

# picoCountdowner

倒數計時器

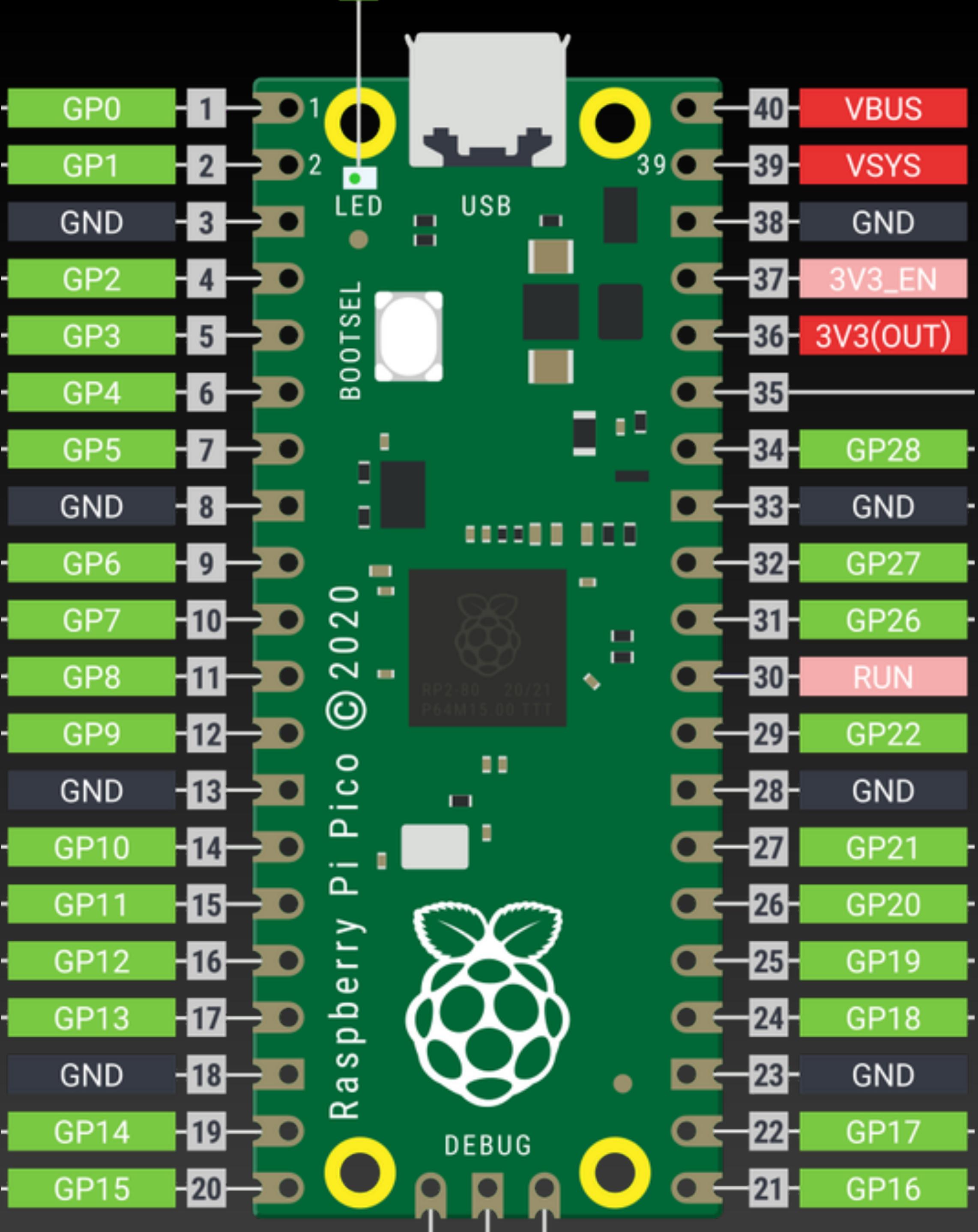
王棋俊  
chyijiunn



# What we use

## Material

- Raspberry pico
- Thonny
- Sg90 motor
- Buzz
- LED



# Kickstarter project example

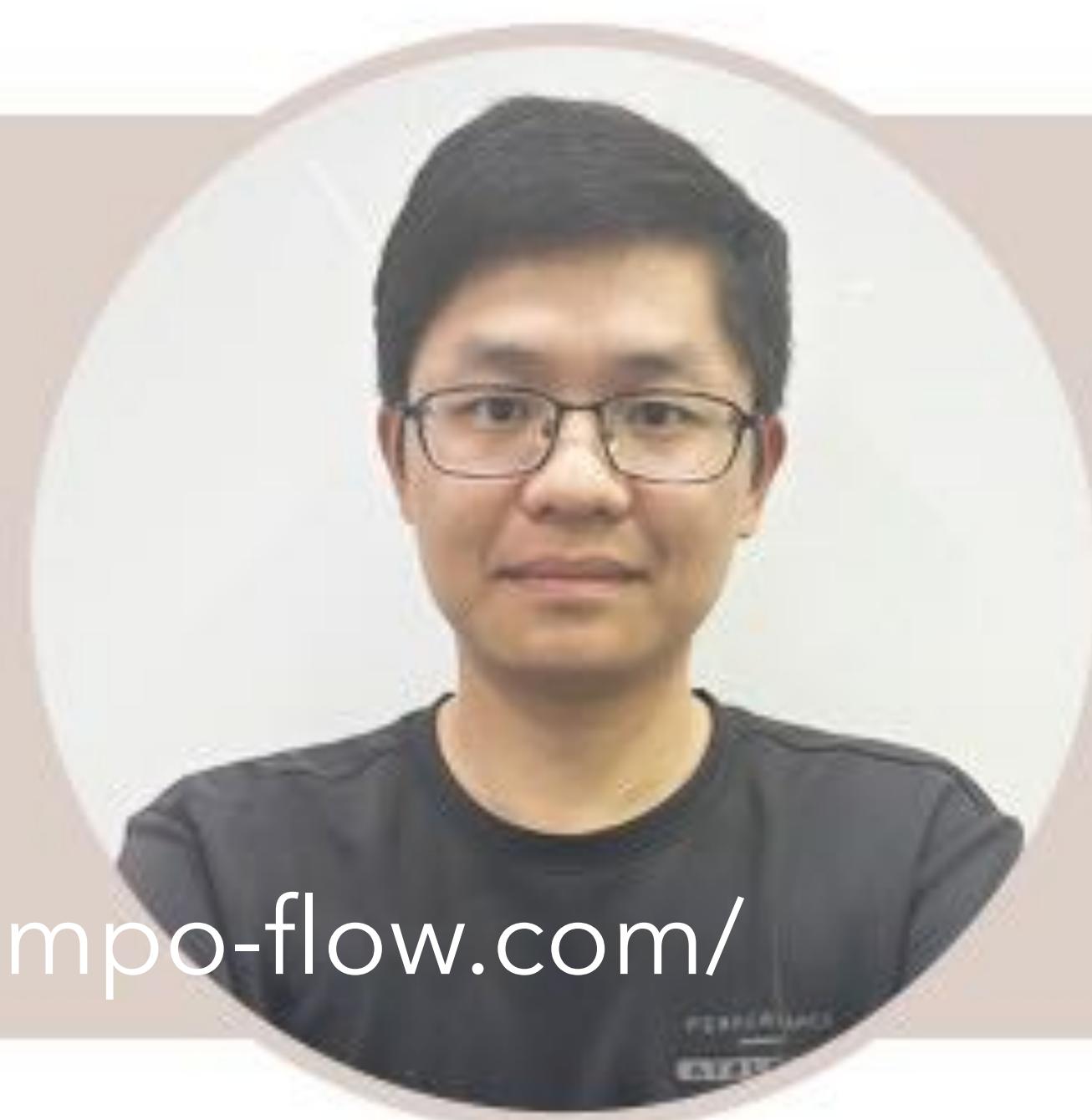
TempoFlow LightClock Pomodoro

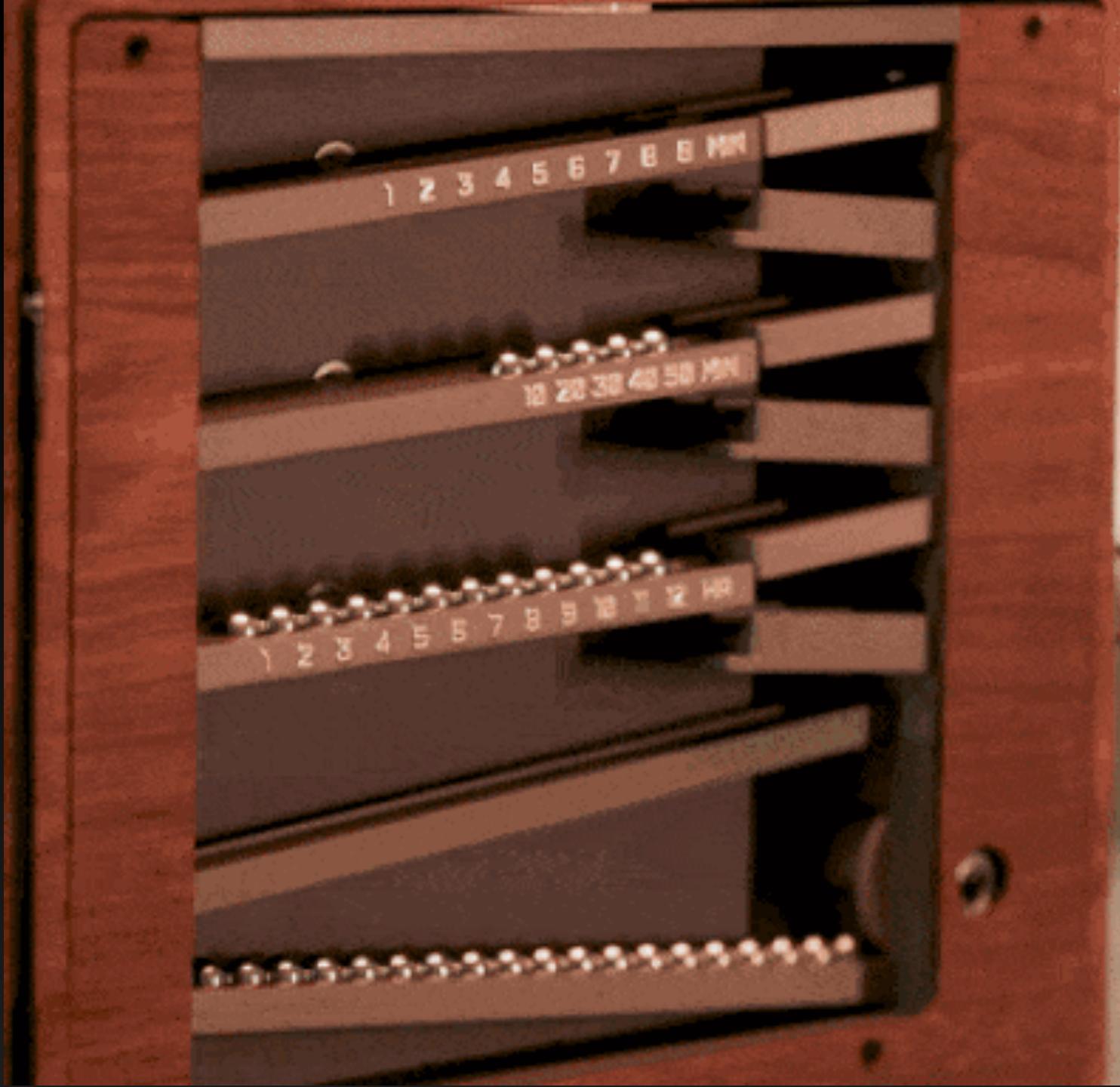
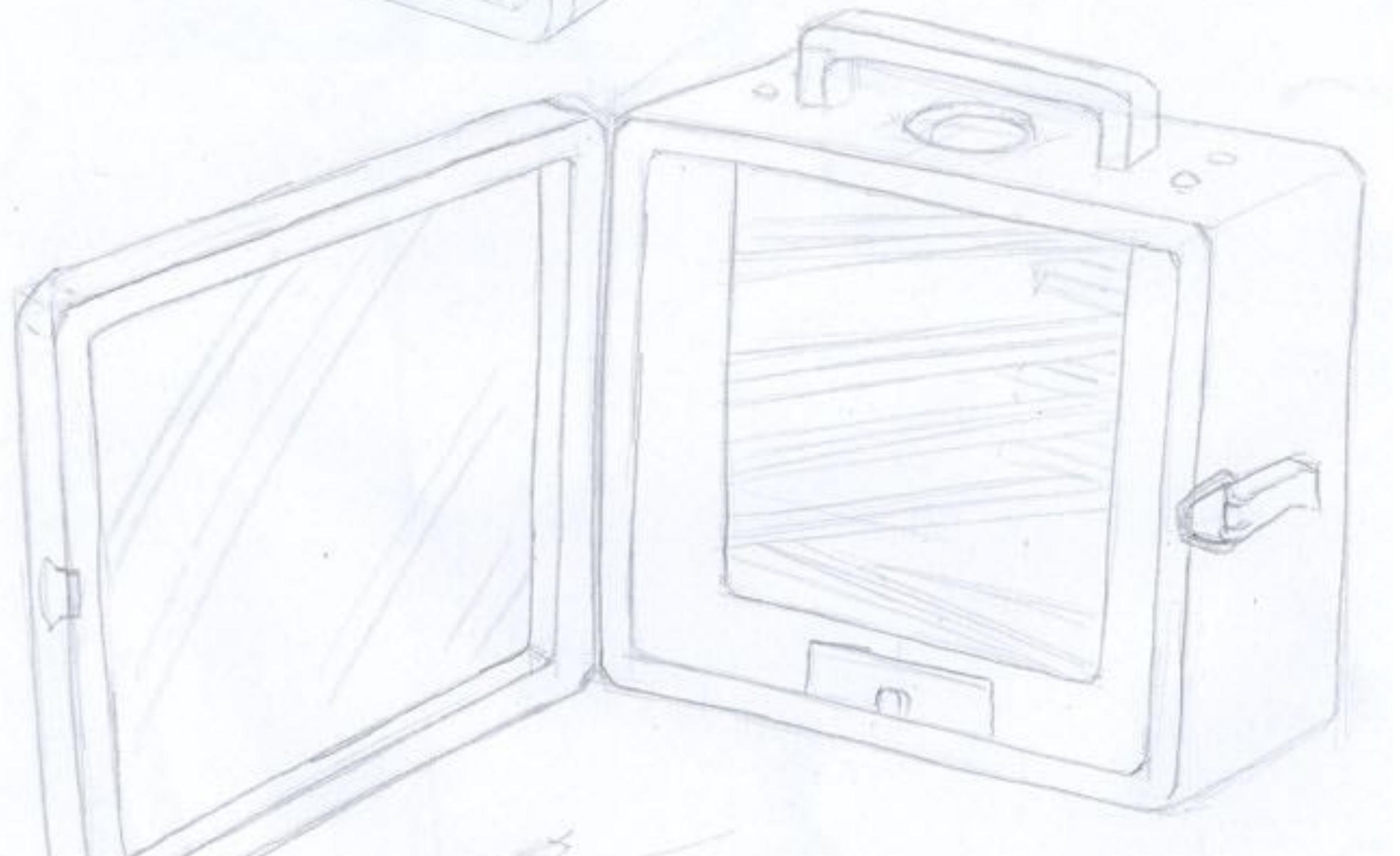
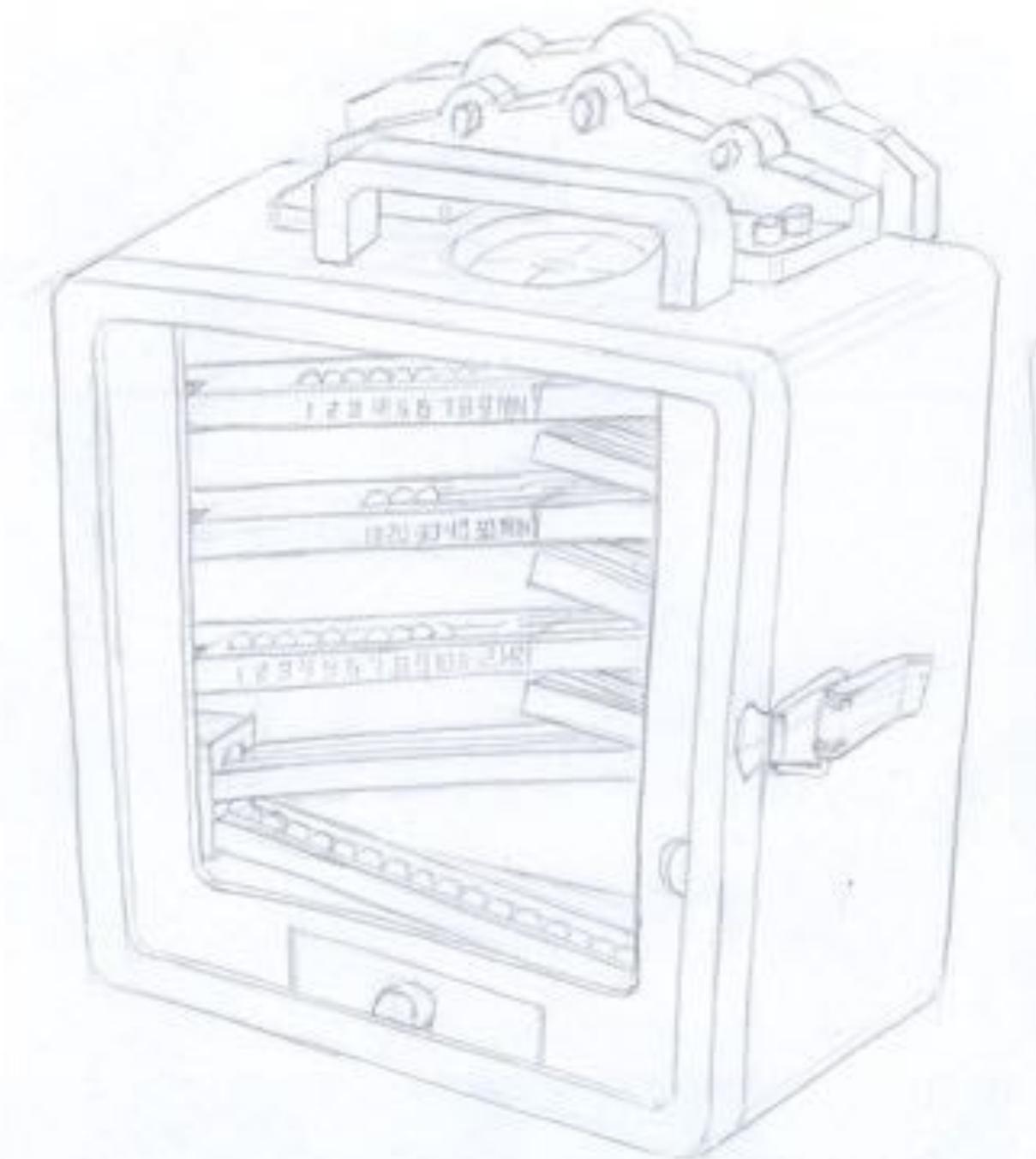
# Specs



**Steven LAM**

<https://www.tempo-flow.com/>





# Rewards

72 Hour Special

**\$159**

~~\$299~~  
47%  
Off



5 Day Special

**\$169**

~~\$299~~  
43%  
Off

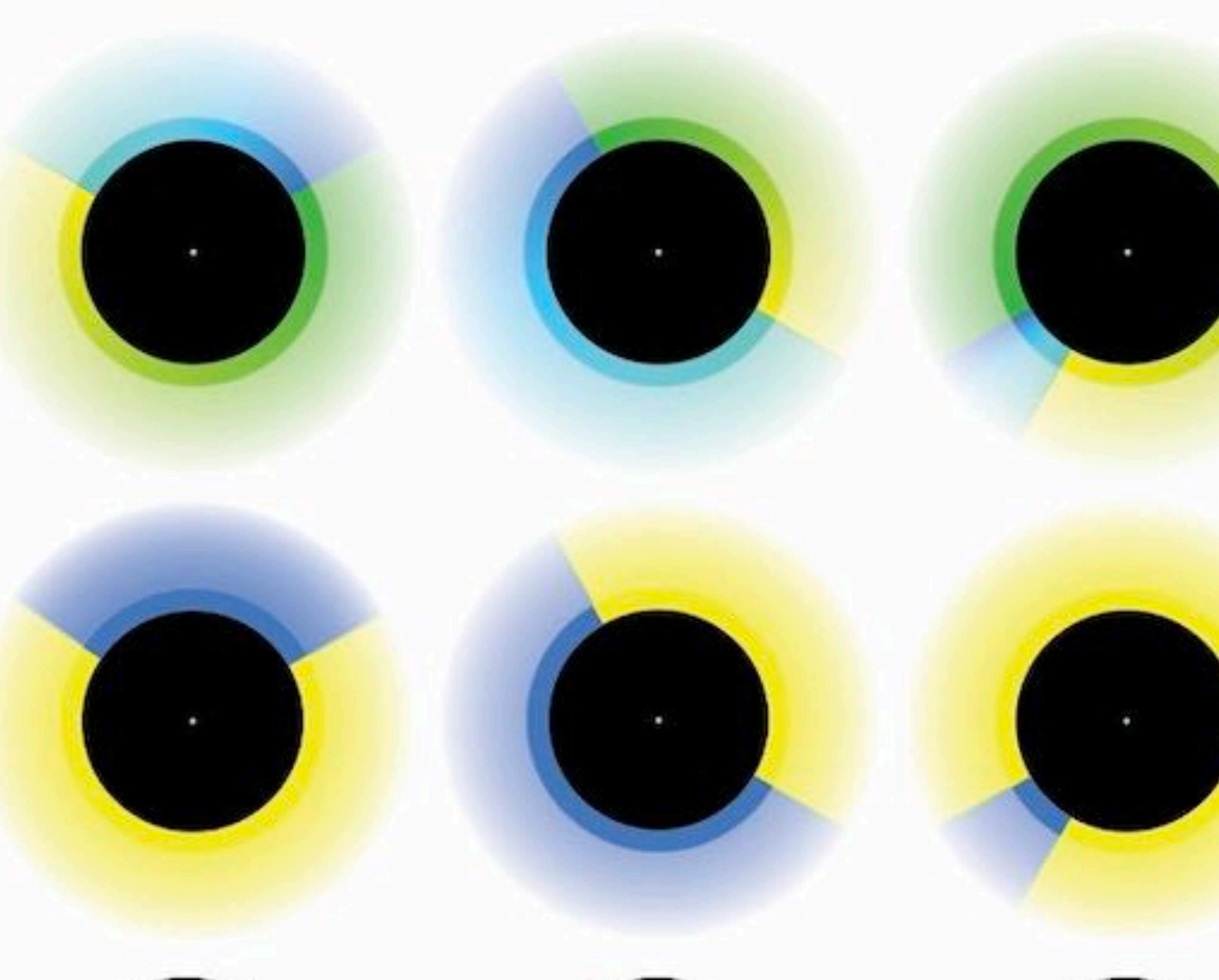


Super Early Bird

**\$179**

~~\$299~~  
40%  
Off

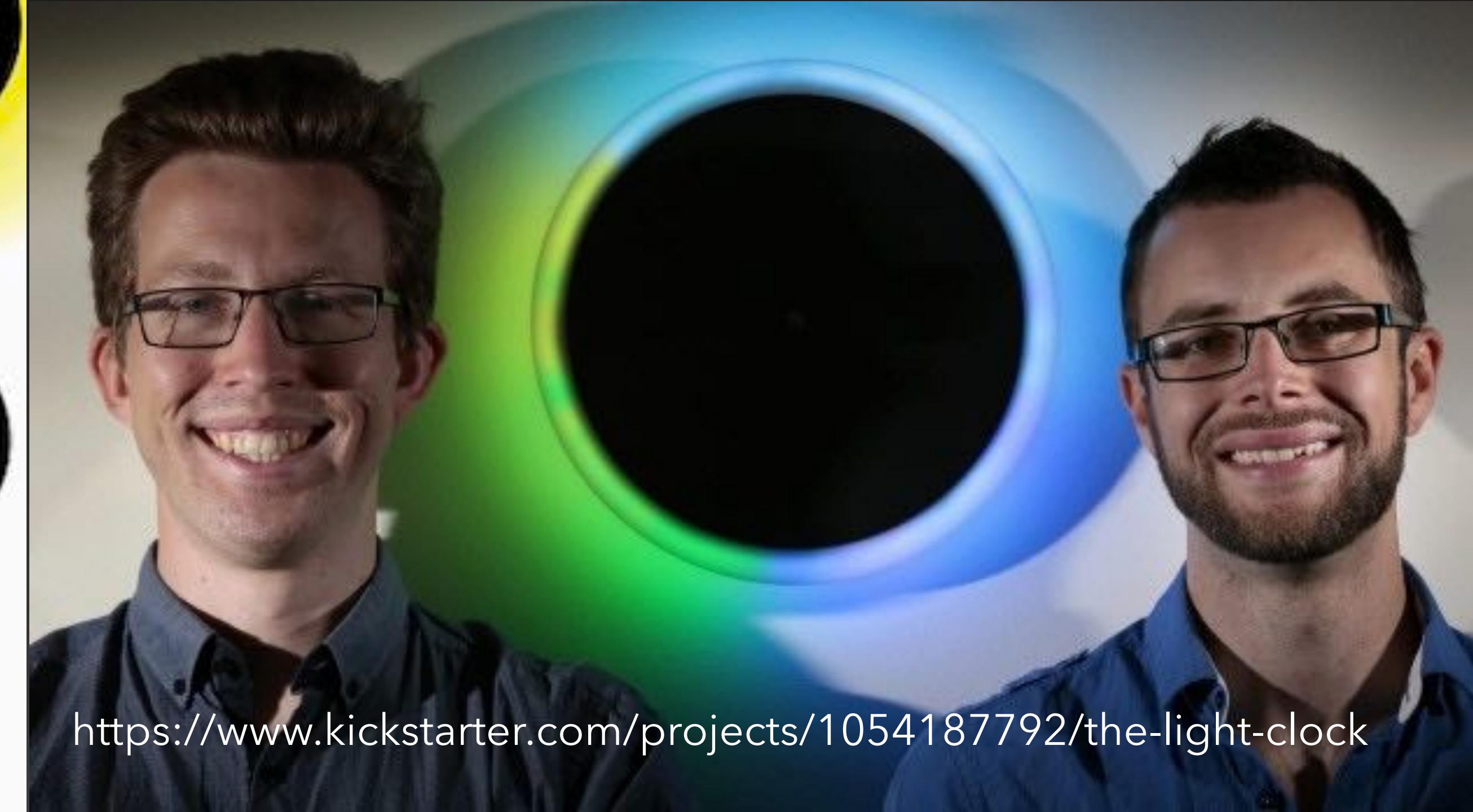




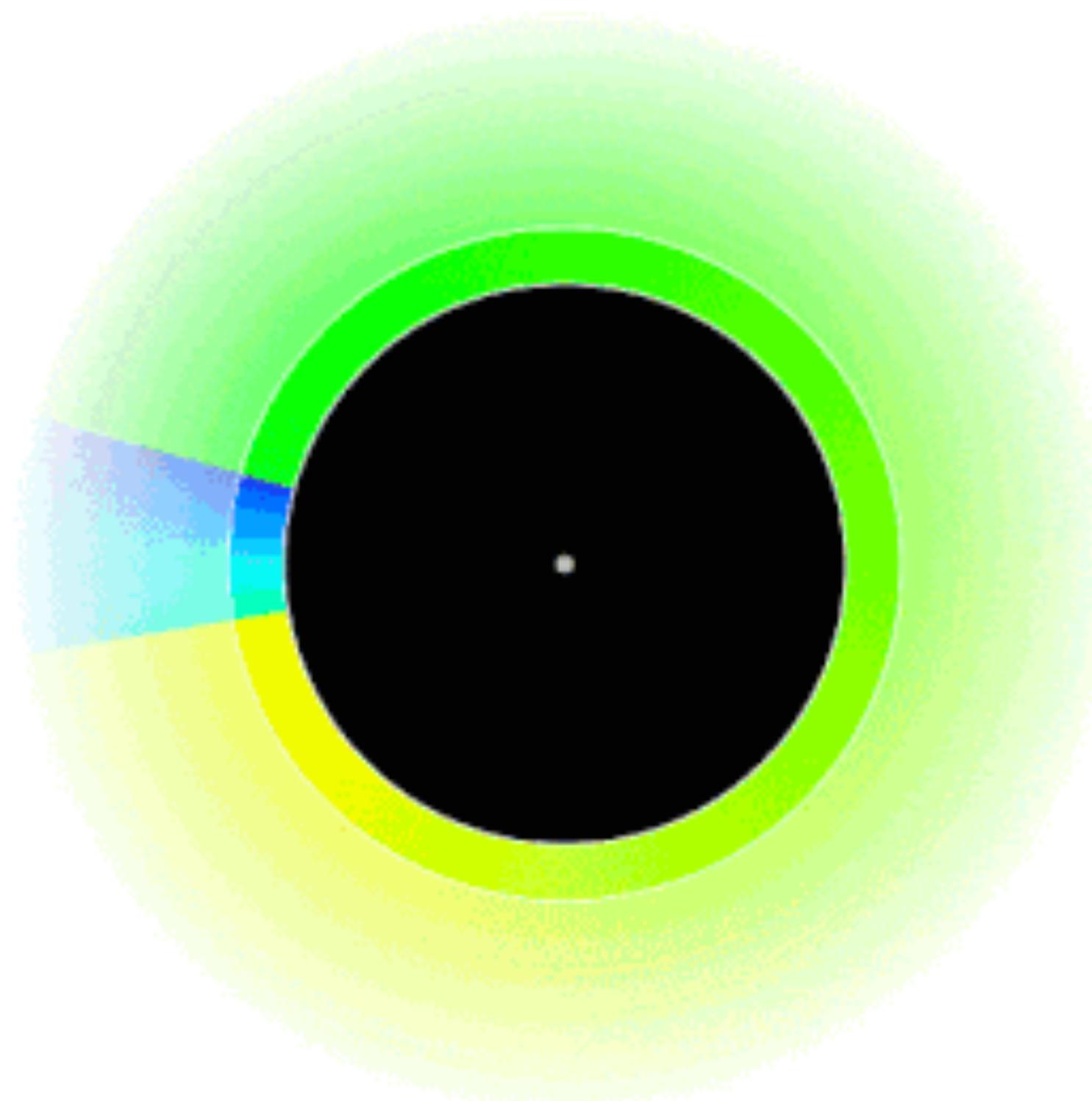
10:10

4:55

7:40



<https://www.kickstarter.com/projects/1054187792/the-light-clock>



Hour Colour

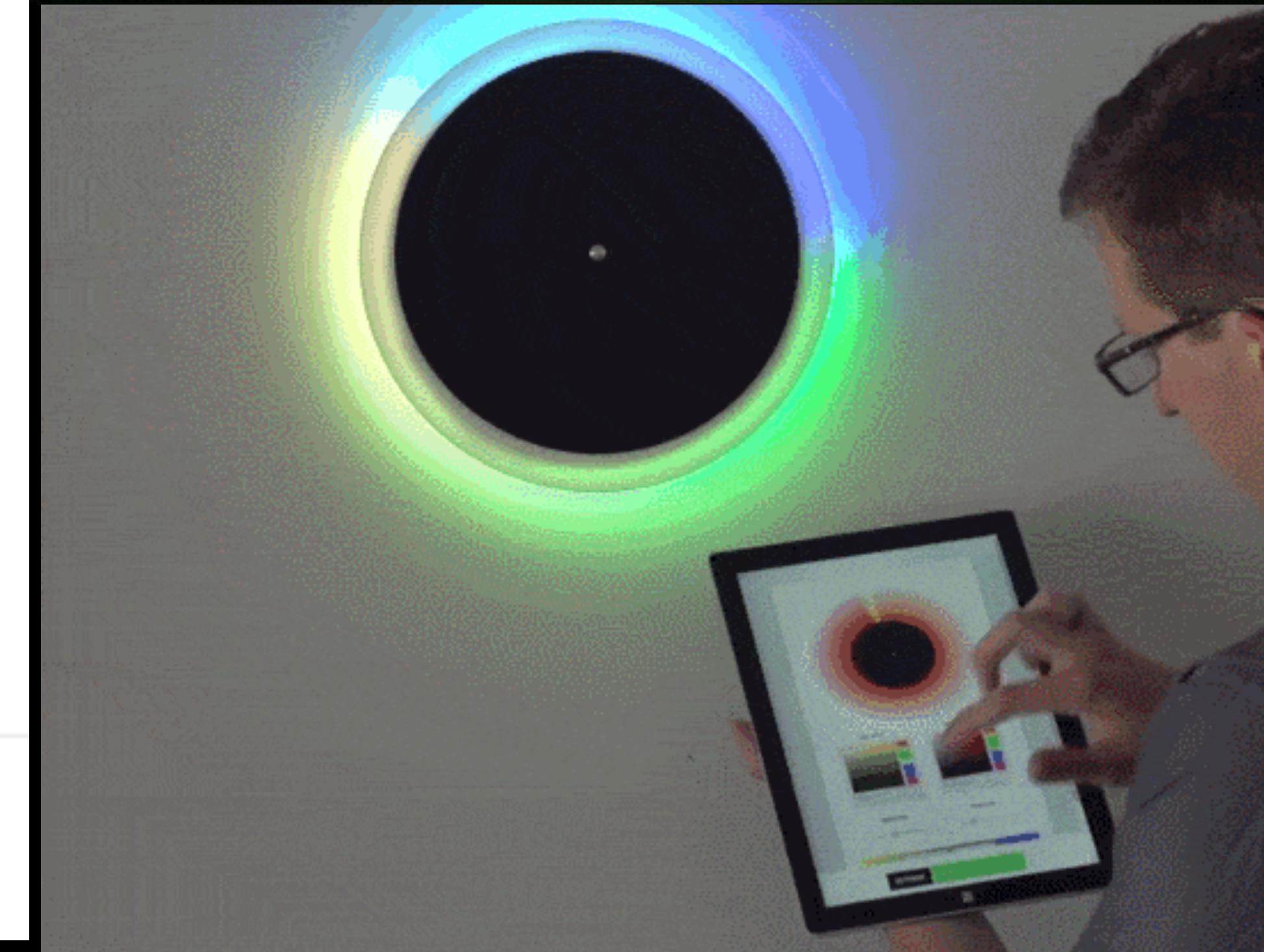
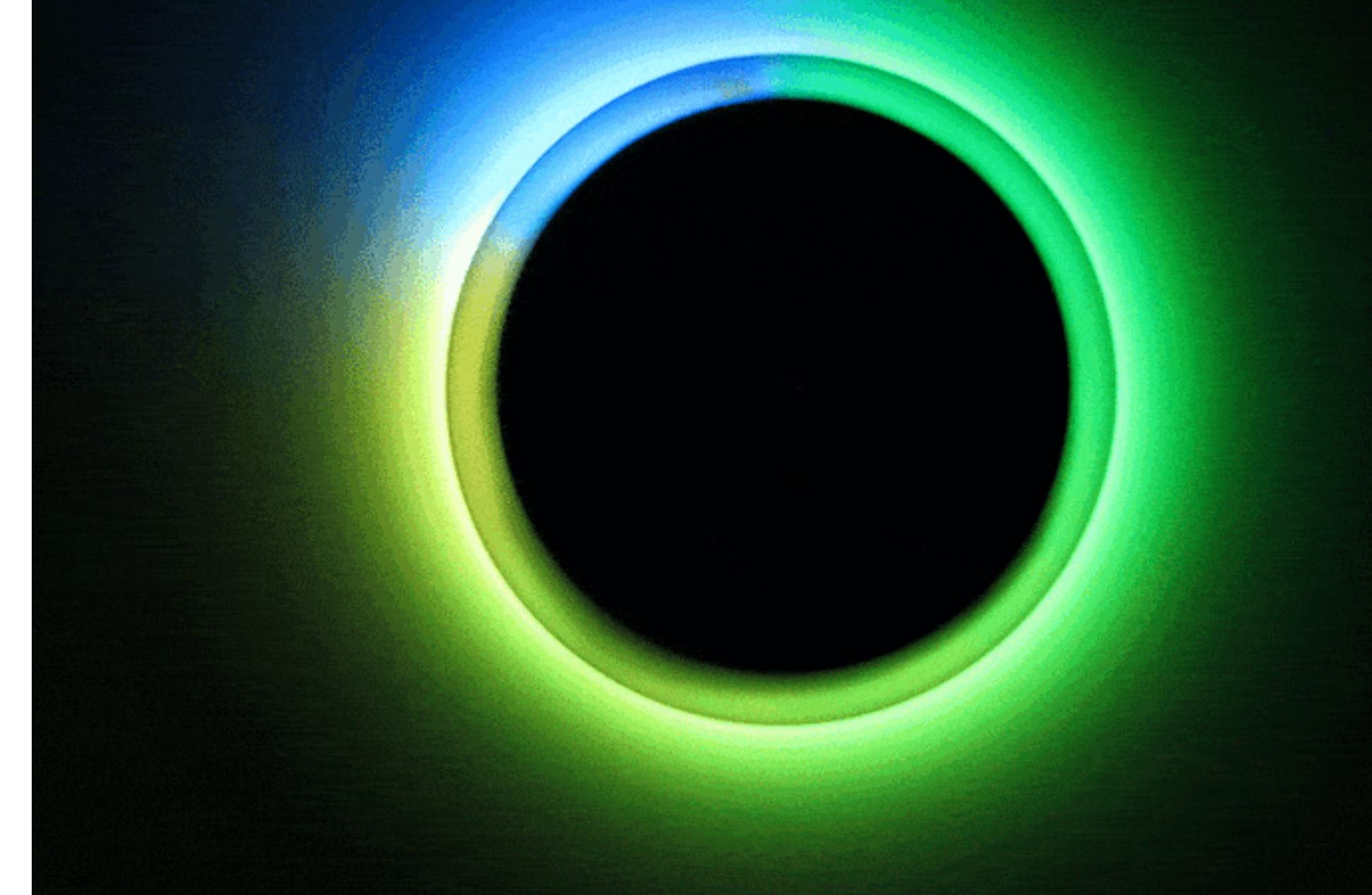


Minute Colour



SETTINGS

UPDATE THE LIGHT CLOCK





Founder / PM  
**Rachel**



Business Developer  
**Shaun**



Product Manager  
**Doo**



Hardware Engineer  
**Steve**



UI/UX Designer  
**Mari**



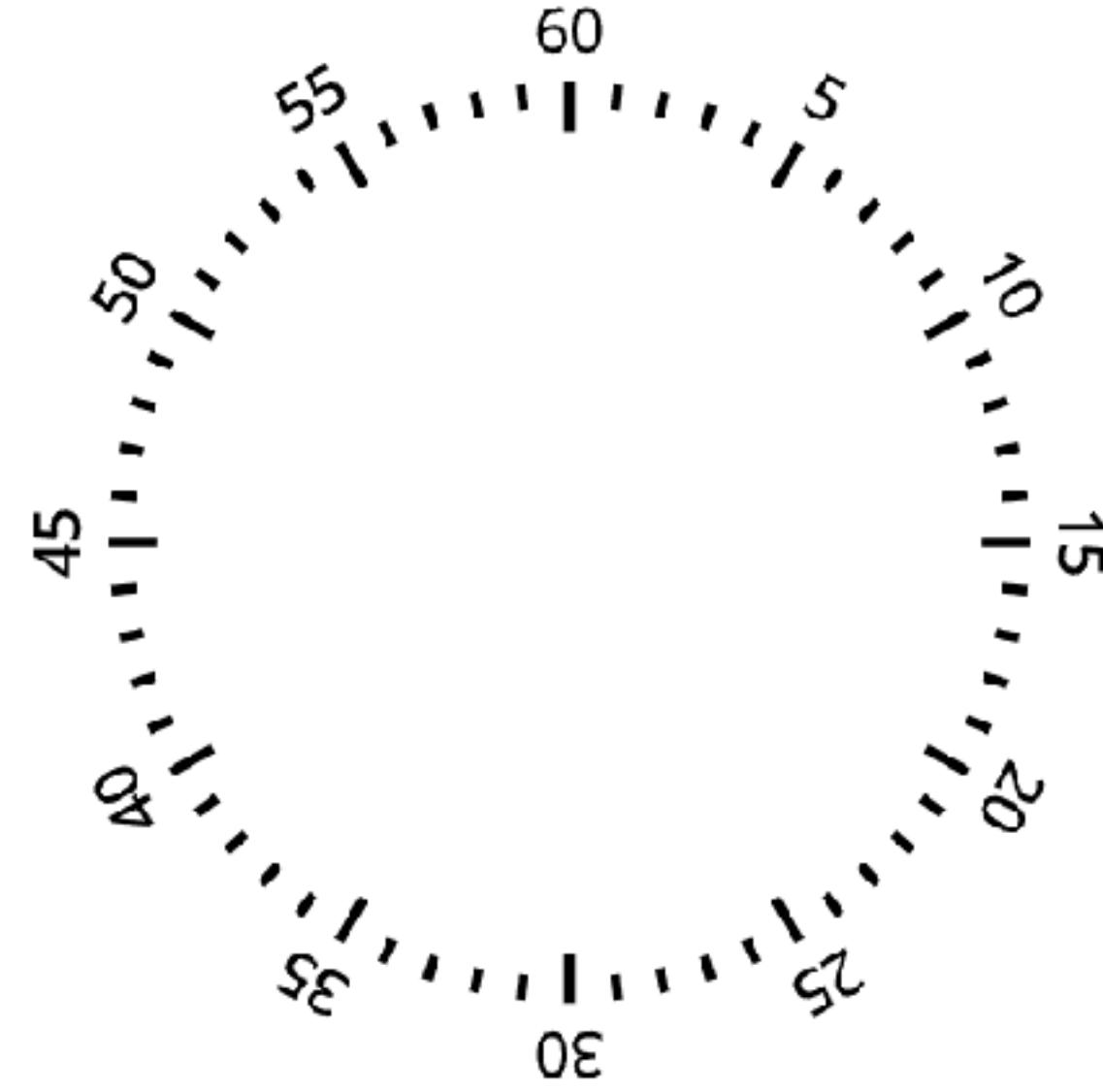
Software Engineer  
**SY Yun**



Marketer  
**Lennie**



Manufacturing QC  
**Zinna**



Focus time

Break time

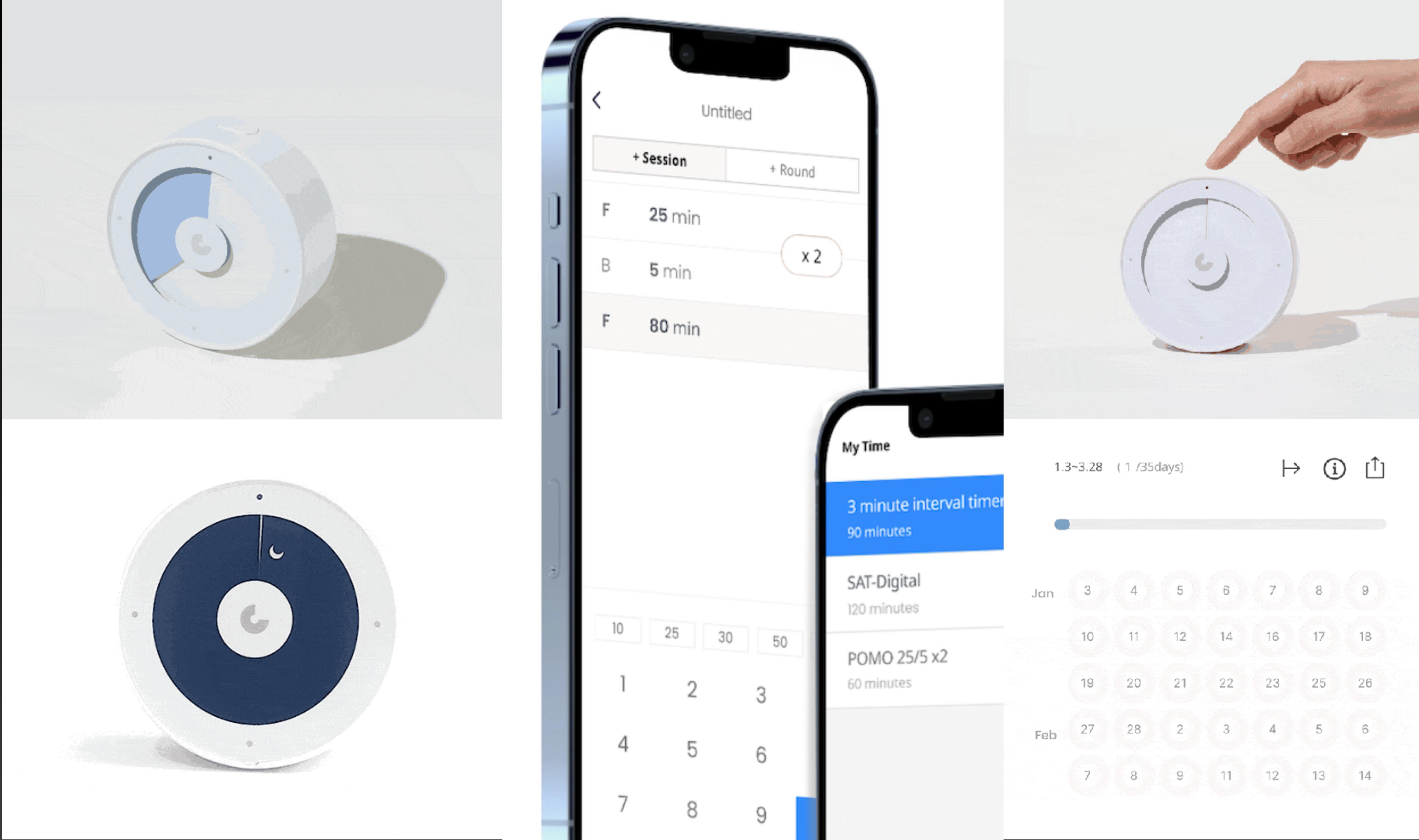
timer 4



minee 3



<https://www.kickstarter.com/projects/minee/minee-habit-tracking-pomodoro-timer-kit-for-your-goal>



# 課程素材

GitHub: picoCountdowner

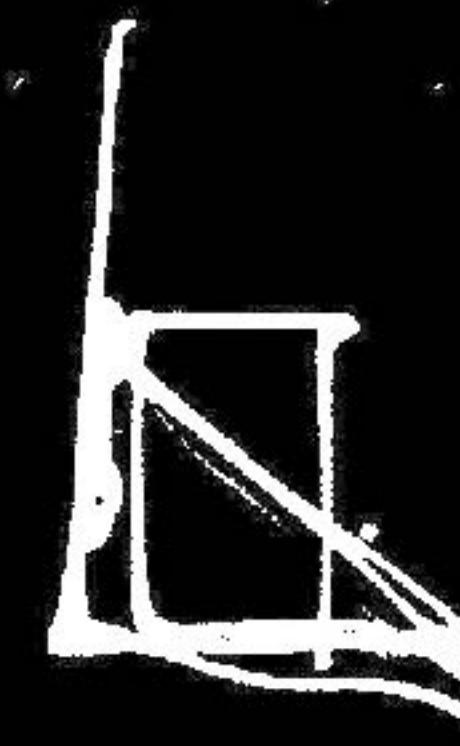
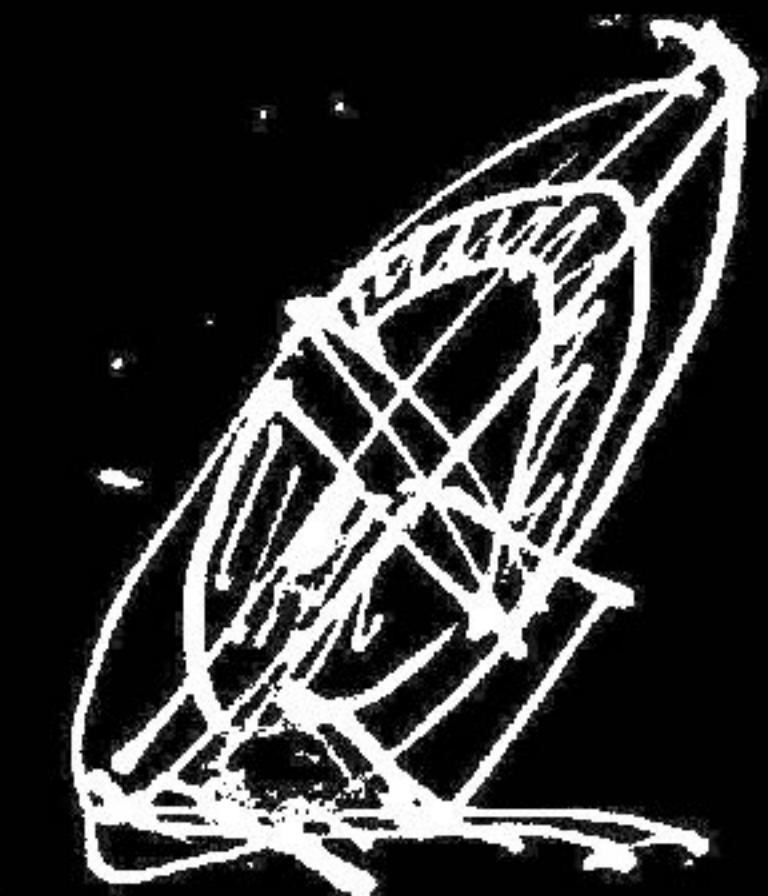
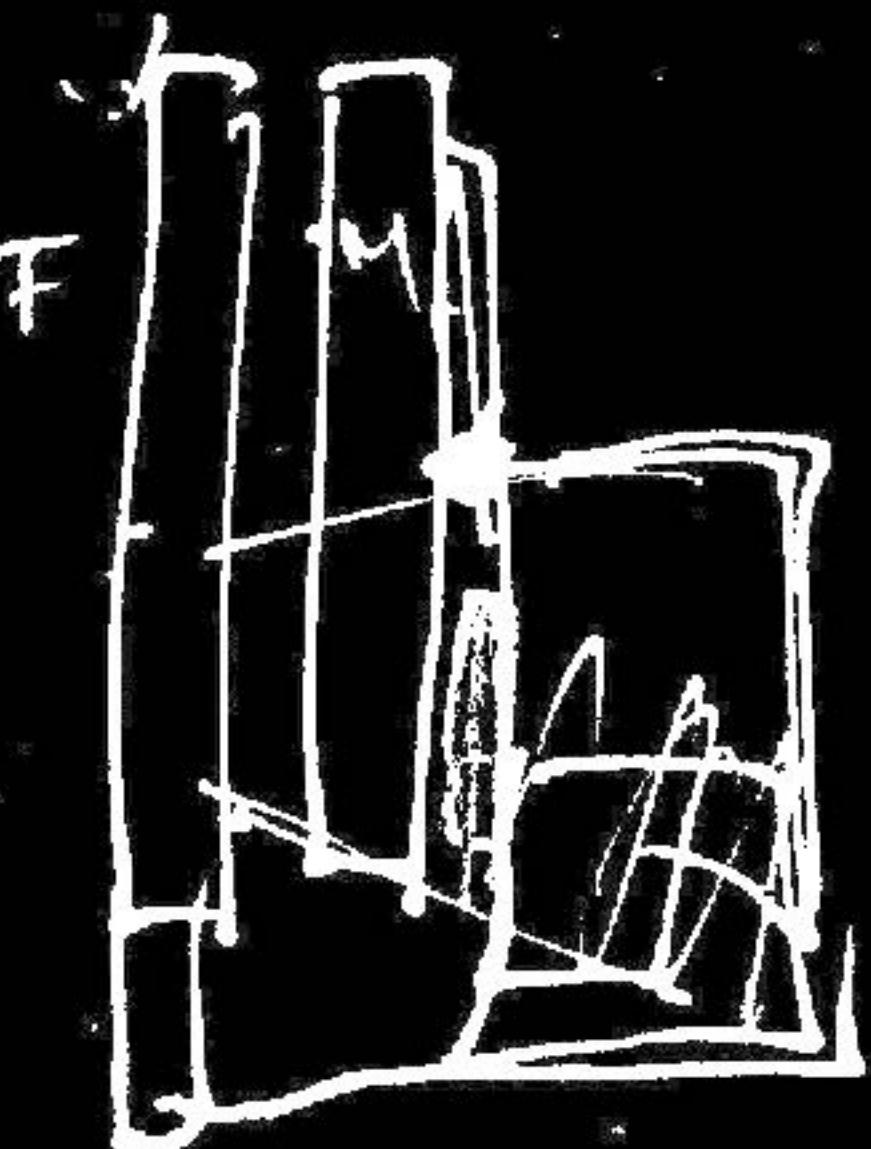
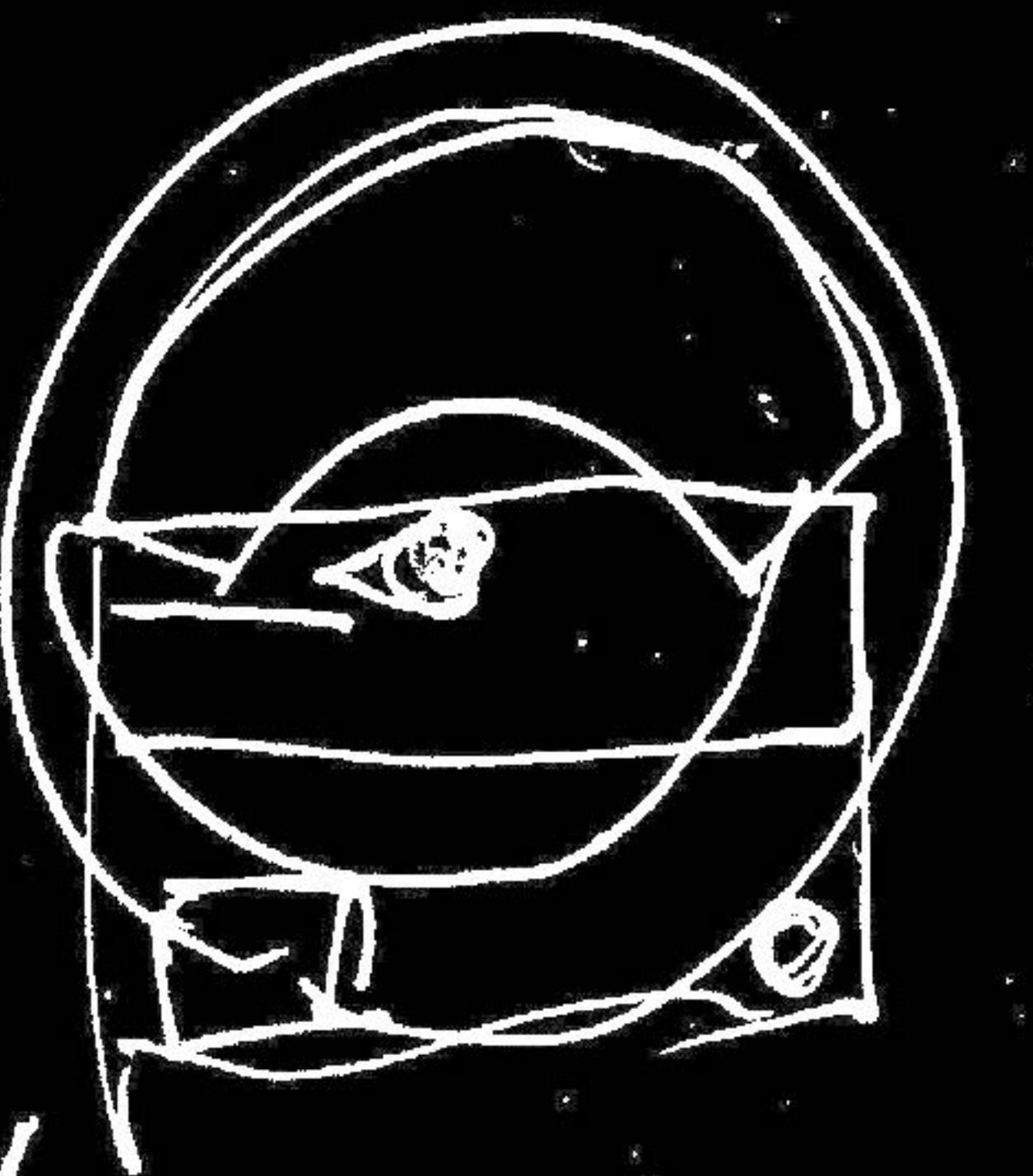
[github.com/chyijiunn/picoCountdowner](https://github.com/chyijiunn/picoCountdowner)



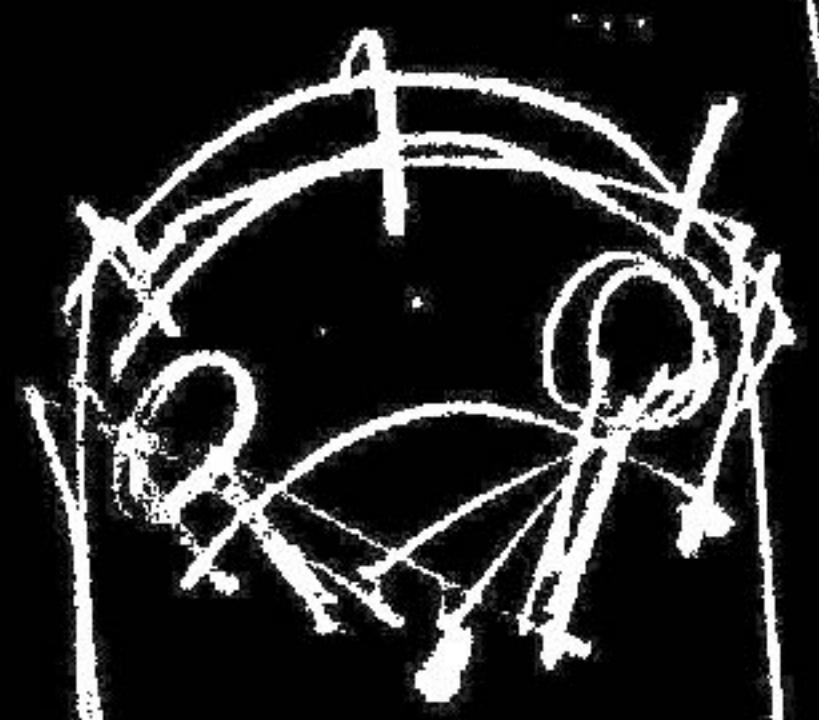
± 30°

15 min. to  
60°

# Start

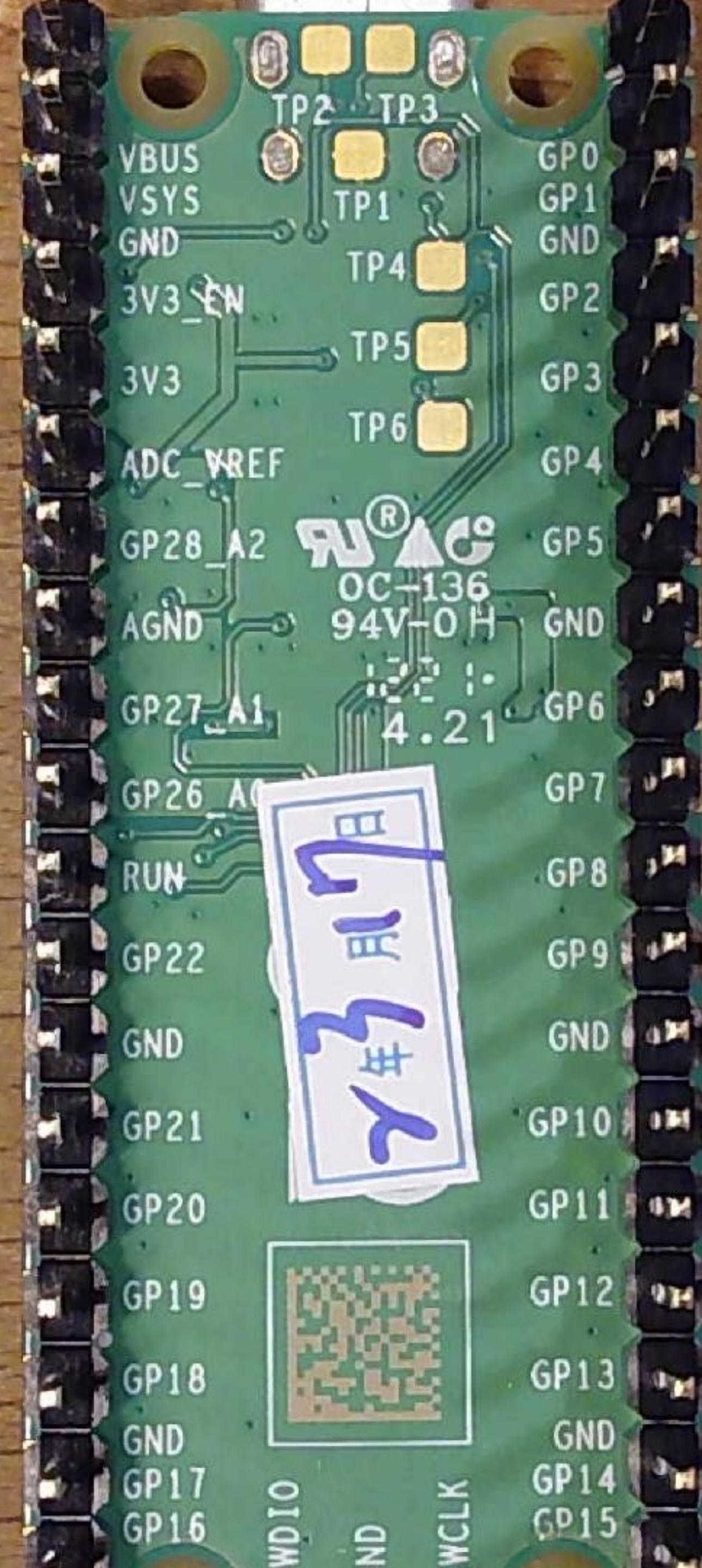


if

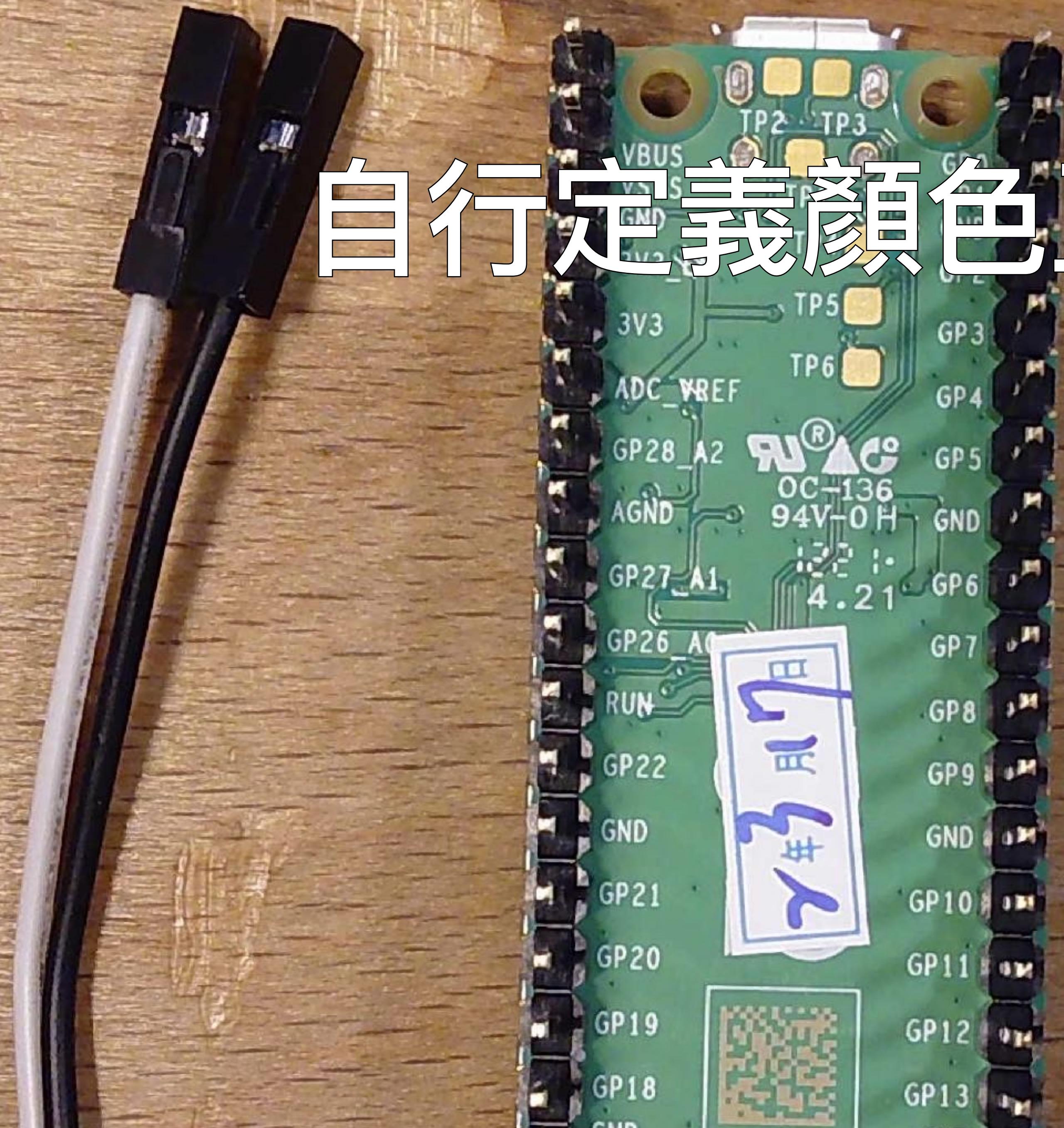


2.

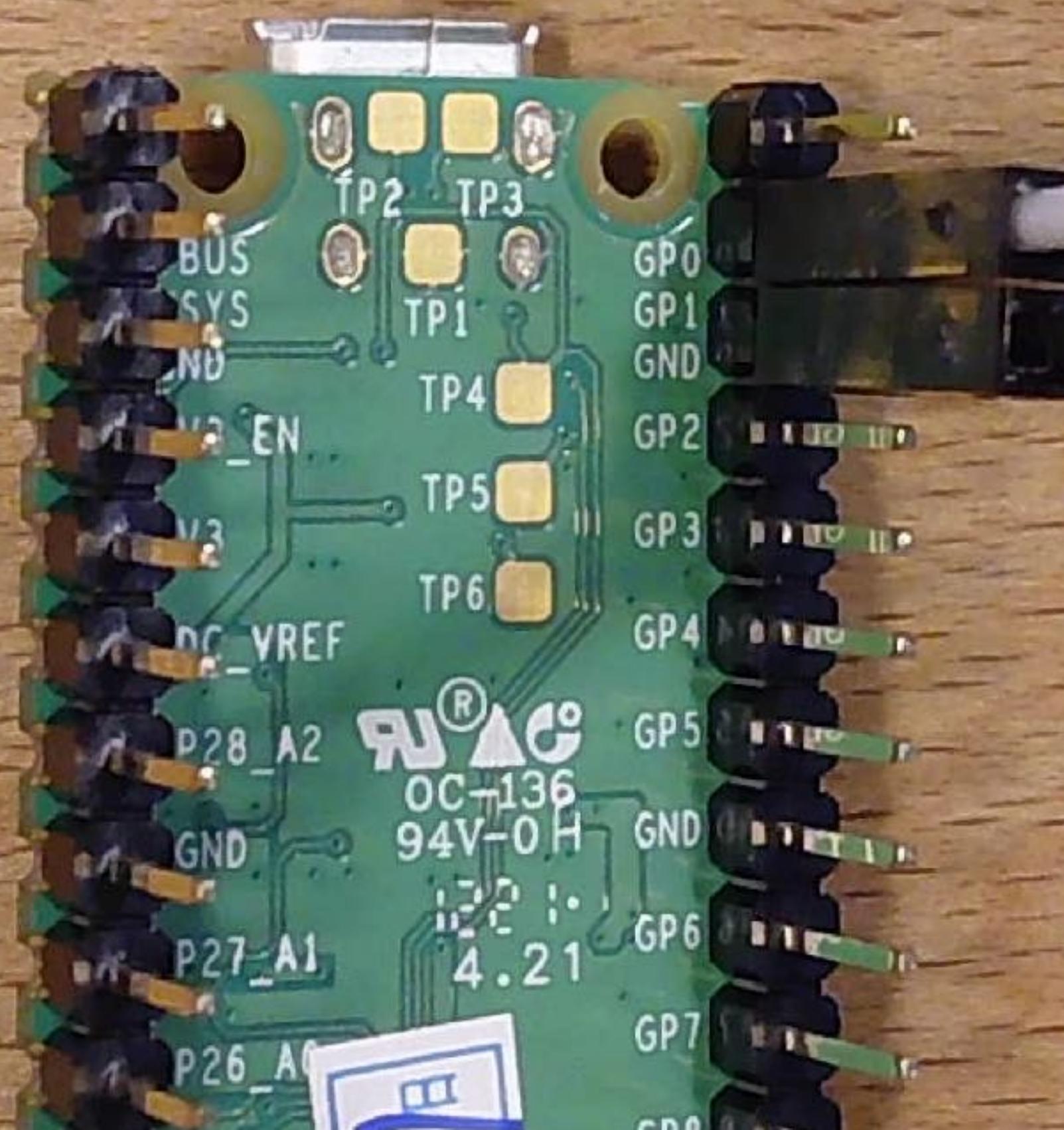




自行定義顏色正負



正極接 GP1，負極接 GND



LED 長腳接正極，短腳接負極



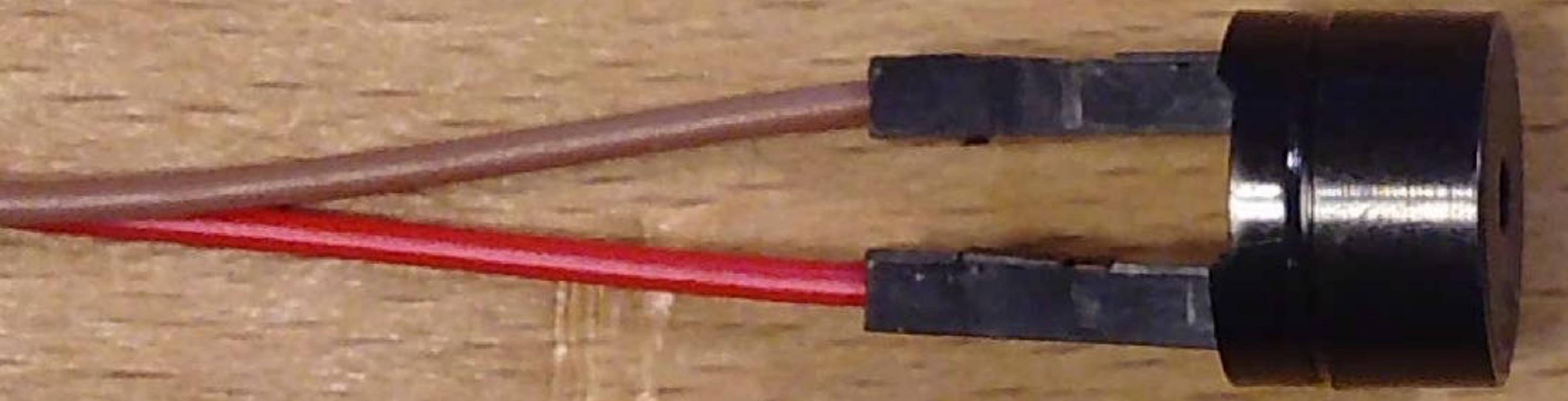


接喇叭用  
正極接 GP14，負極接 GND



喇叭也分正負

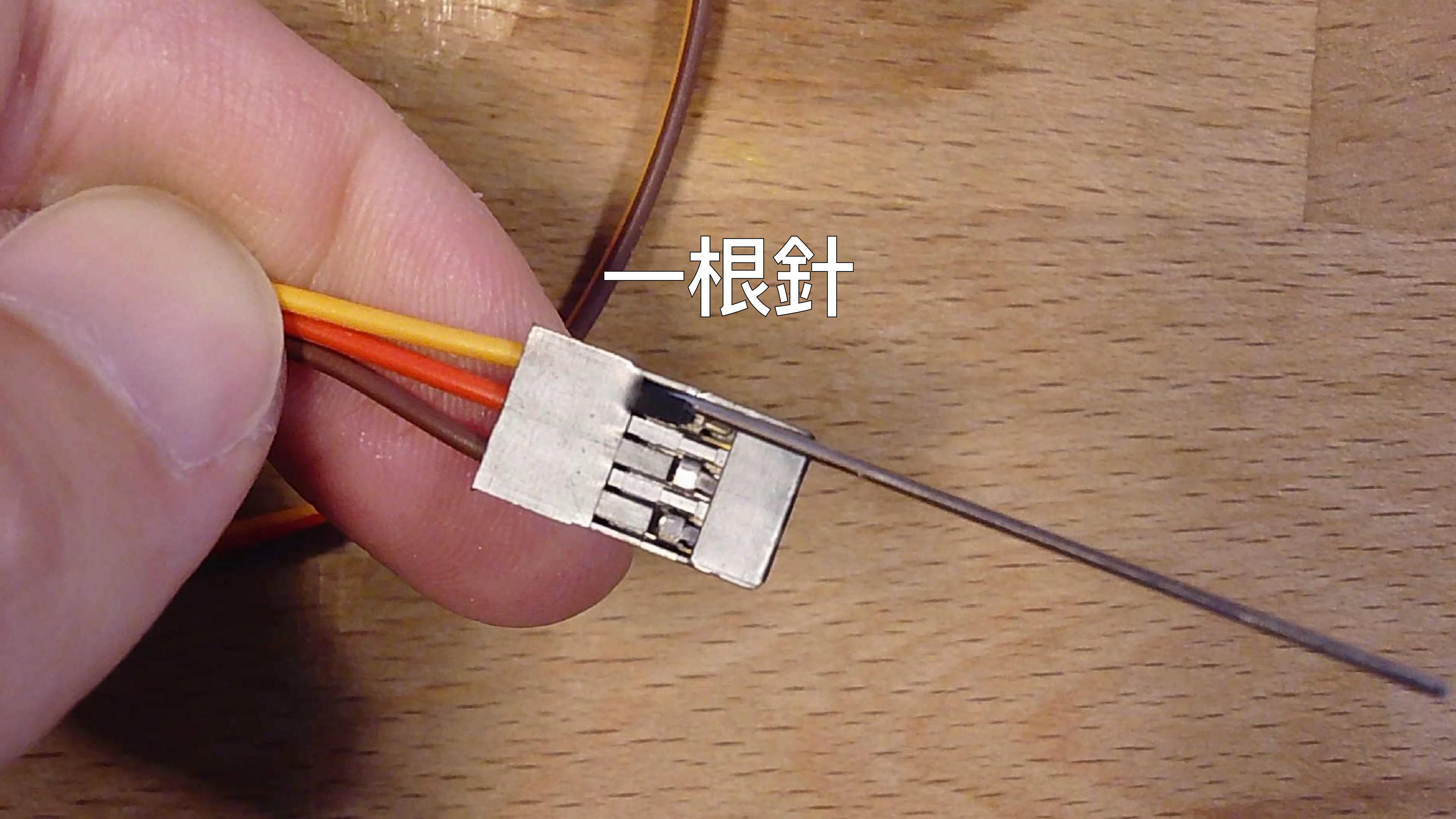




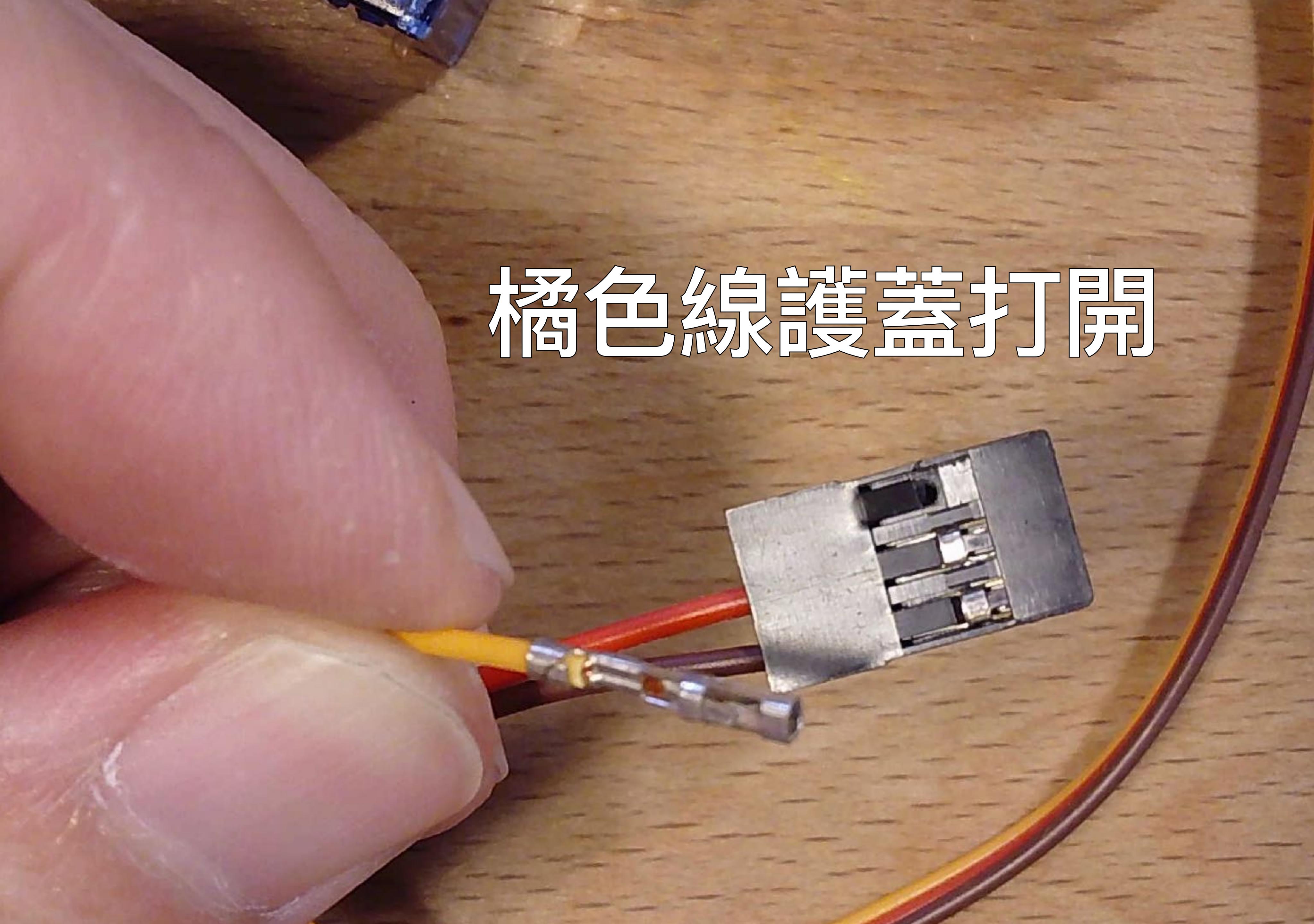
認識馬達



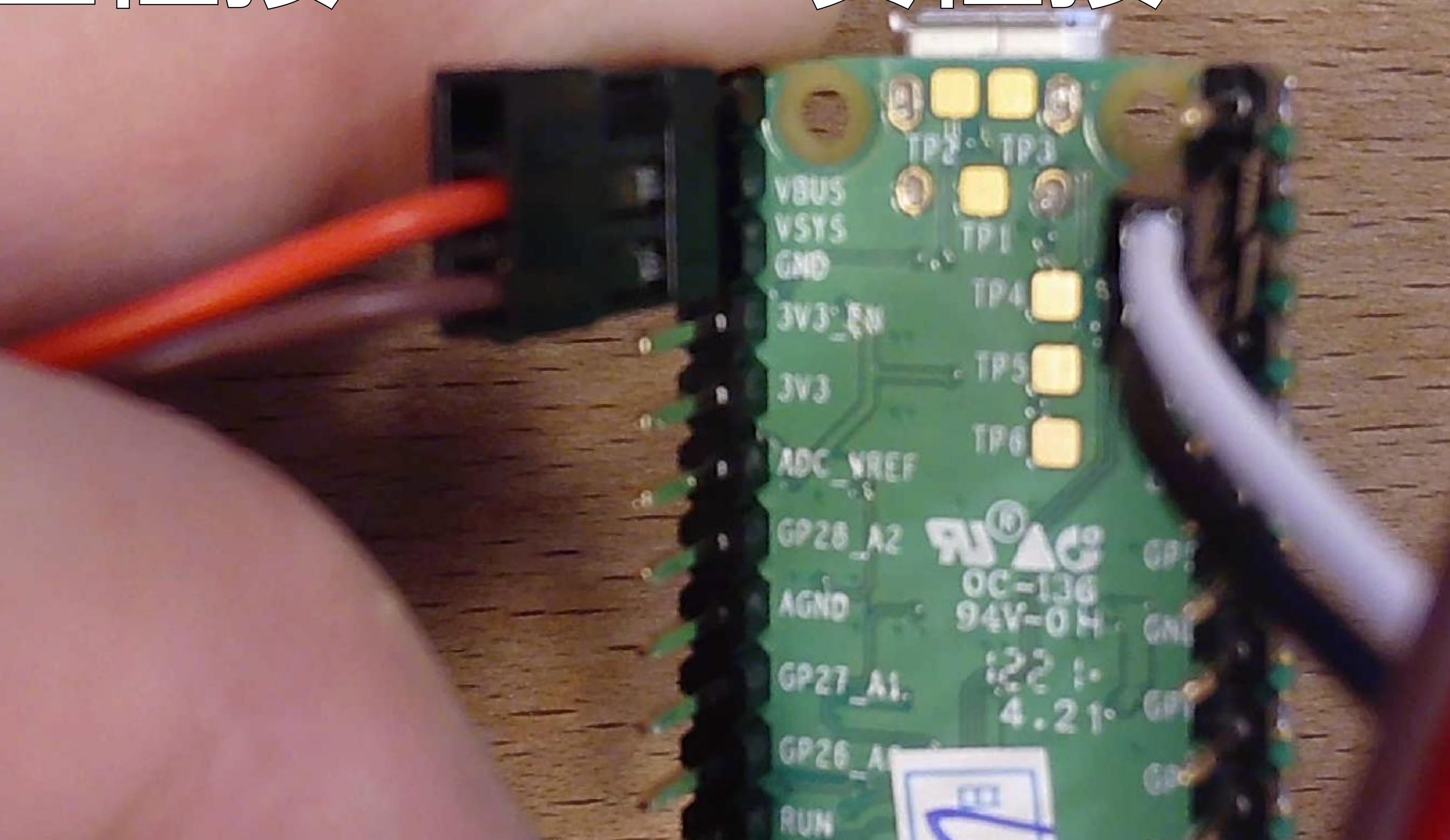
一根針



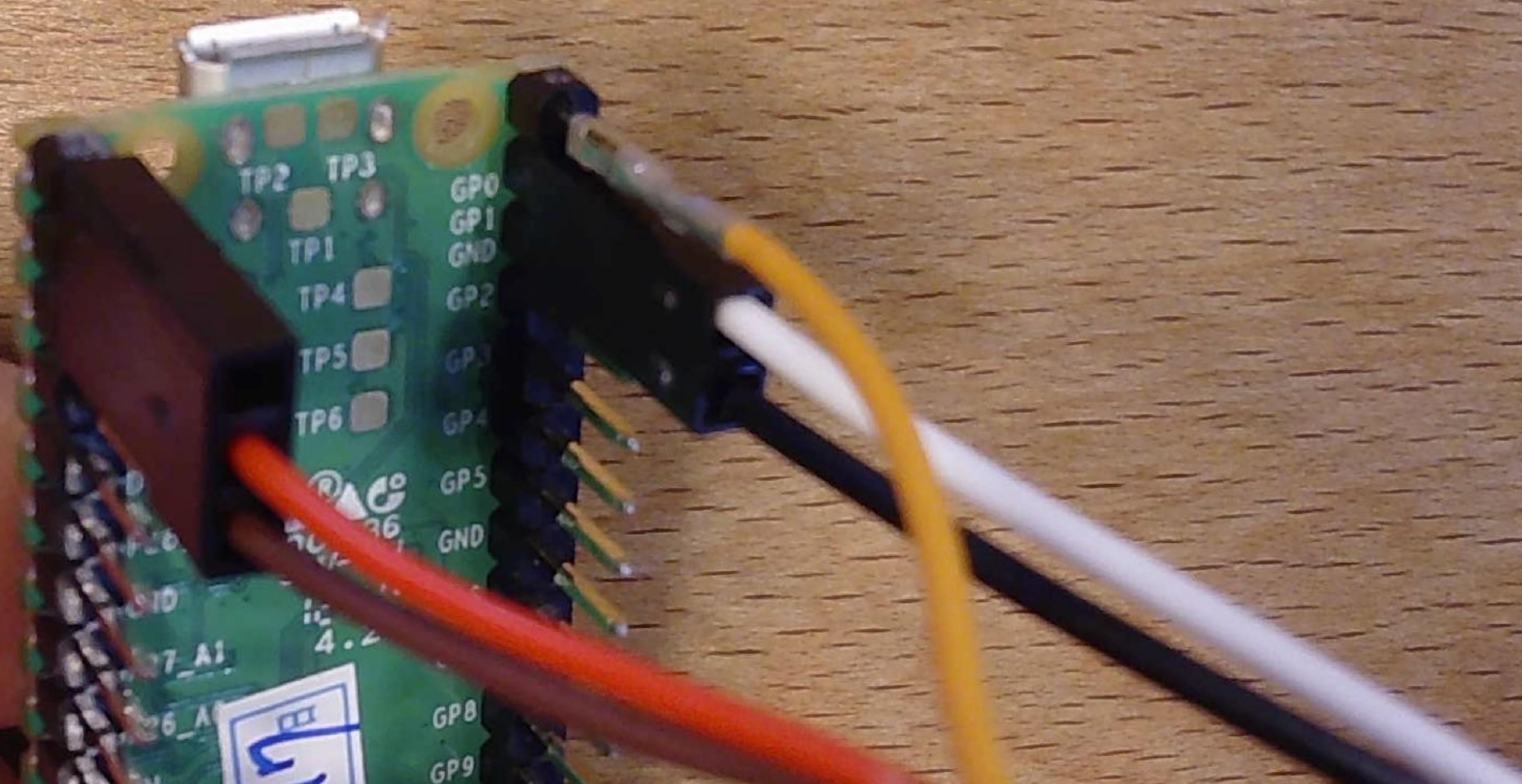
橘色線護蓋打開



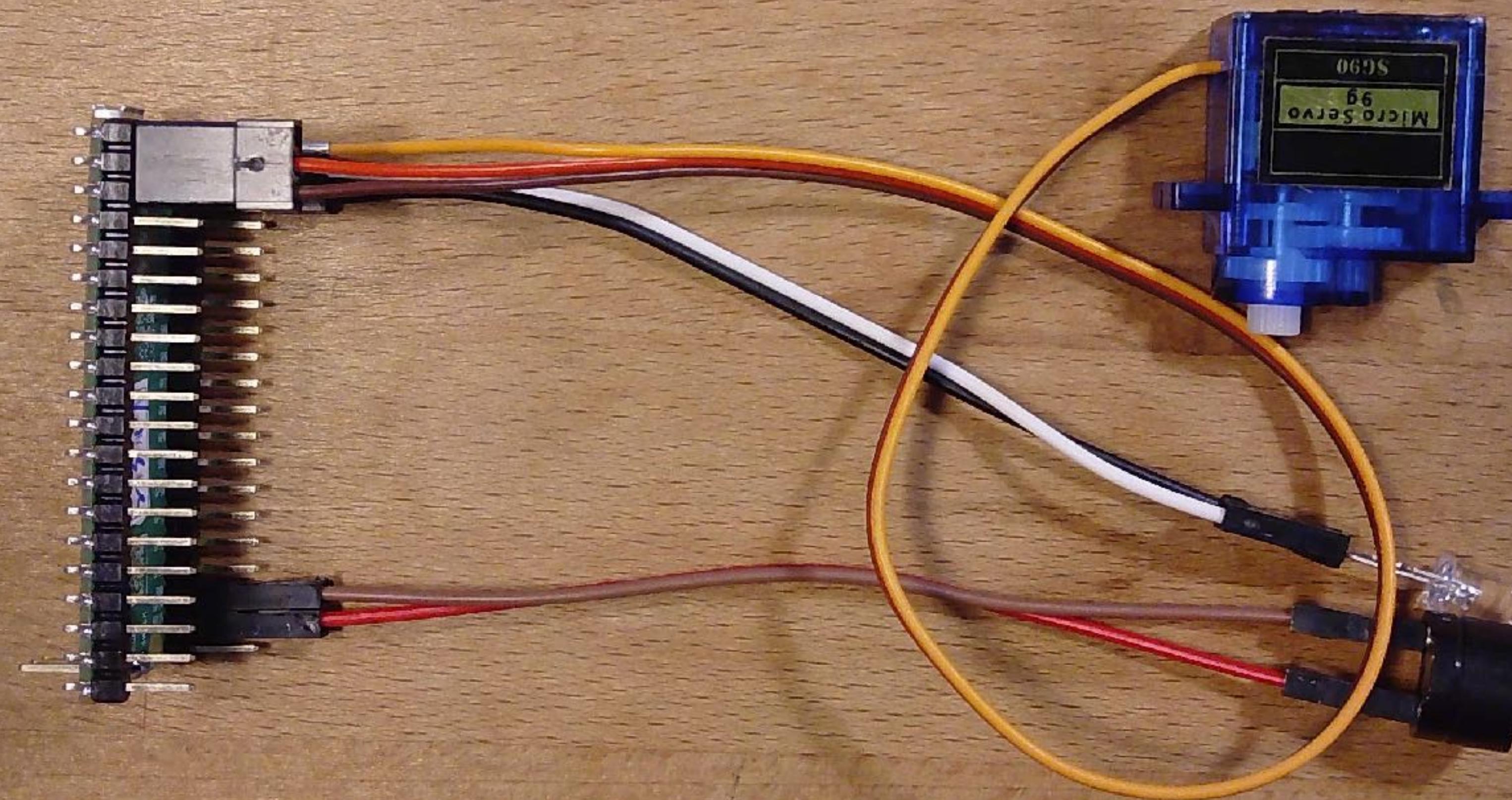
正極接 VSYS，負極接 GND



橘色線接 GP0



全部接完的樣子



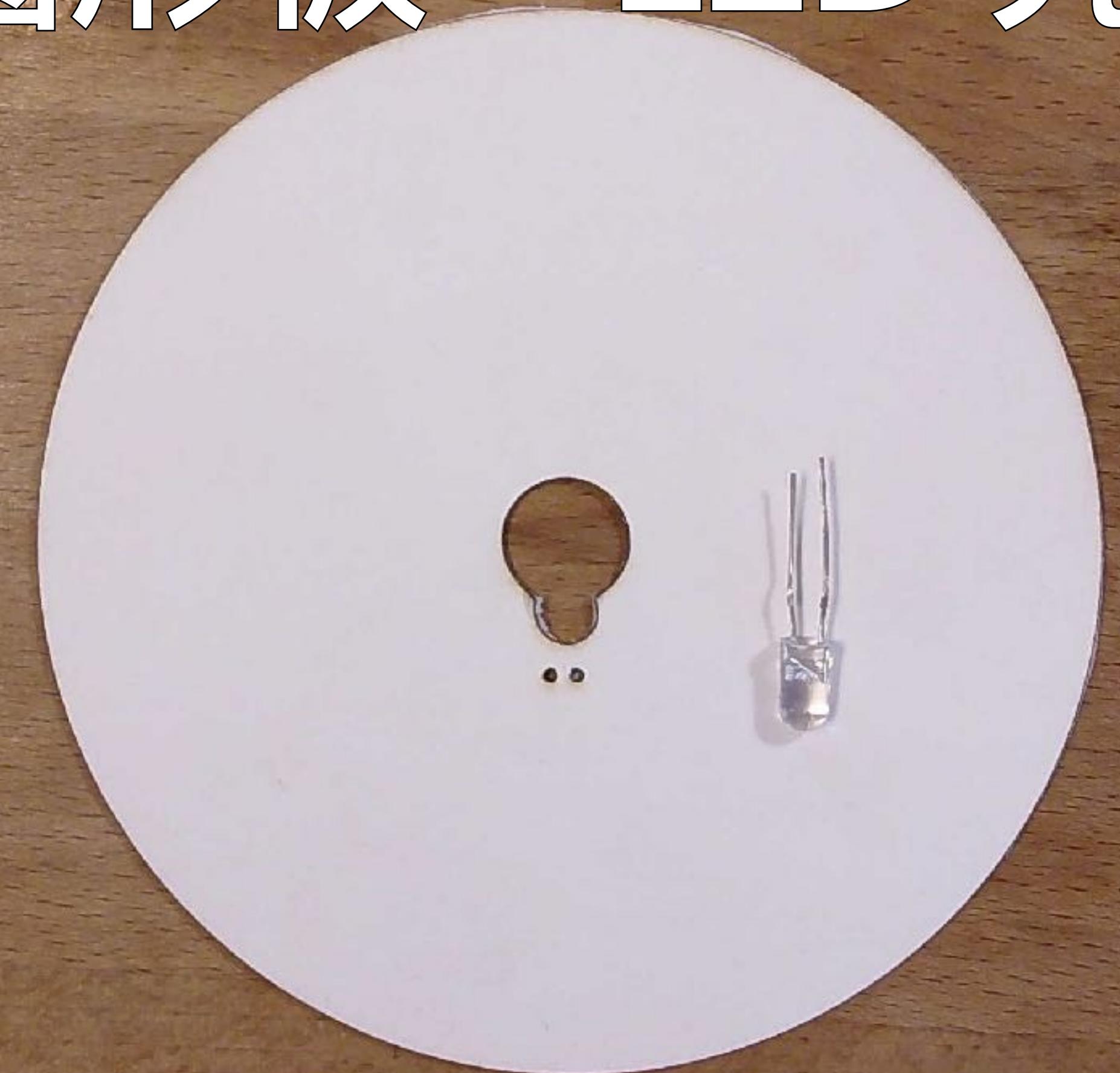
# 硬體測試

chyijiunn

# 外殼組裝

chyijiunn

取出圓形板，LED 先拔下



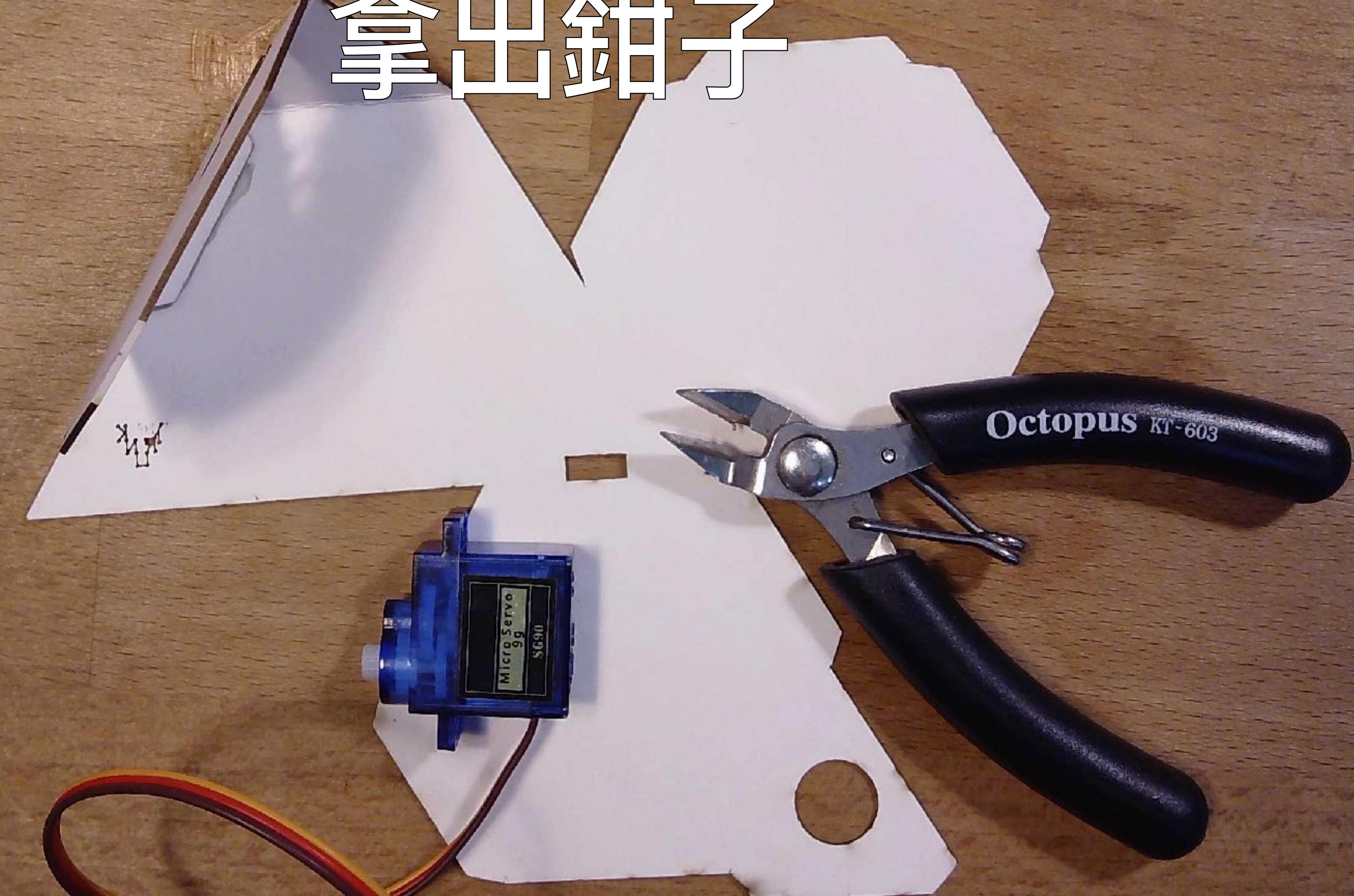
找到一樣形狀的地方  
取出圓形板在外，貼合



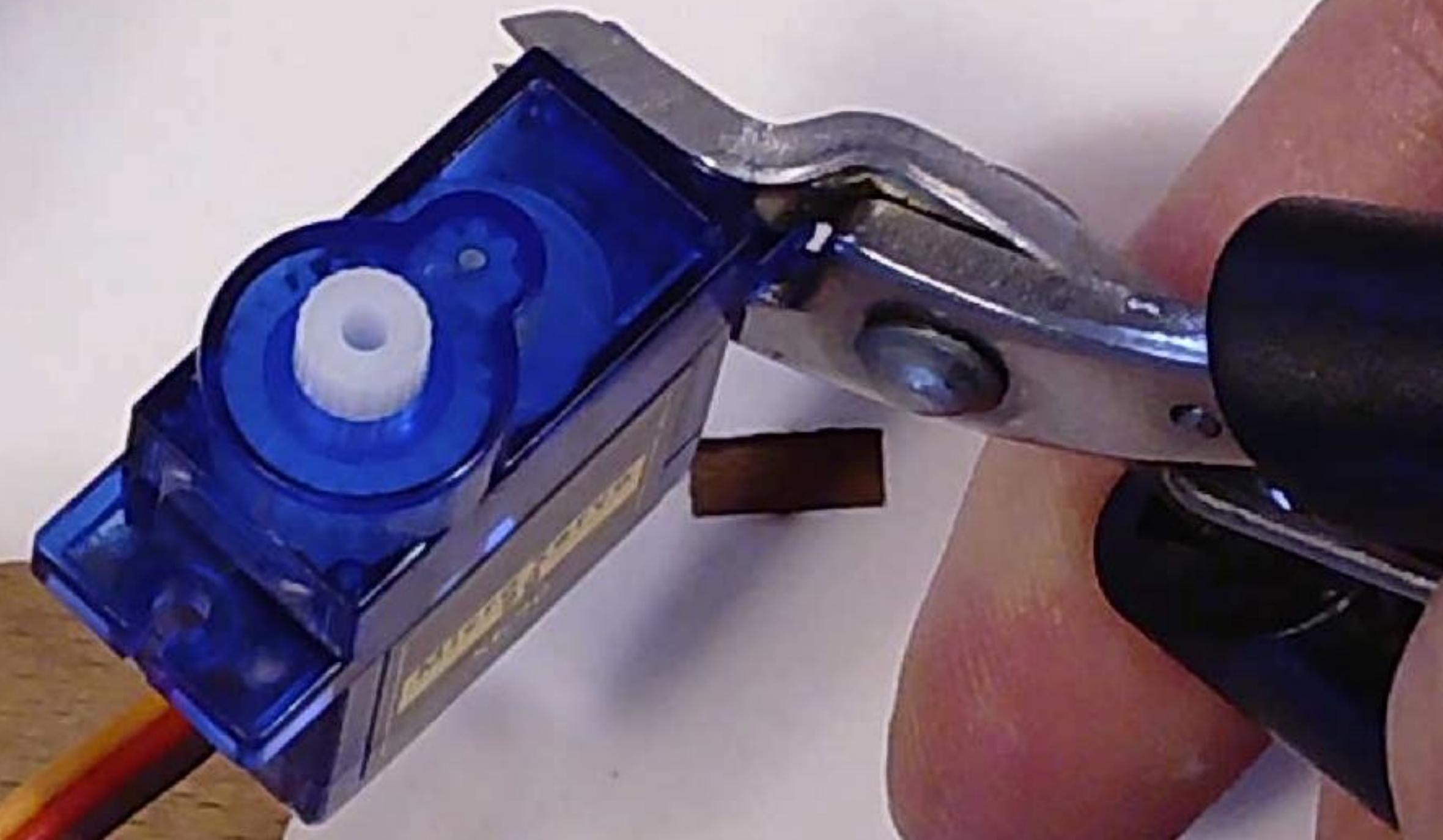
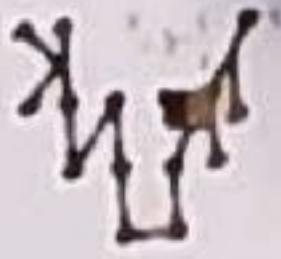
塞入 LED，腳往下折



拿出鉗子



剪斷馬達的兩個耳朵



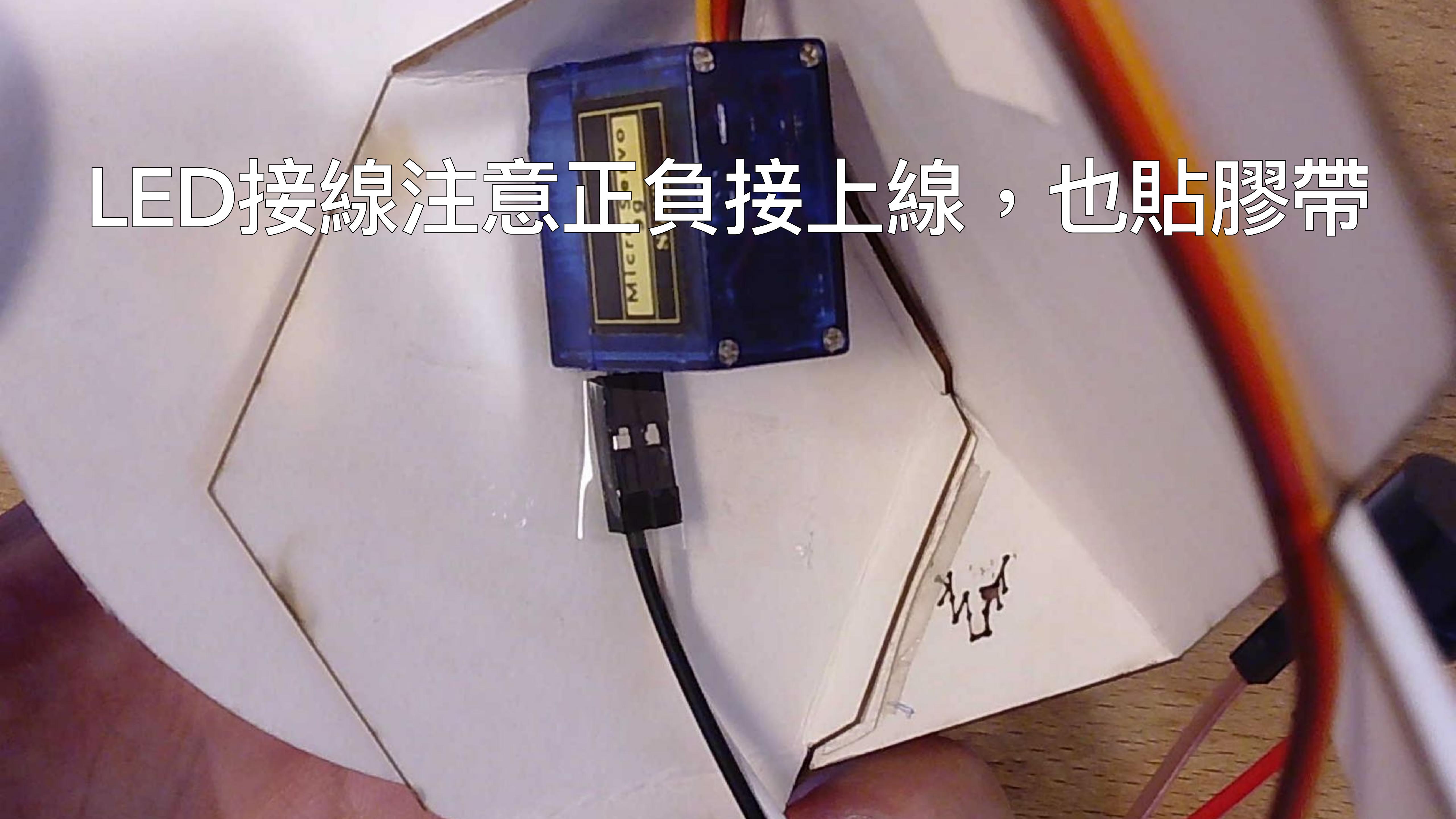
馬達黏上去



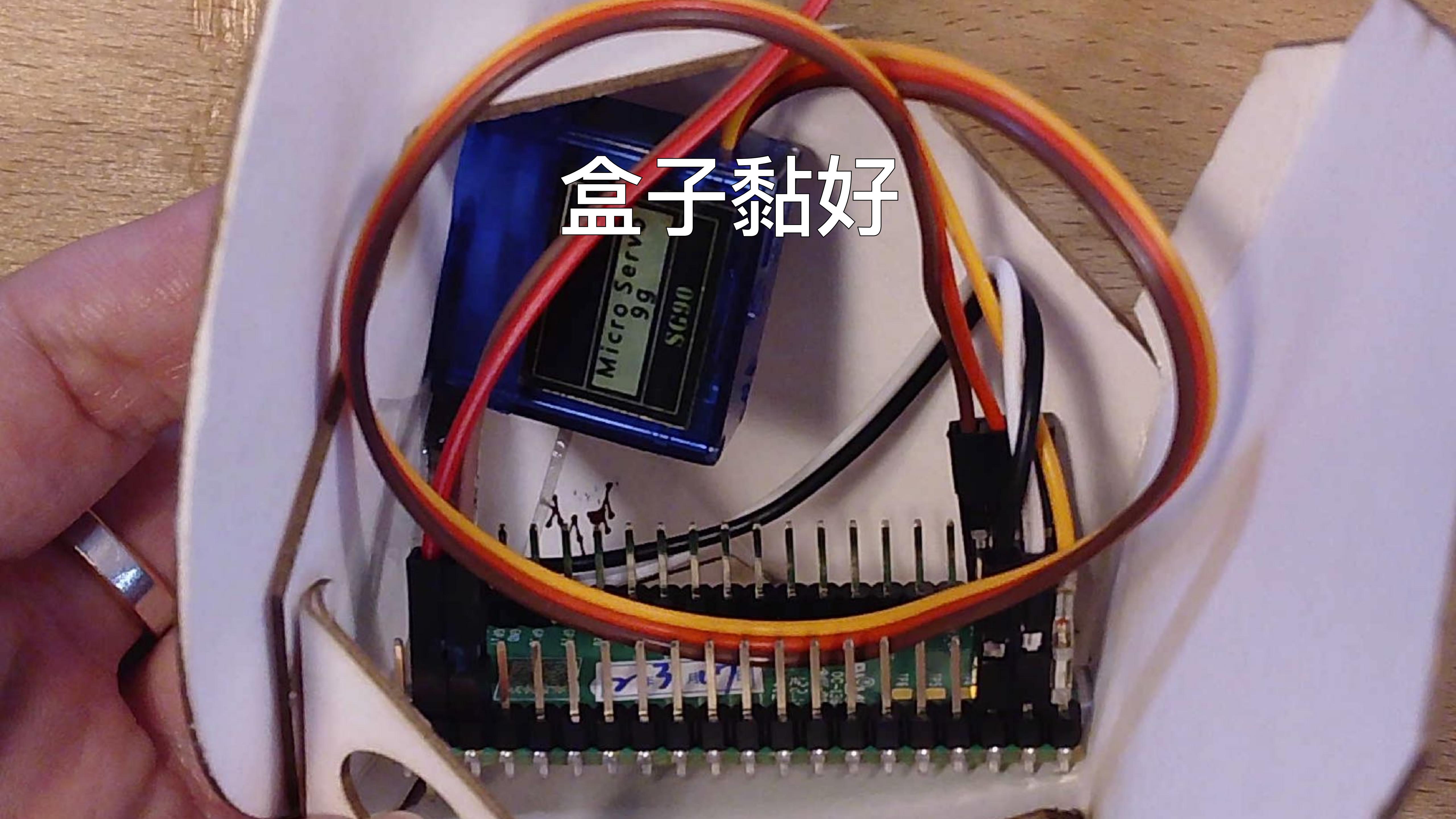
LED貼透明膠帶



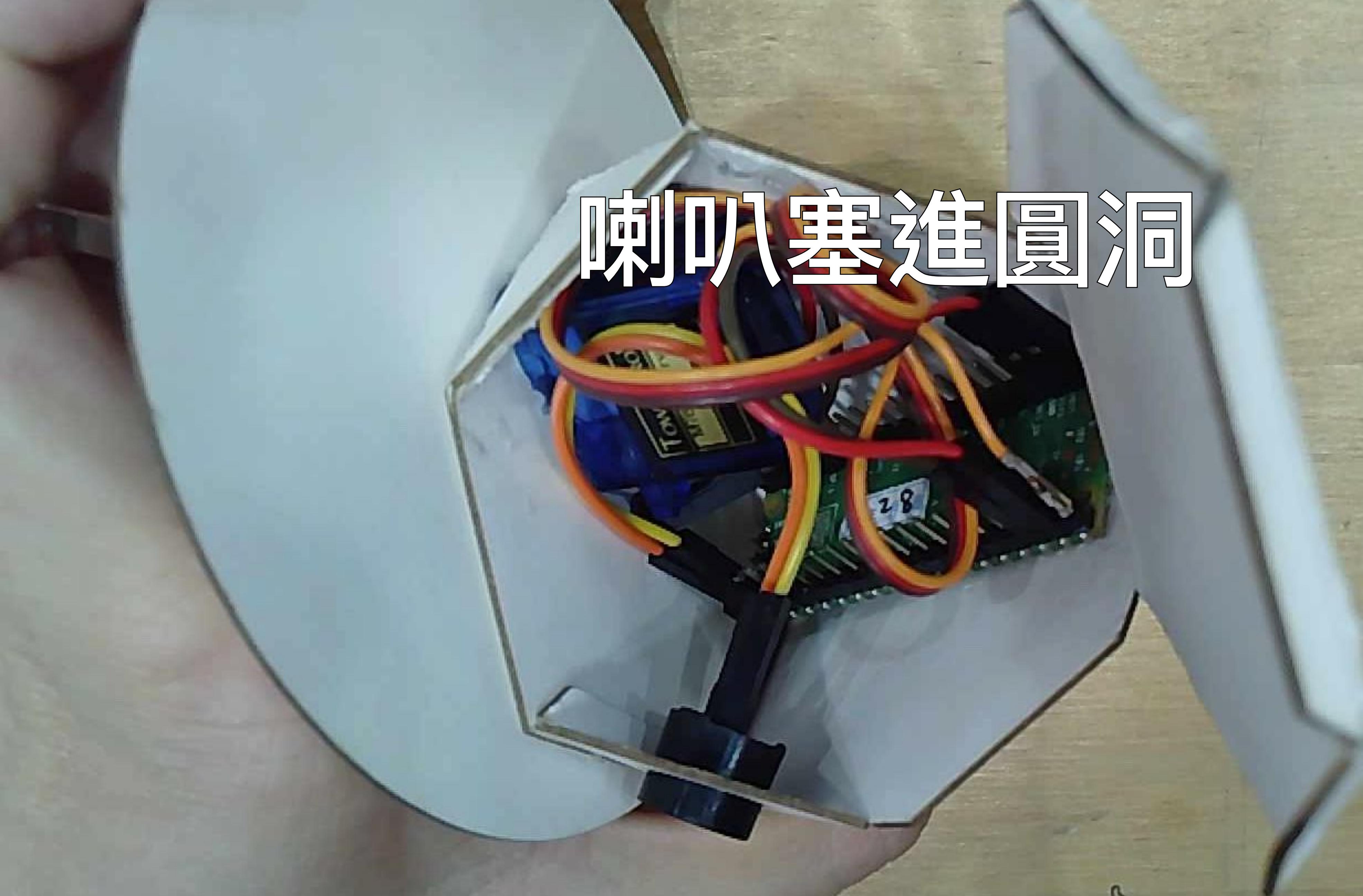
LED接線注意正負接上線，也貼膠帶



盒子黏好



喇叭塞進圓洞



測試一下有沒問題



拿出半圓，貼上馬達轉動臂  
(短臂、非一、十字型的)



食指按住馬達、裝上半圓



正面的樣子

兩側水平，並調整馬達初始值

儘量水平





取出護蓋連結條  
貼上反光膠帶於內側、折彎黏貼處、凹向內側

貼連結條於盤面下方



黏加上護蓋就完成

