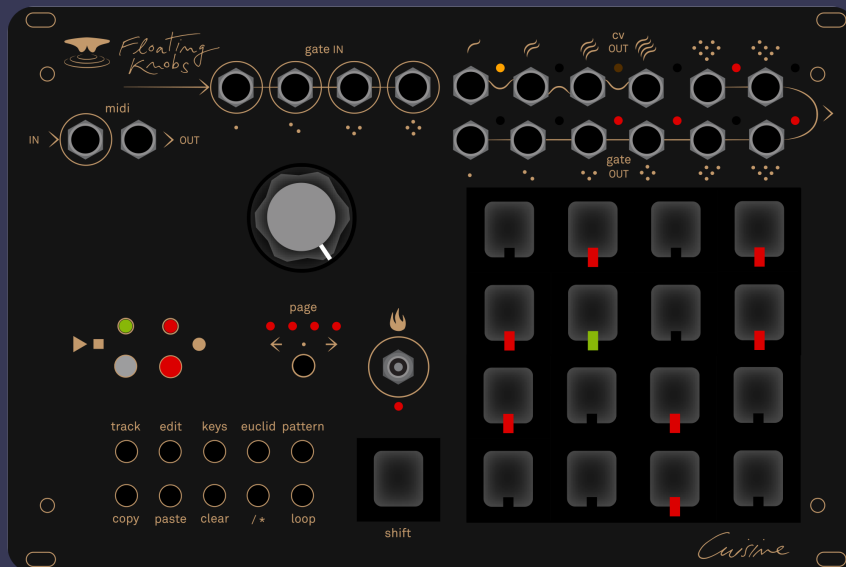


# Cuisine

## Manual



18/02/2024

Warning : This manual is applying for V1.01 check our website  
for an up-to-date version.  
[floatingknobs.com](http://floatingknobs.com)

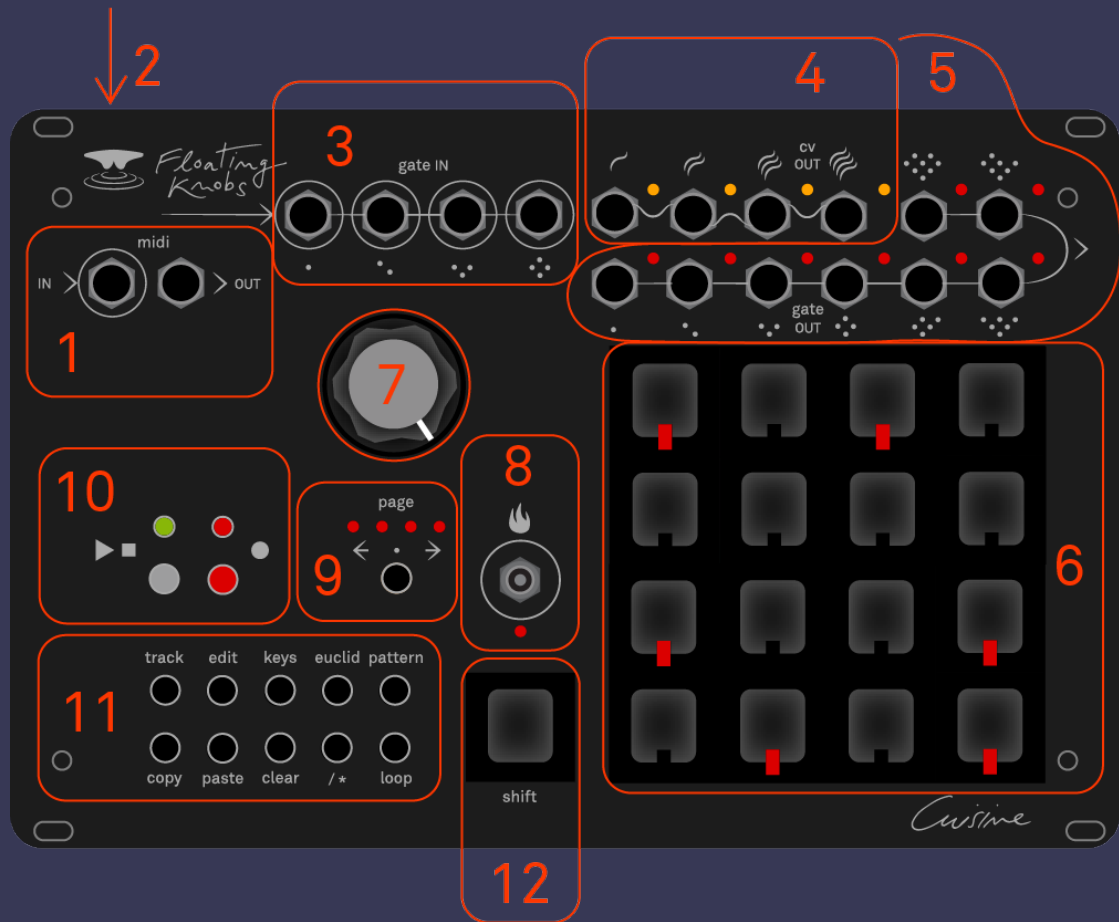
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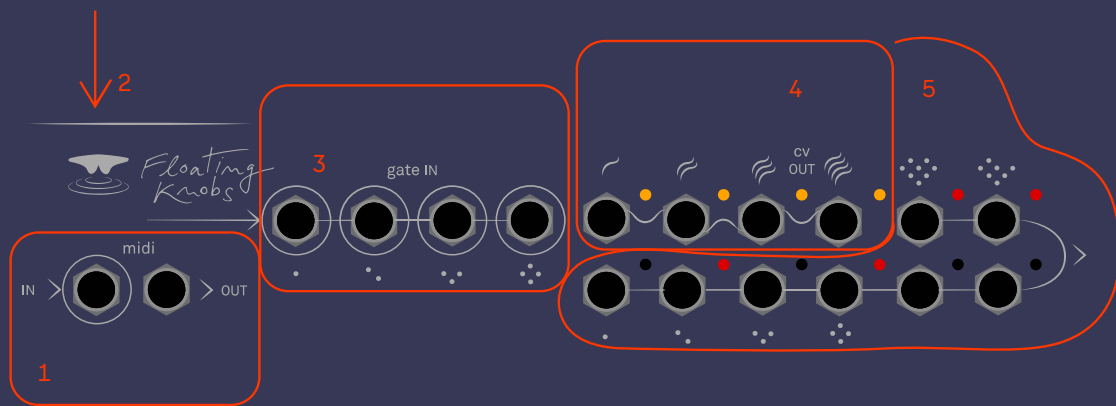
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### 1.1.2 Interface:



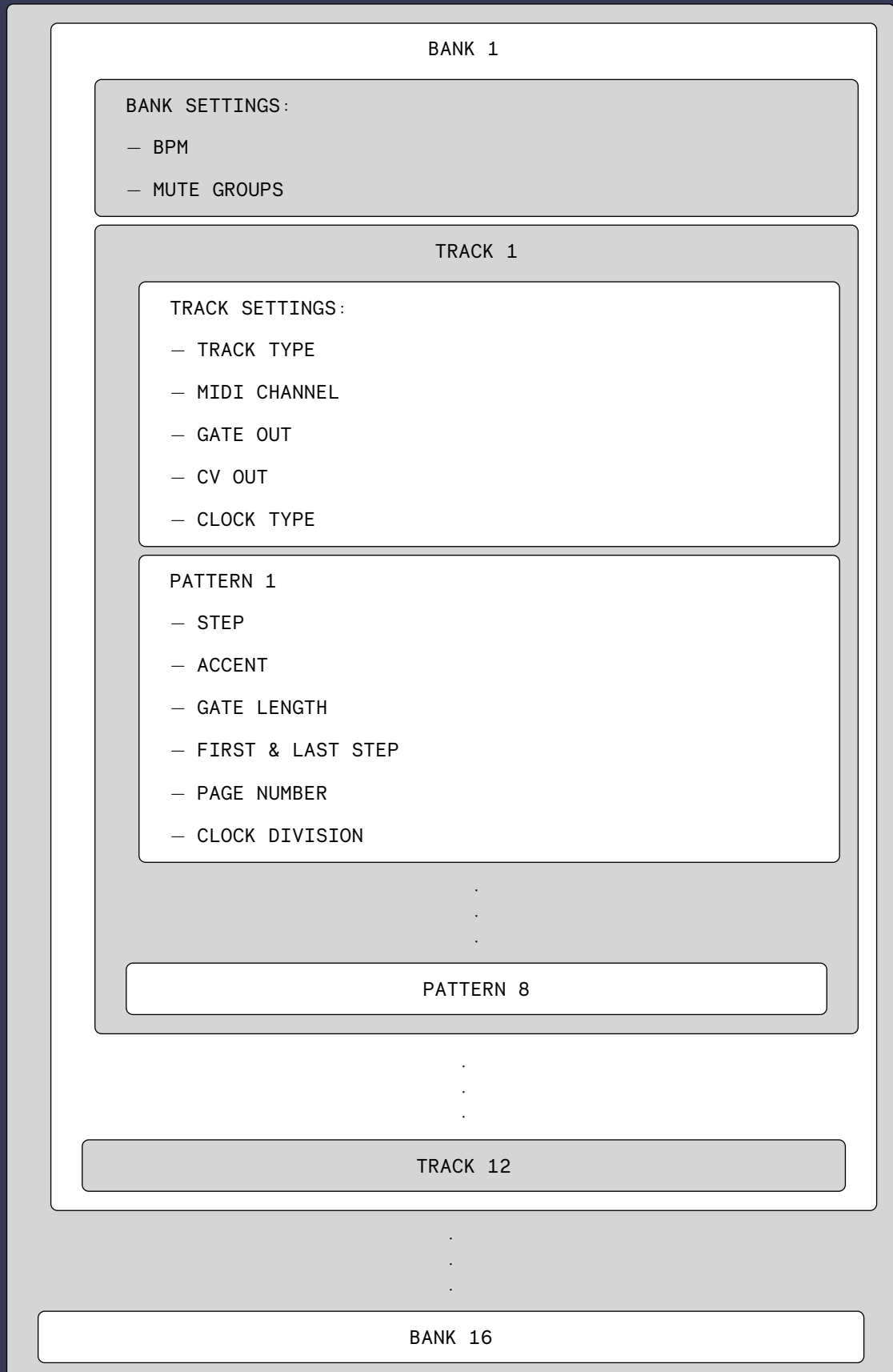
- |                          |                                     |                         |
|--------------------------|-------------------------------------|-------------------------|
| 1. Midi Input and Output | 5. Gate Outputs                     | 9. <b>PAGE</b> explorer |
| 2. USB Power Connector   | 6. <b>STEP</b> keys.                | 10. Transport Keys      |
| 3. Gate Inputs           | 7. Endless <b>KNOB</b>              | 11. Command keys        |
| 4. CV Outputs            | 8. <b>PERFORMANCE</b> toggle switch | 12. <b>SHIFT</b> 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:	<ul style="list-style-type: none"><li>- TRANSPOSE (LVL 3)</li><li>- USER SCALE (LVL 3)</li><li>- ACCENT according VELOCITY MIN/MAX (LVL 3)</li></ul>	<ul style="list-style-type: none"><li>- direct control of the CV output using the <b>Knob</b> when the pattern is empty</li><li>- REC only when <b>Knob</b> is moving</li></ul>	
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.

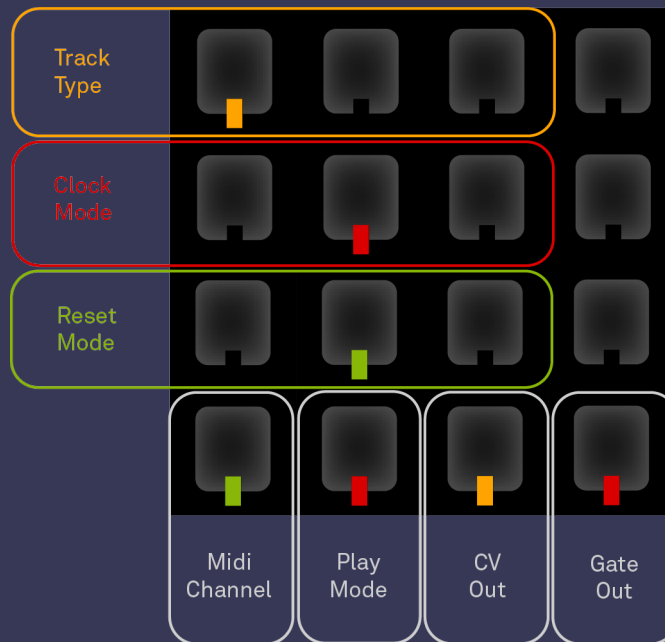
**PERFORMANCE ON** in KEYS PAGE : using the keyboard now will OVERRIDE the output value of the currently playing sequence with the value you are currently playing.

**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 1<sup>st</sup> 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

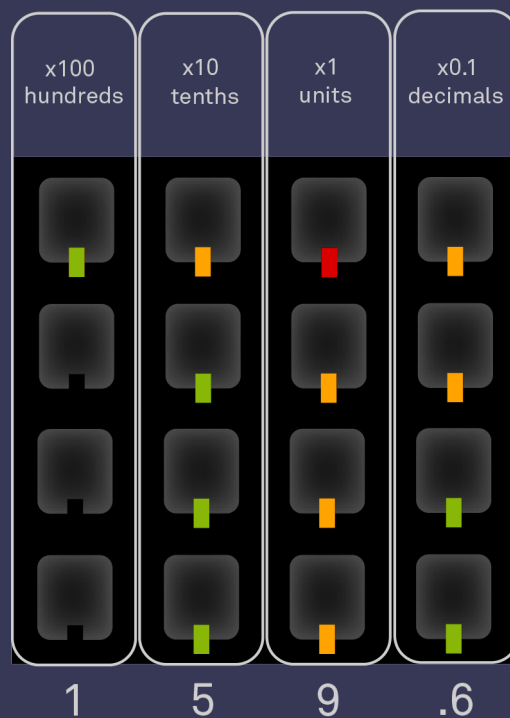
column 4 = decimals

Then each digit is represented using 3 colors via a simple addition :

**GREEN** = digit 1 to 4

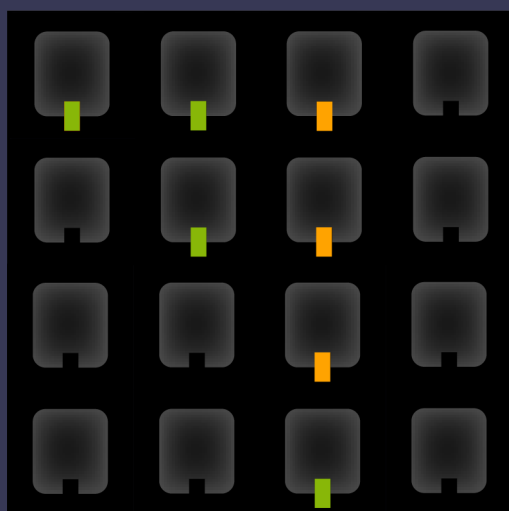
**YELLOW** = digit 5 to 8 or  $4 + 1$  to 4

**RED** = 9 or  $1 + 4 + 4$



Example :

BPM



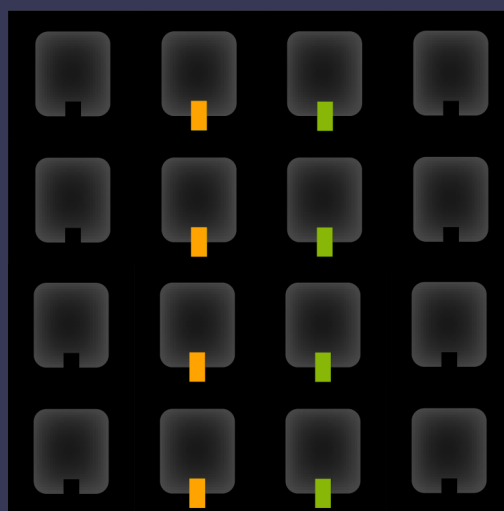
1

2

7

BPM

BPM

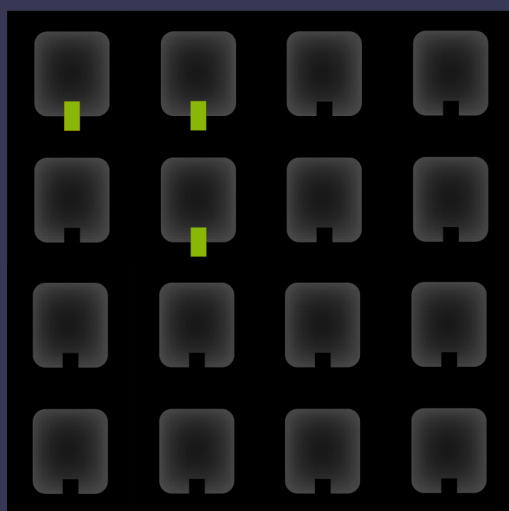


8

4

BPM

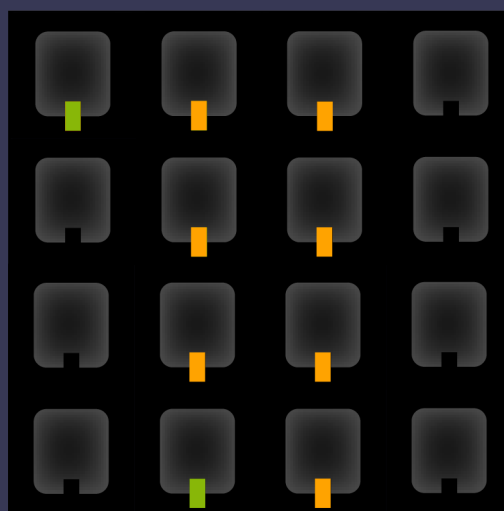
BPM



1

2

0



1

7

8





# 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

(1<sup>st</sup> step = 1<sup>st</sup> 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:

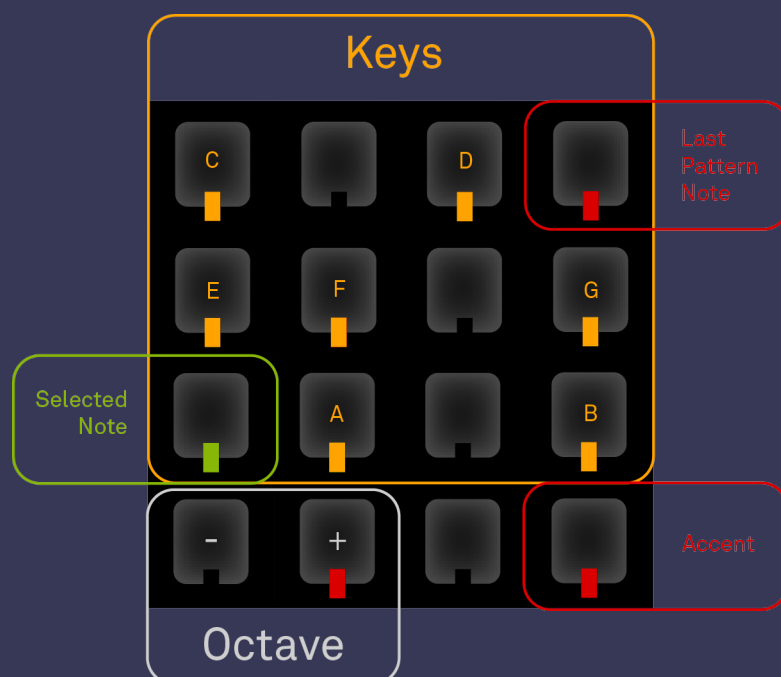
- Holding `SHIFT` and turning the `KNOB` will alter the main `GATE LENGTH`.  
The main `GATE LENGTH` is the default `GATE LENGTH`.  
This time value is relative to the next active step, meaning that the main `GATE LENGTH` set to maximum will tie all the steps together, set to a bit less than the maximum 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 :

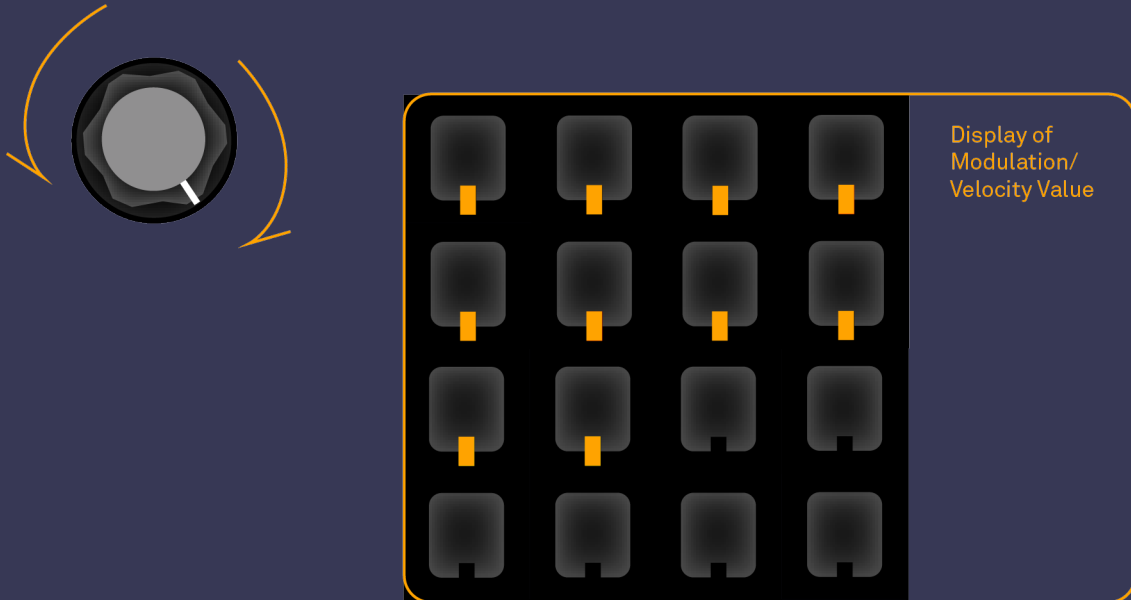
For MODULATION TRACK the KEYS PAGE will give you a 16 step ranging from 0 to 8V or 0 to 127 for CC messages.

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.

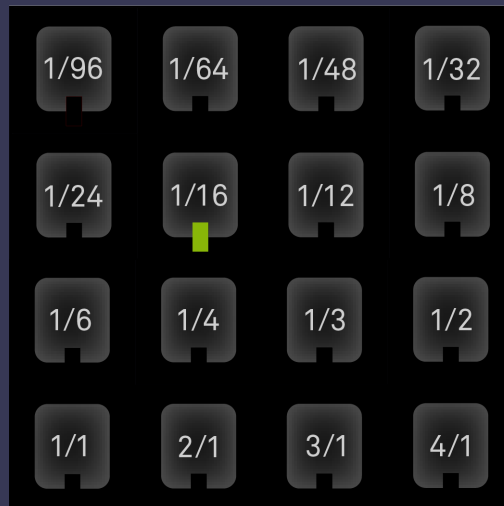
To load a BANK :

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.







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 overridden by the value you are currently playing.  
If RECORD is ON, the sequence will be recorded with the override value.

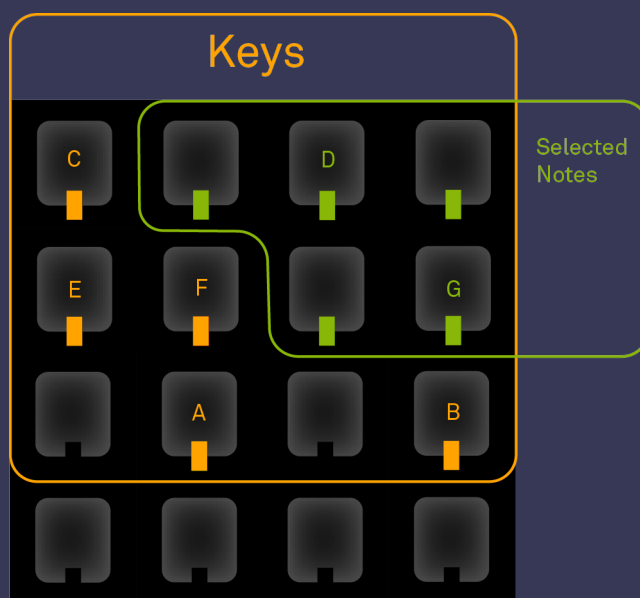
#### SCALE:

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 corresponding **[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.





