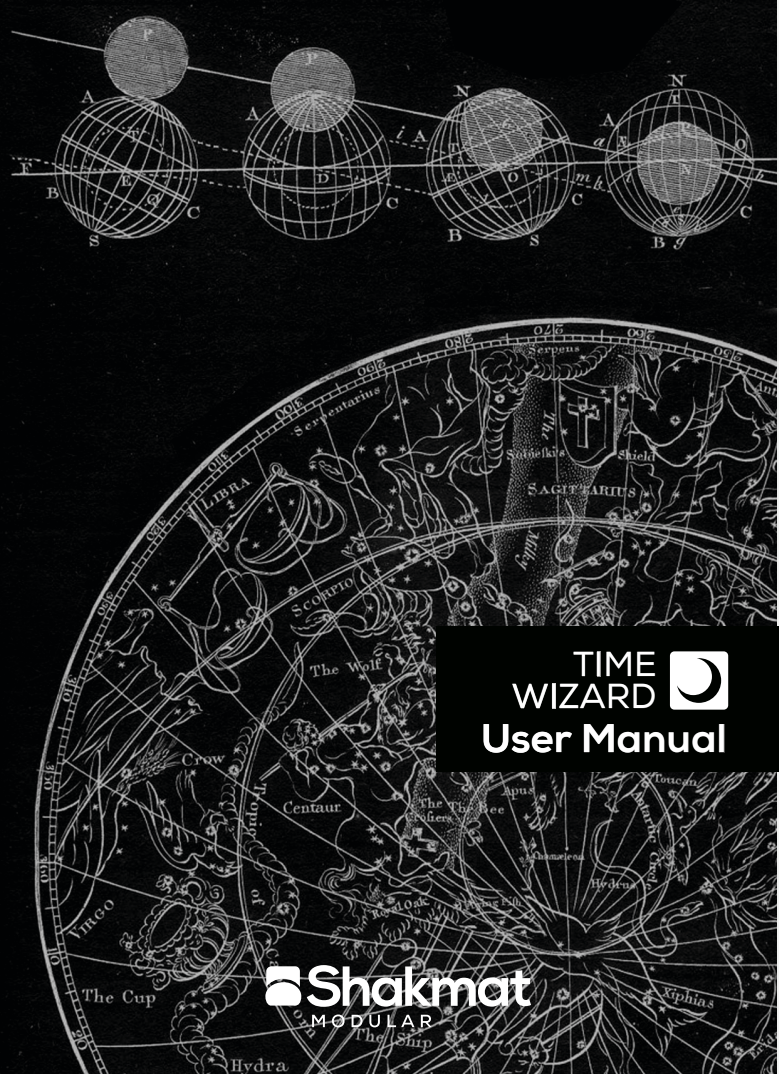


TIME WIZARD
User Manual

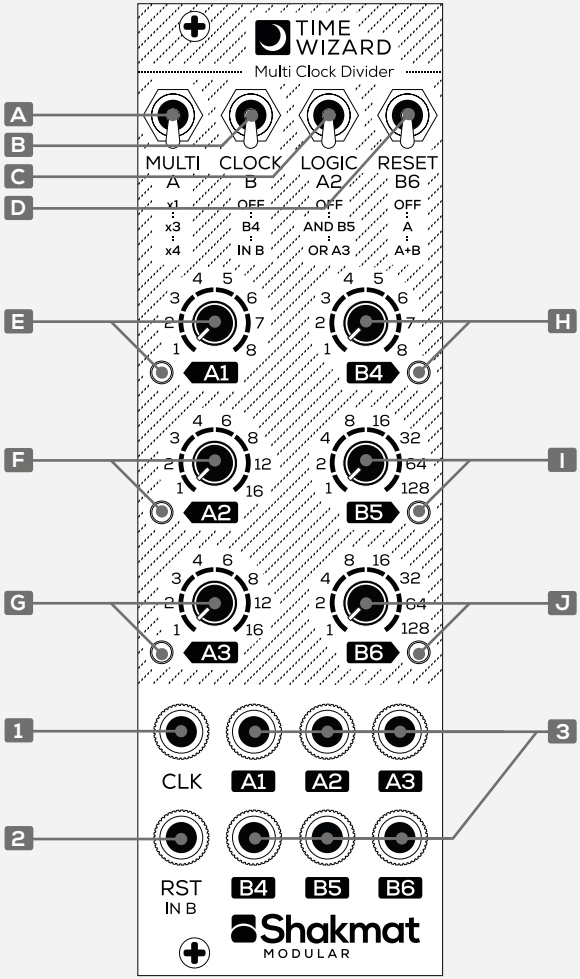
Shakmat MODULAR

Introduction

Casting spells on everyday boring clock signals, The Time Wizard got a bag full of arcane time-warping tricks. All his magical feats are based on 6 dividers with selectable division 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 poly-rhythms.

- **A** Multiply A switch
- **B** Clock B switch
- **C** Logic A2 switch
- **D** Reset B6 switch
- **E** Divider A1 potentiometer & activity LED
- **F** Divider A2 potentiometer & activity LED
- **G** Divider A3 potentiometer & activity LED
- **H** Divider B4 potentiometer & activity LED
- **I** Divider B5 potentiometer & activity LED
- **J** Divider B6 potentiometer & activity LED
- **1** Clock Input
- **2** Reset / Clock Input B section
- **3** Outputs


TIME
WIZARD
Multi Clock Divider
A
B
C
D
MULTI
A
x1
x3
x4
CLOCK
B
OFF
B4
IN B
LOGIC
A2
OFF
AND B5
OR A3
RESET
B6
OFF
A
A+B
E
A1
H
B4
F
A2
I
B5
G
A3
J
B6
1
CLK
A1
A2
A3
3
2
RST
IN B
B4
B5
B6
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Basics

The Time Wizard is a sextuple clock divider. Like every clock divider, the module needs a clock signal at its clock input. Each divider has a dedicated potentiometer to adjust its division factor and an activity LED. Without altering its function with the **CLOCK B** switch, **RST** input is used to reset every divider back to their first step.

By default, all the dividers provide trigger signals. Thanks to the jumper on the back of the module dividers **5** & **6** can produce half period gate signals.

Switches

Switches provide handy functions to create sophisticated clock signals. Each switch has 3 positions, the upper one is deactivating the function.

01. Multiply A

This function multiplies the frequency of the clock signal assigned to the A column, either by 3 or by 4. Therefore **A1, A2** and **A3** can provide weird clock decompositions as 3/7, or transform a 16th clock to triplets.

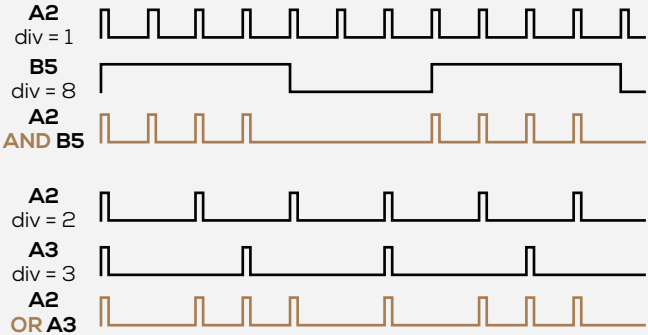
02. Clock B

This function allows you to clock the **B column** differently. At the middle position, divider **B4** clocks

dividers **B5** and **B6** (quite handy to create bars of unusual time signatures). At the lower position, the RST/IN B input stops behaving as a reset input and works as an independent clock input for the second column.

03. Logic A2

This switch adds logic functions to the **A2** output. The middle position of the switch provides the function **A2 AND B5** (very handy to clock events in half the period of divider **B5**). The lower position provides the function **A2 OR B5**, for weird clock sequencing applications.



04. Reset B6

Thanks to this function divider **B6** is automatically reseting the **A column** (middle position) or both **A and B columns** (lower position).

Installation

The Time Wizard requires a standard 2x5 pins eurorack connector. Make sure the red stripe on the ribbon cable is oriented on the -12V side of the board.

Technical Information

Size
8 HP

Depth
22 mm

Current Draw
20 mA @ 12V
0 mA @ -12V

Trigger Inputs
0 - 5V

Outputs
0 - 5V

Credits

Product design and engineering :
François Gaspard

Product and brand design :
Steve Hackx / MadeInside™

Huge thanks to Mudd Corp and Bj_gzp for their generous advices and feedback !

www.shakmatmodular.com