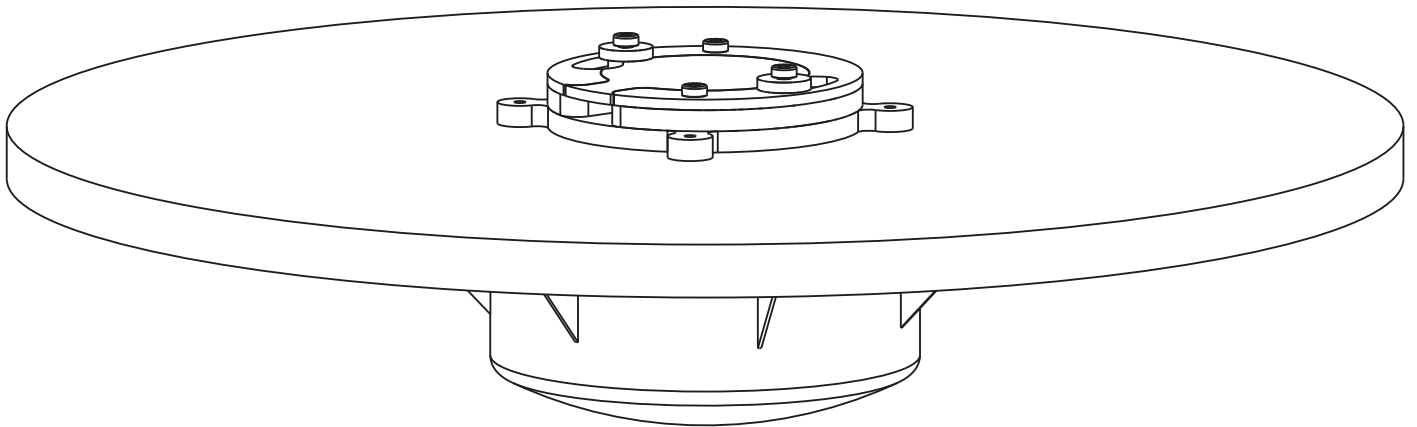


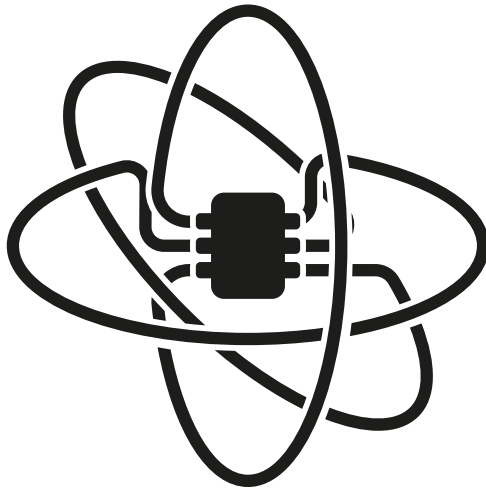
# HOW TO BUILD BALANCE BOARD



by **Adrien Husson**  
for the







This manual refers to the **RGB Lamp Demonstrator** project and is part of the **Movuno** documentation.

Project presentation:

<http://www.movuno.com/index.php/portfolio/rgb-lamp/>



All files of the project can be found on:

[www.github.com/hssnadr/RGB-Lamp-Demonstrator](http://www.github.com/hssnadr/RGB-Lamp-Demonstrator)

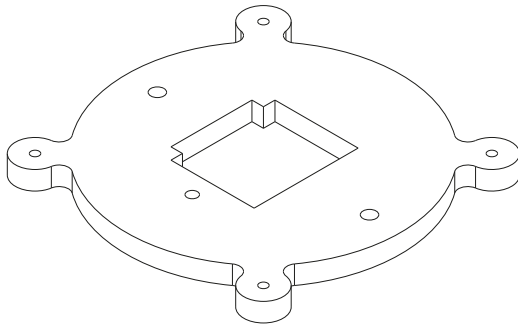


## TO LASER CUT

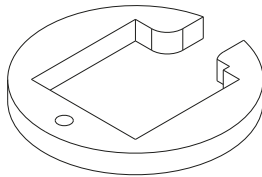


BalanceBoard/01\_MakingRessources/BalanceBoard\_6mm.svg

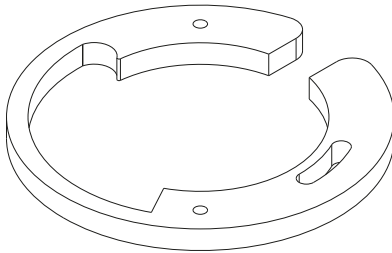
6mm thick



**A1** x1 Base



**A2** x1 Movuino case



**A3** x1 Spring crown

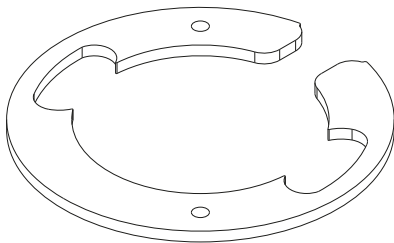


**A4** x1 Movuino case

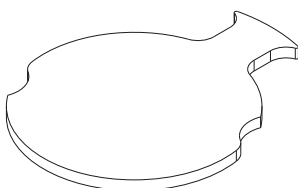


BalanceBoard/01\_MakingRessources/BalanceBoard\_3mm.svg

3mm thick



**B1** x1 Spring case



**B2** x1 Cap



**B3** x2 Washer



**B4** x2 Brace

## TO BUY



**C1** x1 M4 8mm FHC screw



**C4** x2 M4 washers



**C2** x2 M4 8mm CHC screw



**C4** x2 M4 locknuts



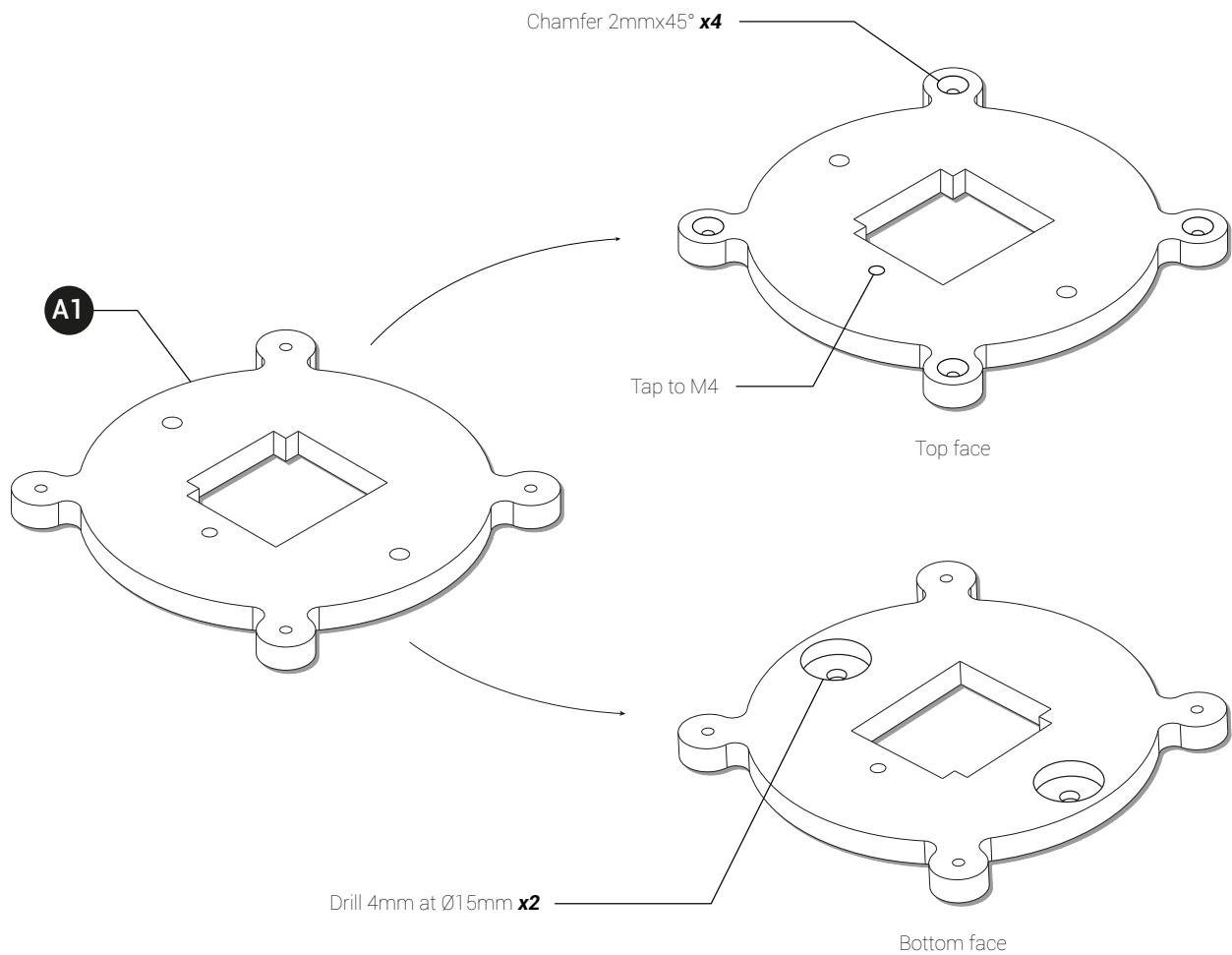
**C3** x2 M4 16mm CHC screw



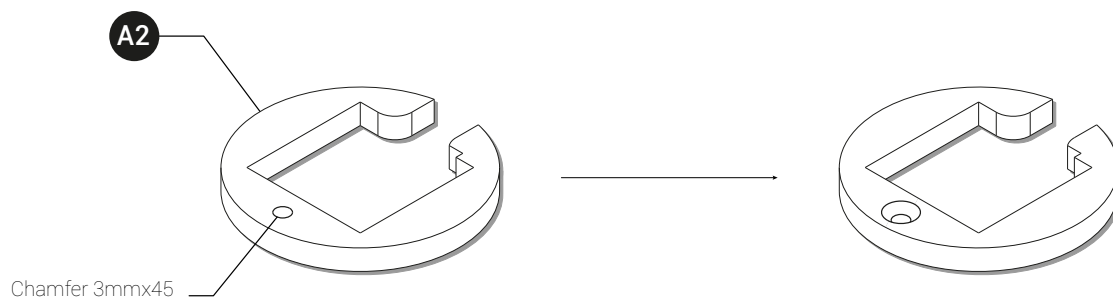
**C4** x9 M3 5mm self-tapping  
screws

# ASSEMBLY

1

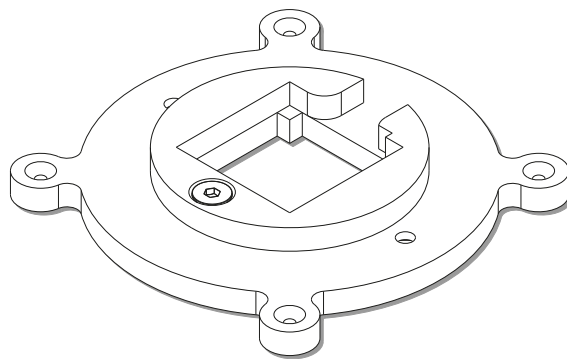
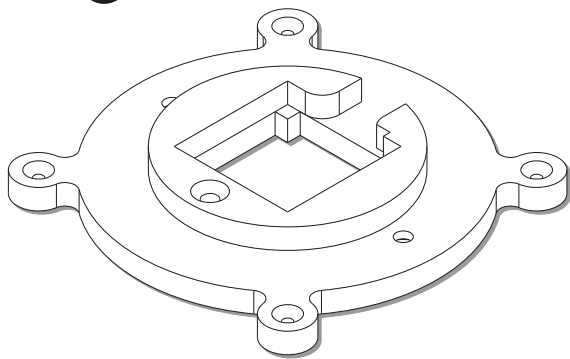


2



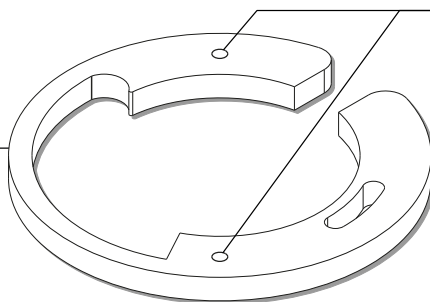
3

C1



3

A3

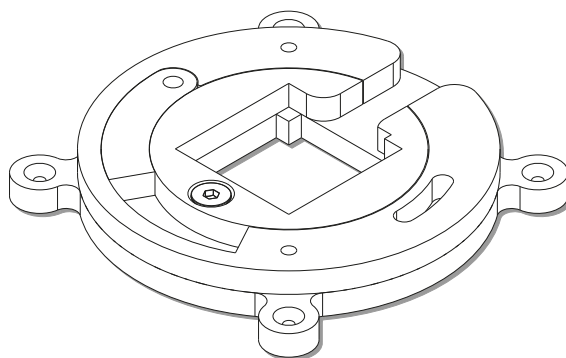
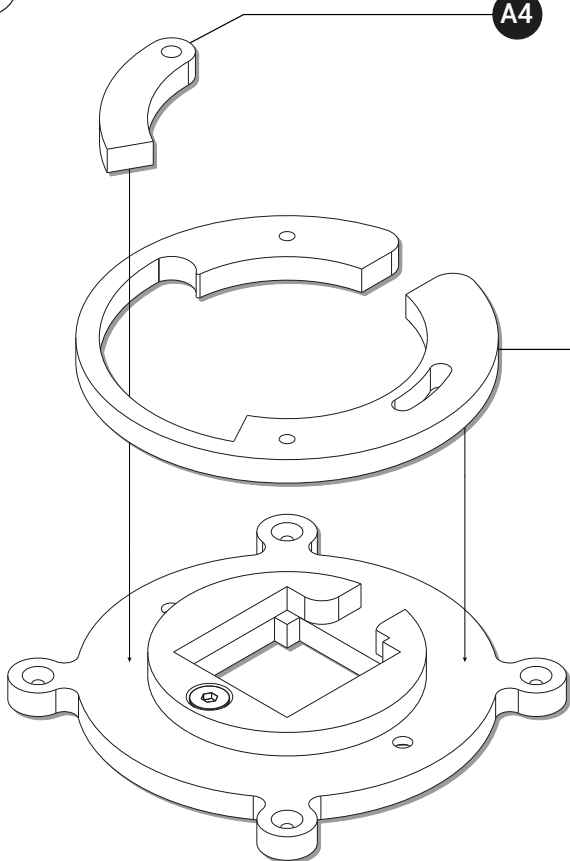


Tap to M4 x2

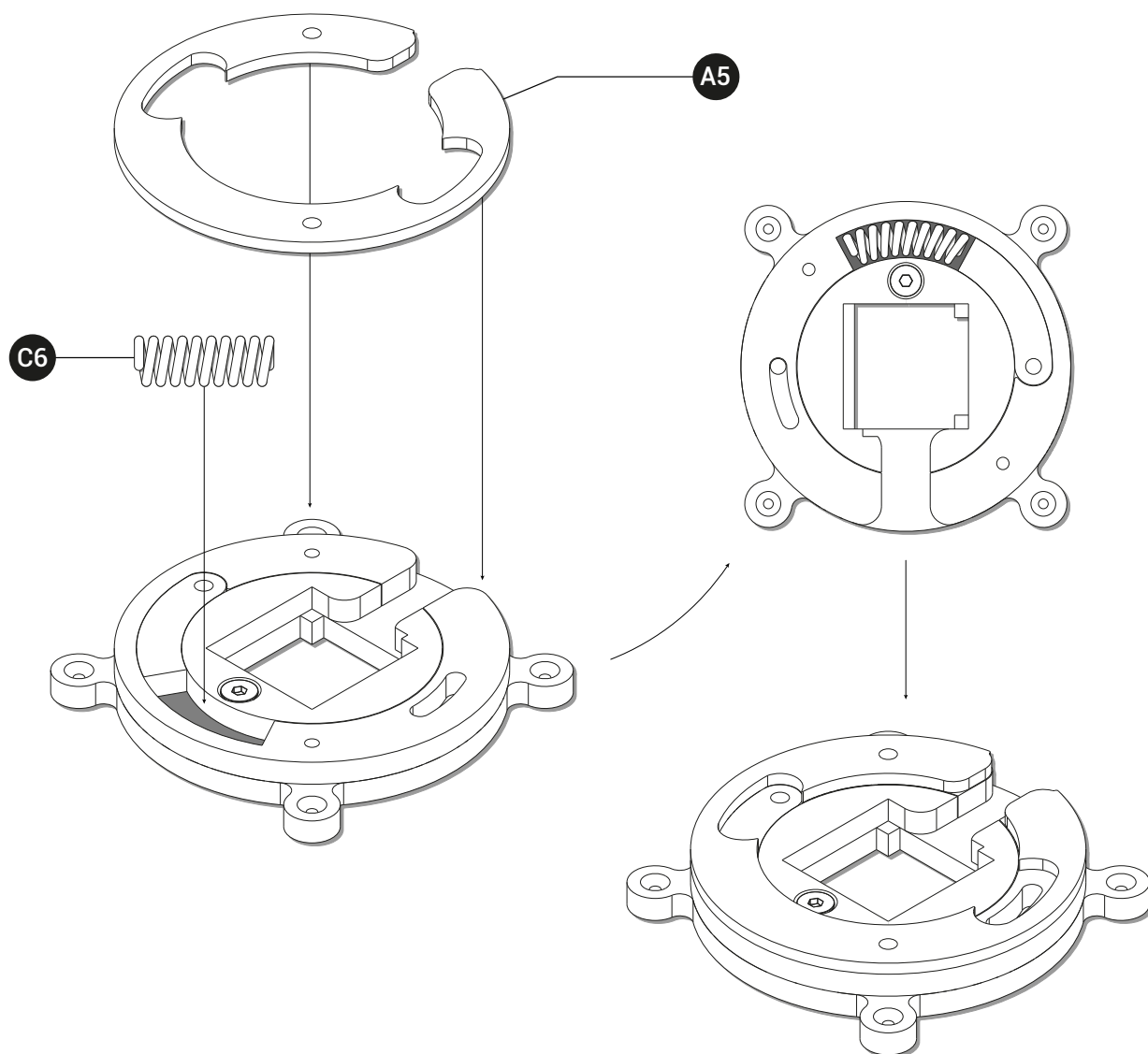
4

A4

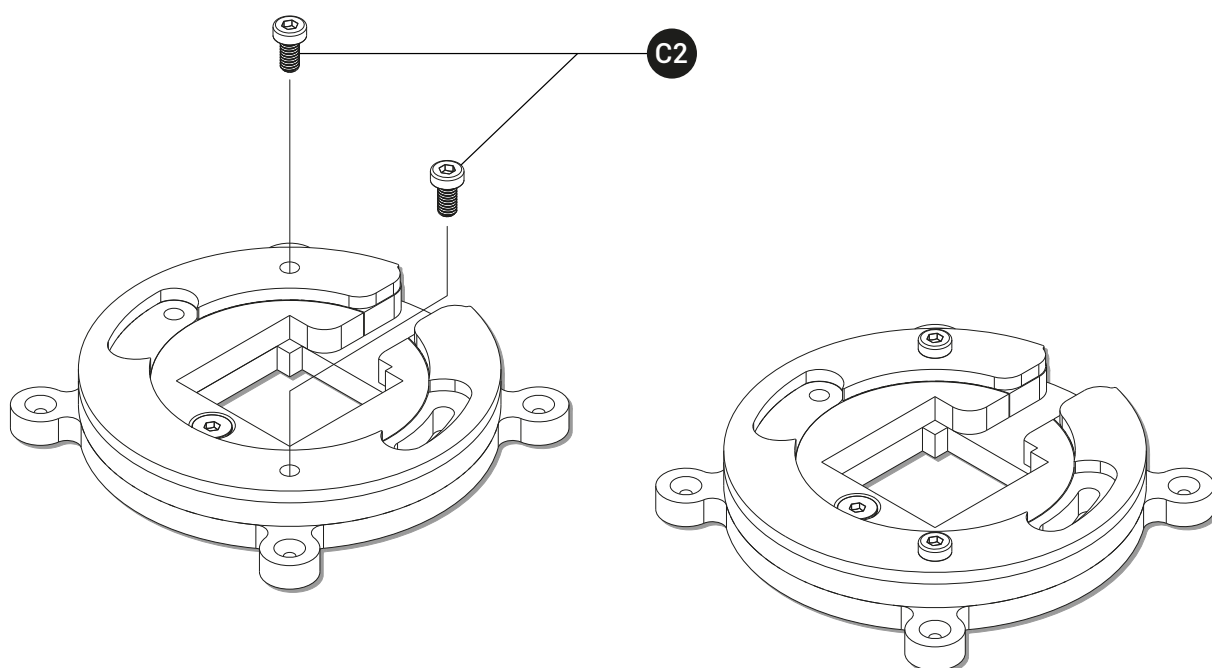
A3



5

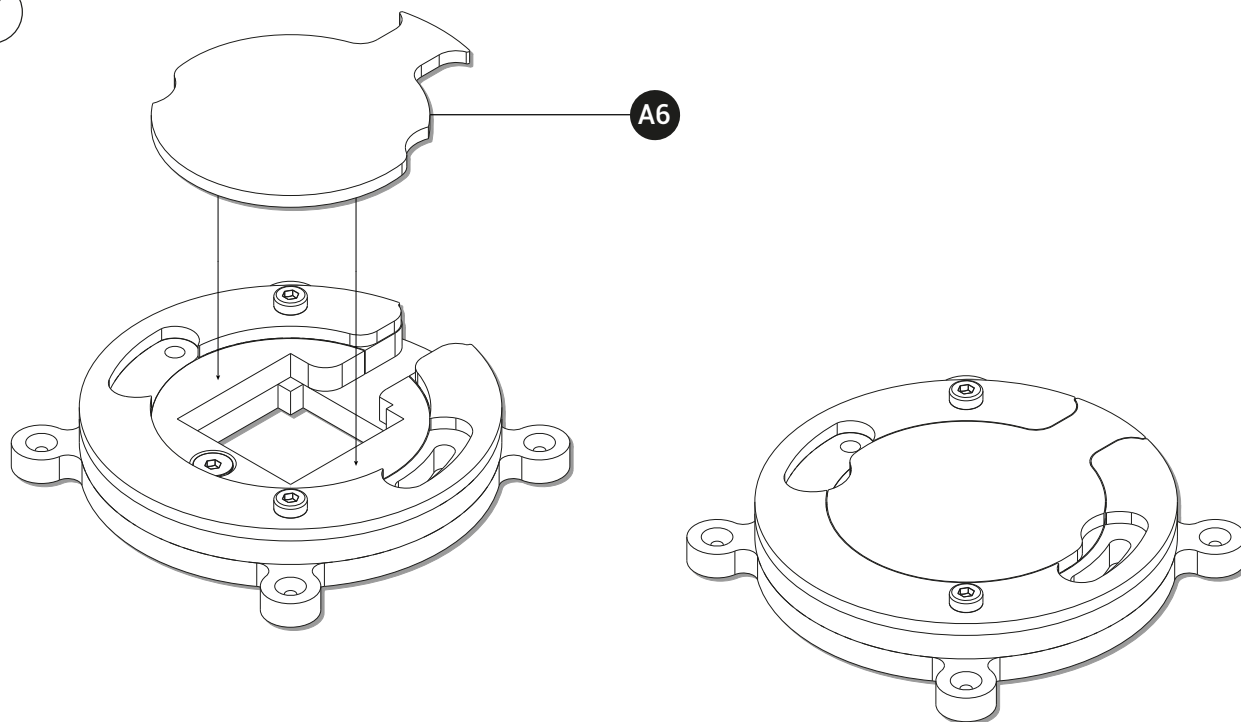


6

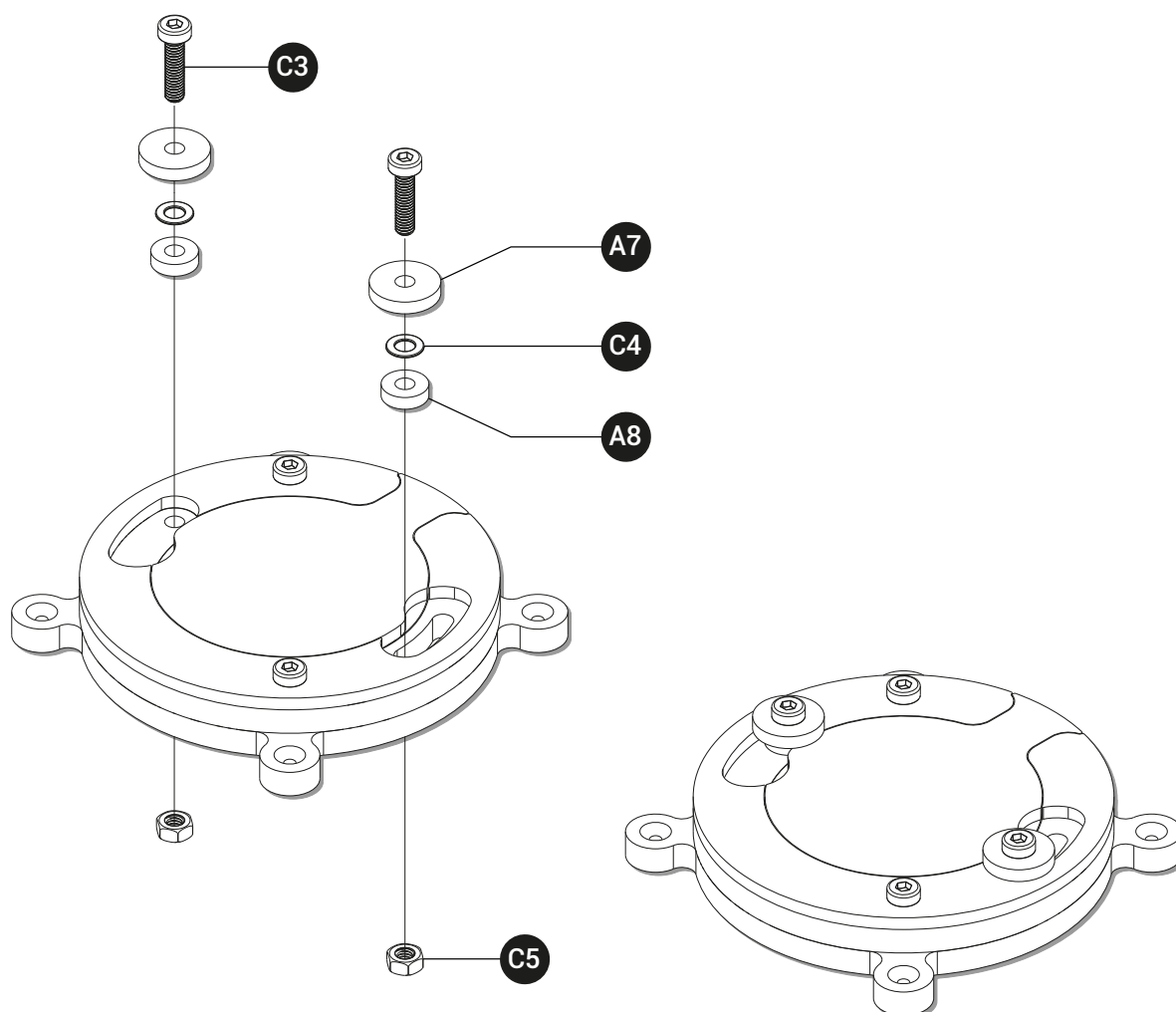




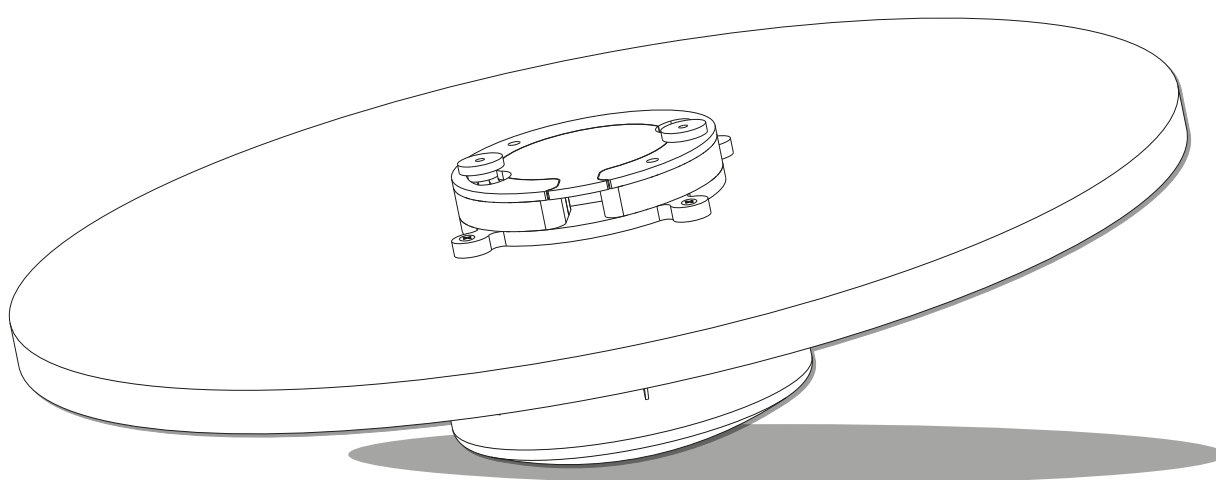
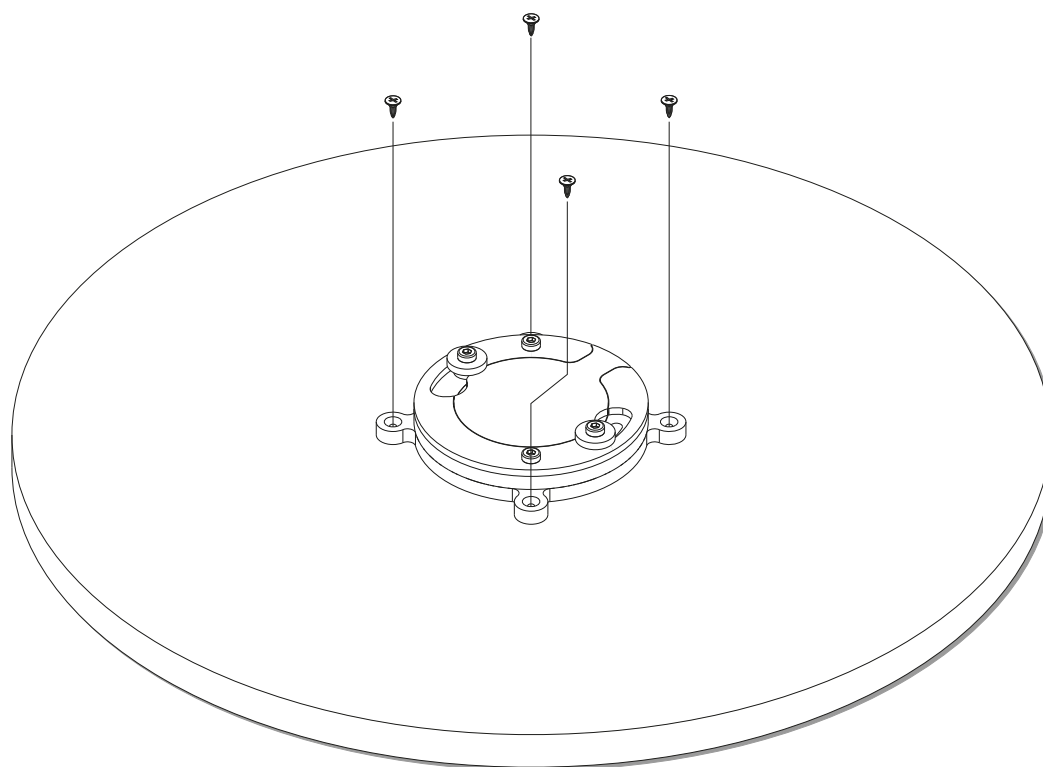
7



8



9



# SET-UP

1 Download and install:



**Movuina** on [www.movuino.com](http://www.movuino.com)



**PureData** on [www.puredata.info](http://www.puredata.info)

**Movuino**

[www.movuino.com](http://www.movuino.com)



2  Run the **BalanceBoard\_Application.pd** application with **PureData**

You'll need to install the **Adafruit Neopixel** library:

**Sketch/Include a library/Manage libraries**

Search for «Adafruit Neopixel» in the search tab and install the latest version



*BalanceBoard/02\_APureData/BalanceBoard\_Application.pd*

3



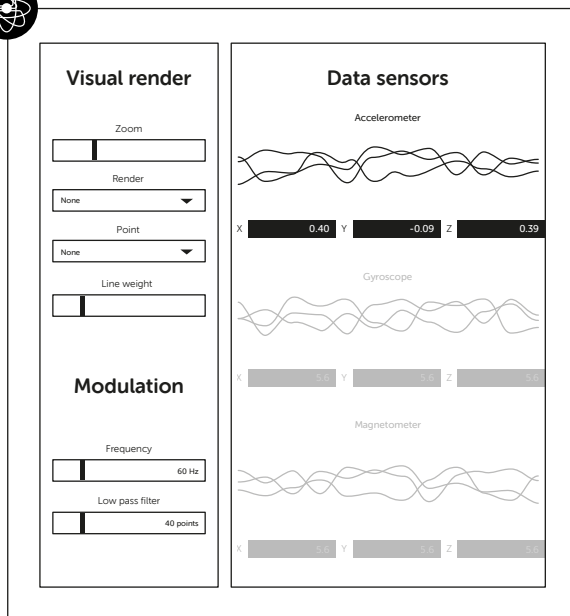
Launch **Movuina** and set-up by following the **Quick Start** tutorial

## Quick Start

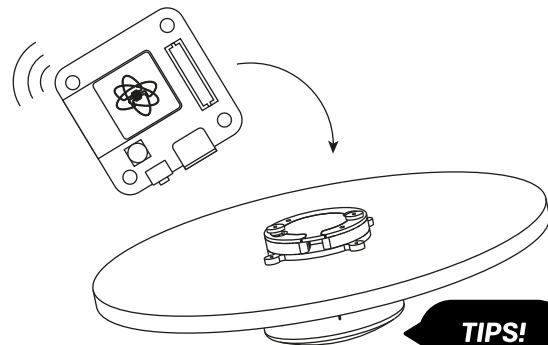
[www.movuino.com/index.php/quick-start](http://www.movuino.com/index.php/quick-start)



Once its done, you can directly receive the acceleration data sensed by the **Movuino** (or **Streamo**) into the **PureData** patch. There the data are processeced to generate sound modulations.

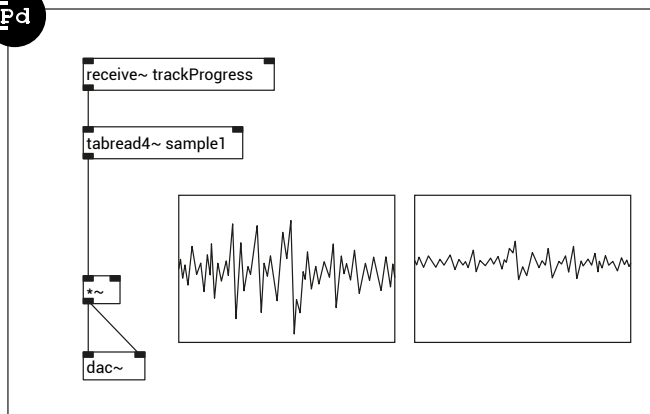


Acceleration data can be smoothed with the **Low pass filter** parameter



Use the spring to open and lock the case

OSC message (127.0.0.1 port 3000)  
/movuino or /streamo





UNIVERSITÉ  
PARIS  
DESCARTES

