

cheat codes

> docs [v2.0]

## cheat codes

> loops

levels

pans

filters

delays

timing

euclid

arp

rnd

# loops

only the freshest ingredients

good to know:

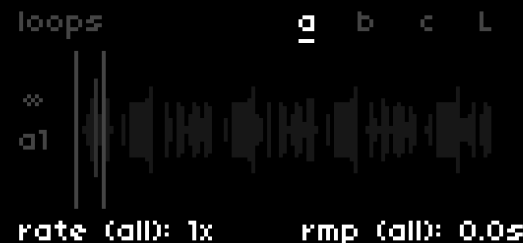
- there are three banks (a, b, c) of 16 pads (a1-a16, etc)
- you can record Live audio or load pre-recorded Clips
- there are three Live segments and three Clip segments
- each pad in each bank can be set to any segment

## 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

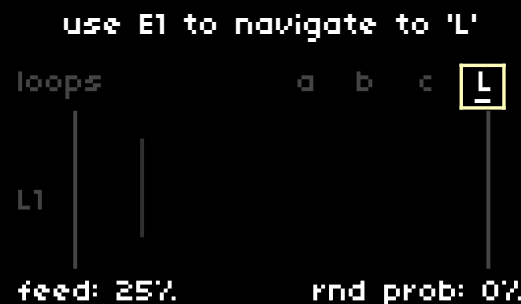
[overview]

# 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



- + 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

```
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

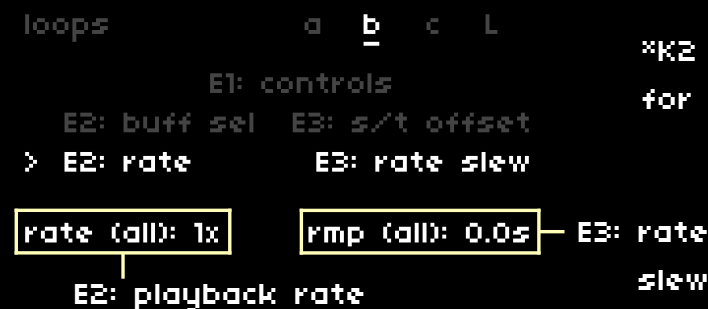
## [bank + pad controls]

global layer controls:

E2 + E3 control bottom parameters  
for the entire bank



K1 hold + E1: switch encoder params



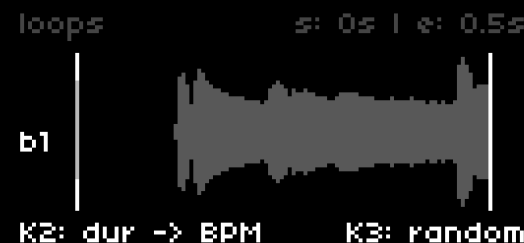
\*K2 hold + K3\*: toggle looping  
for all pads in the bank

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

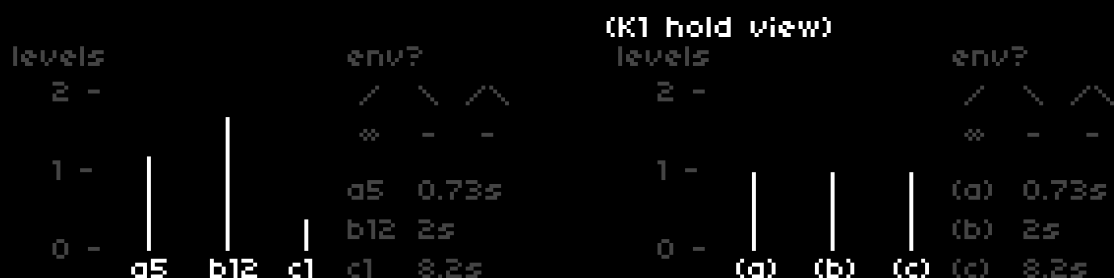
loops	filters	euclid
> levels	delays	arp
pans	timing	rnd

# 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)



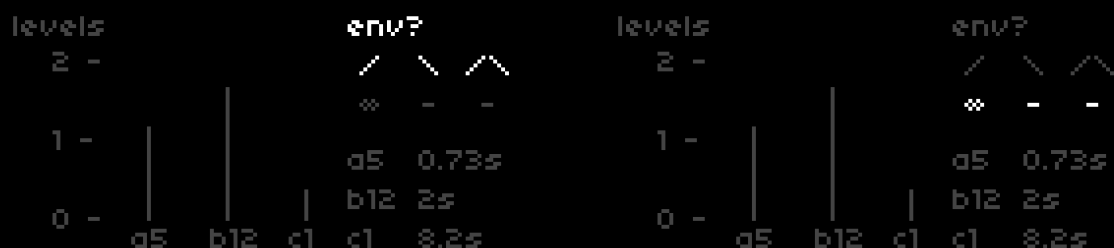
overall level = pad level multiplied by the bank level

-----

encoders: change displayed pad's level

K1 hold + encoders: change bank's level

\* useful for fading in a bank without  
changing pad levels



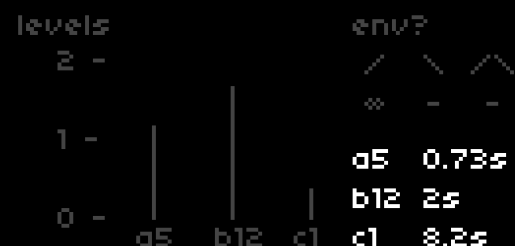
three envelope shapes: falling, rising, rise/fall

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
> 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

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


delays

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

delays

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

delays

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

delays

 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

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

delays

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

delays

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

(K1 hold = fine)

delays

 ctl      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


 ctl      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

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

delays

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

(K1 hold = fine)


delays

 ctl      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


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

delays

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

(K1 hold = jump)

delays

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

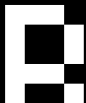
feedback amount can range from 0% to 100%

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

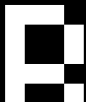
# delays

[flt]

delays

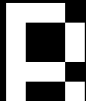
	ctl	<u>flt</u>	mix
	7462.0 Hz	q: 1.0	each delay line has a set of 3 linked filters with a single cutoff frequency control
	LP: 1.0	HP: 0.0	
	BP: 0.0	dry: 0.0	

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

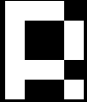
	ctl	<u>flt</u>	mix
	7462.0 Hz	q: 0.18	
	LP: 0.48	HP: 0.85	
	BP: 0.0	dry: 0.0	

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

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

timing bpm: 92 1.3

P1 P2 P3 / A1 A2 A3

rec mode loose

shuffle pat (no pat!)

P1 sets bpm? yes

...

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
- press K2 on a playing pattern to overdub

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 +/-

E2 = number of pulses

0 8 .....

0 0

E3 = time interval

0 8 .....

0 0

0 8 .....

0 0

default is every pulse will re-trigger current pad

euclid

(k , n)

r +/-

0 8 .....

0 0

4 11 |...|...|...|

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)

E1: jump columns

euclid

(k , n)

r +/-

0 8 .....

0 0

4 11 |...|...|...|

4 -2

0 8 .....

0 0

E2 = rotate pattern

E3 = offset pad ID

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	a	b	c
		1/16	
		fwd	
		s: 1	
		e: 4	
		retrig: y	

10

arp	a	b	c
		1/16	
		fwd	
		s: 1	
		e: 4	
		retrig: y	

hold 12

(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	a	b	c
		1/4t	
		fwd	
		s: 1	
		e: 4	
		retrig: y	

hold 5

arp	a	b	c
		1/4t	
		pend	
		s: 1	
		e: 4	
		retrig: y	

hold 13

arp	a	b	c
		1/4t	
		pend	
		s: 2	
		e: 7	
		retrig: y	

hold 5

(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	a	b	c
		1/4t	
		pend	
		s: 2	
		e: 7	
		retrig: y	

hold 13

## cheat codes

loops

levels

pans

filters

delays

timing

euclid

arp


> rnd


# rnd

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  
 param: pan  
mode: non-destructive  
clock: 1/1  
min: L 100 max: R 100

rnd                                    a   b   c  
E2: nav / E3: mod / K3: <-  
 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  
 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  
 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

> collections

# collections

save, load, overwrite, delete

[overview]

to manage your cheat codes sessions, use `PARAMS > collections`

GRID >

cheat codes params

`collections >`

`loops + buffers >`

`patterns + arps >`

`manual control >`

00.cc2

201029A.cc2

201029B.cc2

201029C.cc2

files located at `dust > data > cheat_codes_2`

PARAMETERS / collections

load/save

load collection

collect Live buffers?

no

save new collection

danger zone!

overwrite loaded collection

delete collection

saved audio at `audio > cc2_live-audio`

< = > ? @ A B C D E F G H I J K

DEL

OK

enter a unique name using encoders

saving collection

3

K3 to cancel

deleting collection

3

K3 to cancel

you have 3 seconds to  
back out of destructive actions

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

cheat codes

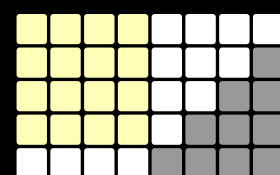
> grid

# grid

[performance page]

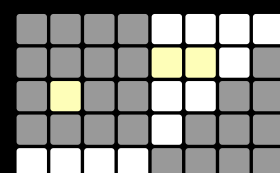
A					1	2	3	*f
					L	C	*r	P
					l/1	arp		
					*1x			
	arc	arc	arc	alt				
B					1	2	3	*f
					L	C	*r	P
					l/1	arp		
					*1x			
	arc	arc	arc	alt				
C					1	2	3	*f
					L	C	*r	P
					l/1	arp		
					*1x			
	arc	arc	arc	alt				
M	ALT	rec L1	rec L2	rec L3	arc P1	arc P2	arc P3	->

basic bank legend:



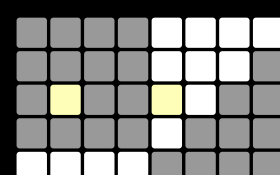
pads

16 unique slices  
of audio content



L / C

assign Live or Clip  
buffer to selected  
pad



l (bright) / 1 (dim)  
set selected pad  
to play as a loop  
or 1-shot

M legend:



ALT

hold to unlock \* functions, apply pad mods to bank



rec L1 / L2 / L3

enables / disables recording into Live segments



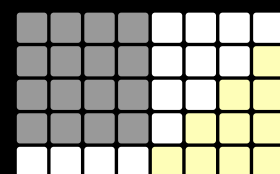
arc P1 / P2 / P3

enables / disables recording arc gestures



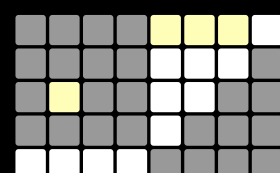
->

changes grid pages



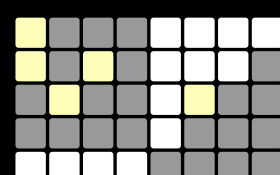
zilchmo

multi-finger  
performance  
gestures



1 / 2 / 3

switch between  
segments of  
specified buffer



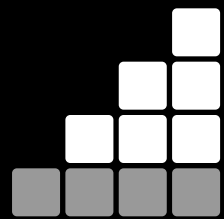
arp

arpeggiate  
between held  
pads  
(while arpeggiating, press  
arp again to hold/pause)

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

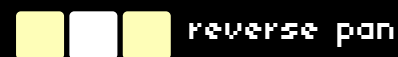


remove all rate slew

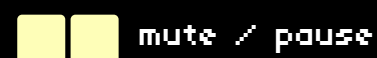
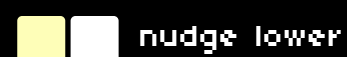
# grid



panning controls:



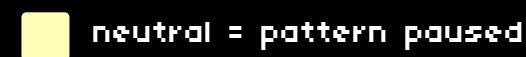
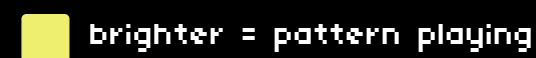
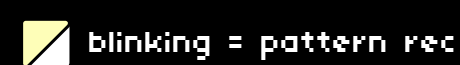
level controls:



## [zilchmos]



pattern controls:



# grid

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

## [ALT and alt]

B A N K					1	2	3	%f
					L	C	%r	P
					1/1	arp		
					%1x			
				alt				

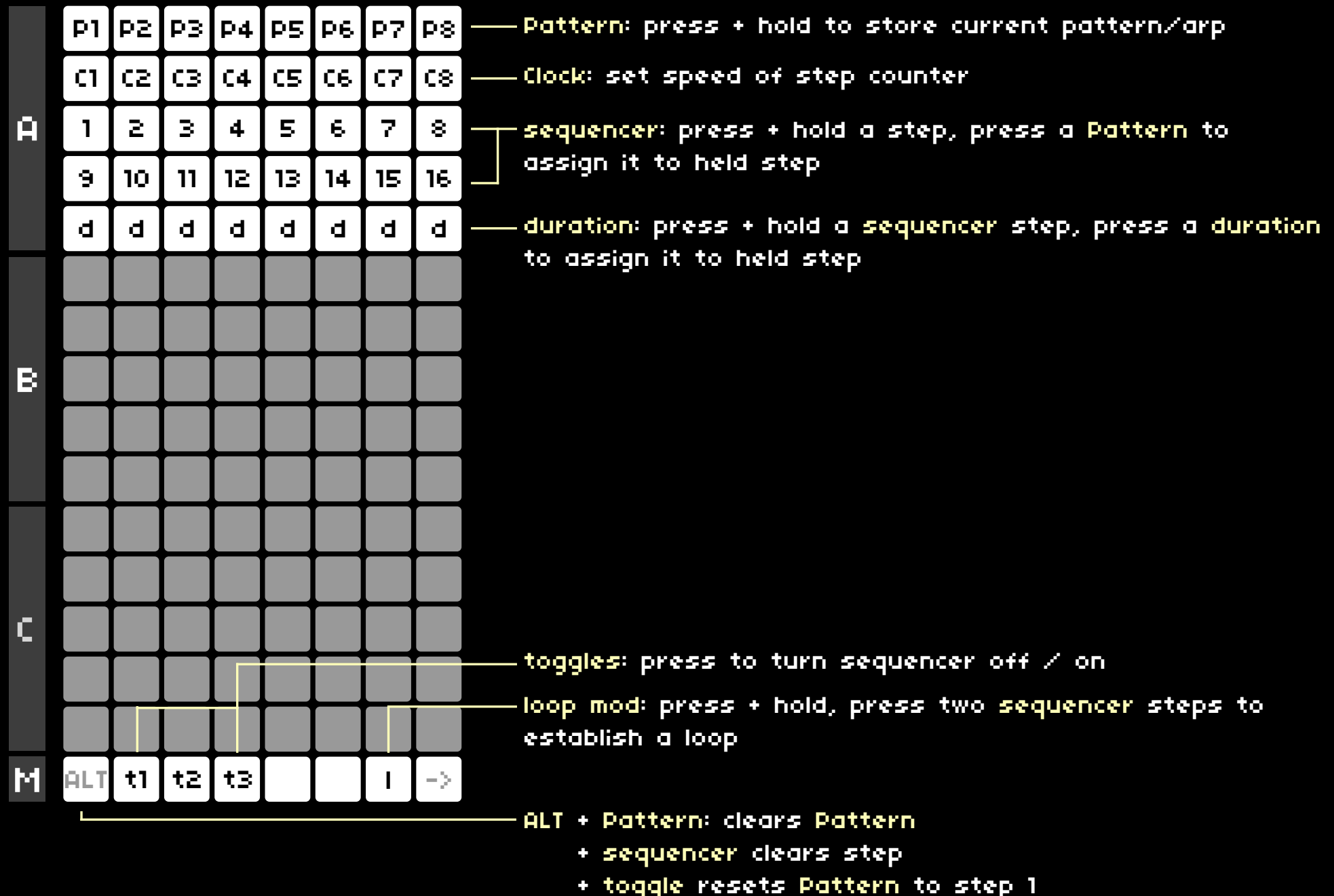
M	ALT	rec L1	rec L2	rec L3	arc P1	arc P2	arc P3	->
---	-----	--------	--------	--------	--------	--------	--------	----

note:

ALT + alt toggles a special alt-lock mode, where zilchmo functions are applied to all pads in the bank.

# grid

[pattern seq]



# grid

[delays page]

## save slots

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

## send level (per pad)

top to bottom:  
100%, 75%, 50%, 25%, 0%

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

Left				Right			
		+	+	+	+		
		-	-	-	-		
		rev	bmp	bmp	rev		
		l	f	f	l		
		e	d	d	e		
		v	b	b	v		
		e	c	c	e		
		l	k	k	l		
		jump	jump	jump	jump		
s		p	p	p	p		s
e		a	a	a	a		e
n		d	d	d	d	arp	n
d		s	s	s	s	loop	d
lvl		a	b	c			lvl
jump		zi	ich	mo	4		jump
ALT							->

## 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

## feedback + level

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

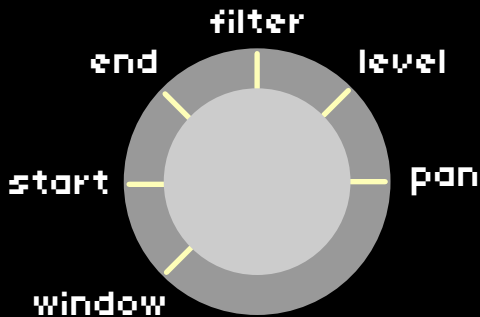
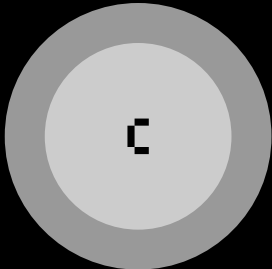
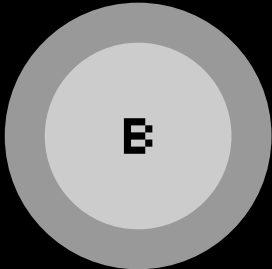
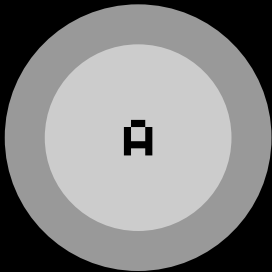
## jump buttons:

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

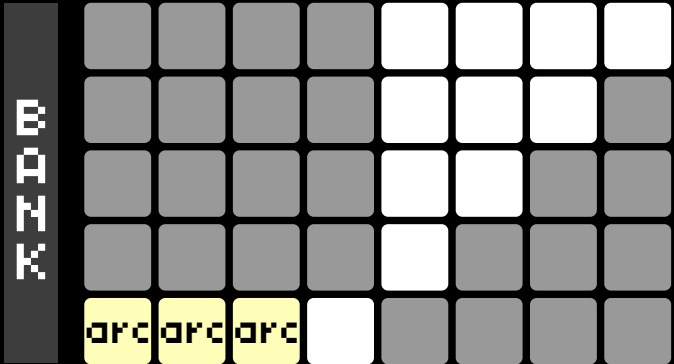
cheat codes

> arc

arc



fourth encoder focuses  
all encoders on one parameter



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



window



filter



start point



level



end point



pan

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

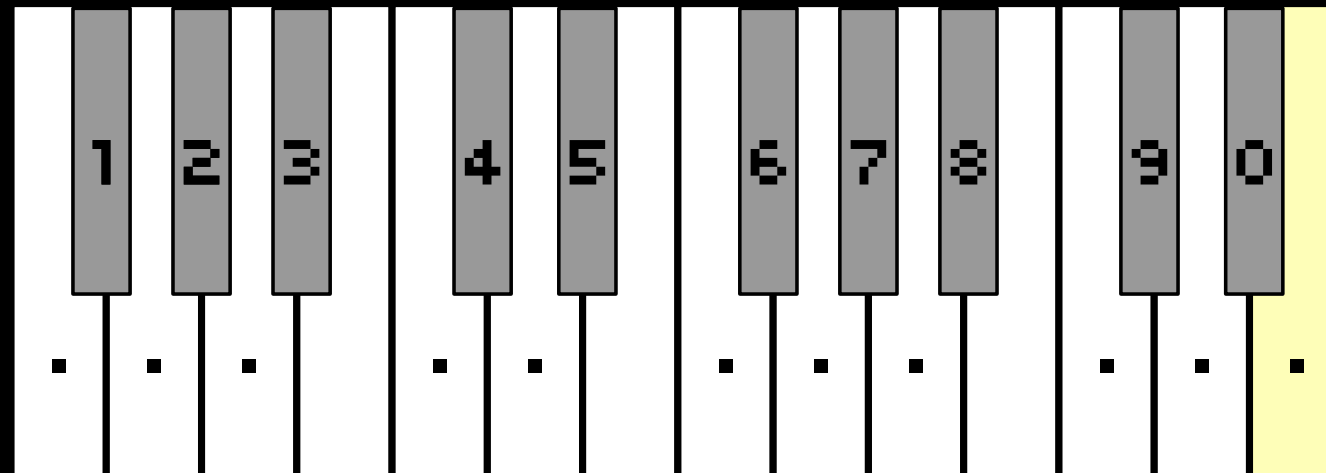
nb. this will affect synth parameters on the OP-2

# 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

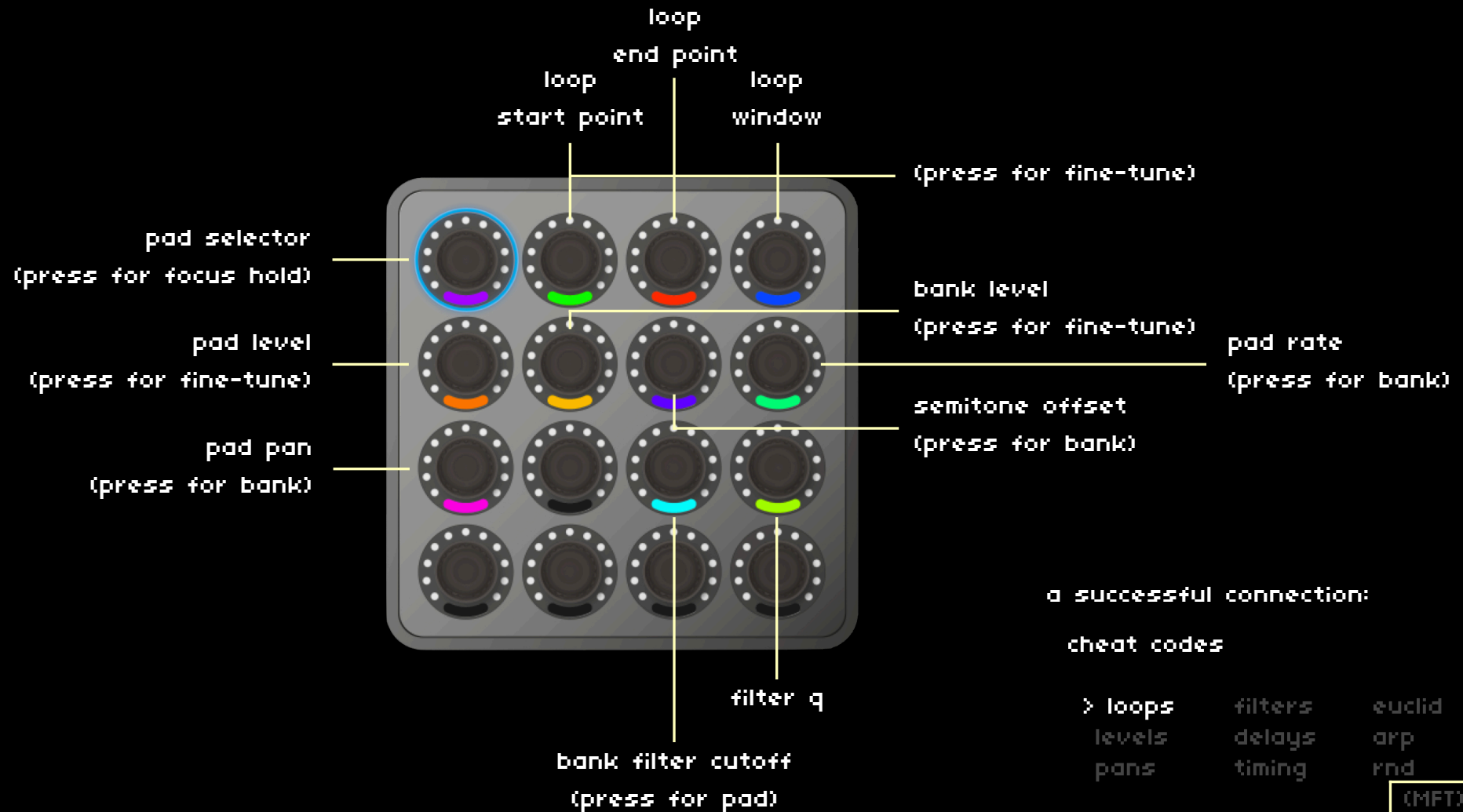
cheat codes

> Midi Fighter Twister

# midi fighter twister

a special template, just for MFT

[setup]



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

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:

note == pad 1

target bank

cheat codes OSC

bank a

192.168.1.100

C3

1/8 1/4 1/2 1 2 4

1/8 1/4 1/2 1 2 4

rev pad

chop

rev bank

1/16ths

rand rates

rand loop

mappable meta-actions

to connect, just enter your norms IP

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

OFF HOTSPOT CONNECT ADD DEL

mappable rate changes

The screenshot shows the CC-OSC application window. It features a colorful abstract background. On the left, there's a 'cheat codes OSC' label pointing to a 'bank a' dropdown menu and an IP address field containing '192.168.1.100'. A 'C3' button is also visible. In the center, there's a vertical column of buttons labeled 'pad', 'bank', and 'rate', each with a corresponding row of fraction buttons (1/8, 1/4, 1/2, 1, 2, 4). To the right of these are buttons for 'rev pad', 'chop', 'rev bank', '1/16ths', 'rand rates', and 'rand loop'. A bracket on the far right groups the 'rev pad', 'chop', 'rev bank', and '1/16ths' buttons under the label 'mappable meta-actions'. Another bracket at the bottom points to the 'rate' column of buttons, labeled 'mappable rate changes'. A line from the top points to the '1' button in the 'rate' column, labeled 'note == pad 1'. A line from the left points to the 'bank a' dropdown, labeled 'target bank'. Below the application window, there's a text area with connection status: 'to connect, just enter your norms IP', 'STATUS: activated', 'NETWORK: PSH 1', 'IP: 192.168.1.100', 'SIGNAL: -50dBm', and a row of buttons: 'OFF', 'HOTSPOT', 'CONNECT', 'ADD', 'DEL'.

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.limlim.co/cheat-codes-2](http://l.limlim.co/cheat-codes-2)