

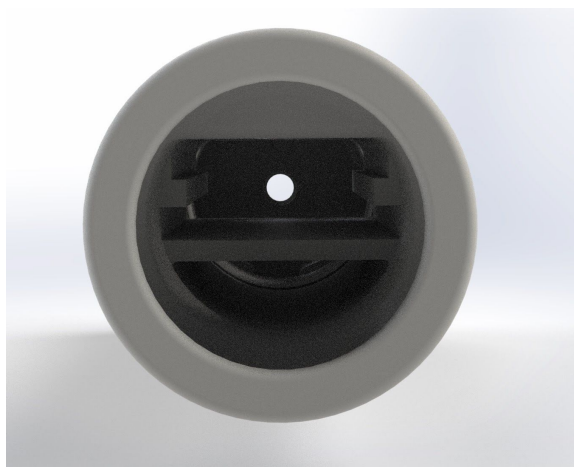
**Initial CAD designs of the enclosure**

	<p>Front view</p> <p>The center hole is for the camera, the hole above for a led light.</p>
	<p>Top view</p> <p>The round hole is for a 3.5mm audio jack, the two rectangle holes are for switches.</p>
	<p>Side view</p> <p>There is a hole for a micro usb charging port on the side of the device.</p>



Back view

The large hole is for a speaker.

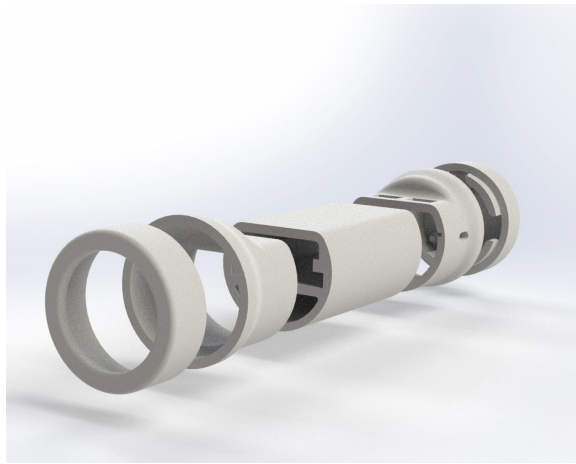


Back view two

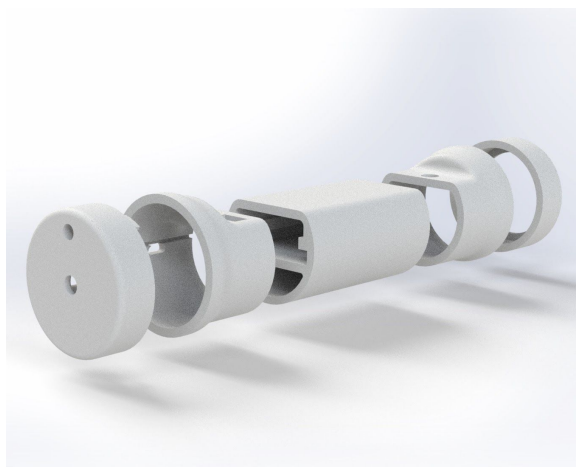
The internals have slots for the different components.



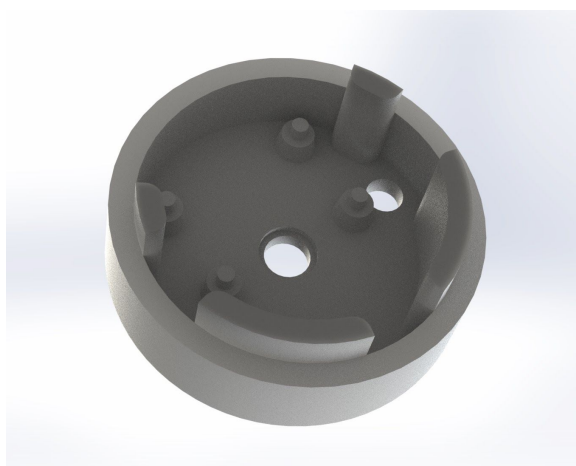
Exploded top view



Exploded back view

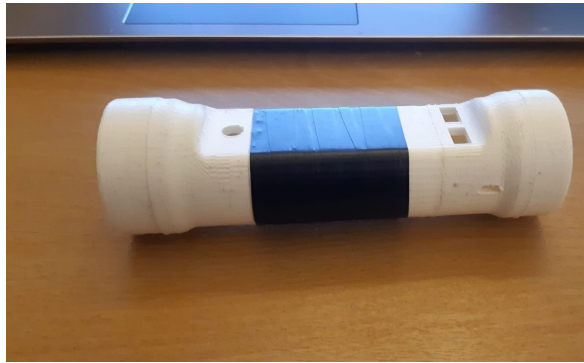


Exploded front view



The front cap of the enclosure. The four pins line up with the screw holes of the camera module.

### 3d printed enclosure



Side view

The 3.5 mm audio jack hole, switch holes and micro usb charging ports are visible. Also note the black grip that has been added. This prevents the device from easily slipping out of your hand.



Top view



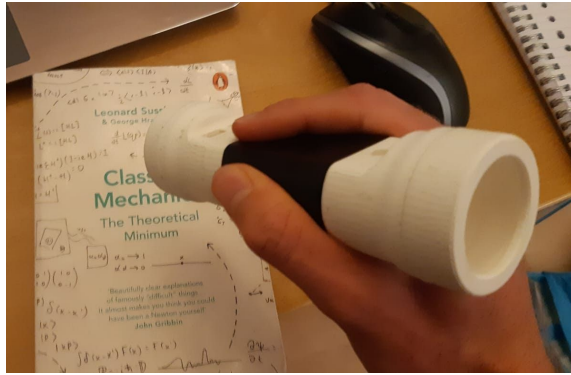
Front view one



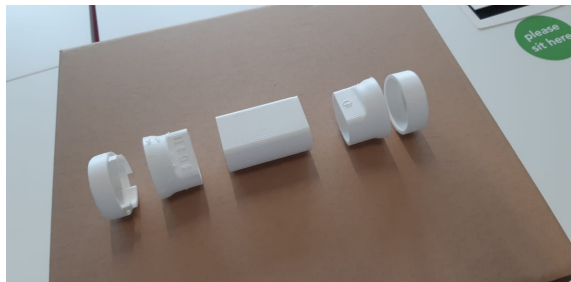
Front view two



back view



The user is to hold the device in the following way. Because of the flat surface at the top of the device (opposed to the round one at the bottom and sides), the user knows how to orientate the device. The user can rest one or two fingers on the flat surface for a stable grip. Also note that the device is symmetric in the vertical axis, the result of this is that our device is ambidextrous.



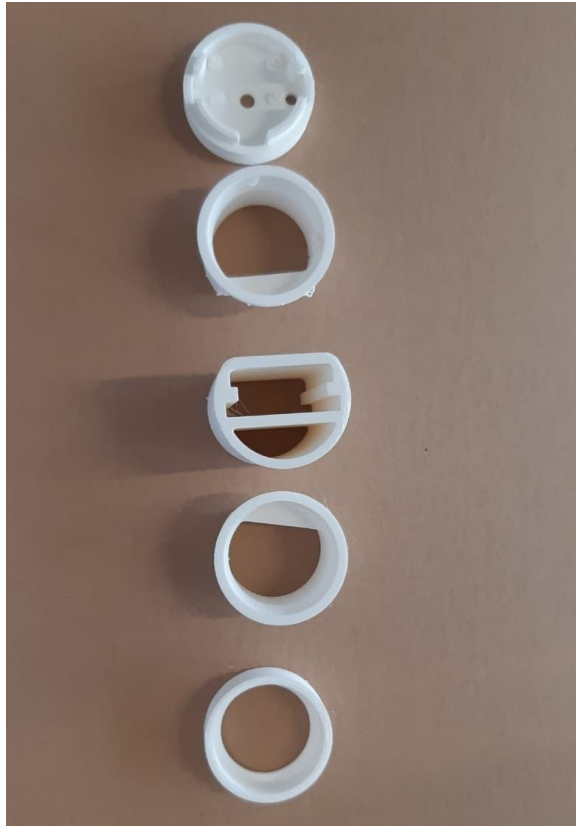
The different components layed out.



The different components layed out from a slightly different angle.



Back view of the components.



Top view of all the separate components.

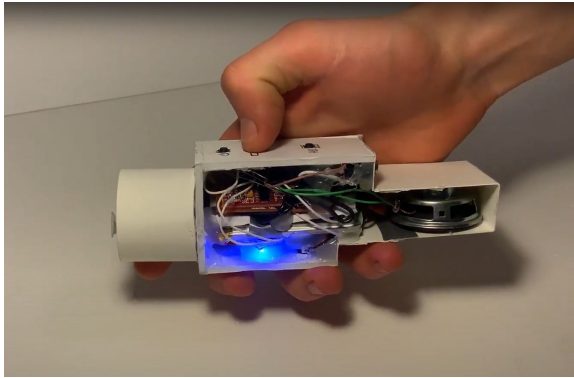


The front cap of the device.

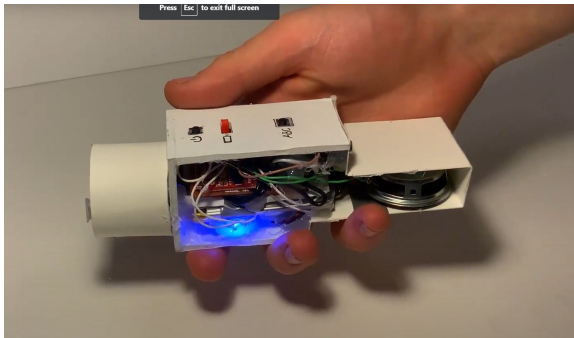


## Final design

After 3d printing the enclosure we came to the unfortunate discovery that the electrical components did not fit in our 3d printed enclosure, despite careful considerations regarding size. We underestimated the large volume of the wiring, which ultimately resulted in the enclosure being too small. This led to the creation of a new enclosure, as seen below.



The new enclosure with internal electronics. The user can easily access the power switch as shown.



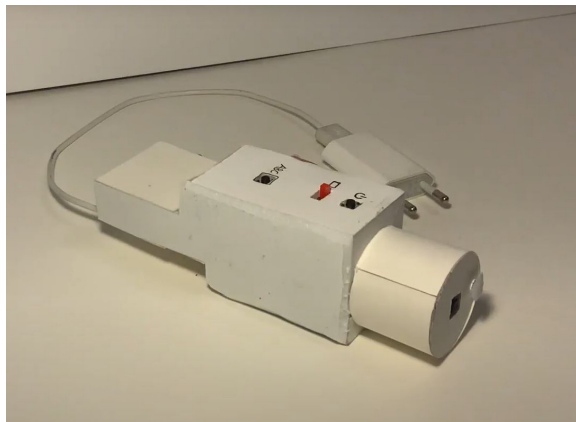
The device has no side cover, since we wanted to have the ability to still access the electronics.



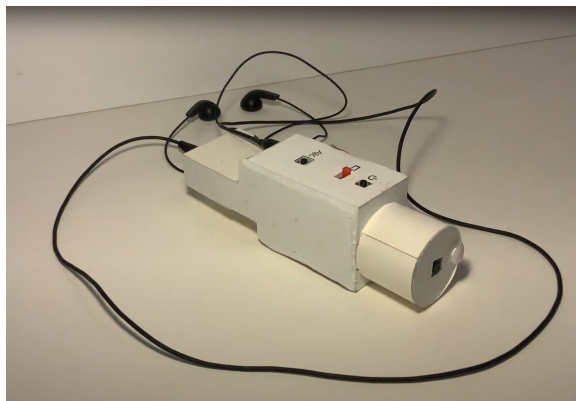
The front of the device has a camera and a led light.



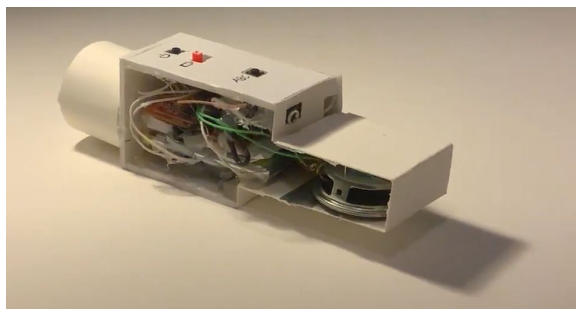
The device in use. The user presses a button as shown to activate it.



Device connected to a charger.

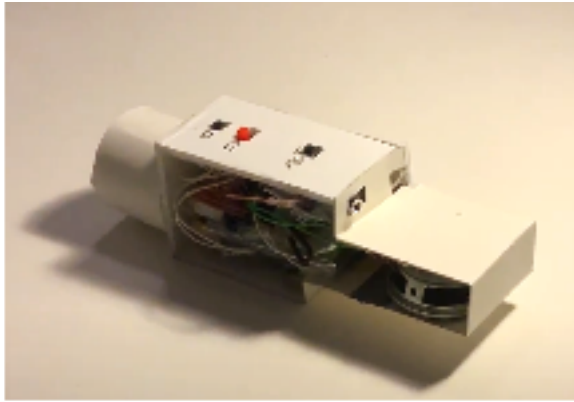


Device connected to headphones.

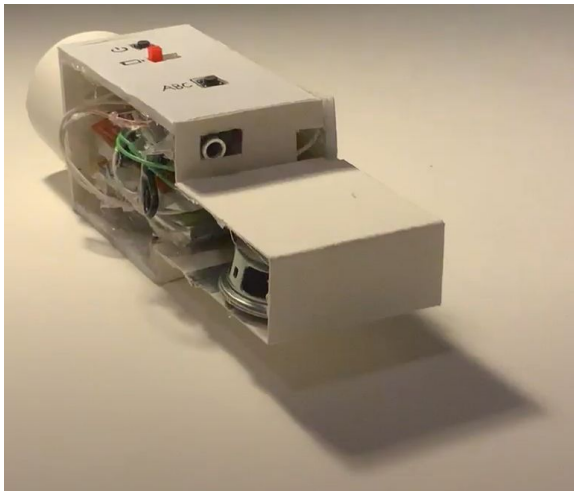


Side view of the internals one

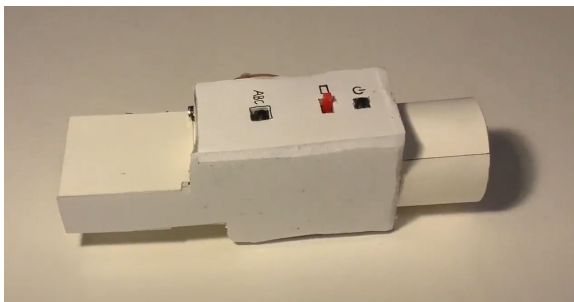




Side view of the internals two



Back View of the device.



Side view of the device.



Front view of the device.



Another photograph of the device in use.

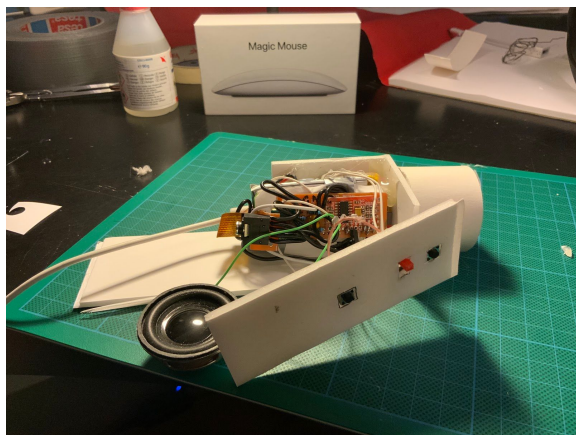
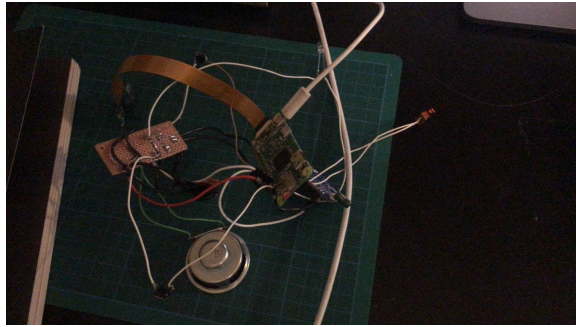
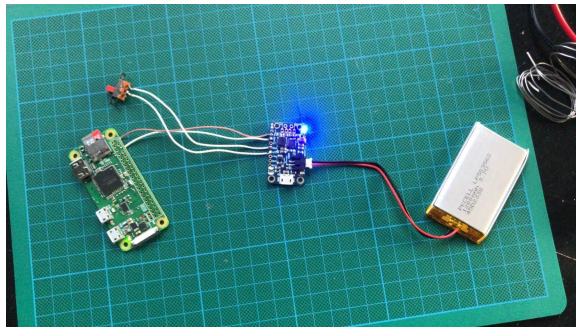


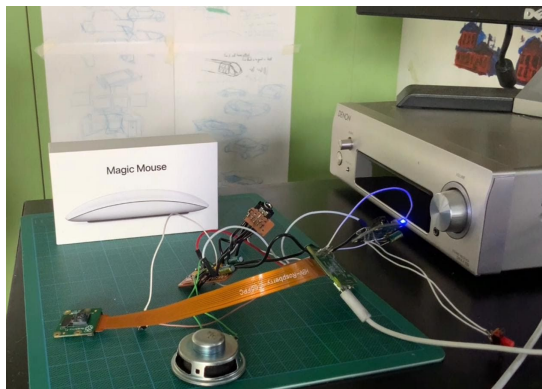
Image from during the construction showing the different electronics.



Photograph showing the internal electronics during the building process.



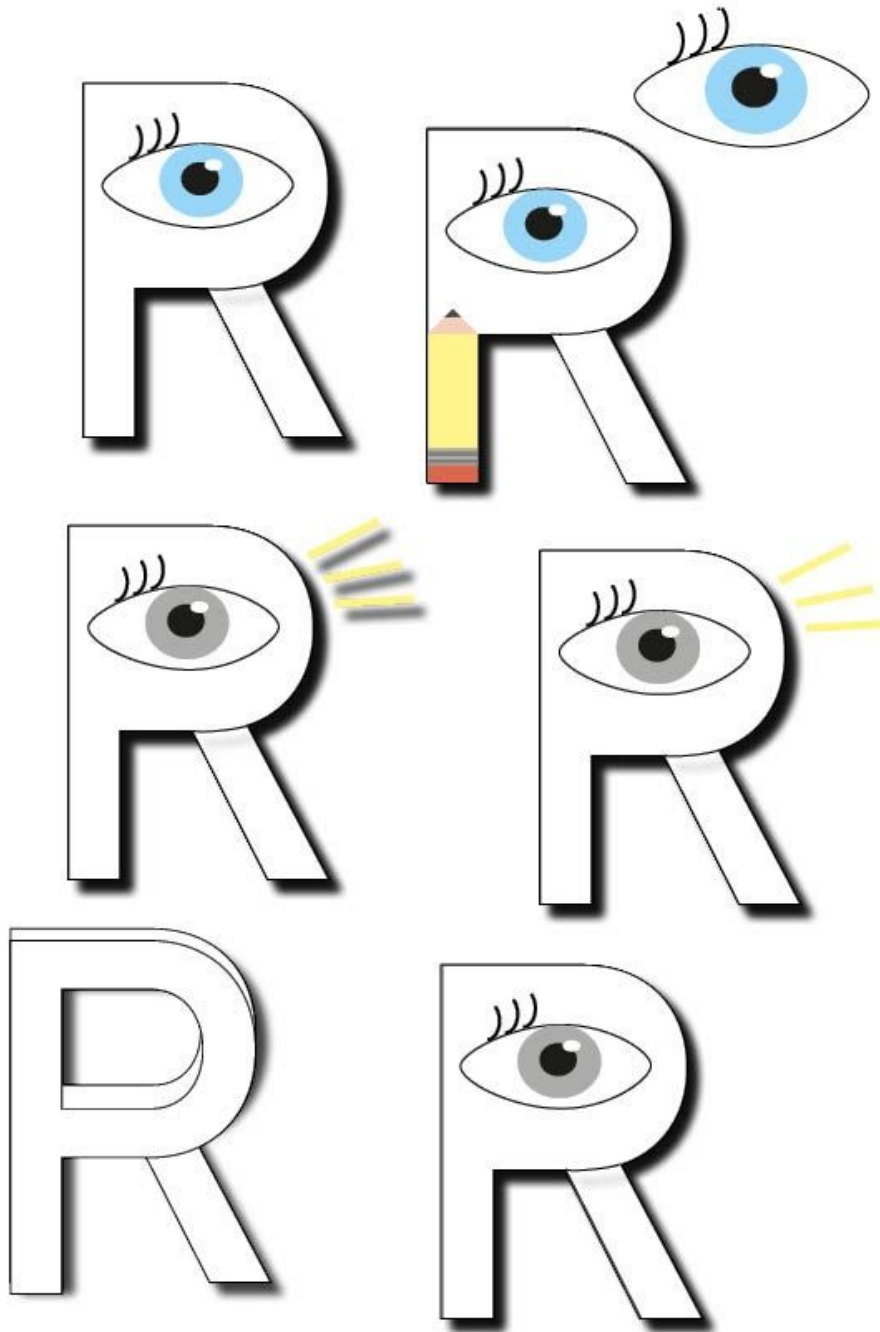
Photograph showing the battery circuit.



Photograph of the completed electronic circuit.

### The logo

Below you can see the different design iterations of our logo. We eventually settled on the logo in the bottom right corner.



### The video

The video can be found with this link: <https://youtu.be/MvgnsnYfqMY>

This link can also be found in the other Canvas subscription.