

Shakmat Time Wizard

- 8HP Eurorack Module

- Built & designed in E.U.

- www.shakmat.com



Introduction

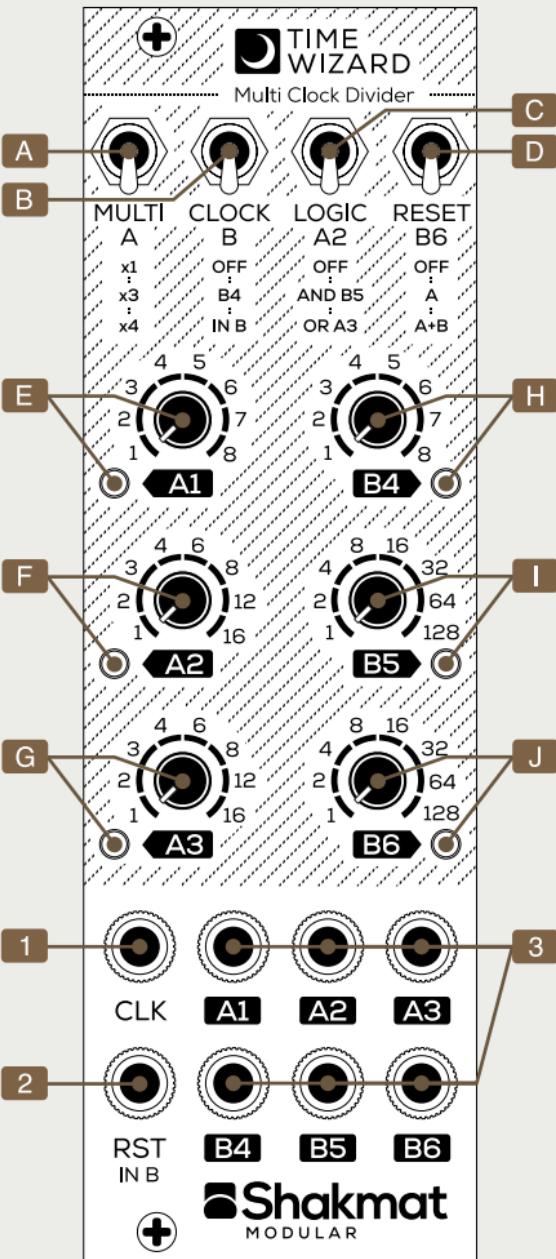
Casting spells on every boring clock signal, the Time Wizard has a bag full of arcane time-warping tricks. All his magical feats are based on 6 dividers with selectable factors and 4 switches providing 81 routing variations.

This module's occult powers have been harnessed to easily clock and reset other sequencers with odd time signatures, provide weird clock division/multiplication ratios, and create complex polyrhythms.

- | | | | |
|----------|-----------------------|----------|---------------------------|
| 1 | Clock input | E | Divider A1 & Activity LED |
| 2 | Reset / Clock B input | F | Divider A2 & Activity LED |
| 3 | Divider outputs | G | Divider A3 & Activity LED |
| A | Multiply A switch | H | Divider B1 & Activity LED |
| B | Clock B switch | I | Divider B2 & Activity LED |
| C | Logic A2 switch | J | Divider B3 & Activity LED |
| D | Reset B6 switch | | |

Installation

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



Basics

The Time Wizard is a sextuple clock divider. Like every clock divider, the module needs a clock signal at its clock input [1]. Each divider [E-J] has a dedicated potentiometer to adjust its division factor and an activity LED. Without altering its function with the Clock B switch [B], the Reset input [2] can be used to reset every divider back to its first step.

Switches

The switches provide handy functions to create sophisticated clock signals. Each switch has 3 positions, the upper one will always disable the function.

A Multiply A

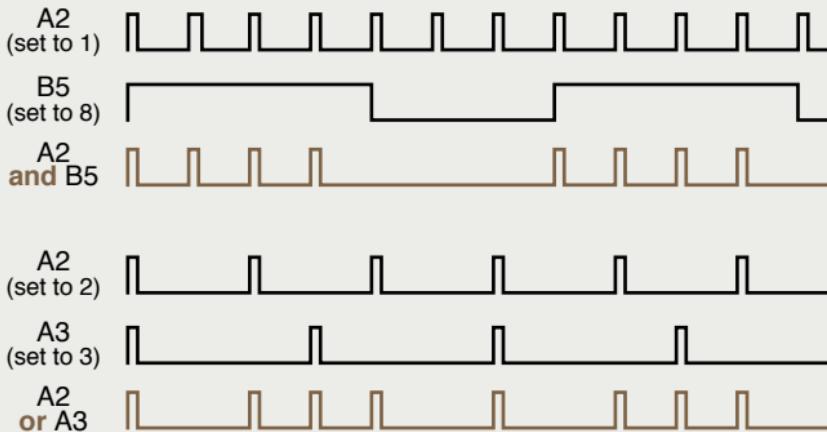
This switch multiplies the frequency of the clock signal assigned to the A column [E-G], either by a factor of 3 or 4. Therefore A1, A2 and A3 can provide weird clock decompositions like 3/7, or transform a 16th clock signal to triplets.

B Clock B

This function allows to clock the B column [H-J] differently. In the middle position, divider B4 [H] clocks B5 & B6 [I&J], this is quite handy to create bars of unusual time signatures. At the lower position, the Reset / In B input [2] stops behaving as a reset input and works as an independent clock input for the whole column [H-J].

C Logic A2

This switch adds logic functions to the A2 output [3]. The middle position provides the function A2 **and** B5, very handy to clock events in half the period of divider B5 [I]. The lower position provides the function A2 **or** A3, for weird clock sequencing applications. The following illustration shows the two logic functions in action:



D Reset B6

Thanks to this function, the B6 divider [J] is either resetting the A column [E-G] on its middle position or both A & B columns [E-J] at its lower position.

Half periode gates

Thanks to the jumper on the back of the module, you can set dividers 5 & 6 [I&J] to produce half period gates instead of triggers.



Specifications

Size	Trigger Inputs
8 HP	0 - 5V
Depth	Outputs
22 mm	0 - 5V
Current Draw	
20 mA @ +12V	
0 mA @ -12V	
0 mA @ +5V	

- www.shakmat.com



Many thanks to Mudd Corp and BJ_gzp for their generous advices and feedback!

Product design & engineering : François Gaspard
Product & brand design : Steve Hackx