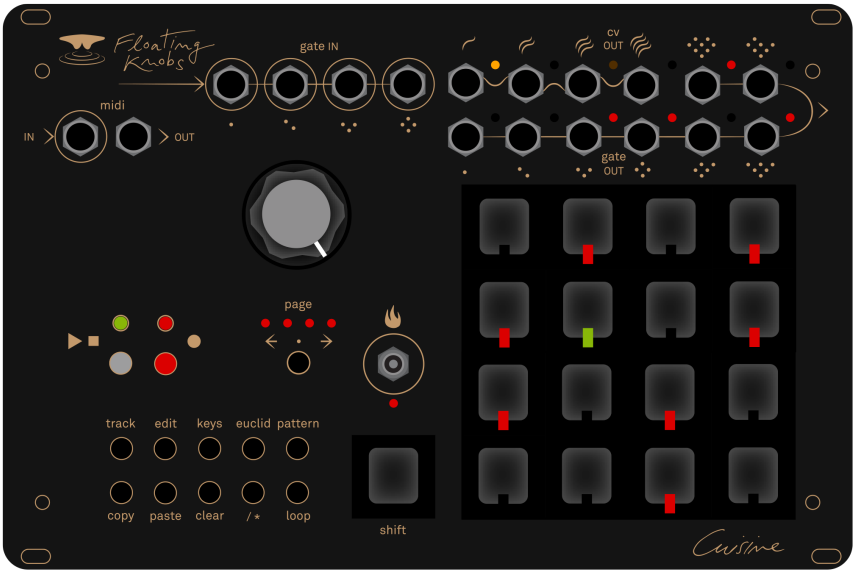
Cuisine

Manual



Floating Knobs

18/02/2024

Warning : This manual is applying for V1.01 check our website for an up-to-date version.

floatingknobs.com

Contents

1 Overview 5
1.1 Hardware: 5
1.1.1 Specification : 5
1.1.2 Interface: 6
1.2 Internal architecture: 8
1.2.1 Memory: 8
1.2.2 TRACK TYPE: 9
1.3 Navigation: 9
1.3.1 The BASIC layer (LVL 1 & 2) 9
1.3.2 The ADVANCED layer (LVL 2 & 3) 10
1.3.3 The PERFORMANCE MODE (LVL 2 & 3) 10
1.3.4 The SETTINGS (LVL 2 & 3) 11
1.3.5 BPM: 14

2 Level 1: I don't know what is step sequencing, please explain to me the genesis 17
2.1 Definitions 17
2.1.1 Sequencing 17
2.1.2 Clock: 17
2.1.3 Step: 18
2.1.4 Gate & Trigger: 18
2.1.5 Control Voltage (CV): 18
2.1.6 MIDI: 18
2.1.7 Euclidean rhythms: 19
2.2 Quick-start 20

3 Level 2: This is not my first step sequencer, just tell me where is what 21
3.1 Basic operation: 21
3.1.1 Default settings: 21
3.1.2 TRACK PAGE: 21
3.1.3 EDIT PAGE 22
3.1.4 KEYS PAGE: 23
3.1.5 EUCLID PAGE: 25
3.1.6 PATTERN PAGE: 25
3.1.7 BANK page: 26
3.1.8 / * page: 26

3.1.9 LOOP page: 27

4 Level 3: I know my way around the basic step sequencing features, and I am ready to practice the advance ones. 29
4.0.1 Performance mode: 29

5 Troubleshooting 31
5.1 The device is not powering ON: 31
5.2 No output: 31
5.3 The pattern is not playing: 31
5.4 The pattern is not playing as expected: 31
5.5 The whole sequencer is not playing: 32

Overview

Convention :

[FRAMED WORD] : represent keys on the interface of Cuisine.
eg : [SHIFT] key.

CAPS WORD PAGE : represent the name of a page.
eg : TRACK PAGE.

CAPS WORD : represent the name of a function or feature.
eg : SCALE.

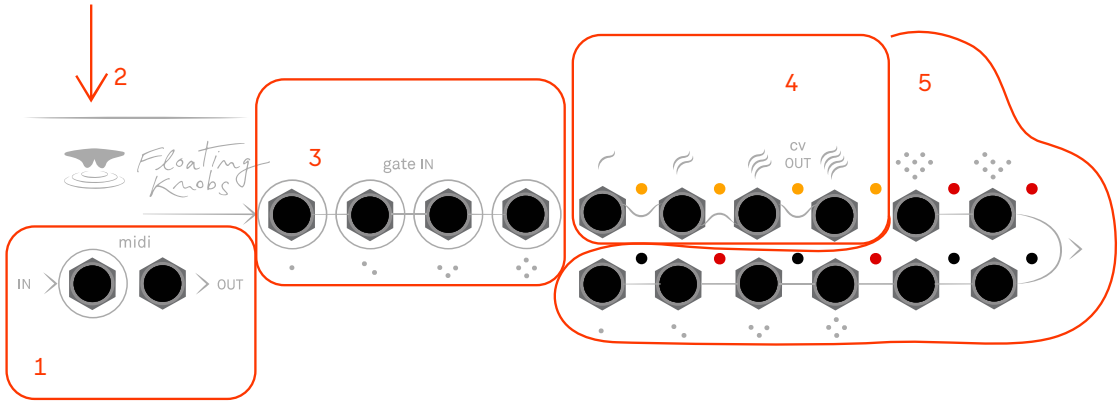
1.1 Hardware:

1.1.1 Specification :

Width		38HP
Depth		20mm
Power	300ma @ 5V (USB)	300ma @ 12V (eurorack)

1.1.2 Interface:

1. Midi Input and Output
2. USB Power Connector
3. Gate Inputs
4. CV Outputs
5. Gate Outputs
6. STEP keys.
7. Endless KNOB
8. PERFORMANCE toggle switch
9. PAGE explorer
10. Transport Keys
11. Command keys
12. SHIFT key



1. MIDI TRS-A input and output
Connects and control MIDI instruments.

2. USB-C port
You will find the USB-C Port on the top side of the sequencer for power and updates.

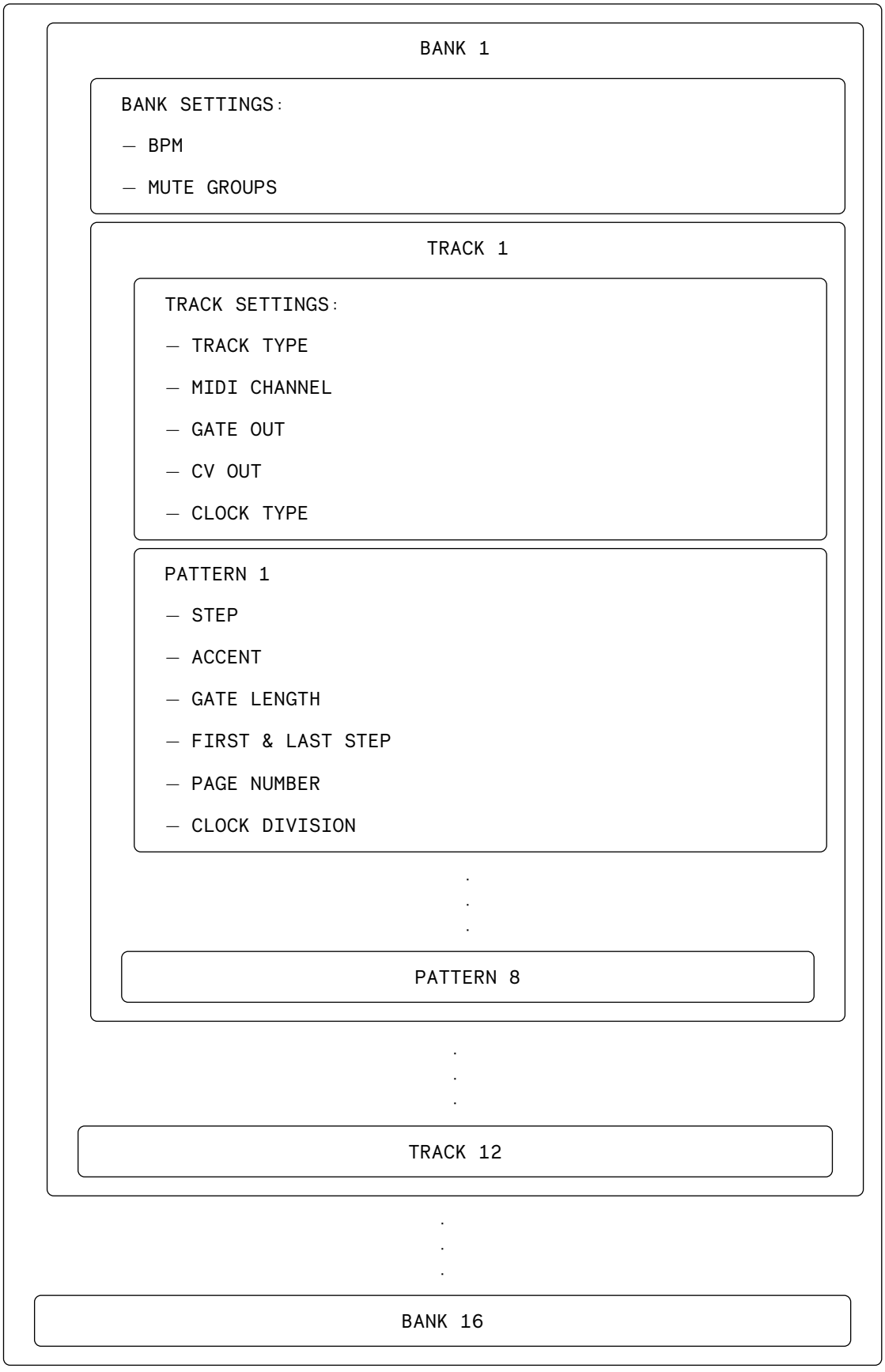
3. Gate Inputs
Clocks and Resets the Tracks of Cuisine.

4. Gate Outputs Sends gates from 0 to 5V to your systems.

5. CV Outputs Modulates your other instruments with control voltages from 0 to 8V.

1.2 Internal architecture:

1.2.1 Memory:



1.2.2 TRACK TYPE:

Cuisine is designed around 3 different track type behaving differently in terms of output, edition and control:

	NOTE TRACK	MODULATION TRACK	DRUM TRACK
CV output :	V/oct	unquantized voltage	unquantized voltage
GATE output :	gate with variable gate lenght	gate with variable gate lenght	trigger
KEYS PAGE :	chromatic keyboard	CC value: 16 step ranging from 0 to 8V	VELOCITY value: 16 step ranging from 0 to 8V
Specific features:	- TRANSPOSE (LVL 3) - USER SCALE (LVL 3) - ACCENT according VELOCITY MIN/MAX (LVL 3)	- direct control of the CV output using the KNOB when the pattern is empty - REC only when KNOB is moving	
MIDI output:	MIDI notes	CC	MIDI notes

1.3 Navigation:

Menu navigation is design around 3 layers plus the SETTINGS PAGES:

1.3.1 The BASIC layer (LVL 1 & 2)

All those pages are accessible straight from the interface just pressing the corresponding button. It is recommended to get familiar with the basic operation of the device before starting to use the SHIFT button, PERFORMANCE switch and messing with the SETTINGS.

TRACK : TRACK page, this page give you an overview of the current activity of all the tracks and allow you to select a track to edit.

EDIT : EDIT page, this page allows you to visualize and edit the current sequence.

KEYS : KEYS page, this page give you a performable keyboard and allows you to select the value for sequence edition as well as .

EUCLID : EUCLID page, this page give you an euclidian rythm generator.

PATTERN : PATTERN page, this page allows you to save and load patterns.

COPY, PASTE, CLEAR : those are edition keys allowing for copy, paste and clear in sequence editing.

*/ : DIV/MULT page, this page allows you to select the clock rate of the current track.

LOOP : LOOP page, this page allows you to set the FIRST and LAST step for ALL THE ACTIVE PAGES.

1.3.2 The ADVANCED layer (LVL 2 & 3)

Those pages and features are accessible by pressing the SHIFT button in combination with other keys.

SHIFT + KEYS : SCALE page, this page allows you to select the note of the scale you want to use.

SHIFT + EUCLID : ACCENT page, this page allows you to set accent on active step as well as settings the LOW VELOCITY and HIGH VELOCITY.

SHIFT + BANK : BANK page, this page allows you to save and load banks.

SHIFT + COPY OR PASTE OR CLEAR : QUICK SAVE or LOAD or CLEAR, allows you for quick save, load or clear of the selected track's pattern.

1.3.3 The PERFORMANCE MODE (LVL 2 & 3)

This mode is active when the performance switch is set to ON, it allows the alteration the currently running sequence. This mode is designed to be used in a live situation and is not saved in the pattern. It is contextual and the performed action depends on the current page :

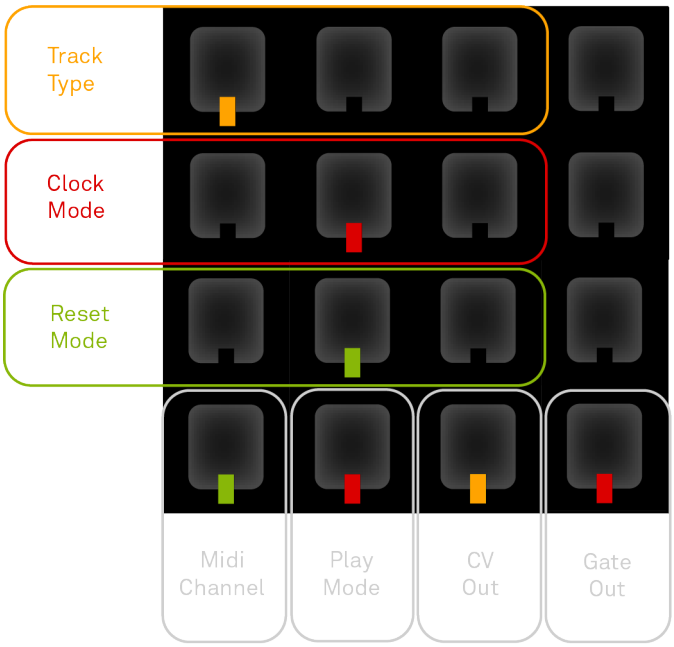
PERFORMANCE ON in TRACK PAGE : selecting a track now will also allow for LIVE PLAYING of the tracks set to LIVE PLAY MODE.

PERFORMANCE ON in KEYS PAGE : using the keyboard now will OVERRIDE the output value of the currently playing sequence with the value you are currently playing.

PERFORMANCE ON in LOOP PAGE : selecting FIRST and LAST STEP now will temporally loop the currently running sequence, holding the current page.

1.3.4 The SETTINGS (LVL 2 & 3)

Accessed by double tapping the corresponding button:
TRACK SETTINGS 1 : [TRACK] x 2



ROW 1 sets the track type:
[STEP] 1 = Note

[STEP] 2 = Modulation

HOLD [STEP] and turn the [KNOB] to set the Midi CC number

[STEP] 3 = Drum

HOLD [STEP] and turn the [KNOB] to set the Note number.

You can use a note from the key menu as an alternative way of selecting the desired note for your drum:
Put your track in the Note Mode. Then select the note you want to use on the KEY PAGE and finally set the track to Drum.

ROW 2 sets the clock mode of the track:
[STEP] 5 = Main Clock

[STEP] 6 = Trigger

HOLD [STEP] and turn the [KNOB] to set the source:
[STEP] 1 to 12 = internal Track's trigger
[STEP] 13 to 16 = external Gate in 1 to 4

[STEP] 7 = Coupling track to another one.
(The pattern reading of the selected track will follow the pattern reading of the track that it is coupled to)

HOLD [STEP] and turn the [KNOB] to select the track to follow

ROW 3 sets the reset mode of the track:
STEP 9 = No reset

STEP 10 = Trigger

HOLD STEP and turn the KNOB to set the source:
STEP 1 to 12 = internal Track's trigger
STEP 13 to 16 = external Gate in 1 to 4

STEP 11 = Reset on 1st step of the source track.
HOLD STEP and turn the KNOB to set the source: [step 1 to 12] = internal Track's first step.

HOLD STEP and turn the KNOB to select the track to follow.

Output :
HOLD STEP 13 and turn the KNOB to set the MIDI channel output [1 to 16]
HOLD STEP 15 and turn the KNOB 15 to set the CV output [1 to 4]
HOLD STEP 16 and turn the KNOB to set the Gate output [1 to 8]

Play mode :
press STEP 14 to switch between play mode:
GREEN the track is played normally.
RED the track is played manually :
To play the track in Manual play mode :

Go to the TRACK PAGE and turn the PERFORMANCE switch on.

Then just press the STEP corresponding to the track you want play manually.

Hold STEP for as long as you want it to play.

If you want the track to keep playing, then just hold SHIFT before releasing STEP.

TRACK SETTINGS 2: EDIT x 2

This page set the SCALE ON or OFF for the selected track.

Press STEP 1 to activate or deactivate the SCALE for the selected track.
If STEP 1 is ON, the selected track will be quantized to the selected SCALE (if a SCALE is active).

GENERAL SETTING:
PATTERN x 2

This page set the MAIN CLOCK.
HOLD STEP 1 while turning the KNOB to select the CLOCK.

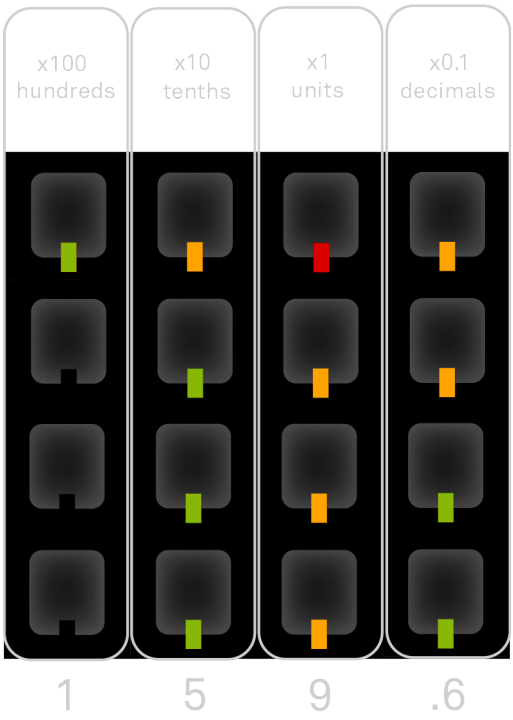
1 is for internal clock, 2 is for external MIDI clock.

1.3.5 BPM:

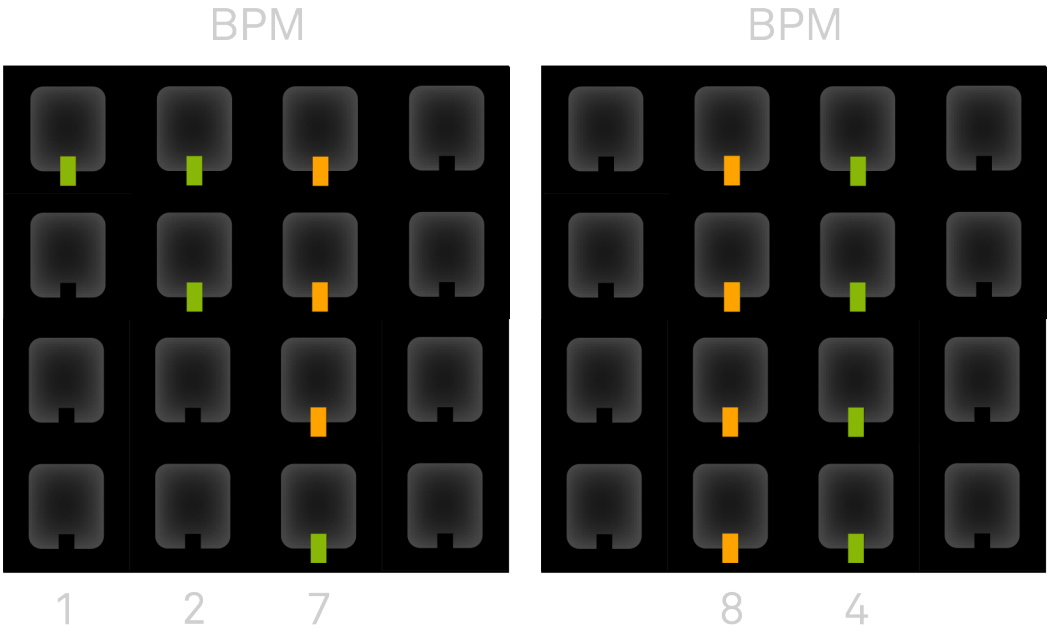
To set the BPM press TRACK to access the KEY PAGE.
Holding [shift] and then turning [pot] allows you to set the internal BPM of the sequencer.

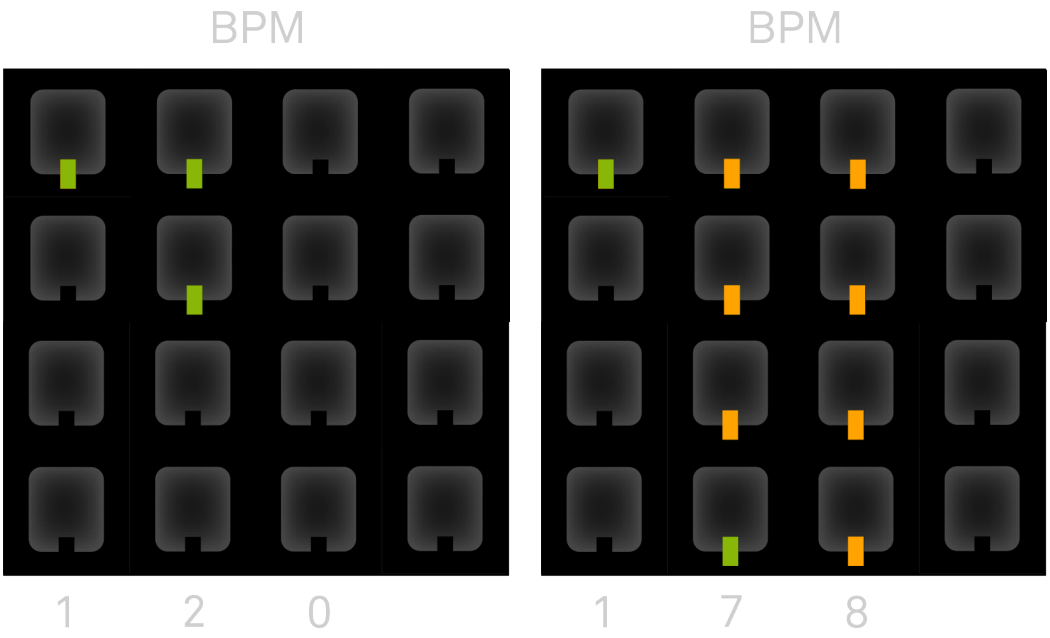
Do not be afraid about the numerical representation, it is pretty simple :
Each [step] column represents one digit
from left to right we get :
column 1 = hundreds
column 2 = tenths
column 3 = units
column 4 = decimals

Then each digit is represented using 3 colors via a simple addition :
GREEN = digit 1 to 4
YELLOW = digit 5 to 8 or 4 + 1 to 4
RED = 9 or 1 + 4 + 4



Example :





Level 1: I don't know what is step sequencing, please explain to me the genesis

This chapter describes the very basis of step sequencing and will guide you step by step to have a sequence running. For the sake of clarity it will only describe NOTE TRACK edition as the basis of operation as the two other track is very similar.

To go through this chapter it is recommended to have a "factory" initialized device, it should be the case upon receiving it from us but if for some reason Cuisine is no longer in factory state here the procedure to reset the sequences :

- set the PERFORMANCE ON (lower position), red LED is now on
- hold the SHIFT key while powering Cuisine OFF and ON
- the operation finishes when the LED are back ON

2.1 Definitions

2.1.1 Sequencing

Sequencing is the process of arranging musical events or elements in a specific order. It allows musicians to organize and control the timing and arrangement of notes, rhythms, and other musical parameters. Step sequencing, in particular, involves programming sequences of steps to create structured musical compositions or patterns.

2.1.2 Clock:

The clock is the heartbeat of step sequencing. It provides the timing reference for the progression of steps at a consistent tempo. Imagine it as a metronome setting the pace for a musician. In step sequencing, a clock

signal ensures that each step occurs in synchronization with the overall rhythm, allowing for precise timing of events.

2.1.3 Step:

Steps are the building blocks of a sequencer. Each step represents a discrete unit of time, typically corresponding to a beat or a fraction thereof. Think of steps as individual slots where you can program specific actions or events.

2.1.4 Gate & Trigger:

Gates and triggers are control signals used to initiate events at specific steps. While similar in function, they differ in duration and purpose. A gate signal typically remains high (on) for the duration of a step, while a trigger signal is short and transient, signaling a brief event. In step sequencing, gates and triggers are often used to trigger sounds or control the duration of notes.

2.1.5 Control Voltage (CV):

Control Voltage (CV) is a fundamental concept in analog and modular synthesis. It represents voltage levels used to control various parameters of electronic instruments. In step sequencing, CV signals are employed to modulate parameters such as pitch, filter cutoff, or amplitude over time, allowing for dynamic and expressive control of sound.

Volt per Octave (V/Oct):

Volt per Octave (V/Oct) is a standard scaling method used in analog synthesizers to control pitch. In this system, each octave corresponds to a doubling (or halving) of voltage. By applying precise voltages to the control inputs of oscillators, musicians can achieve accurate and musically meaningful pitch tracking across the instrument's range.

Modulation:

Modulation refers to the process of dynamically alter one or more parameters of a sound over time. In step sequencing, modulation sources such as envelopes, Low-Frequency Oscillators (LFOs), or sequencer-generated CV signals can be used to create evolving timbral effects, rhythmic variations, or expressive articulations, adding depth and movement to the music.

2.1.6 MIDI:

MIDI (Musical Instrument Digital Interface) is a universal protocol for communication between electronic musical instruments, computers, and related devices.

2.1.7 Euclidean rhythms:

Euclidean rhythms are a type of rhythm pattern generated by evenly distributing a certain number of beats across a specific number of subdivisions within a musical measure. This creates a pattern with a balanced distribution of accents, often producing interesting and polyrhythmic sequences.

2.2 Quick-start

After powering ON your Cuisine you always start on the EDIT PAGE, this page allows you to edit and visualize your current sequence.

Press PLAY for the sequence to start playing, the green LED on the STEP keys now represent the currently read step, going from step 1 to step 16 in a loop.

Your sequence should now be playing and empty, to activate a step just press one of the STEP keys.

The track's gate output should now turn ON following the programmed sequence.

To edit the note value of a step, press and hold the STEP until the value selection page pops up, now use the KNOB to select the desired note, release the STEP to commit the value to the selected step.

Level 2: This is not my first step sequencer, just tell me where is what

3.1 Basic operation:

3.1.1 Default settings:

TRACK	TYPE	CLOCK	RESET	MIDI CHANNEL	PLAY MODE	CV OUT	GATE OUT	TRANSPOSE	MIDI CC
1	NOTE	MAIN	NO RESET	1	normal	1	1	OFF	x
2	NOTE	MAIN	NO RESET	2	normal	2	2	OFF	x
3	NOTE	MAIN	NO RESET	3	normal	3	3	OFF	x
4	NOTE	MAIN	NO RESET	4	normal	4	4	OFF	x
5	DRUM	MAIN	NO RESET	5	manual	x	5	OFF	x
6	DRUM	MAIN	NO RESET	6	manual	x	6	OFF	x
7	DRUM	MAIN	NO RESET	7	manual	x	7	OFF	x
8	DRUM	MAIN	NO RESET	8	manual	x	8	OFF	x
9	MODULATION	MAIN	NO RESET	9	normal	x	x	OFF	9
10	MODULATION	MAIN	NO RESET	10	normal	x	x	OFF	10
11	MODULATION	MAIN	NO RESET	11	normal	x	x	OFF	11
12	MODULATION	MAIN	NO RESET	12	normal	x	x	OFF	12

3.1.2 TRACK PAGE:

To enter the track page press the TRACK key, this will give you an activity overview of all of your tracks.

TRACK activity:

The track activity is visualized with the corresponding colors:

RED: Gate / Note On

GREEN: Selected track

YELLOW: Track is part of an active mute group

The first 12 steps of the sequencer correspond to the 12 tracks

(1st step = 1st track …)

TRACK selection:

Press [STEP] 1 to 12 to select a track.

MUTE GROUP:

There are 4 mute groups available, visualized on the remaining steps: [STEP] 13 to 16.

Those 4 mute groups can be edited as follows:

HOLD [STEP] 13 to 16 and press on the tracks [STEP] 1 to 12 that you want to add or remove from the mute group.

RELEASE [STEP] 13 to 16 to activate or deactivate the mute group.

If you want to exit the mute group editor without alter its current state hold [SHIFT] and then RELEASE [STEP] 13 to 16

3.1.3 EDIT PAGE

To enter the track page press the [EDIT] key, this will give you an overview of the currently running sequence and allows you to edit this sequence.

Sequence overview:

- RED steps are active steps
- GREEN step is the currently read step
- YELLOW steps are ACCENT steps

Sequence edition:

STEP:

- Press and release a [STEP] key to activate or deactivate a step.

VALUE:

- Turning the [KNOB] will preselect the VALUE to write.

- Press and release a STEP key to write the preselected VALUE.
- Press and hold a STEP then turn the KNOB to edit the VALUE of the step.
- Press and hold a STEP key will copy the VALUE of this step.

GATE LENGTH:

- Holding SHIFT and turning the KNOB will alter the main GATE LENGTH.
The main GATE LENGTH is the default GATE LENGTH.
This time value is relative to the next active step, meaning that the main GATE LENGTH set to maximum will tie all the steps together, set to a bit less than the maximum will give you gates perfectly lasting until just before the next active step

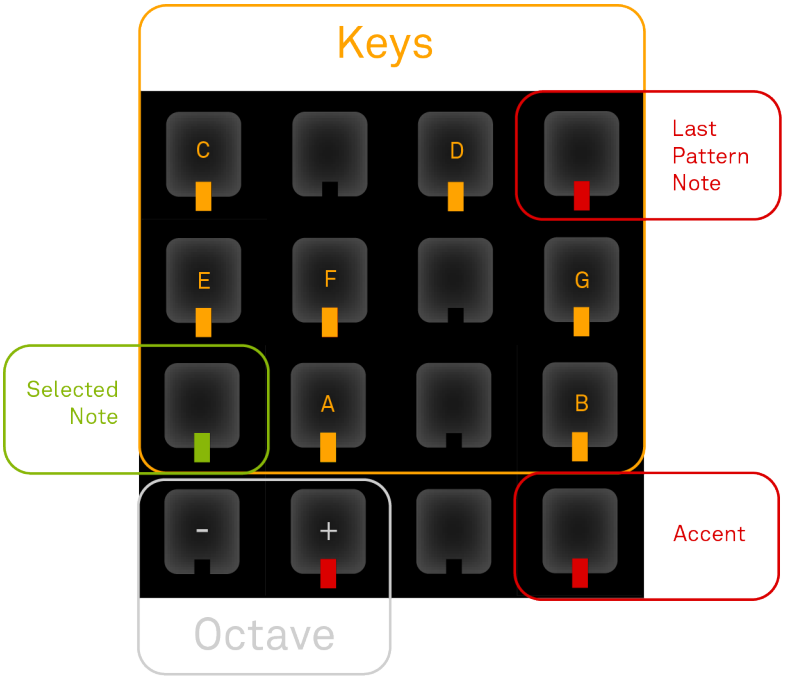
- Holding SHIFT and turning the KNOB while holding a STEP will alter the GATE LENGTH of the selected step.
This time value is absolute, meaning that the gate will last for the number of step set by the KNOB regardless of the next active step.

3.1.4 KEYS PAGE:

To enter the KEYS PAGE press the KEYS key, this will give a performable keyboard and an overview of the values of the currently playing sequence.
This page is relative to the TRACK TYPE of the selected track:

NOTE TRACK :

For NOTE TRACK the KEYS PAGE will give you a chromatic keyboard.



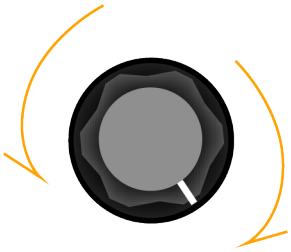
RED: shows the last played note from the pattern.
GREEN: shows the selected note.
YELLOW: The last note is equal to the selected note.
The Octave can be selected via STEP 13 or STEP 14:
STEP 13 is OCTAVE DOWN
STEP 14 is OCTAVE UP

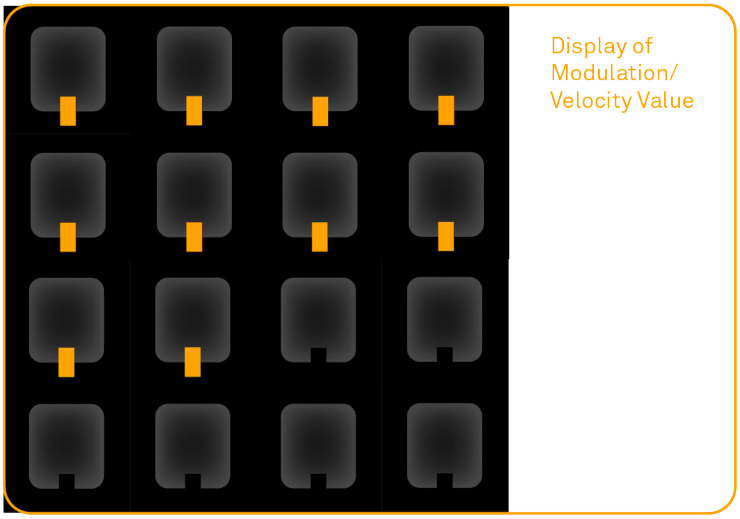
DRUM TRACK :

In Drum mode the STEP keys always output the same note On but with 16 different levels of velocity (1 to 127).
To set the velocity press STEP 1 to 16 which will also output a Trigger or a Note ON.
You can also change the velocity by turning the KNOB.

MODULATION TRACK :

For MODULATION TRACK the KEYS PAGE will give you a 16 step ranging from 0 to 8V or 0 to 127 for CC messages.
In Modulation mode STEP keys behave like in Drum track but output Midi CC (Control Change) instead of note ON.
To set the Midi CC value press STEP 1 to 16 which will also output a Gate but no Note ON.
You can also change the CC value by turning the KNOB.





3.1.5 EUCLID PAGE:

To enter the EUCLID PAGE press the EUCLID key, this will give you an overview of the currently running sequence but allows you to set the STEP (Number of hits), SIZE (Total number of beats) and OFFSET (or rotation) of the EUCLIDIAN RYTHM GENERATOR.

Simply use the KNOB or the STEP keys to set the selected parameter to the desired value.

Press page to alter select the parameter to edit :
- STEP : PAGE 1
- SIZE : PAGE 2
- OFFSET : PAGE 3

The active STEPS from the EUCLIDEAN RHYTHM GENERATOR will appear DIMMED YELLOW.

3.1.6 PATTERN PAGE:

To enter the PATTERN PAGE, press the PATTERN key, this page allows you to save and load the currently playing pattern.

This page is being divided in two part:

- STEP 1 to 8 allows you to save and load patterns ONLY FOR THE CURRENTLY SELECTED TRACK.

- STEP 9 to 19 allows you to save and load pattern FOR ALL THE TRACKS.

To save a PATTERN :
HOLD SHIFT + STEP key of the PATTERN you want to write to until the all the STEP are turned red, then release.

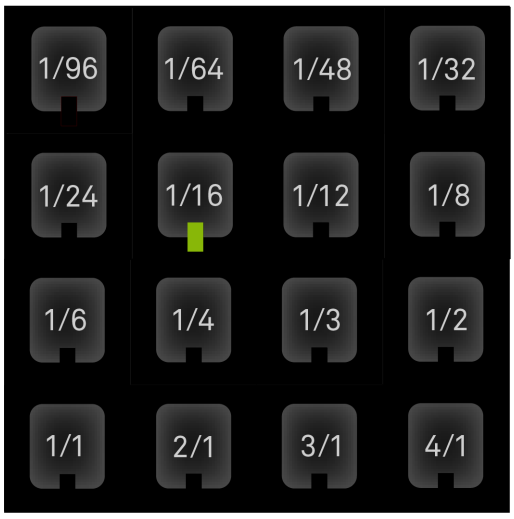
To load a PATTERN :
Just press the corresponding STEP key.

3.1.7 BANK page:

To enter the PATTERN page press SHIFT + PATTERN key, this page allows you to save and load banks.
To save a BANK :
HOLD SHIFT + STEP key of the BANK you want to write to.
To load a BANK :
Just press the corresponding STEP key.

3.1.8 / * page:

To enter the / * page, press the /* key, this page allows you to select the clock division of the current track's PATTERN.
Just turn the KNOB or press the corresponding STEP to select the desired clock division.



3.1.9 LOOP page:

To enter the LOOP page, press the [LOOP] key, this page allows you to set the FIRST and the LAST STEP of the current PATTERN.
This parameter is applied to all the pages, so you can keep your measure well define (for ex: 4 measure of 12 step).
Just press [STEP] first + [STEP] last to define the first and the last step.
If first [STEP] > last [STEP] then the sequence will play in reverse.

Level 3: I know my way around the basic step sequencing features, and I am ready to practice the advance ones.

4.0.1 Performance mode:

The PERFORMANCE mode allows the alteration of the currently running sequence. This mode is designed to be used in a live situation and is not saved in the pattern. It is contextual and the performed action depends on the current page.

LIVE PLAY:

LIVE PLAY allows you to manually start and stop tracks independently of the transport status of the sequencer using the STEP keys.

First you need your track to be set to LIVE PLAY mode :
The STEP 14 should be RED in the TRACK SETTINGS PAGE 1, if not just press STEP 14.

Now with the PERFORMANCE switch set to ON, you can start and stop the track by PRESSING and HOLDING the corresponding STEP key in the TRACK PAGE.

To have the track keep playing after releasing the STEP key, just turn PERFORMANCE MODE OFF before releasing the STEP key.

OVERRIDE:

OVERRIDE allows you to manually alter the output value of the currently playing sequence with the value you are currently playing using the KEYS page.
In the KEYS PAGE, simply press the STEP keys while the PERFORMANCE switch

is ON, now the output value of the currently playing sequence will be overriden by the value you are currently playing.
If RECORD is ON, the sequence will be recorded with the override value.

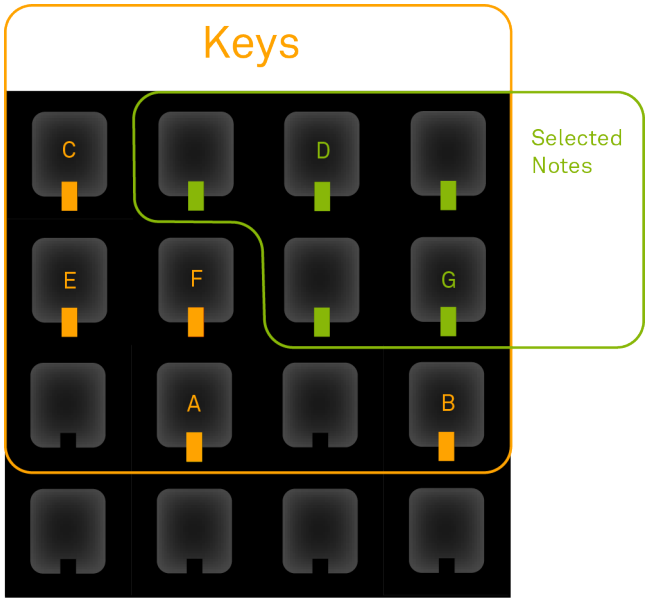
SCALE:

The SCALE page allows you to select the note of the scale you want to use.

Just press [SHIFT] + [KEYS] to enter the SCALE page, now select the note you want to use for your SCALE by pressing the coressponding [STEP] keys.

Now the KEYS PAGE PAGE will display only the selected note.

The TRANSPOSE function will be quantized to the selected SCALE, this way you can really easily make chord progression.



TRANSPOSE:

The TRANSPOSE function allows you to transpose the output value of the currently playing sequence.

First you need to activate the TRANSPOSE function in the TRACK SETTINGS PAGE 2 (double tap [EDIT]), [STEP] 1 should be lit GREEN, if not just press [STEP] 1.

Now in the KEYS PAGE, HOLD [SHIFT] and press the [STEP] keys to transpose the output value of the currently playing sequence.

You can transpose OCTAVE by pressing [STEP] 13 and [STEP] 14.

Troubleshooting

5.1 The device is not powering ON:

- Check for the power supply, via USB the brick should be able to provide 300ma if powered via the eurorack power supply, 300ma should be available on the 12V rail.

5.2 No output:

- Check the output settings in the TRACK SETTINGS PAGE 1, the output should be set to the desired output.
- Check that a track is not overriding unintentionally the output of the selected track.
- Check the MUTE GROUP settings.

5.3 The pattern is not playing:

- Check the CLOCK and RESET settings in the GENERAL SETTINGS PAGE 1.
- Check the LIVE PLAY settings in the TRACK SETTINGS PAGE 1.
- Check the BPM settings.
- Check the FIRST and LAST STEP settings in the LOOP PAGE.
- Check the CLOCK DIVIDER settings in the / * PAGE.

5.4 The pattern is not playing as expected:

- Check the EUCLIDIAN RHYTHM GENERATOR settings in the EUCLID PAGE.
- Check the SCALE settings in the SCALE PAGE.
- Check the TRANSPOSE settings in the TRACK SETTINGS PAGE 2.
- Check the ACCENT settings in the ACCENT PAGE.

5.5 The whole sequencer is not playing:

- Check the MAIN CLOCK settings in the GENERAL SETTINGS PAGE.


Floating Knobs