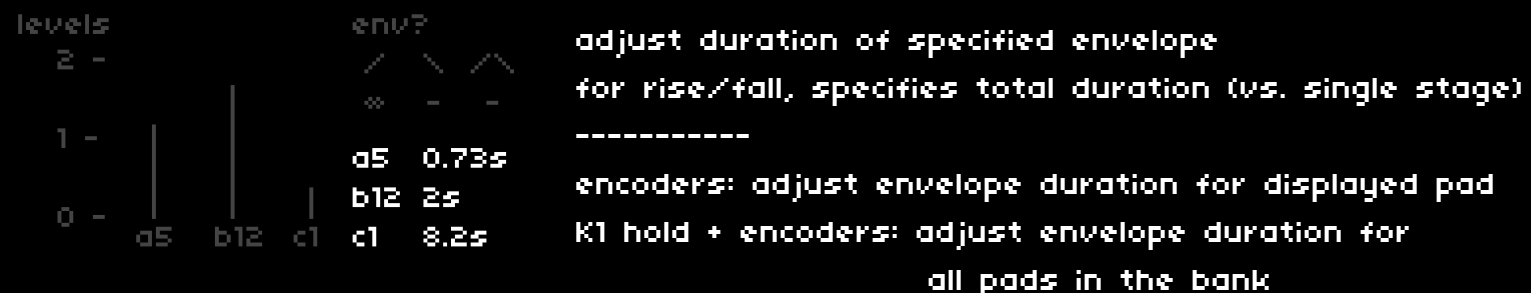
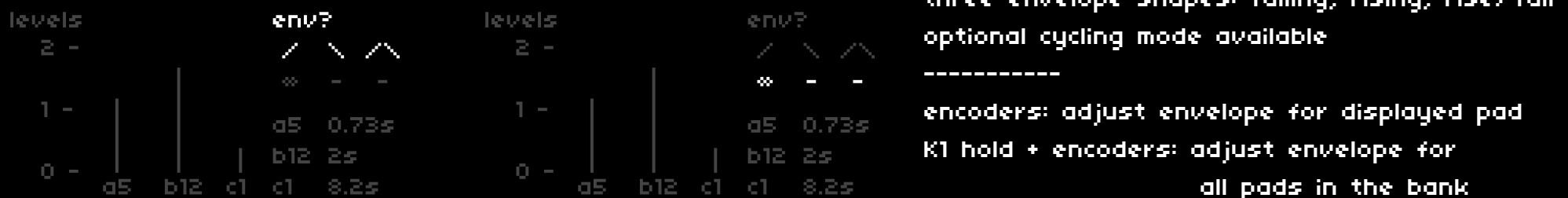
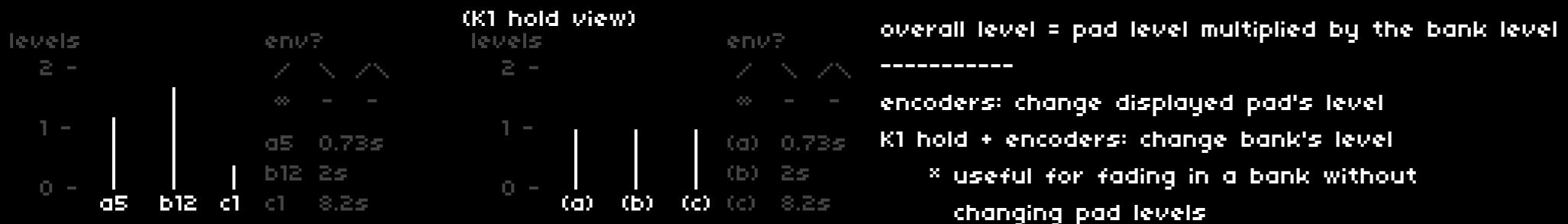
loops	filters	euclid
> levels	delays	arp
pans	timing	rnd

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)



cheat codes

loops	filters	euclid
levels	delays	arp
> pans	timing	rnd

pan5

location, location, location

pan5

L

C

R

a14

b3

c9

encoders:

change displayed pad's
panning position

(K1 hold view)

pan5

L

C

R

(a)

(b)

(c)

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

levels

pans

> filters

delays

timing

euclid

arp

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)

filters			encoders: filter cutoff
(a)	(b)	(c)	
.....	
1.49s	0.78s	0.50s	
50.01%	92.01%	99.61%	
cont	cont	jumpy	

filters			encoders: slew duration (time it takes to go from one cutoff value to another)
(a)	(b)	(c)	
.....	
1.49s	0.78s	0.50s	
50.01%	92.01%	99.61%	
cont	cont	jumpy	

filters			encoders: q (controls peak resonance, higher is more resonant)
(a)	(b)	(c)	
.....	
1.49s	0.78s	0.50s	
50.01%	92.01%	99.61%	
cont	cont	jumpy	

filters			encoders: slew behavior cont: slew to new cutoff jump: snap to new cutoff
(a)	(b)	(c)	
.....	
1.49s	0.78s	0.50s	
50.01%	92.01%	99.61%	
cont	cont	jumpy	

(K1 hold view)

filters		
a10	b6	c1
.....
1.49s	0.78s	0.50s
50.01%	92.01%	99.61%
cont	cont	jumpy

K1 hold:
toggle controls between
entire bank and current pad

cheat codes

loops

levels

pans

filters

> delays

timing

euclid

arp

rnd

delays

where the sauce meets the cheese

[navigation]

E1: switch between L and R

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

R

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

K3: switch between menu layers

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

E2: navigate selected menu layer

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

L

ctl flt mix
12000.0 Hz q: 1.0
LP: 1.0 HP: 0.0
BP: 0.0 dry: 0.0

delays

L

ctl flt mix
a1 in: 0.0 thru: false
b1 in: 0.0 thru: false
c1 in: 0.0 thru: false
main output level: 0.00

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

L

ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

E3: adjust selected parameter

delays

R

ctl flt mix
clocked x1
fade: 0.2 rate: 7
feedback: 50%

delays

[ctl]

TIMEBASE

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

delays

A ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

A ctl flt mix
clocked x1
fade: 0.2 rate: 1
feedback: 50%

delays

A ctl flt mix
clocked x16
fade: 0.2 rate: 1
feedback: 50%

delays

A ctl flt mix
clocked /4
fade: 0.2 rate: 1
feedback: 50%

delays

A ctl flt mix
clocked x3 3/4
fade: 0.2 rate: 1
feedback: 50%

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

delays

L ctl flt mix
free 1 sec
fade: 0.2 rate: 1
feedback: 50%

delays

L ctl flt mix
free 1 sec
fade: 0.2 rate: 1
feedback: 50%

delays

L ctl flt mix
free 30 sec
fade: 0.2 rate: 1
feedback: 50%

(K1 hold = fine)

delays

L ctl flt mix
fine-tune enabled
free 0.004 sec
fade: 0.2 rate: 1
feedback: 50%

delay length can range from 0 seconds to 30 seconds

delays

L ctl flt mix
fine-tune enabled
free 0.004 sec
fade: 0.001 rate: 1
feedback: 50%

fade time needs to be less than free time!

hold K1 for fine-tune adjustments

RATE

delays

L ctl flt mix
free 0.004 sec
fade: 0.001 rate: 1
feedback: 50%

delays

L ctl flt mix
free 0.004 sec
fade: 0.001 rate: 24
feedback: 50%

(K1 hold = fine)

delays

L ctl flt mix
fine-tune enabled
free 0.004 sec
fade: 0.001 rate: 0.25
feedback: 50%

playback rate can range from 1/4x to 24x with 1/100 resolution
with short length + fade, rate affects aliasing depth

FEEDBACK

delays

L ctl flt mix
free 0.004 sec
fade: 0.001 rate: 0.25
feedback: 50%

delays

L ctl flt mix
free 0.004 sec
fade: 0.001 rate: 0.25
feedback: 100%

(K1 hold = jump)

delays

L ctl flt mix
quick-jump!!
free 0.004 sec
fade: 0.001 rate: 0.25
feedback: 0%

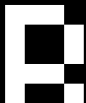
feedback amount can range from 0% to 100%

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

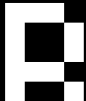
delays

[flt]

delays

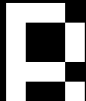
	ctl	<u>flt</u>	mix
	7462.0 Hz	q: 1.0	each delay line has a set of 3 linked filters with a single cutoff frequency control
	LP: 1.0	HP: 0.0	
	BP: 0.0	dry: 0.0	

delays

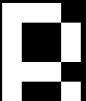
	ctl	<u>flt</u>	mix
	7462.0 Hz	q: 0.18	the q value determines the shape of the filter peak (0 = oscillating, 8 = gentle)
	LP: 1.0	HP: 0.0	
	BP: 0.0	dry: 0.0	

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


delays

	ctl	<u>flt</u>	mix
	7462.0 Hz	q: 0.18	
	LP: 0.48	HP: 0.0	
	BP: 0.0	dry: 0.0	

delays

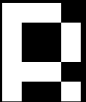
	ctl	<u>flt</u>	mix
	7462.0 Hz	q: 0.18	
	LP: 0.48	HP: 0.85	
	BP: 0.0	dry: 0.0	

delays

	ctl	<u>flt</u>	mix
	7462.0 Hz	q: 0.18	
	LP: 0.48	HP: 0.85	
	BP: 0.65	dry: 0.0	

the dry signal can also be re-introduced

delays

	ctl	<u>flt</u>	mix
	7462.0 Hz	q: 0.18	
	LP: 0.48	HP: 0.85	
	BP: 0.65	dry: 0.27	

delays

[mix]

every pad can have its own delay input level

delays

```
L      ctl      flt      mix
a1  in: 0.5 thru: false
b1  in: 0.0 thru: false
c1  in: 0.0 thru: false
main output level: 0.00
```

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

delays

map changes to bank

```
L      ctl      flt      mix
a1  in: 0.5 thru: false
b1  in: 0.0 thru: false
c1  in: 0.0 thru: false
main output level: 0.00
```

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

delays

```
L      ctl      flt      mix
a1  in: 0.5 thru: false
b1  in: 0.0 thru: false
c1  in: 0.0 thru: false
main output level: 0.00
```

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

delays

```
L      ctl      flt      mix
a1  in: 0.5 thru: false
b1  in: 1.0 thru: true
c1  in: 0.2 thru: true
main output level: 0.61
```

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

```
delays
  ctl      flt      mix
  clocked   x1
  fade: 0.2  rate: 1
  feedback: 50%
```

hold K1 and press K3

```
delays
  ctl      flt      mix
  clocked   x1
  fade: 0.2  rate: 1
  feedback: 50%
```

linked

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

```
delays
  ctl      flt      mix
  clocked   x1
  fade: 0.2  rate: 3
  feedback: 50%
```

linked

```
delays
  ctl      flt      mix
  clocked   x1
  fade: 0.2  rate: 3
  feedback: 50%
```

linked

cheat codes

loops

levels

pans

filters

delays

> timing

euclid

arp

rnd

timing

peaceful co-habitation of order and chaos

[navigation]

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

timing	bpm: 92	3.2
<u>P1</u>	<u>P2</u>	<u>P3 / A1 A2 A3</u>
rec mode	loose	
shuffle pat	(no pat!)	
P1 sets bpm?	no	
...		

timing	bpm: 92	4.1
<u>P1</u>	<u>P2</u>	<u>P3 / A1 A2 A3</u>
loop(w):	none	filter: none
level:	none	pan: none
all:	play	stop clear

E2: scroll through the selected pattern's parameters

timing	bpm: 92	4.3
<u>P1</u>	<u>P2</u>	<u>P3 / A1 A2 A3</u>
rand pat [K3]	keep rates	
pat start	(no pat!)	
pat end	(no pat!)	
...		

timing	bpm: 92	1.1
<u>P1</u>	<u>P2</u>	<u>P3 / A1 A2 A3</u>
...	crow pulse	pads

(... means there's more to see!)

E3: adjust the selected parameter

timing	bpm: 92	2.1
<u>P1</u>	<u>P2</u>	<u>P3 / A1 A2 A3</u>
rec mode	loose	
shuffle pat	(no pat!)	
P1 sets bpm?	no	
...		

timing	bpm: 92	1.3
<u>P1</u>	<u>P2</u>	<u>P3 / A1 A2 A3</u>
rec mode	loose	
shuffle pat	(no pat!)	
P1 sets bpm?	yes	
...		

timing

[pad pattern recording]

there are two different pad pattern recording modes:

timing bpm: 92 3.2

P1 P2 P3 / A1 A2 A3

rec mode loose

shuffle pat (no pat!)

P1 sets bpm? no

...

loose:

- completely un-clocked

- starts when a pad is pressed

timing bpm: 92 3.2

P1 P2 P3 / A1 A2 A3

rec mode

shuffle pat (no pat!)

P1 sets bpm? no

...

distro:

- pattern length is synced to clock

- starts on "1" beat

loose patterns can set the session bpm

timing bpm: 92 1.3

P1 P2 P3 / A1 A2 A3

rec mode loose

shuffle pat (no pat!)

P1 sets bpm? yes

...

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

timing bpm: 92 2.3

P1 P2 P3 / A1 A2 A3

*rec mode distro 16

shuffle pat (no pat!)

P1 sets bpm? no

...

timing bpm: 92 4.3

P1 P2 P3 / A1 A2 A3

*rec mode distro 3.75

shuffle pat (no pat!)

P1 sets bpm? no

...

press K3 on 'rec mode' to start recording:

timing bpm: 92 4.2

P1 P2 P3 / A1 A2 A3

rec

...

timing bpm: 92 2.4

P1 P2 P3 / A1 A2 A3

-2.0

...

<--- 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

```
timing      bpm: 92      1.1
> = playing >P1  P2  P3 / A1  A2  A3
             current step    4
             shuffle pat      [K3]
             P1 sets bpm?     no
             ...
```

```
timing      bpm: 92      4.1
x = paused xP1  P2  P3 / A1  A2  A3
             rec mode         distro 8
             shuffle pat      [K3]
             P1 sets bpm?     no
             ...
```

hold K1 and press K3
to clear a pattern

adjust pattern start and end points

```
timing      bpm: 92      3.1
>P1  P2  P3 / A1  A2  A3
rand pat [K3]  keep rates
pat start      1
pat end        14
...
```

```
timing      bpm: 92      3.2
>P1  P2  P3 / A1  A2  A3
rand pat [K3]  keep rates
pat start      1
pat end        10
...
```

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

```
timing      bpm: 92      3.3
>P1  P2  P3 / A1  A2  A3
             current step    4
             shuffle pat      [K3]
             P1 sets bpm?     yes
             ...
```

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
<hr/>		
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
<hr/>		
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

timing bpm: 130 3.4

P1 P2 P3 / A1 A2 A3

loop(w): none filter: none

level: none pan: none

all: play stop clear

timing bpm: 130 4.1

P1 P2 P3 / A1 A2 A3

loop(s): none filter: none

level: none pan: none

all: play stop clear

timing bpm: 130 4.3

P1 P2 P3 / A1 A2 A3

loop(e): none filter: none

level: none pan: none

all: play stop clear

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

timing bpm: 130 4.1

P1 P2 P3 / A1 A2 A3

loop(w): none filter: rec

level: none pan: none

all: play stop clear

timing bpm: 130 4.3

P1 P2 P3 / A1 A2 A3

loop(w): none filter: active

level: none pan: none

all: play stop clear

timing bpm: 130 1.3

P1 P2 P3 / A1 A2 A3

loop(w): none filter: idle

level: none pan: none

all: play stop clear

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

timing bpm: 130 1.4

P1 P2 P3 / A1 A2 A3

loop(w): none filter: active

level: active pan: active

all: play stop clear

timing bpm: 130 2.2

P1 P2 P3 / A1 A2 A3

loop(w): none filter: idle

level: idle pan: idle

all: play stop clear

timing bpm: 130 1.1

P1 P2 P3 / A1 A2 A3

loop(w): none filter: none

level: none pan: none

all: play stop clear

cheat codes

loops

levels

pans

filters

delays

timing

> euclid

arp

rnd

euclid

quick + easy rhythm generation

E1: navigate vertically

euclid

(k , n)

r +/-

default is every pulse will re-trigger current pad

euclid

(k , n)

r +/-

E2 = number of pulses

0 8

.....

0 0

E3 = time interval

0 8

.....

0 0

0 8

.....

0 0

hold K1 to adjust default values

euclid

(k , n)

b mode: single

b rate: 1/8

r +/-

0 8

.....

0 0

4 11

..|..|..|..|

0 0

0 8

.....

0 0

euclid

(k , n)

b mode: span

b rate: 1/16

r +/-

0 8

.....

0 0

4 11

..|..|..|..|

0 0

0 8

.....

0 0

E2 = mode

- 'single' re-triggers current

- 'span' travels across pads

E3 = rate

- sets speed (1/16 to 1 bar)

K3: jump columns

euclid

(k , n)

r +/-

E2 = rotate pattern

E3 = offset pad ID

0 8

.....

0 0

4 11

..|..|..|..|

4 -2

0 8

.....

0 0

hold K1 to add auto advancement

E2 = auto-rotate

E3 = auto-offset

euclid

(k , n)

b auto rot: 2

b auto off: -3

r +/-

0 8

.....

0 0

4 11

..|..|..|..|

10 -7

0 8

.....

0 0

K1 hold + K2: reset all lanes

K1 hold + K3: reset selected

cheat codes

loops

levels

pans

filters

delays

timing

euclid

> arp

rnd

arp

in-the-moment sequencing with grid + MIDI

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

arp

...

a

b

c

1/16

fwd

s: 1

e: 1

retrig: y

arp

10

a

b

c

1/16

fwd

s: 1

e: 4

retrig: y

arp

hold

12

a

b

c

1/16

fwd

s: 1

e: 4

retrig: y

(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

arp

hold

5

a

b

c

1/4t

fwd

s: 1

e: 4

retrig: y

arp

hold

13

a

b

c

1/4t

pend

s: 1

e: 4

retrig: y

arp

hold

5

a

b

c

1/4t

pend

s: 2

e: 7

retrig: y

(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

arp

hold

13

a

b

c

1/4t

pend

s: 2

e: 7

retrig: y

cheat codes

loops

levels

pans

filters

delays

timing

euclid

arp

> rnd

END

the melt stage: random value generators for creative chaos

E1: change banks

K3: switch between generators and parameters

```

rnd          a      b      c
E2: sel / K3: edit / K1+K3: run
1 param: pan
  mode: non-destructive
  clock: 1/1
  min: L 100 max: R 100

```

```

rnd      a      b      c
E2: nav / E3: mod / K3: <-
1 param: pan
  mode: non-destructive
  clock: 1/1
  min: L 100 max: R 100

```

E2: select generator or navigate parameters

```

rnd          a      b      c
E2: sel / K3: edit / K1+K3: run
7 param: filter tilt
mode: non-destructive
clock: 1/1
min: -1.00 max: 1.00

```

```

rnd      a      b      c
E2: nav / E3: mod / K3: <-
  param: filter tilt
  mode: non-destructive
  clock: 1/1
  min: -1.00 max: 1.00

```

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

```

rnd      a      b      c
E2: nav / E3: mod / K3: <-
param: filter tilt
mode: non-destructive
clock: 6 / 1
min: -1.00 max: 1.00

```

```

rnd          a      b      c
E2: nav / E3: mod / K3: <-
param: filter tilt
mode: non-destructive
clock: 6 / 1
min: 0.43 max: 0.72

```

```

rnd      a      b      c
K1+K3:  kill / K3:  edit / E2:  sel
7        param: filter tilt
        mode: non-destructive
        clock: 6 / 1
active   min: 0.43 max: 0.72

```

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

> midi + 0p-2

midi + OP-2

[setup]

all pads can be called via MIDI notes
from an attached keyboard, sequencer, or OP-2

navigate to PARAMS

```
delays >  
OSC setup >  
MIDI note/OP-2 setup >  
MIDI encoder setup >
```

enable MIDI control

```
PARAMETERS / MIDI note/OP-2  
  
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 PARAMS > MIDI note/OP-2 setup

if using an OP-2, you can control + display pad values via
the OP-2's on-board encoders:

- PARAMS > MIDI note/OP-2 setup > enable MIDI echo?: yes
- enc 1: start point
- enc 2: end point
- enc 3: filter cutoff
- enc 4: level

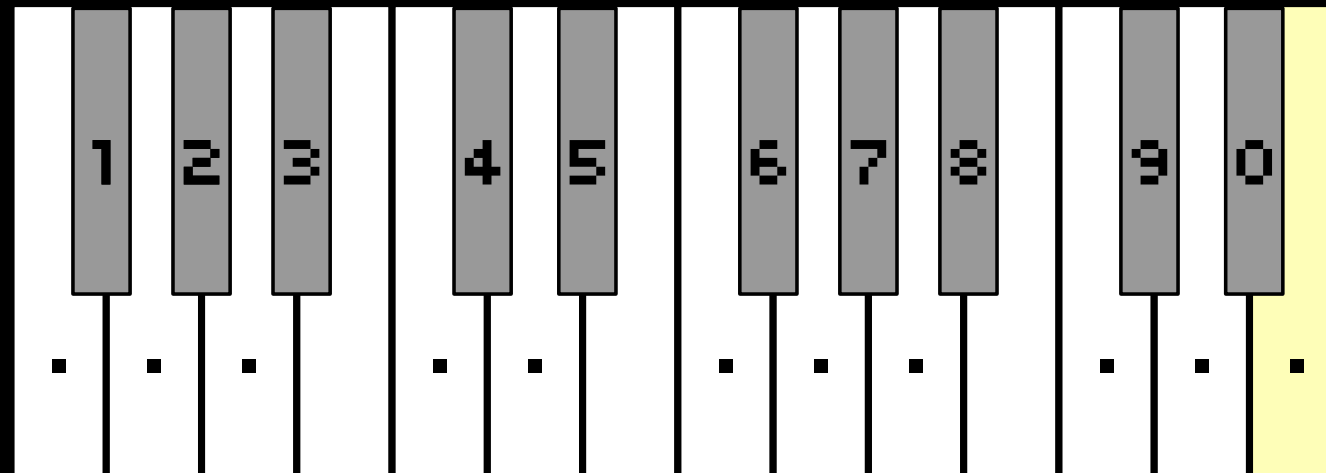
nb. this will affect synth parameters on the OP-2

midi + OP-2

[overview]

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

(numbers + dots reflect OP-2 layout)



mod key

+ number: perform zilchmo on bank

+ dot to left of a number:
perform zilchmo on pad

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

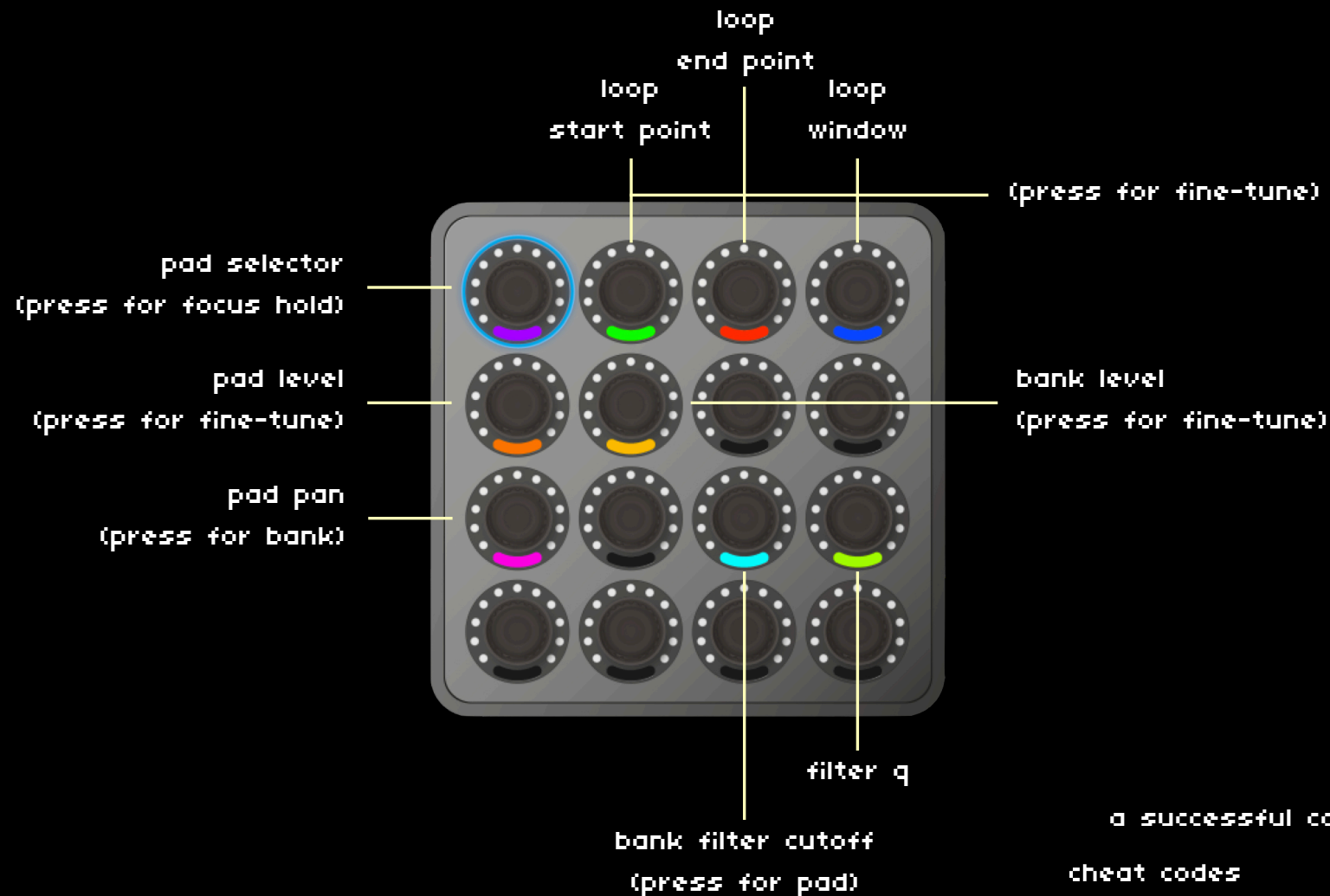
cheat codes

> Midi Fighter Twister

midi fighter twister

[setup]

a special template for Midi Fighter Twister



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

a successful connection:

cheat codes

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

cheat codes

> osc

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 norms to an OSC source,
enter the norms IP in your OSC client

```
STATUS: activated
NETWORK: PSH 1
IP: 192.168.1.100
SIGNAL: -50dBm
```

OFF HOTSPOT CONNECT ADD DEL

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

```
PARAMETERS / OSC setup

source OSC IP      192.168.1.117
OSC port           59171
refresh OSC [K3]
```

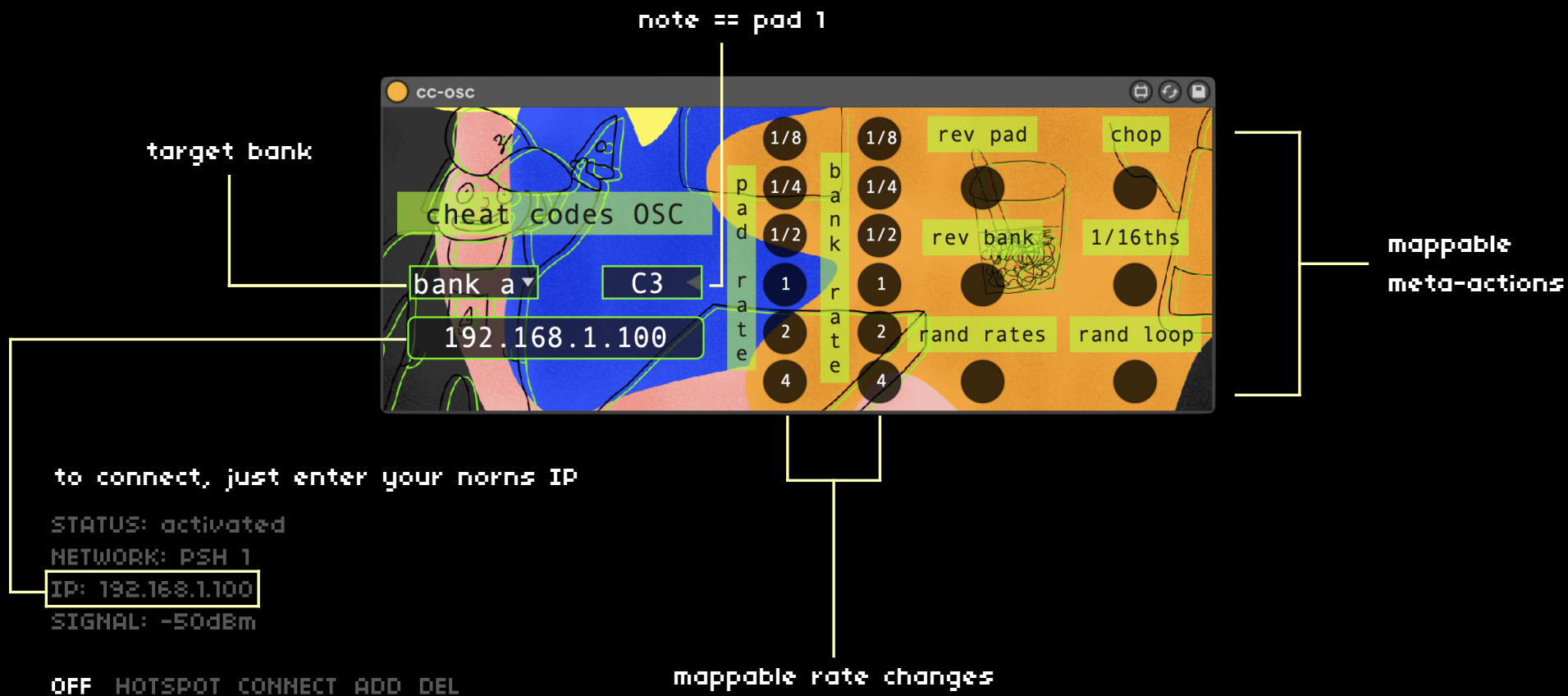
cheat codes

> 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: lllllll.co/cheat-codes-2