

- 1U/14HP Eurorack Module
- Designed in E.U.



# Shakmat Time Apprentice Building Guide

# Thank You for purchasing a Shakmat DIY Kit!

We spare no effort in our packaging process to prevent any mistakes or missing parts. In this document as well, we tried our best to describe the assembly process in the most practical and comprehensive way. Therefore, we strongly advised you to follow the steps as described in this guide :)

If by any chance there is a missing or damaged part in your kit, feel free to contact us at [shakmat.com/support](https://shakmat.com/support)

- Building Guide
- Shakmat Time Apprentice

# Content

## **Pack 1**

- 2x 3 pin male header
- 3x 2 pin male headers
- 1x Power header
- 4x Jack connectors
- 4x Jack connectors nuts
- 2x Plastic potentiometers
- 2x Green LED
- 4x Jumpers
- 4x M3 Screws
- 1x Power header connector

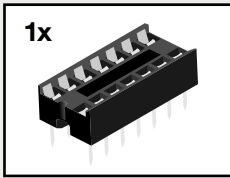
## **Pack 3**

- 1x PCB
- 1x Aluminum front panel
- 1x Composite front panel

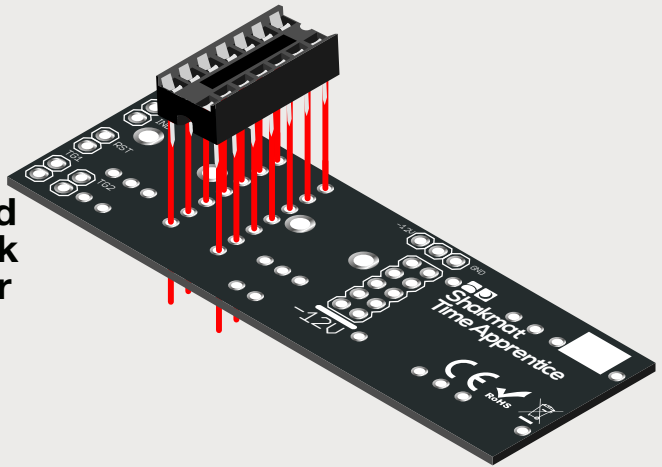
## **Loose parts**

- 1x IC Socket & IC
- 1x 10x10 power cable
- 1x User manual

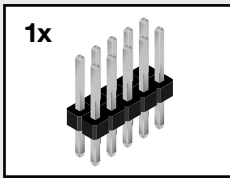
# 01



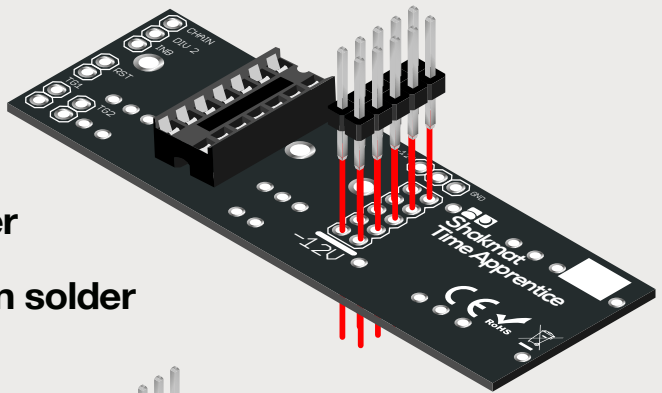
Place the IC socket and solder one point. Check alignments, then solder the remaining points.



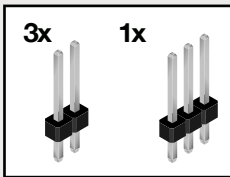
# 02



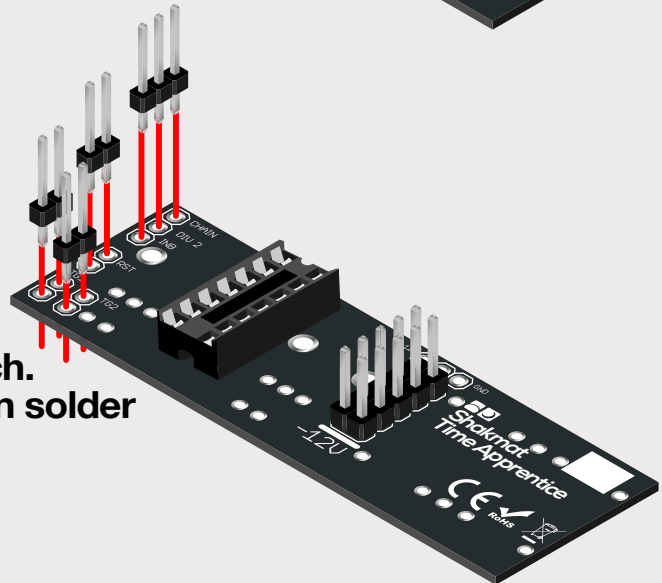
Place the power header and solder one point. Check alignments, then solder the remaining points.



# 03

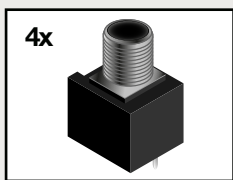


Place the headers and solder one point of each. Check alignments, then solder the remaining points.

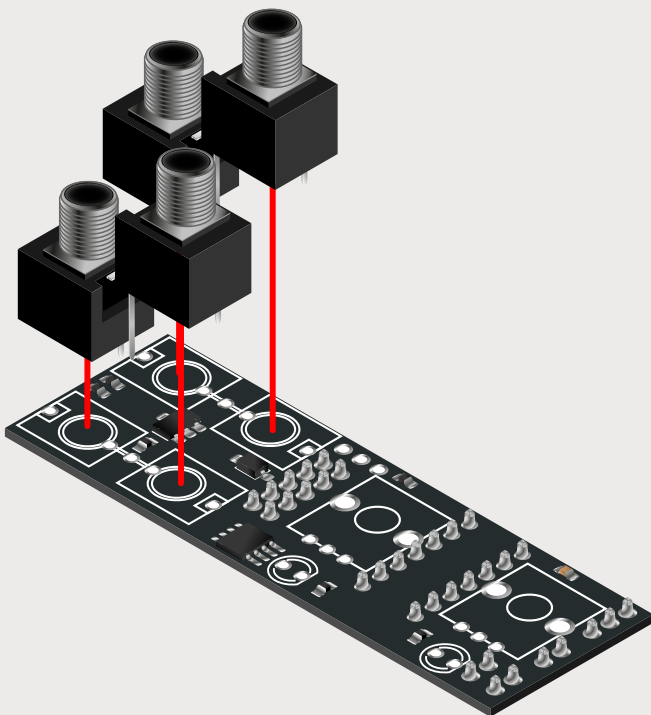


- Building Guide
- Shakmat Time Apprentice

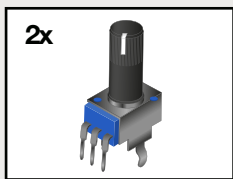
# 04



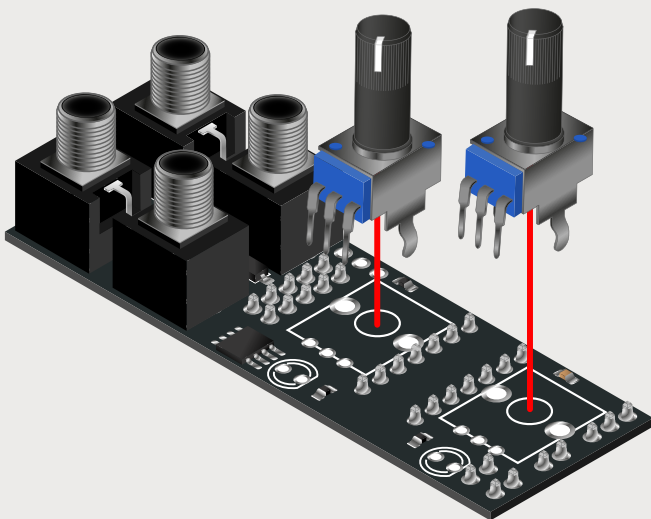
**Place the four jacks and solder one point of each. Check alignments, then solder the remaining points.**



# 05



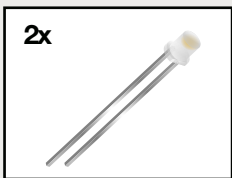
**Place the two potentiometers, but do not solder!**



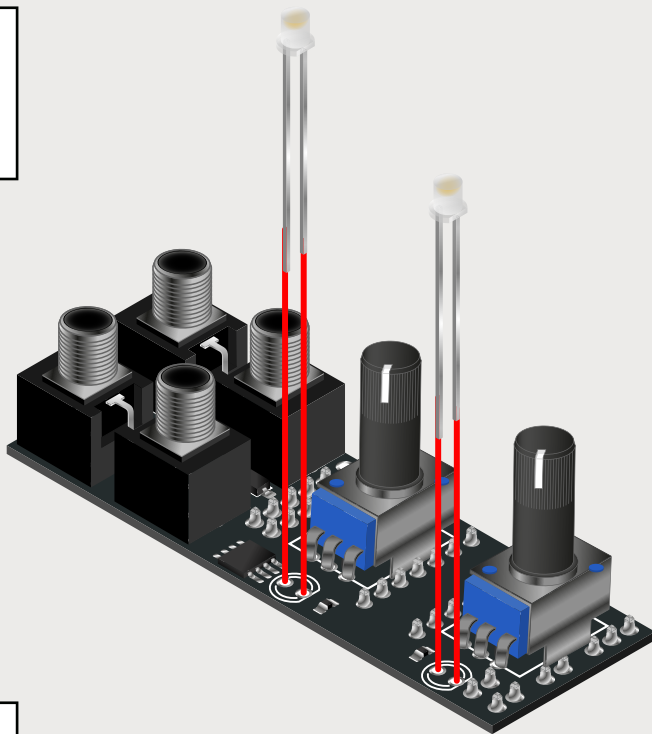
- Building Guide
- Shakmat Time Apprentice

# 06

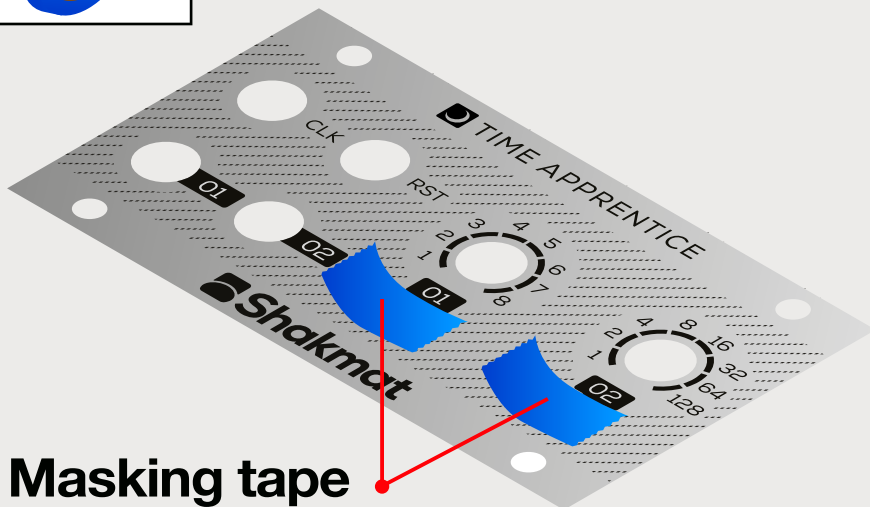
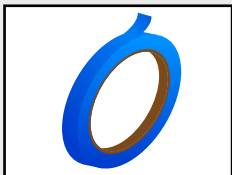
2x



**Place the two LEDs  
but do not solder!**



# 07

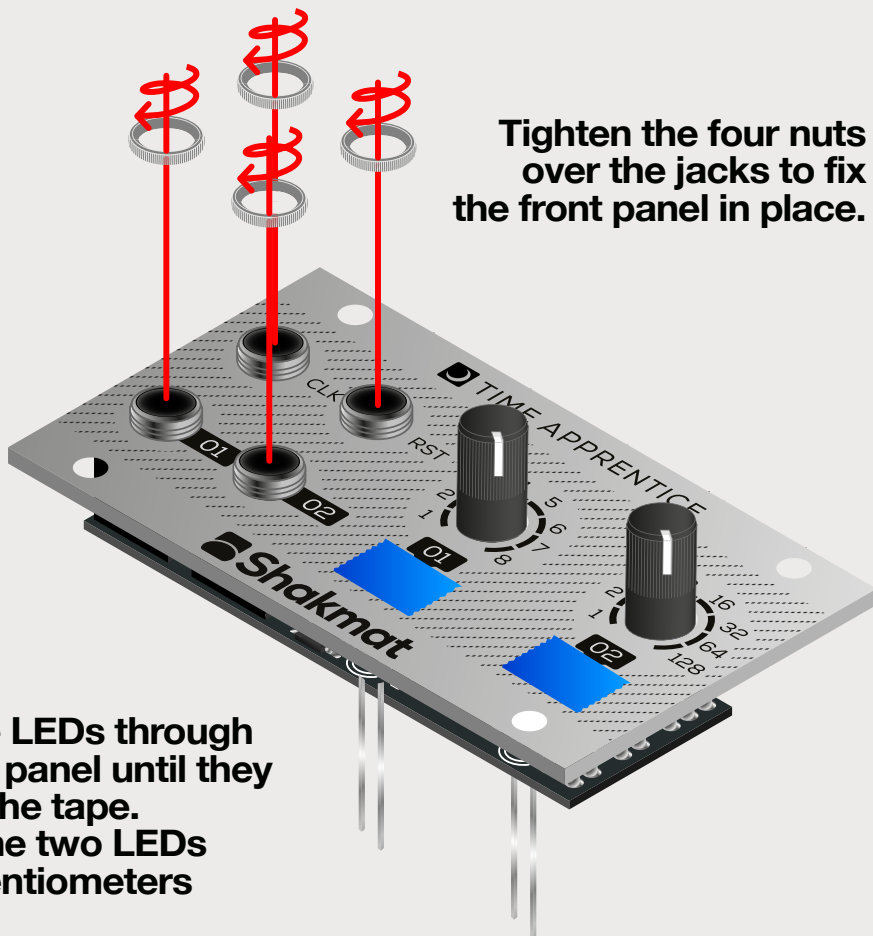


**Masking tape  
over LED holes**

- Building Guide
- Shakmat Time Apprentice

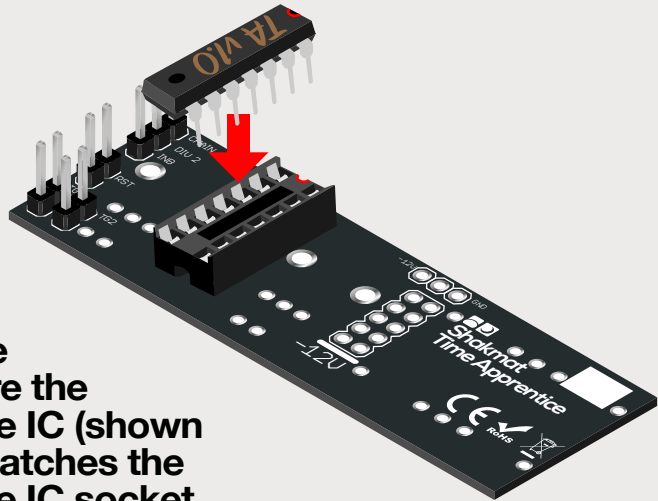
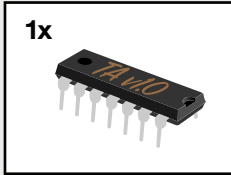
# 08

4x



- Building Guide
- Shakmat Time Apprentice

# 09

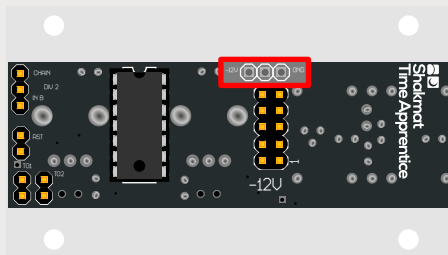


**Push the IC in the socket. Make sure the indentation on the IC (shown by the red line) matches the indentation on the IC socket.**

**To insert the IC without damaging the fragile legs, you may have to slightly bend one row inward. You can bend it against a table to keep the legs evenly bent.**

- Building Guide
- Shakmat Time Apprentice

In order to provide a cross standard approach, the module comes with both Intellijel and Pulp Logic 1U front panels. The format is easily changed by swapping them out. To do so, unscrew the 4 jack nuts, swap the front panels & screw the nuts back on.



The Time Apprentice can also be powered via a 1U Tile power bus. For this, you need to solder a cable ending with a Futaba J male connector to the three soldering holes right above the standard eurorack power header. The cable has to be soldered on the right way. The white wire goes to -12V, the red wire in the middle hole and the black wire goes to GND. Strip about 3 mm off the cable and tin the wires. Pass the wires through the PCB holes from the back and solder them to the front. Finally, mount the Pulp Logic panel and screw the jack nuts back on. When the Pulp Logic power socket is used, cover the eurorack power header with the provided blank connector in order to prevent shorts.

Your Time Apprentice is provided with 4 jumpers that are meant to be used on male headers. Placing those alter the behavior of the module. For more information regarding those alterations, please refer to the user manual.

- Building Guide
- Shakmat Time Apprentice

**Congratulations,  
you're done!**