



Shakmat Four Bricks Rook

- 16HP Eurorack Module

- Built & designed in Belgium

- www.shakmat.com



Introduction

Far beyond basic step sequencing, the Four Bricks Rook brings a highly intuitive interface to all of your rhythmic duties. Providing a diverse array of features including a CV addressable memory of 128 thirty-two step tables. The Four Bricks Rook can store your own sequences, use an auto randomizer or pattern filler, record precise timings of unquantized rhythms, all this accessible via four modes defining the pads behavior : Play, recall Patterns, play Fills, or Mute your sequences.

| | | | |
|---|------------------------------|---|---------------------------------|
| 1 | Clock input | E | Shift potentiometer |
| 2 | Reset input | F | Rec button & LED / Load Pattern |
| 3 | Fill All input | G | Erase button / Save Table |
| 4 | Shift CV input | H | A/B button & LED / Load Fill |
| 5 | Length CV input | I | Function button |
| 6 | Table CV input | J | Quantize button / Random Amount |
| 7 | Outputs | K | Track status LEDs |
| A | Menu potentiometer & display | L | Pads |
| B | Menu LEDs | M | Mode LEDs |
| C | Table potentiometer | | |
| D | Length potentiometer | | |

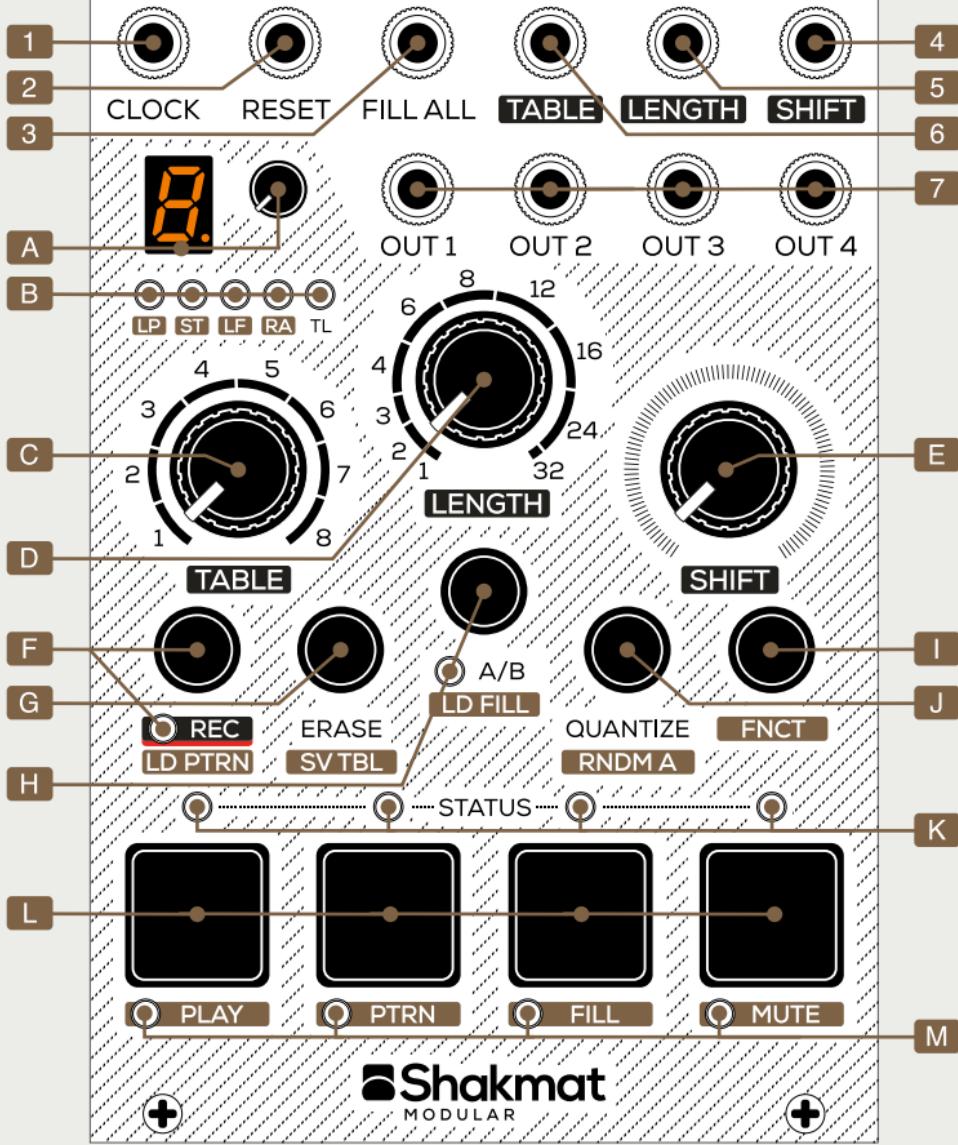
Installation

The Four Bricks Rook requires a standard 2x5 pin eurorack power cable. Make sure the red stripe on the cable matches the -12V side of the power header.



FOUR BRICKS ROOK

Quad Trigger Sequence Generator



Shakmat
MODULAR

Modes

Let's start by feeding the module with a clock signal through the Clock input [1]. Four modes are available, defining the pads behavior. To select one of them press Function [I] and the corresponding pad [L] simultaneously.

PLAY

In Play mode, the four pads act as manual triggers. If recording is engaged [F], the associated LED lights on and the triggers performed on the pads are recorded into the buffer.

PATTERN

In Pattern mode, pressing a pad will cause the module to read the sequence off a table (as defined by the Table potentiometer and Table CV input) instead of the current buffer. To show that a track is reading a table, the corresponding LED [K] is acting in an inverted way so that it stays lit & turns off when a trigger is played. To return to the buffer's sequence, press the pad a second time. Pressing a pad while Rec is engaged will import the pattern to the track.

FILL

Similarly to Pattern mode, Fill mode reads the selected table but in a more dynamic way as the patterns play only while the pad is pressed. This on-the-fly reinterpretation of the tables can be recorded. Sending a gate signal to the module's Fill All CV input [3] will cause all the tracks to play fills for the duration of the gate signal.

MUTE

This mode mutes a track by pressing on the corresponding pad. A muted track will have a slowly pulsating status LED. While record is engaged, this mode also allows to erase parts of a sequence.

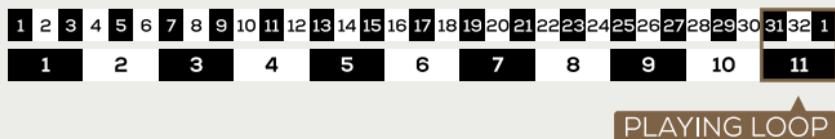
Sequences

A sequence length is determined by the Length potentiometer [D], in conjunction with the bipolar Length CV input [5]. Available sequence lengths are: 32, 24, 16, 12, 8, 6, 4, 3, 2 and 1 step. By using the Reset CV input [2] you can easily play sequences of different lengths.

The Shift potentiometer [E] addresses parts of a recorded sequence and can also be controlled via the Shift CV input [4]. For example, if you record a 32 step sequence and then set the Length potentiometer down to 8 steps, the original 32 step sequence will be divided into four 8 step long segments. Using the Shift potentiometer allows you to choose between these four segments on the fly. The figure below shows that specific example in a visual way:



Here is another example, Length is reduced to 3 & Shift is all the way up. The sequence is now divided into 11 segments, and the last one is played:



A/B recording

The A/B function allows you to record two separate sequences in the buffer, like two sides of a tape. To switch between bank A and bank B, press the A/B button [H].

Quantize & Erase

The Four Bricks Rook records unquantized sequences which can then be quantized to the incoming clock. To quantize a track press the Quantize button [J] and corresponding pad. You can also erase the current buffer content of a track at any time by pressing the Erase button [G] and corresponding pad.

Load Pattern

The Four Bricks Rook contains two buffers stored in a volatile memory and a variety of tables stored in a non-volatile memory. You can directly address 8 tables via the Table potentiometer [C] and Table CV input [6],

To load another track with 8 other tables, you can use the Load Pattern operation by pressing Function [I] and Load Pattern [F] buttons simultaneously. The first menu LED (labeled LP) [B] will turn on, while the menu potentiometer and display will help you choose between the 16 available slots.

Save table & Load Fill

The Save Table operation saves the buffer content into the non-volatile memory. To do so press the Function [I] and Save Table [G] buttons simultaneously. You can choose the tracks to be saved by pressing the corresponding pad, the destination table using the Table potentiometer and the slot using the menu potentiometer and display.

The Load Fill operation allows you to choose a different slot for the Fill mode than the one used in Pattern mode. To do so press the Function [I] and Load Fill [H] buttons simultaneously.

For Load Pattern, Save Table & Load Fill, you have to confirm your operation by pressing the Rec, Erase or A/B button. You can also leave the functions without saving the changes by pressing the Function button [I].

Randomizer

The module contains an internal randomizer allowing you to create random fills. The probability of playing a fill can be modified by pressing the Function [I] and Random Amount [J]. The menu potentiometer and display [A] will allow you to set the amount of randomization. The figure from 0 to 9 only affects the probability of a fill to occur, the values from A to E also affect the table from which the fill is performed. Choosing F will cause the module to generate totally random triggers.

The Random Amount can be set for each track individually : while being in the random amount menu, press a pad and turn the menu potentiometer [A] simultaneously, the corresponding track status LED will blink to notify you that the track has its own random amount. The random algorithm is not a pure random generator : the probability of a fill occurring gets higher near the end of the sequence, similarly to how a drummer would do fills.

Trigger length

By default the menu potentiometer **A** acts on the trigger length, from 4 milliseconds to a clock-period long gate. It is possible to have different trigger lengths per track by double clicking the Function button **I**. The display will show a dash, you can then press the pad corresponding to the track you want to edit and hold it while turning the menu potentiometer to the desired trigger length value.

Current state storage

The buffers content, trigger lengths, random amount and pointed slots (for fills and patterns) can be stored, so you can turn off your rack and keep all the current state in memory for your next session. To do so press & hold the Rec button **F** for 5 seconds.

Factory Tables

All the tables are user editable and can be restored by a factory reset of the module. To do so, turn your module on while maintaining the four pads pressed for 10 seconds then release. All the LEDs will blink to confirm the factory reset.

Musicians tables

- | | |
|------------------------------------|---------------------------------------|
| 0 Shakmat's Basics | 5 Mudd Corp's Metropolitan |
| 1 Richard Devine's Beats | Usefull Drum Device |
| 2 Ucture's Raight Tree | 6 Konstantine's Funky Patterns |
| 3 Ripit's Nasty steps | 7 Latin Classics |
| 4 Osica's Tech Fundamentals | 8 Old Time Classics |
| | 9 Euclidean Combos |

Utility tables

- | | |
|----------------------------------|---------------------------------|
| A Binary divide/multiply | D Multiply 1 to 8 |
| B Ternary divide/multiply | E Swing 16 th |
| C Mixed divide/multiply | F Swing 8 th |

As some users might want to keep the utility tables (A to F) unchanged, a partial reset can be performed to restore them. Press the three first pads for 10 seconds while turning the module on and only the utility tables will be restored to their default states.

Tips & tricks

Length & Shift

Using the Length and Shift potentiometers and CV inputs can be compared to using a slice function in a sampler. For example, load the last table of the "Old Time Classic" slot which is the infamous Amen break, and mangle Length and Shift. By doing so, it is quite easy to obtain junglish breaks with any sound you want!

Gates

Even if the Four Bricks Rook is originally a trigger sequencer, it can also generate gates, even long ones! Use the trigger length function along with a clock multiplication table (from slot A, B or C). As the trigger length can be set to the length of the clock period, playing faster triggers than the received clock will cause the output to stay high.

Specifications

Size

16 HP

Depth

27 mm

Current Draw

25 mA @ +12V

1 mA @ -12V

CV Inputs

-5 to 5V

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