

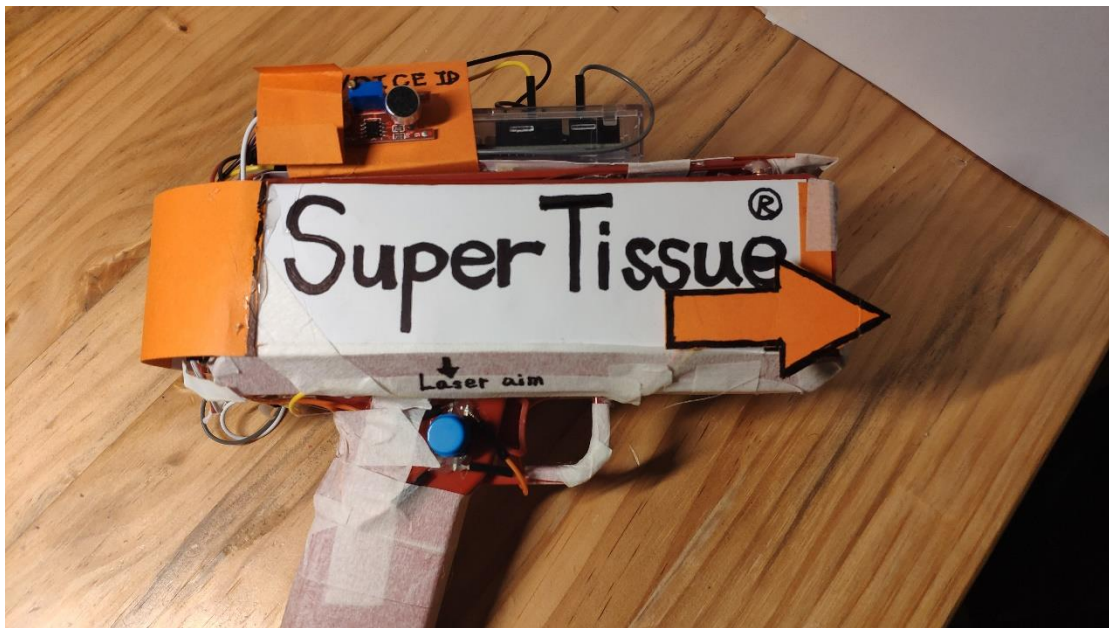
# 'Super Tissue' tissue gun

——*Handing the paper without reaching out your arms*

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## 1. Abstract

This design is a gun that can shoot out tissue, controlled by arduino. Users can use it to give others tissue without reaching out your hand. The double laser sight system can make you aim better. However, it is just for fun because it is totally useless, since tissue flies in random direction and the progress of preparation before shooting is quite long. The comparison between the complex preparation and week shooting is funny.



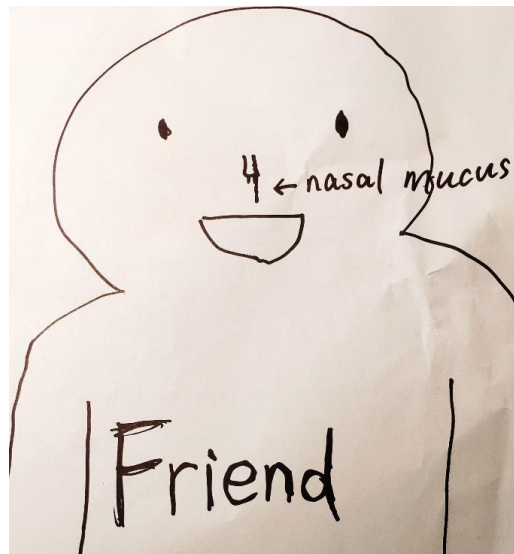
*Fig1 the exterior of the tissue gun*

## 2. Introduction

Tissue is very popular in Chinese people's daily lives. When they sneeze or what to dry their washed hands, they will use tissue. Every day we use a lot of tissue for dry or clean work. But sometimes, we or our friends (even strangers) may run out of tissue and need our help. When we sitting in a distance, it is very hard to hand them tissue without struggling reaching out each other's' arms.



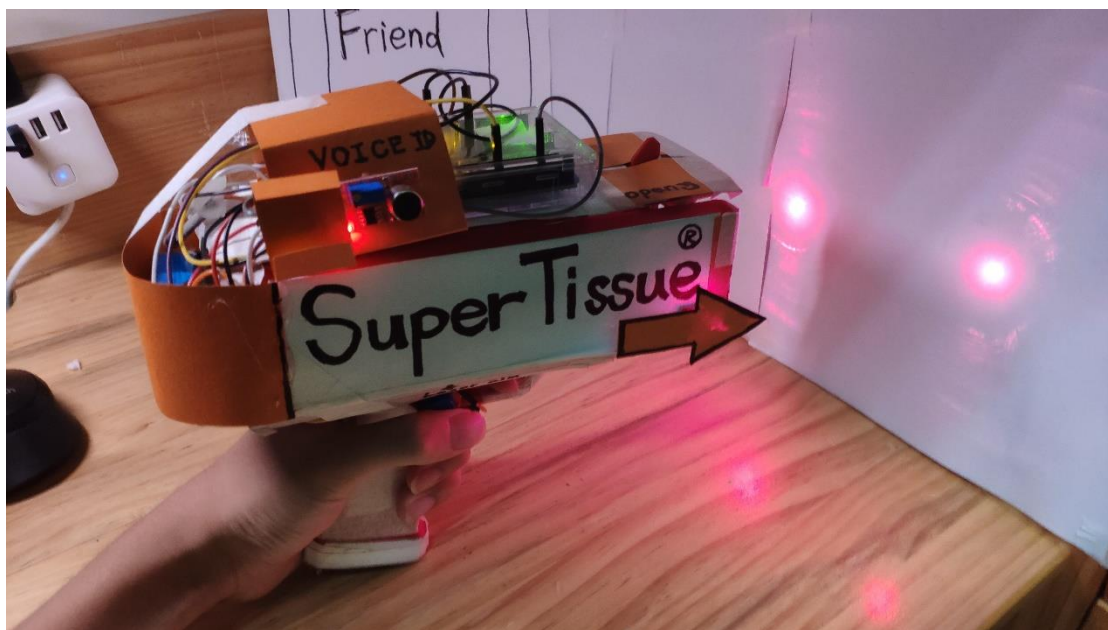
*Fig2 tissue is common in Chinese people's daily life*



*Fig3 friend with nasal mucus needs tissue*

To hand the tissue in a more **graceful** and easy way, I design this tissue gun.

Pushing a switch near the trigger, the user can turn on the laser targeting system to help aiming the people in need. The gun also has a fake 'voice id' function to help you look cooler when doing the shooting preparation.





*Fig4,5,6 lacer aim & 'voice id'*

However, this is totally useless because the time of shooting preparation is longer than just reaching out you arm and the gun can only shoot out the paper for a short distance.

What's more the tissue will fly in random direction and drop very fast. You can not control any of these, so you may can not hand you friend the paper successfully. Sometimes, you even need to catch the tissue in the mid air with you hands or it will fell to the floor. The comparison between the complex preparation and week shooting is quite fun to me.

### 3.Related work

#### Required:

1.[https://www.dropbox.com/sh/qwm2rplsva0g2u9/AACHR\\_0SVaWzBqxYtBgTGUUFa?dl=0](https://www.dropbox.com/sh/qwm2rplsva0g2u9/AACHR_0SVaWzBqxYtBgTGUUFa?dl=0)

The part of Norman's book. I learn a lot from it: Visceral Level、Behavioral Level、Reflective Level and why we love things.

2.Carelman, J., Catalog of Unfindable Objects, Century Hutchinson, 1984.

3.Kamprani, K., The Uncomfortable,

<https://www.theuncomfortable.com/> , (accessed on July 27th 2020).

I am very enjoying viewing these works.

4.Fujiwara, M.

[https://fujiwaram.com/%E7%84%A1%E4%B8%AD%E7%94%9F%E6%9C%89%E7%9A%84%E6%B2%92%E6%9C%89%E7%94%A8%E9%83%A8%E5%B1%8B-](https://fujiwaram.com/%E7%84%A1%E4%B8%AD%E7%94%9F%E6%9C%89%E7%9A%84%E6%B2%92%E6%9C%89%E7%94%A8%E9%83%A8%E5%B1%8B-in%E5%8F%B0%E5%8C%97%E7%84%A1%E7%94%A8%E7%99%BC%E6%98%8E%E5%B1%95/)

[in%E5%8F%B0%E5%8C%97%E7%84%A1%E7%94%A8%E7%99%BC%E6%98%8E%E5%B1%95/](https://fujiwaram.com/%E7%84%A1%E7%94%A8%E7%99%BC%E6%98%8E%E5%B1%95/) (accessed on July 27th 2020).

#### Extra:

1.<https://www.cnblogs.com/Lonelychampion/p/12204871.html>

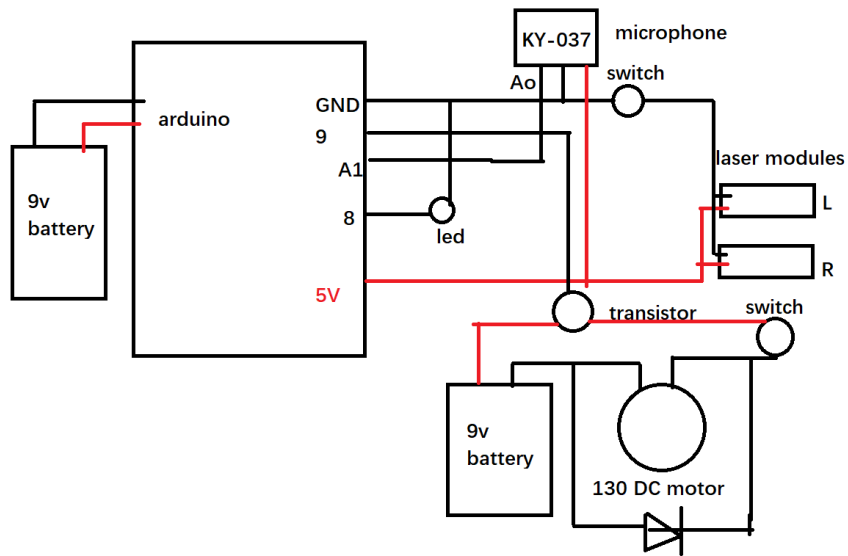
An introduction on how to use KY-037 microphone module.

2.<https://www.wmagazine.com/story/supreme-money-gun/#:~:text=The%20Supreme%20Money%20Gun%20Is%20Spring%E2%80%99s%20Most%20Instagrammable,the%20Supreme%20faithful%20can%27t%20seem%20to%20get%20enough.>

Supreme's money gun which can shoot out money in a similar way.

### 4.Description of 'Super Tissue' tissue gun

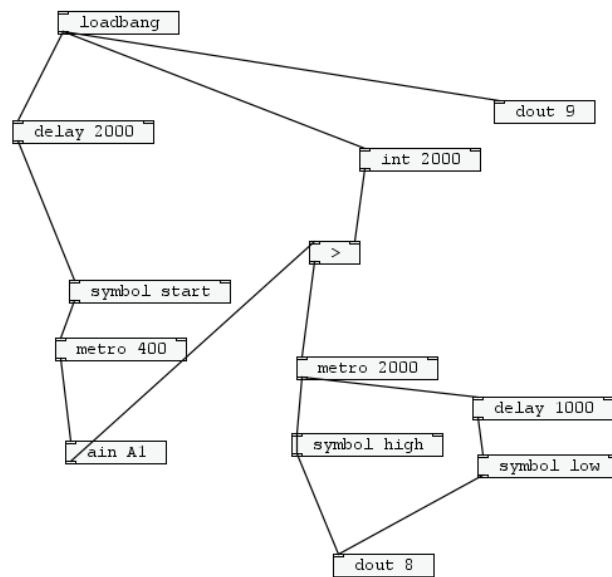
#### Tech:



*Fig7 the circuit (simplified)*

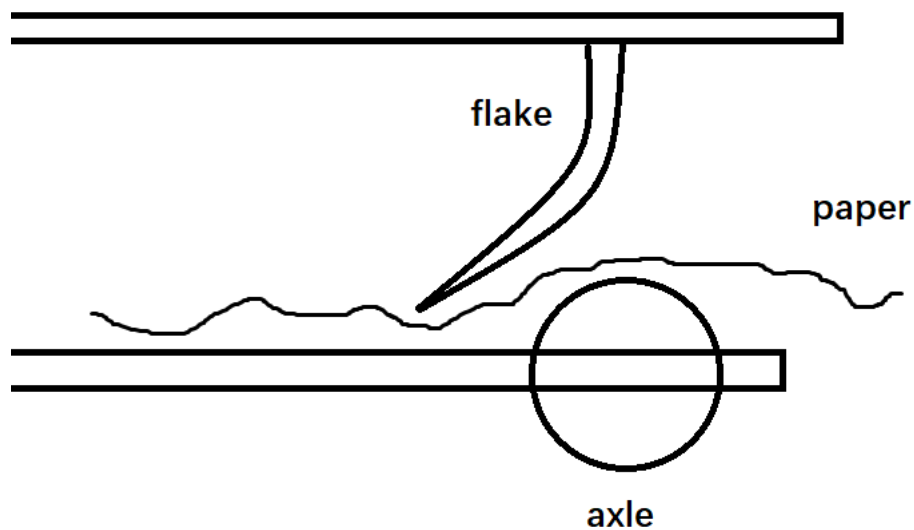
I use the double 9v battery and transistor to make sure that both the dc motor and they laser modules work at their full power.

I first tried 18650 battery, but 9v is better because it deliver the similar of power with a smaller size and lighter wight, this will help users hold the gun more comfortably.



*Fig8 the code*

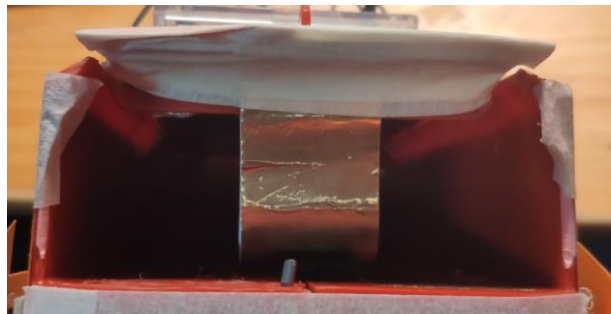
Looks very simple, but it is a very tough to make KY-037 work smoothly. You have to adjust the parameter of the int object and the potentiometer KY-037 bit by bit.



*Fig9,10,11 the flake structure for tissue shooting*

The plastic part is from a fake supreme money gun, but the way it work is totally different from 'Super Tissue' tissue gun. If you put tissue in a money gun, it will get stuck because tissue is light and soft, low in friction, compared to the money.

I use a new trigger structure to make the gun shoot out the soft and light paper. It involves a Elastic flake to gain the paper more power from the axle. What's more, I modified the front part to give the flake more room when working.



*Fig12 modified front part*

**Design:**

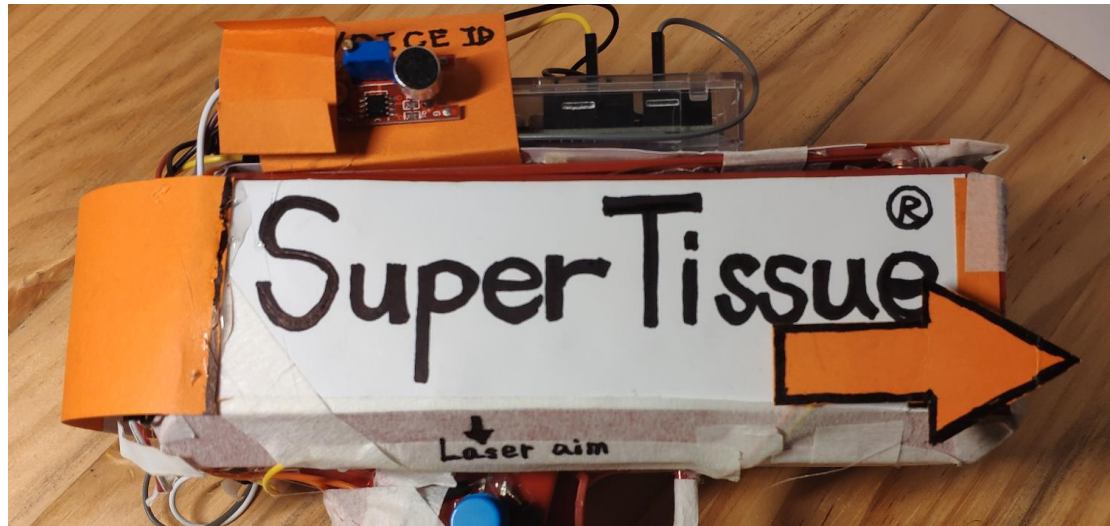
**Concepts:**

I use the light orange and white cards to decorate the surface of the gun. This make it looks



quite eye-catching with the huge-sized 'Super Tissue'(small R on the right-upside to show that it is a product). The cut-out orange arrow points the front direction and hides the laser modules behind it.

I also use a special paper tape to cover the plastic gun body and this relates with the theme of tissue. This tape helps me to hide the wires. However, I still leave some part of wires that can not bother the users outside since I think this will give the gun a more technical appearance.



*Fig9 the color, arrow, and paper tape*

To make the size of the gun much smaller, I abandon the bread board. Instead, I weld the lines together with electric iron on a copper surface. I also add the protection glue on it to make it more stable and prevent loose contacts.



*Fig10 the way I connect the wires*

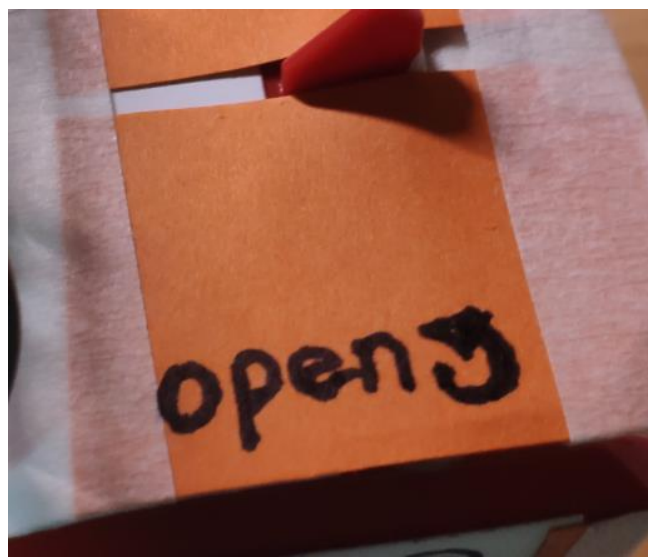
#### **Some user-friendly parts:**

I glue the switch just near the trigger so the use the lasers and trigger off at the same time easily from the both side of the gun, no matter which hand the use to hold the gun.



*Fig11 switch near the trigger*

I also add a 'open' sign on the front to help users get to know how to open the gun and put paper in.



*Fig12 the open sign on the front*

#### **Culture reasons behind the design:**

The supreme's money gun is vulgar in my point of view because the rich young people use it to shoot money, showing off their richness. However, the gun that shooting out the tissue looks very close to our daily life. There are some sarcasm components behind this design.

#### **5.Discussion**

From Norman's ideas, my work may involve the three level of design.

First, Visceral Level, which refers to the basic instinct generated by the senses of human. Human cognition at this level happens not as a result of logic thinking, but a natural reaction of human to the world. My work origin from these needs: people what to clean their noses or dry their hands with tissues, which comes from human nature.

Then, Behavioral Level is the immediate response of human being to what he is interacting with. In my work this means the technical appearance, the laser targeting and 'voice id ' will make users feel the tissue gun is very interesting and attractive. When they try and find it useless, they may feel the whole experience is very funny.

Third, Reflective Level. The tissue gun may make people reflect on their lives, like:

- 1.If we are using too much tissue, is that good for the environment?
- 2.What are the social interaction ideas or cultural components behind tissue handing (with body contact)?
- 3.Do we bother too much to solve some small problems?

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Different people may have different ideas.

Fujiwara, M. and Kamprani, K.'s works also make us reflect to our life element and our emotions towards them.



Fig13 Kamprani, K.'s work

## 6.Summary

This 'Super Tissue' tissue gun, with some fun parts like laser, can shoot out tissue in a useless way. The comparison between the complex preparation and week shooting is funny, but also make people think.

## 7.References

1.[https://www.dropbox.com/sh/qwm2rplsva0g2u9/AACHR\\_0SVaWzBqxYtBgTGUUFa?dl=0](https://www.dropbox.com/sh/qwm2rplsva0g2u9/AACHR_0SVaWzBqxYtBgTGUUFa?dl=0)

2.<https://www.theuncomfortable.com/>

Kamprani, K., The Uncomfortable.

3.Carelman, J., Catalog of Unfindable Objects, Century Hutchinson, 1984.

4. Kamprani, K., The Uncomfortable, <https://www.theuncomfortable.com/> , (accessed on July 27th 2020).

5.<https://image.baidu.com/search/index?tn=baiduimage&ipn=r&ct=201326592&cl=2&lm=-1&st=->

[1&fm=result&fr=&sf=1&fmq=1596465573335\\_R&pv=&ic=&nc=1&z=&hd=&latest=&copy](https://image.baidu.com/search/index?tn=baiduimage&ipn=r&ct=201326592&cl=2&lm=-1&st=-1&fm=result&fr=&sf=1&fmq=1596465573335_R&pv=&ic=&nc=1&z=&hd=&latest=&copy)



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6.<https://www.wmagazine.com/story/supreme-money-gun/#:~:text=The%20Supreme%20Money%20Gun%20Is%20Spring%E2%80%99s%20Most%20Instagrammable,the%20Supreme%20faithful%20can%27t%20seem%20to%20get%20enough.>

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