

# AELECTROSONICS: LISTENING IN ON AIR AND ELECTRICITY

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Ur-sound, or, the noise no writing can store (2012)

to achieve such a degree of silence. The phenomenon, on every repetition of it, remained astonishing, indeed positively staggering. We were confronting, as it were, a new and infinitely delicate point in the texture of reality, from which something far greater than ourselves, yet indescribably immature, seemed to be appealing to us as if seeking help. At the time and all through the intervening years I believed that that independent sound, taken from us and preserved outside us, would be unforgettable. That it turned out otherwise is the cause of my writing the present account. As will be seen, what impressed itself on my memory most deeply was not the sound from the funnel but the markings traced on the cylinder; these made a most definite impression.

I first became aware of this some fourteen or fifteen years after my school-days were past. It was during my first stay in Paris. At that time I was attending the anatomy lectures in the École des Beaux-Arts with considerable enthusiasm. It was not so much the manifold interlacing of the muscles and sinews nor the complete agreement of the inner organs one with another that appealed to me, but rather the bare skeleton, the restrained energy and elasticity of which I had already noticed when studying the drawings of Leonardo. However much I puzzled over the structure of the whole, it was more than I could deal with; my attention always reverted to the study of the skull, which seemed to me to constitute the utmost achievement, as it were, of which this chalky element was capable; it was as if it had been persuaded to make just in this part a special effort to render a decisive service by providing a most solid protection for the most daring feature of all, for something which, although itself narrowly confined, had a field of activity which was boundless. The fascination which this particular structure had for me reached such a pitch finally, that I procured a skull in order to spend many hours of the night with it; and, as always happens with me and things, it was not only the moments of deliberate attention which made this ambiguous object really mine: I owe my familiarity with it, beyond doubt, in part to that passing glance, with which we involun-

tarily examine and perceive our daily environment, when there exists any relationship at all between it and us. It was a passing glance of this kind which I suddenly checked in its course, making it exact and attentive. By candlelight—which is often so peculiarly alive and challenging—the coronal suture had become strikingly visible, and I knew at once what it reminded me of: one of those unforgotten grooves, which had been scratched in a little wax cylinder by the point of a bristle!

And now I do not know: is it due to a rhythmic peculiarity of my imagination, that ever since, often after the lapse of years, I repeatedly feel the impulse to make that spontaneously perceived similarity the starting point for a whole series of unheard of experiments? I frankly confess that I have always treated this desire, whenever it made itself felt, with the most unrelenting mistrust—if proof be needed, let it be found in the fact that only now, after more than a decade and a half, have I resolved to make a cautious statement concerning it. Furthermore, there is nothing I can cite in favour of my idea beyond its obstinate recurrence, a recurrence which has taken me by surprise in all sorts of places, divorced from any connexion with what I might be doing.

What is it that repeatedly presents itself to my mind? It is this: The coronal suture of the skull (this would first have to be investigated) has—let us assume—a certain similarity to the closely wavy line which the needle of a phonograph engraves on the receiving, rotating cylinder of the apparatus. What if one changed the needle and directed it on its return journey along a tracing which was not derived from the graphic translation of a sound, but existed of itself naturally—well: to put it plainly, along the coronal suture, for example. What would happen? A sound would necessarily result, a series of sounds, music . . .

Feelings—which? Incredulity, timidity, fear, awe—which of all the feelings here possible prevents me from suggesting a name for the primal sound which would then make its appearance in the world . . .

Leaving that side for the moment: what variety of lines then, occurring anywhere, could one not put under the needle and

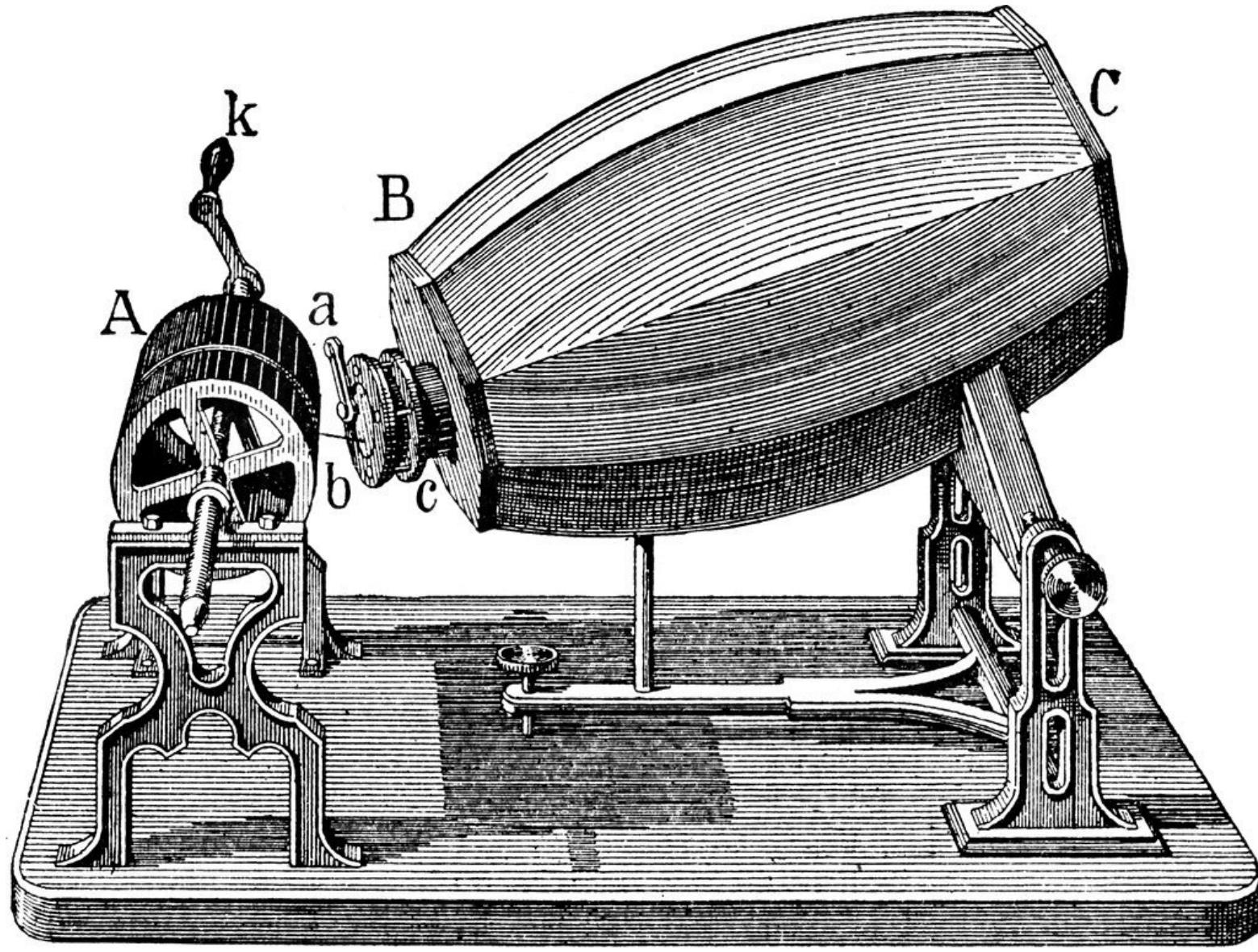
transposition  
from one sensory  
center to another



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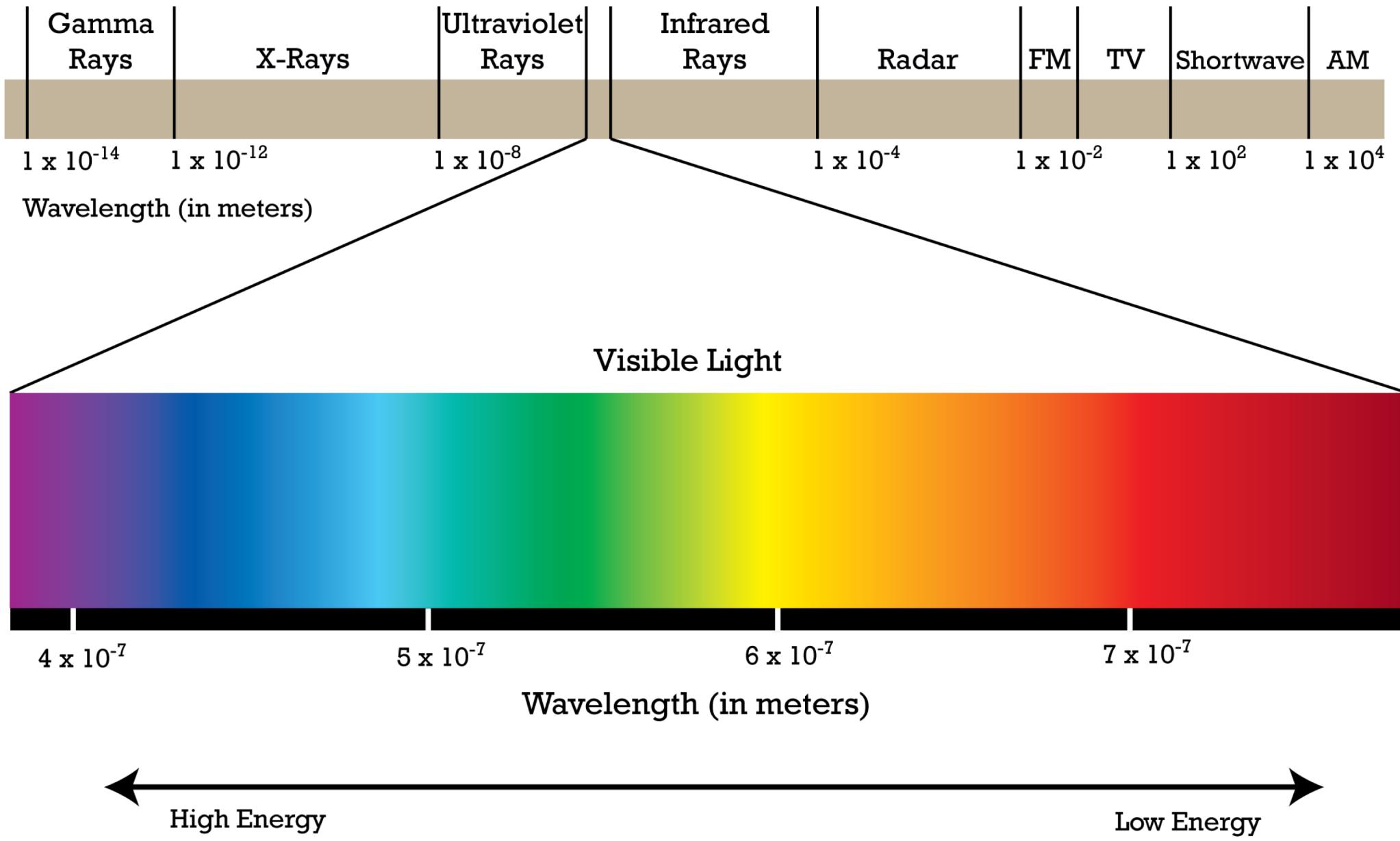


Ur-sound, or, the noise no writing can store (2012)



Phonograph.

*BC*, barrel with opening at *C*; *c*, brass tube with membrane and style at *b*, and movable piece *a*, by which the position of the nodal points can be regulated; *k*, handle to turn cylinder (*A*) covered with lampblacked paper.





Christina Kubisch, *Electrical Walks* (2004-2017)

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## Elektrosluch 3+

€100.00

Sold Out

Want one? Sign-up for this [mailing-list](#) to stay informed about new batches.

**Elektrosluch 3+** is an open-source device for electromagnetic listening. It allows one to discover sonic worlds of electromagnetic fields, surrounding our every step. Just plug your headphones & explore.

**Elektrosluch 3+** is the most sensitive Elektrosluch yet. By using state of the art operational amplifier, we have managed to **significantly improve signal to noise ratio** and **extend the frequency response** (both on low and high frequencies). This will allow you to capture even more delicate electromagnetic sounds with **greater detail and definition**. Its cover is now made from more robust & frosty plastics for better protection.

**Stereophonic electromagnetic listening device**

**Power:** 9V battery (user replaceable)

**Headphone/Line Output:** 3.5 mm (1/8") stereo mini jack

**Ext. input:** 3.5 mm (1/8") stereo mini jack

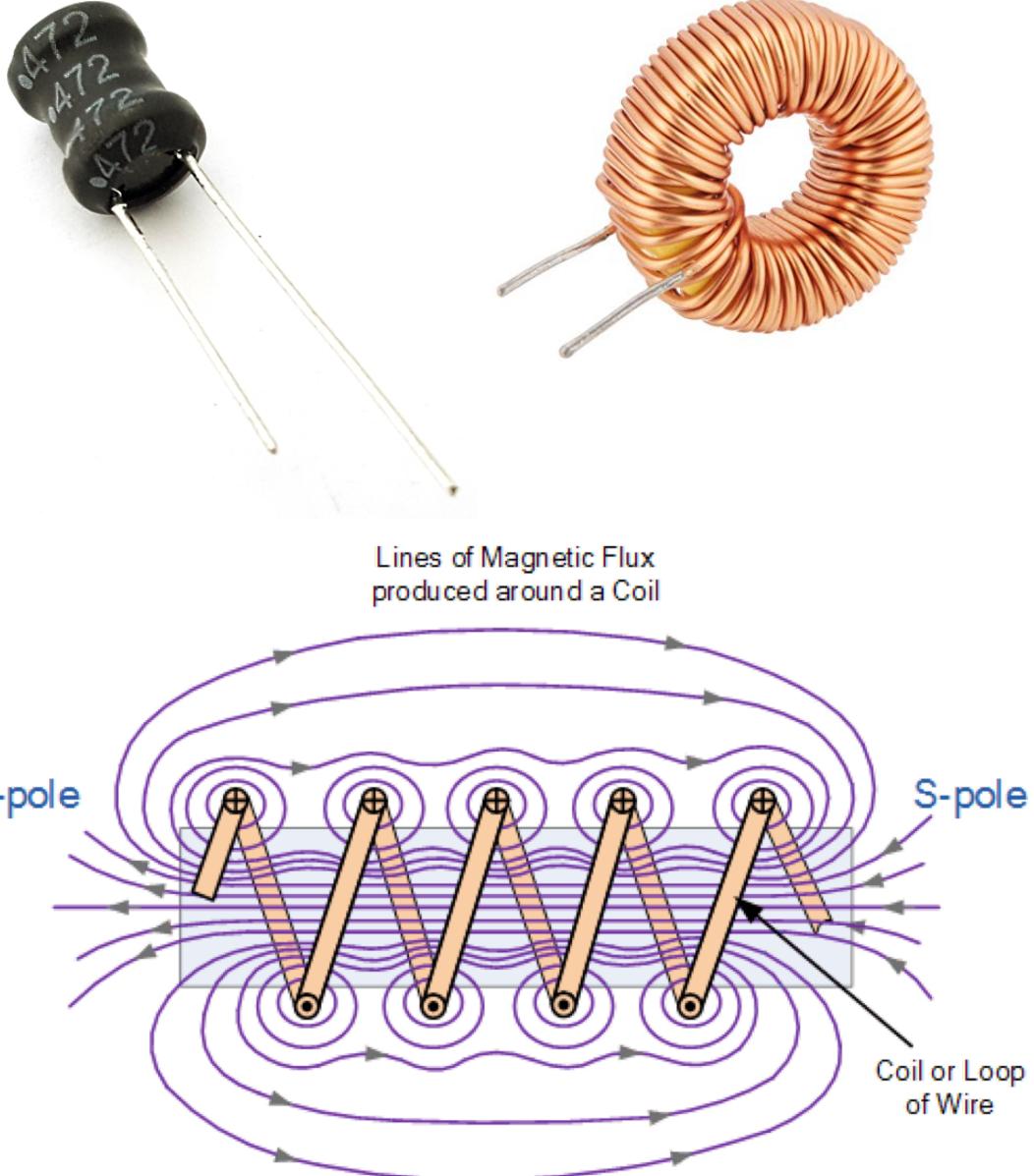
**Maximum gain:** 60 dB

Sample recordings made with Elektrosluch 3+

► Electromagnetic Bus

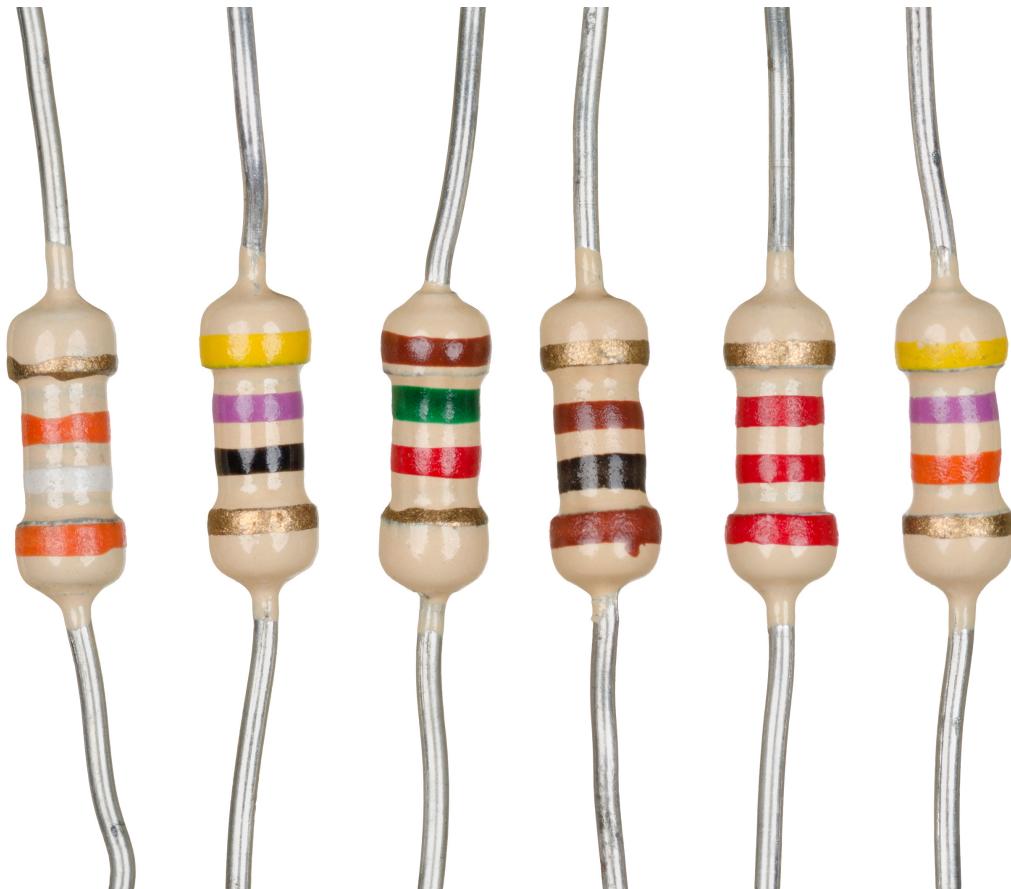
SOUND CLOUD

Elektrosluch users include: [Richard Devine](#), [Somaticae](#), [proto/kolle](#), [Drakh](#), [Jonny Fox](#) and many other musicians, field recordists, performers and other people curious about the world of electromagnetics.



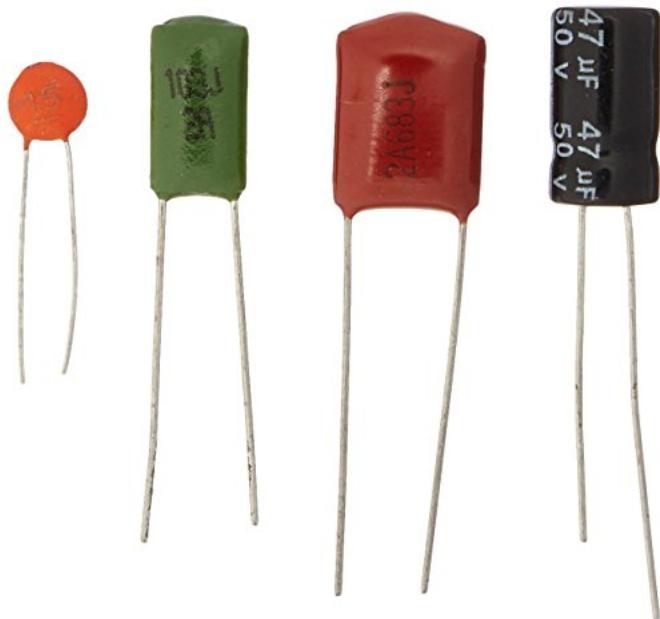
## INDUCTOR:

- Wire coil wrapped around magnetic core
- Electrical current running through coil produces magnetic field
- Stores electrical energy and releases it slowly
- Exposure of coil to magnetic field affects electrical flow through circuit



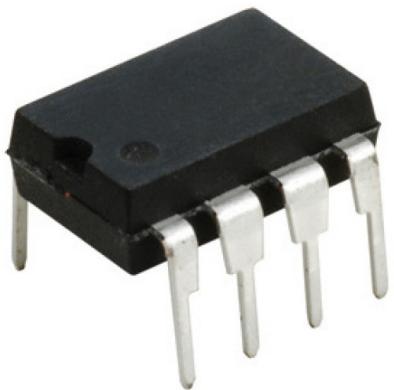
## RESISTOR:

- Reduces flow of current through circuit



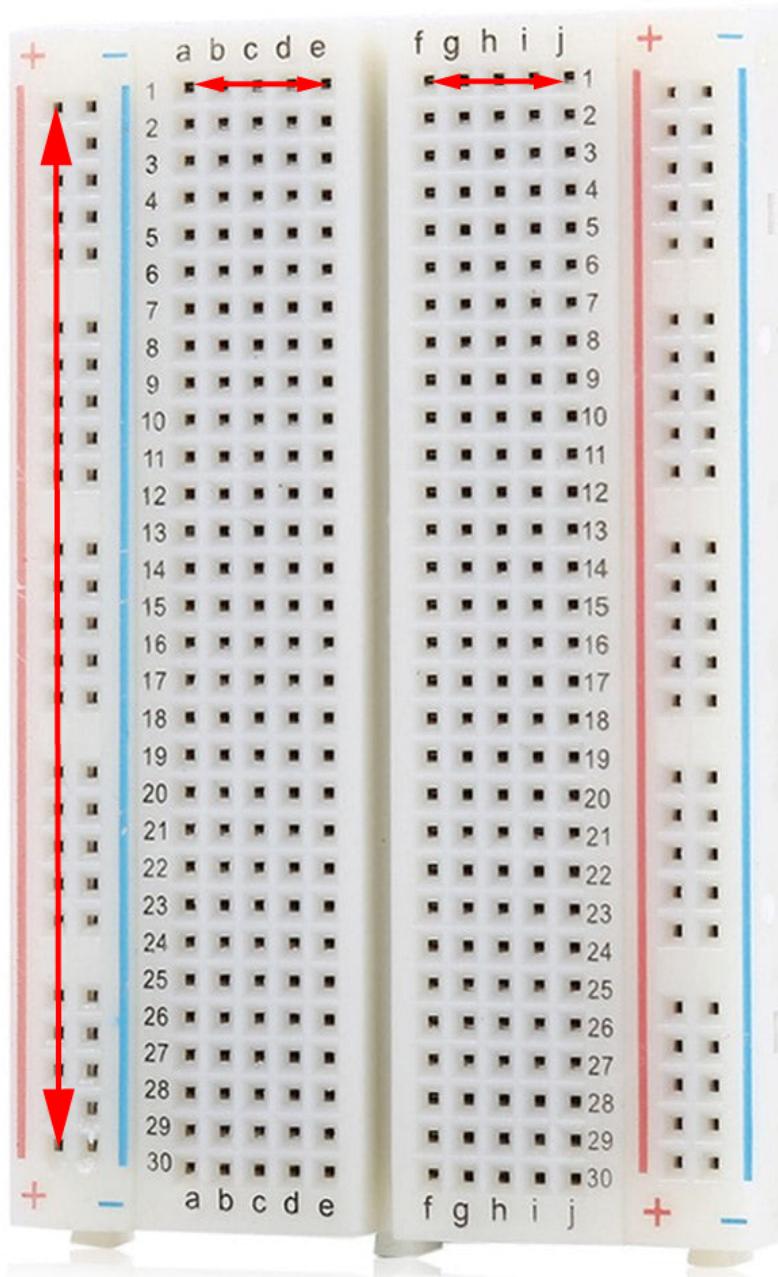
## CAPACITOR:

- Collects, stores, releases electrical energy (vs inductor, which stores magnetic energy)
- Filters or smooths current spikes



## OP AMP:

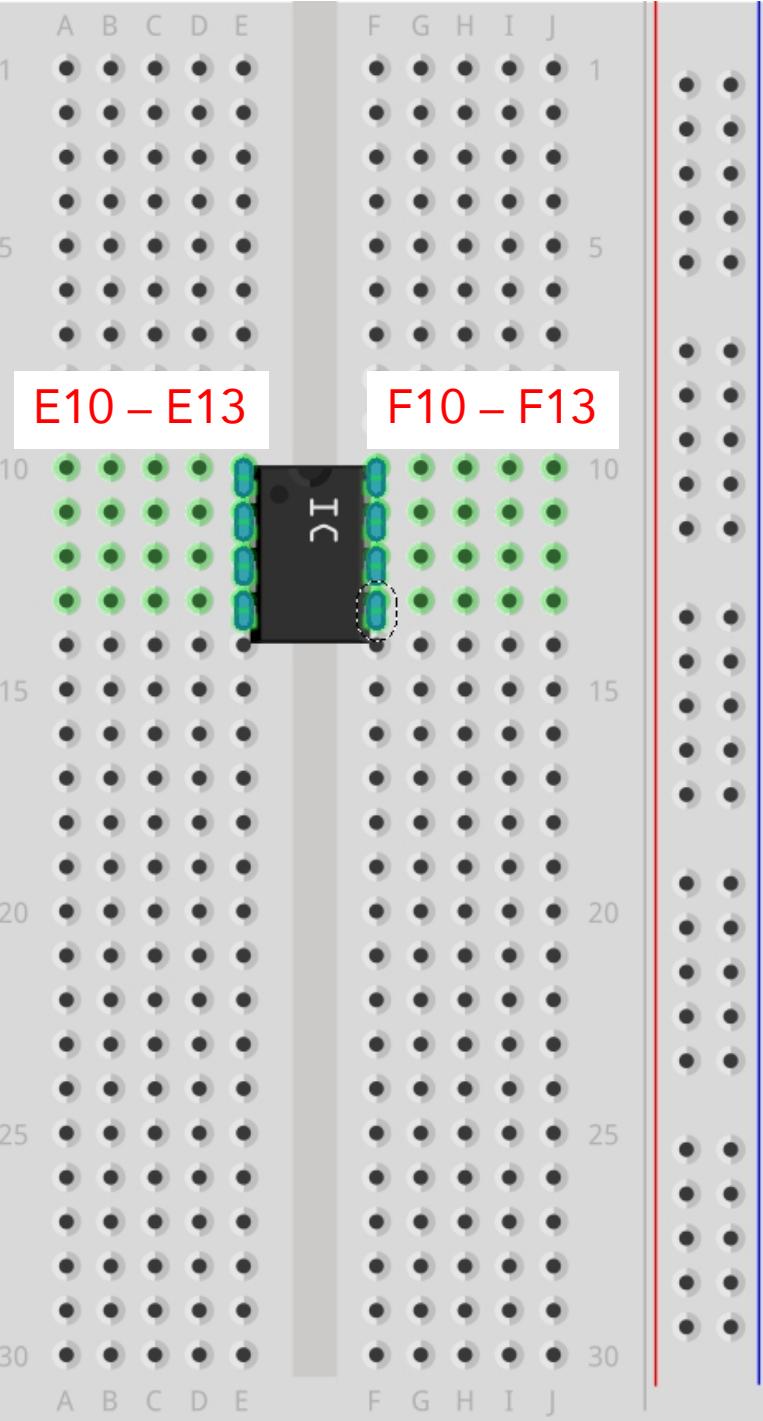
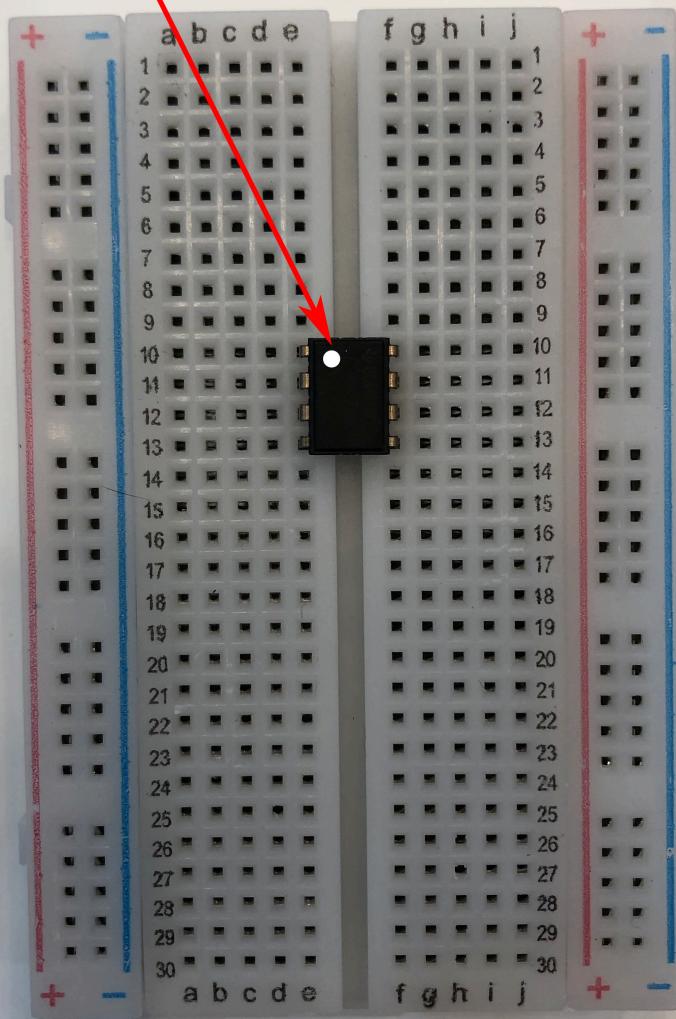
- Operational amplifier
- Boosts strength of electrical signal



## BREADBOARD:

- Distributes current internally

Shiny dot to top left



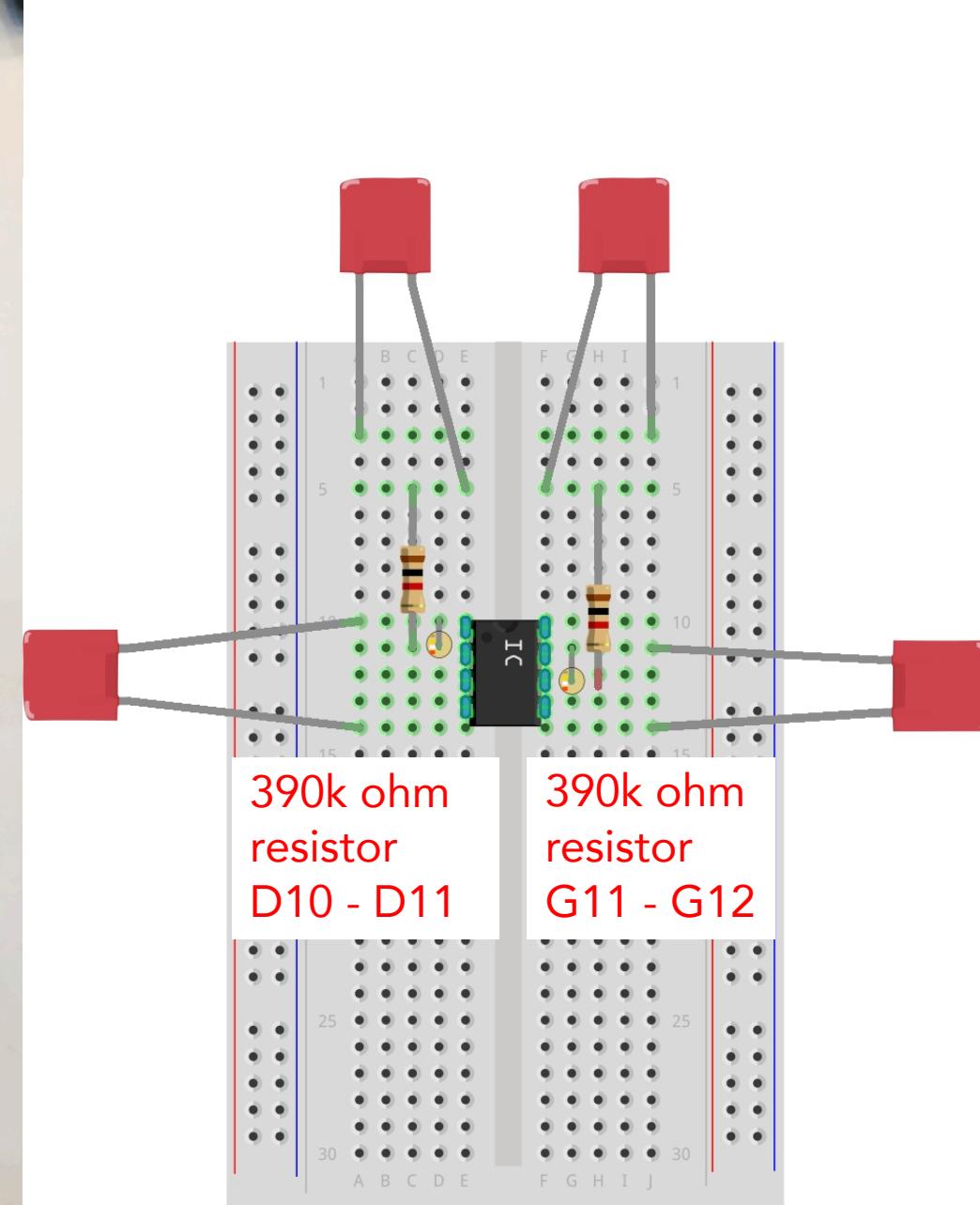
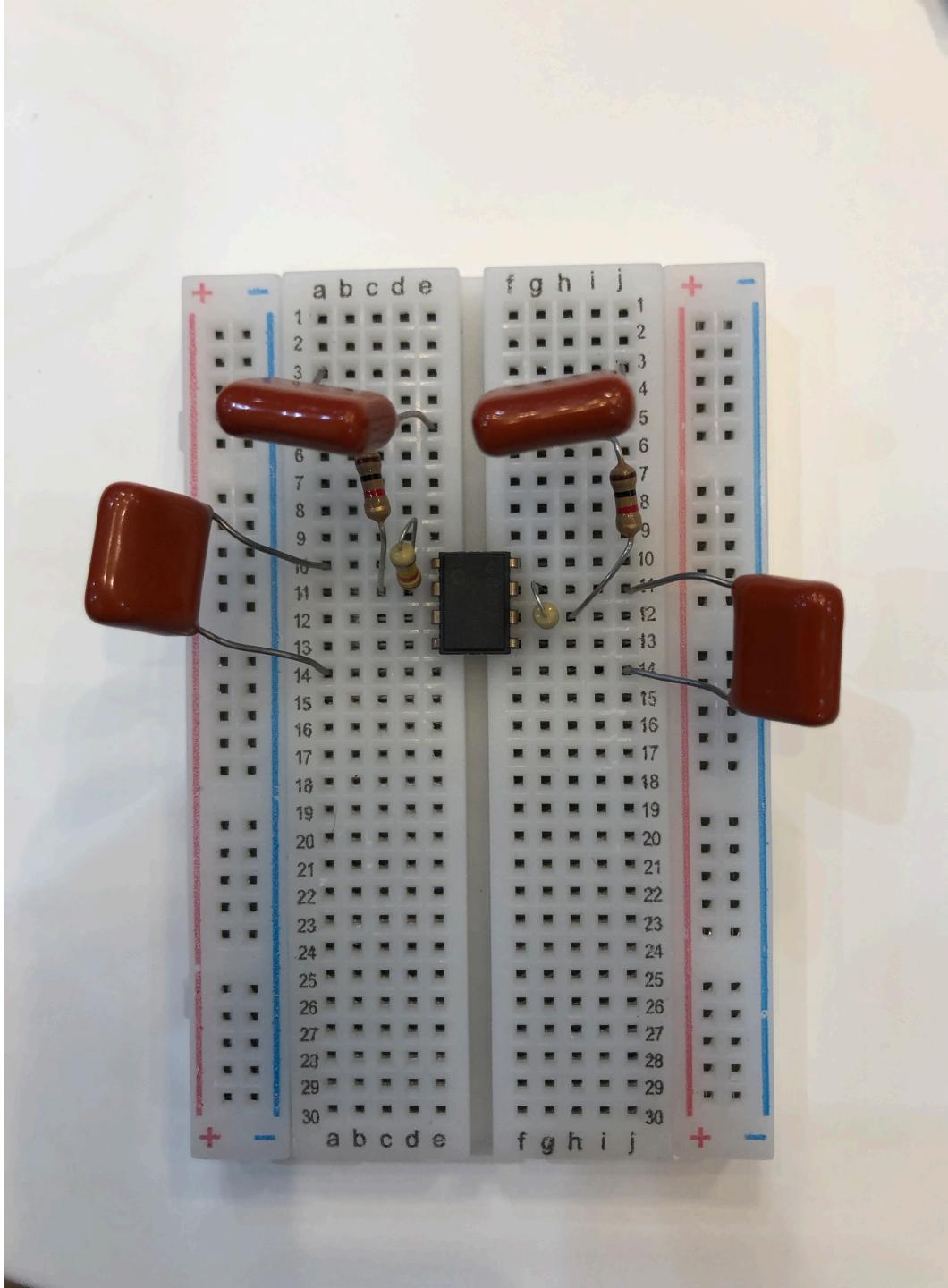
1k

390 k

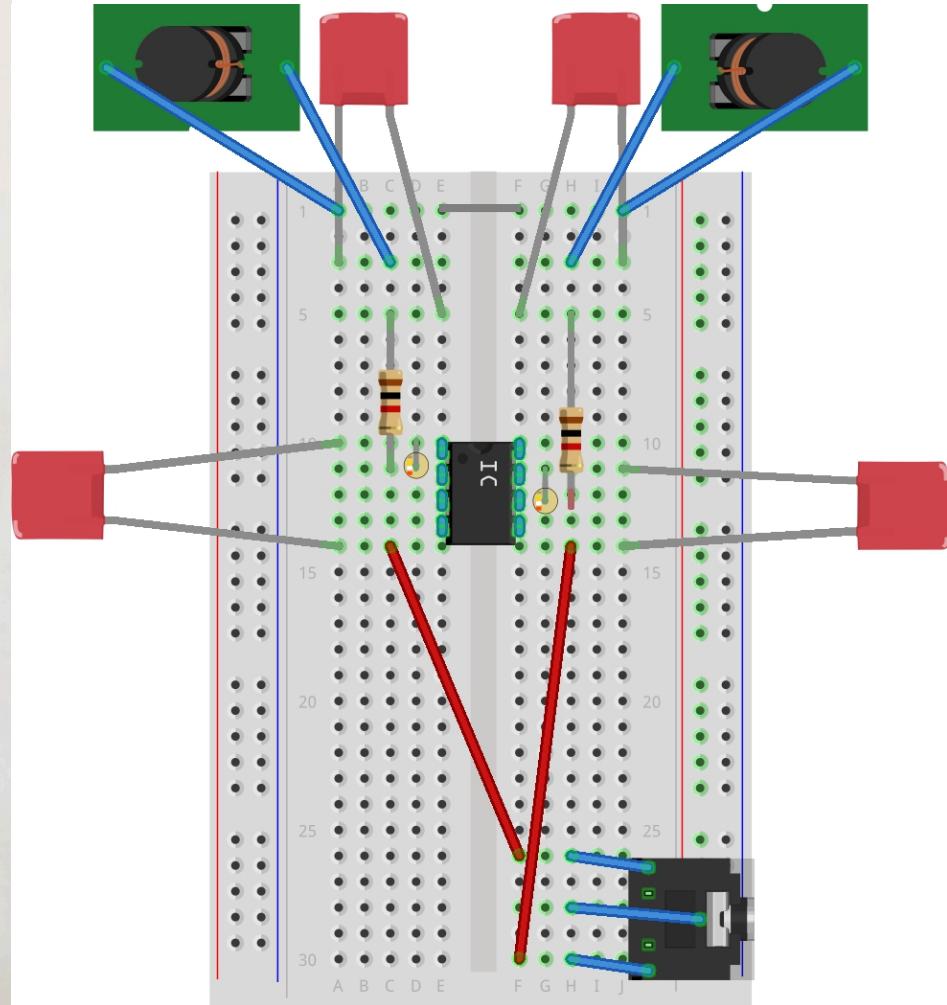
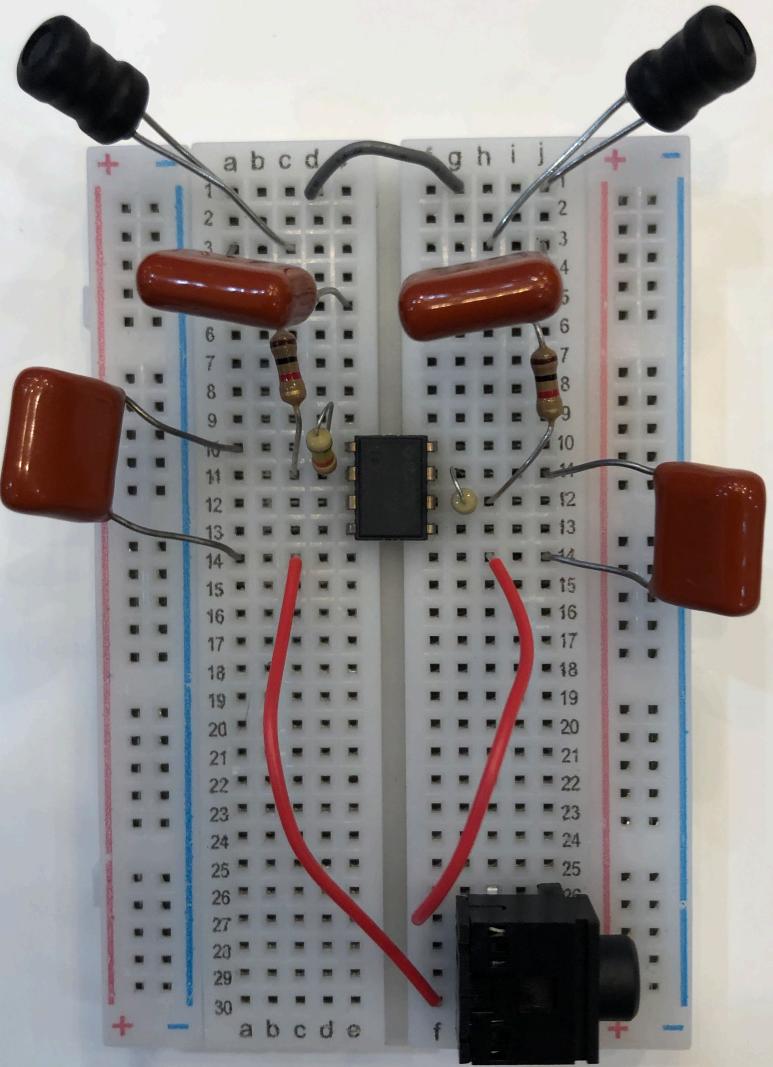
100k

Trim 390k ohm resistors  
and bend to place  
upright in board



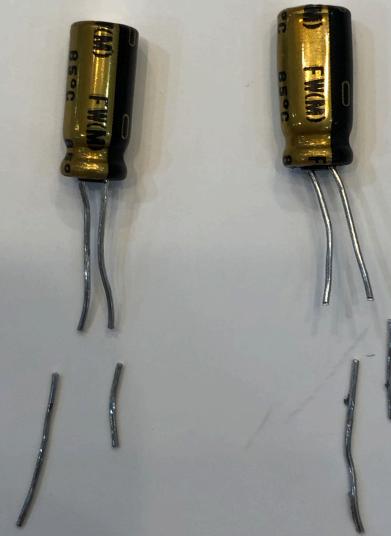


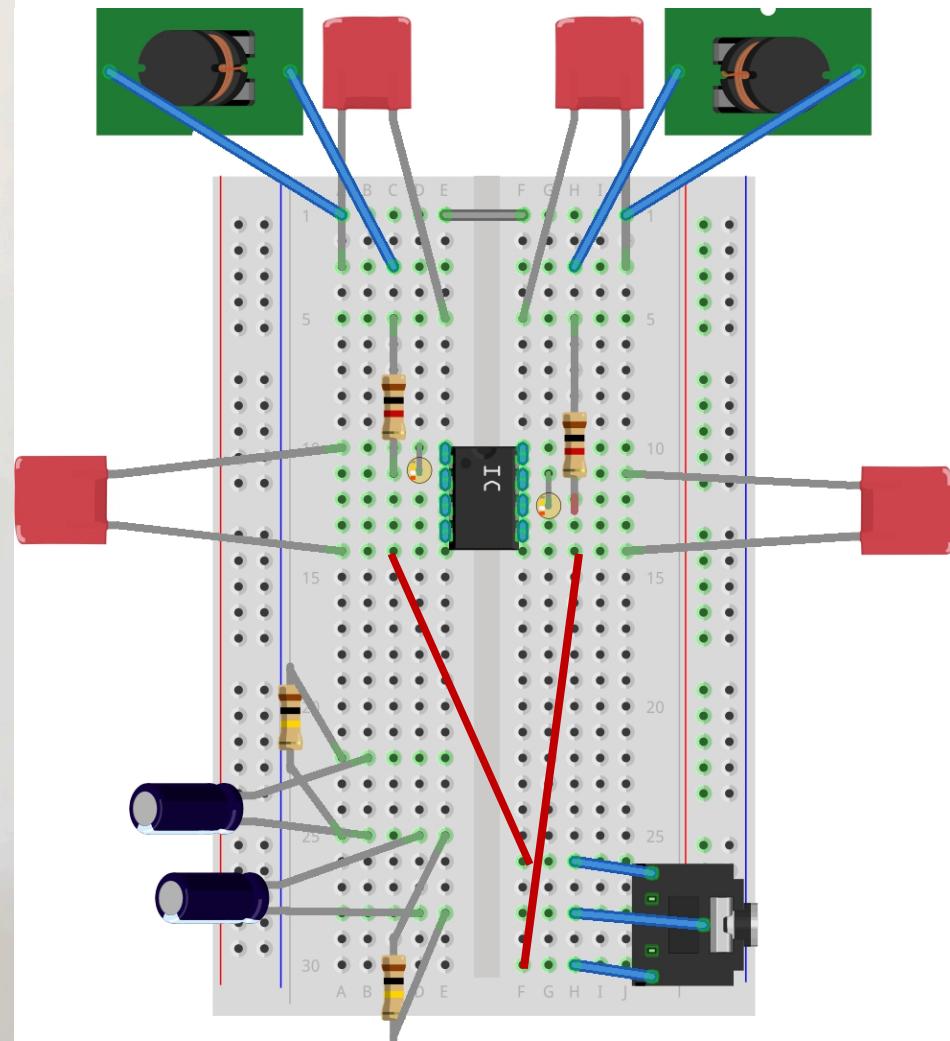
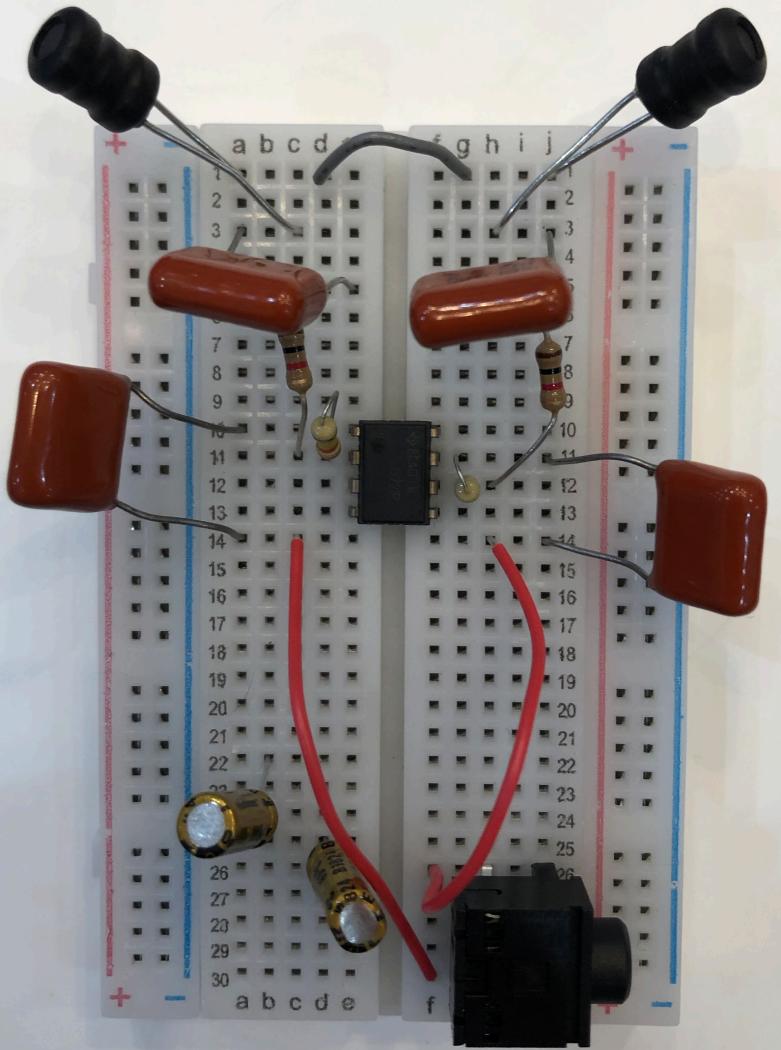
fritzing



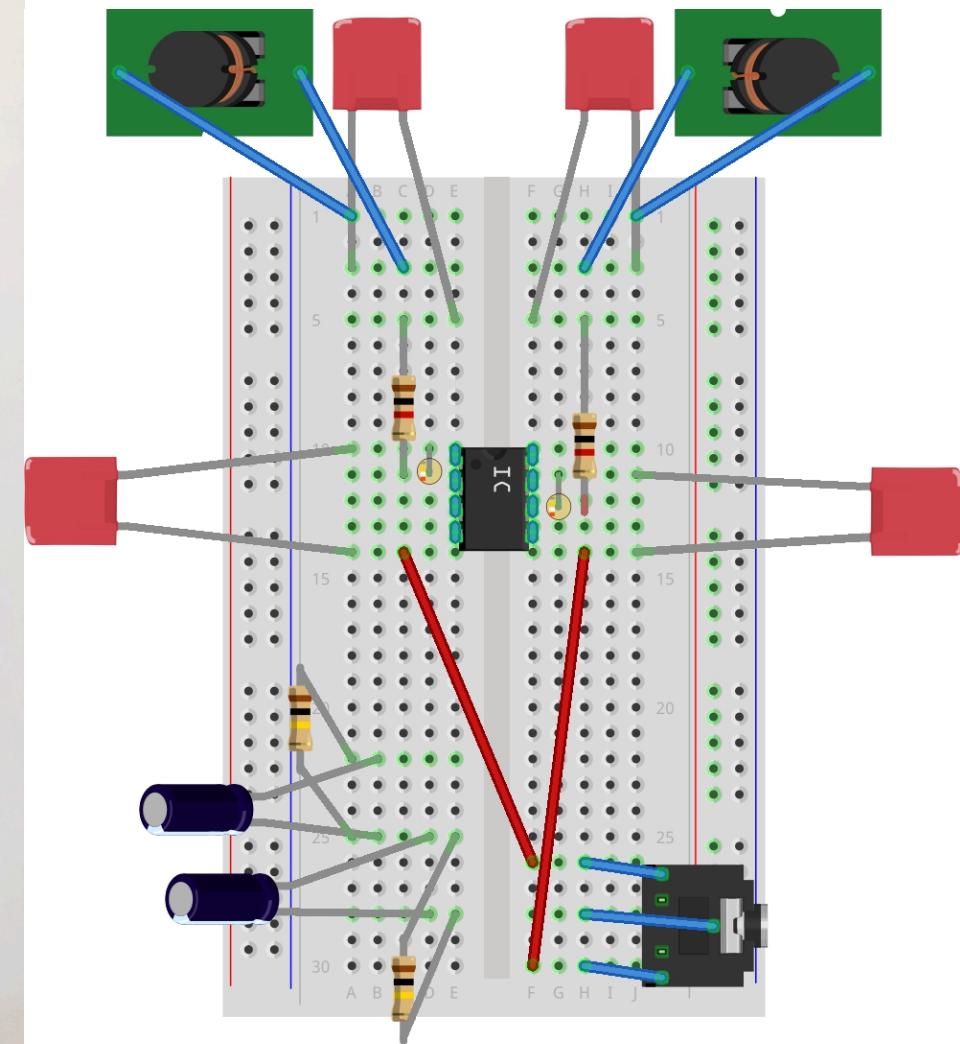
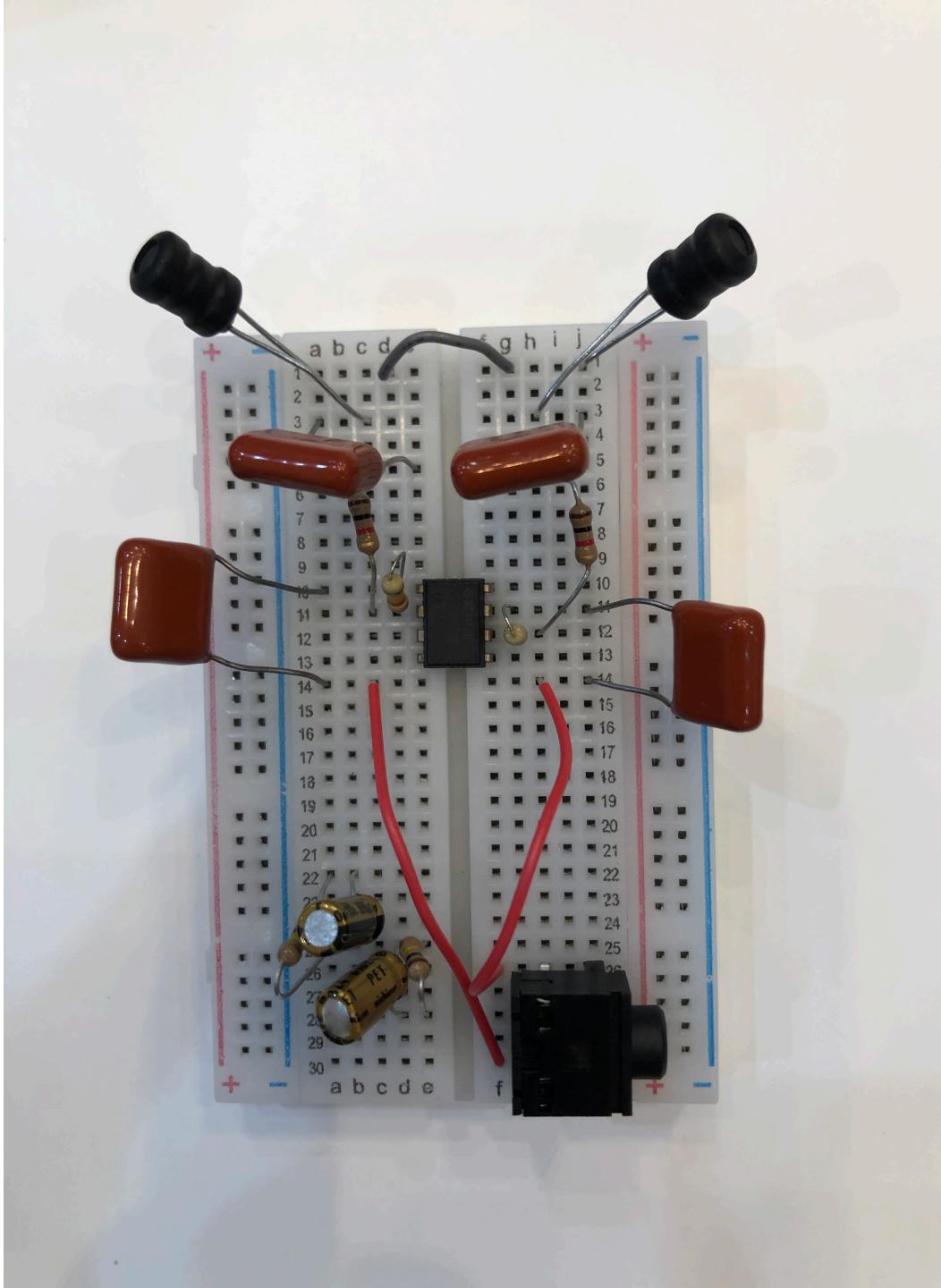
fritzing

Trim bottoms of capacitors.  
Note that long leg is  
positive. Short is negative,  
which is also indicated by  
band on side.

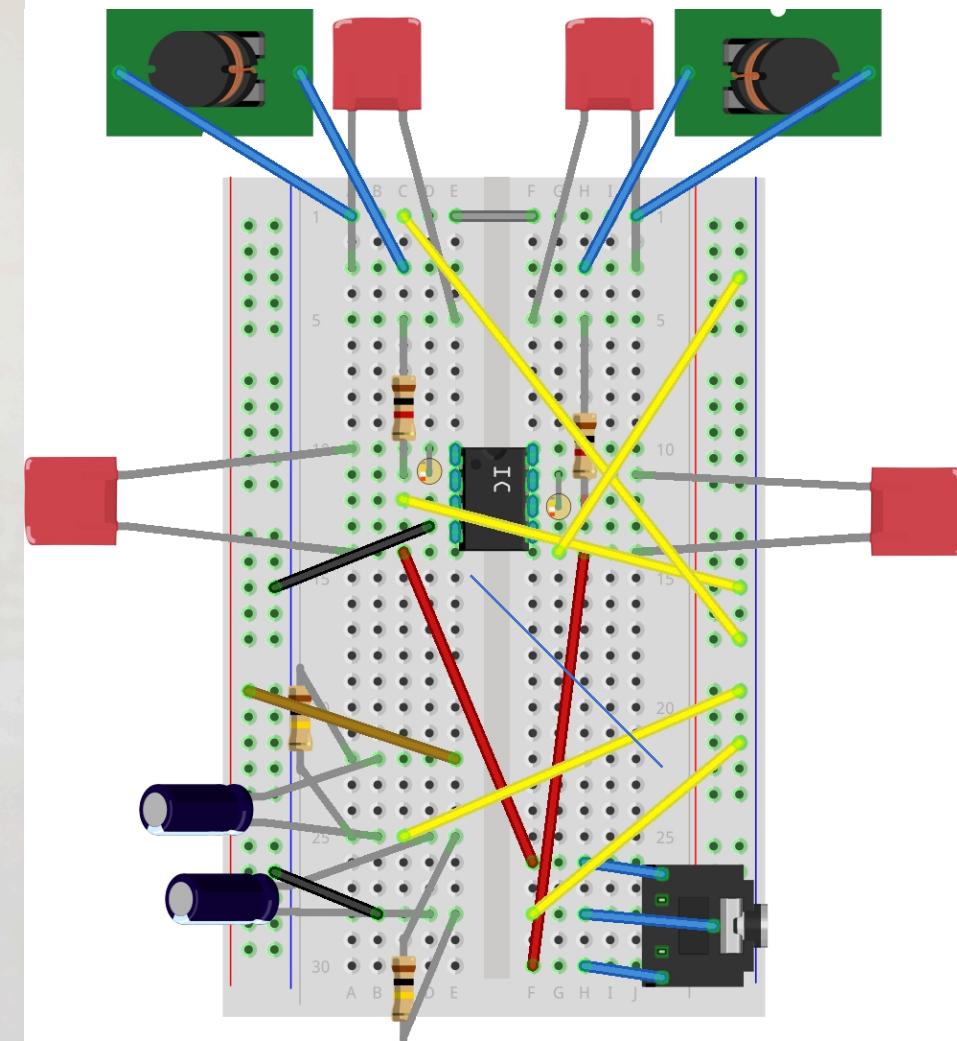
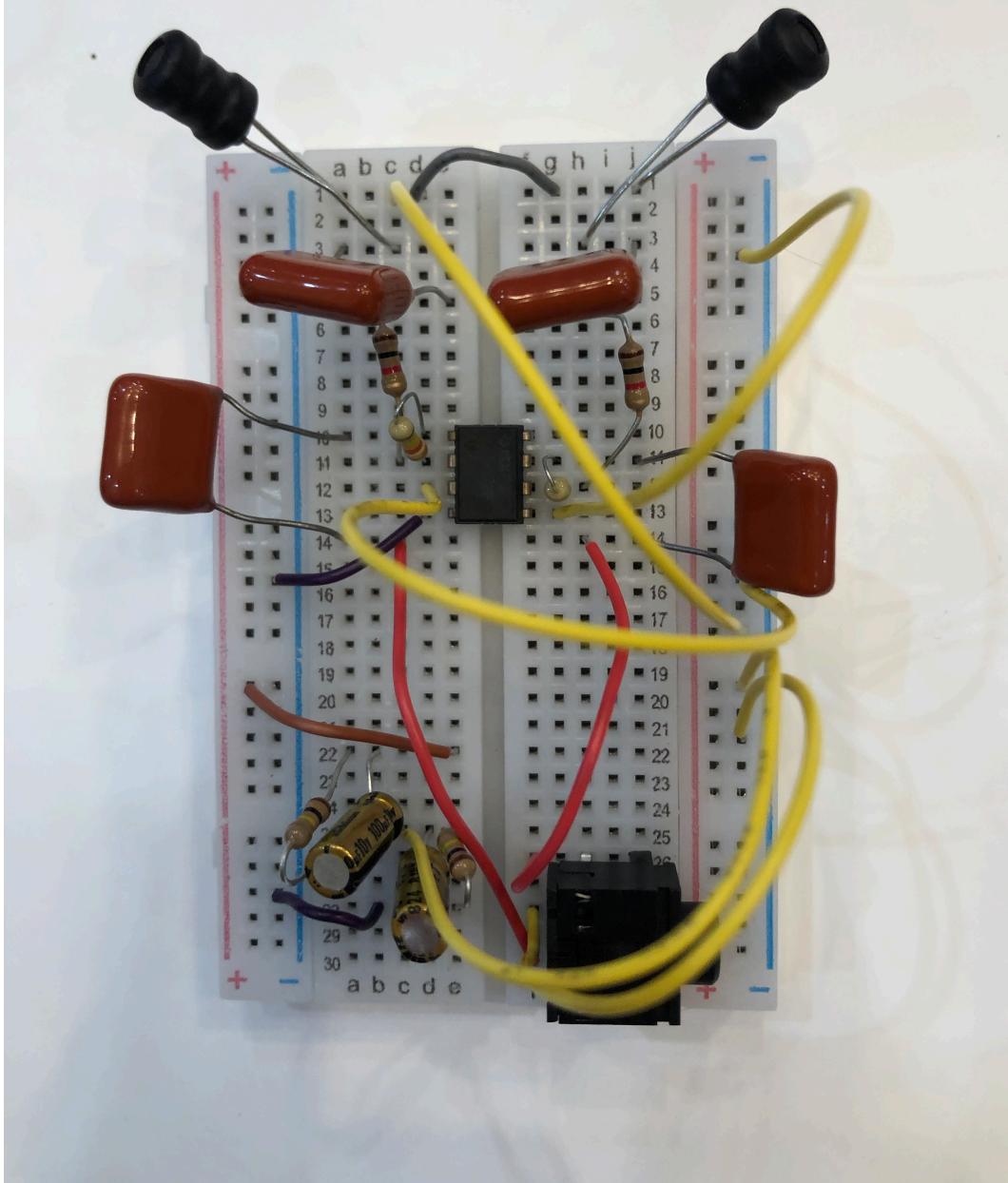




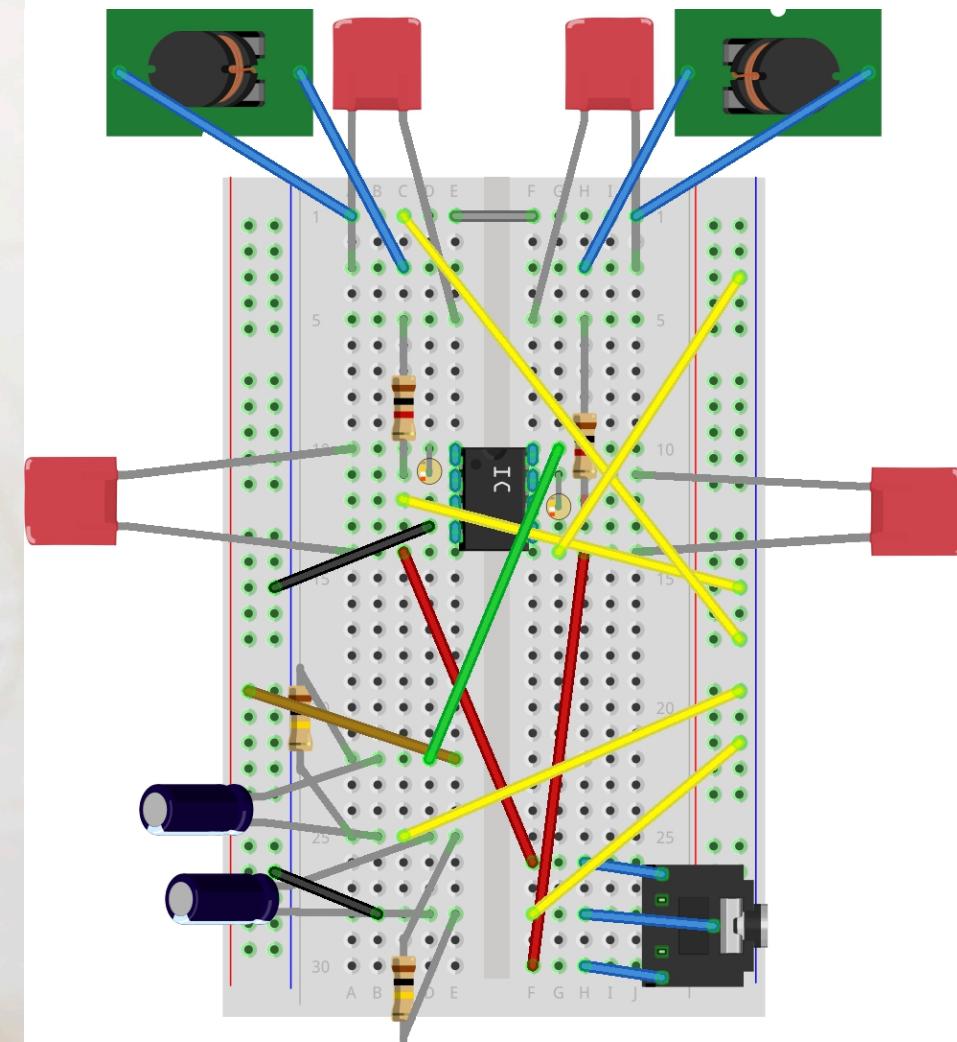
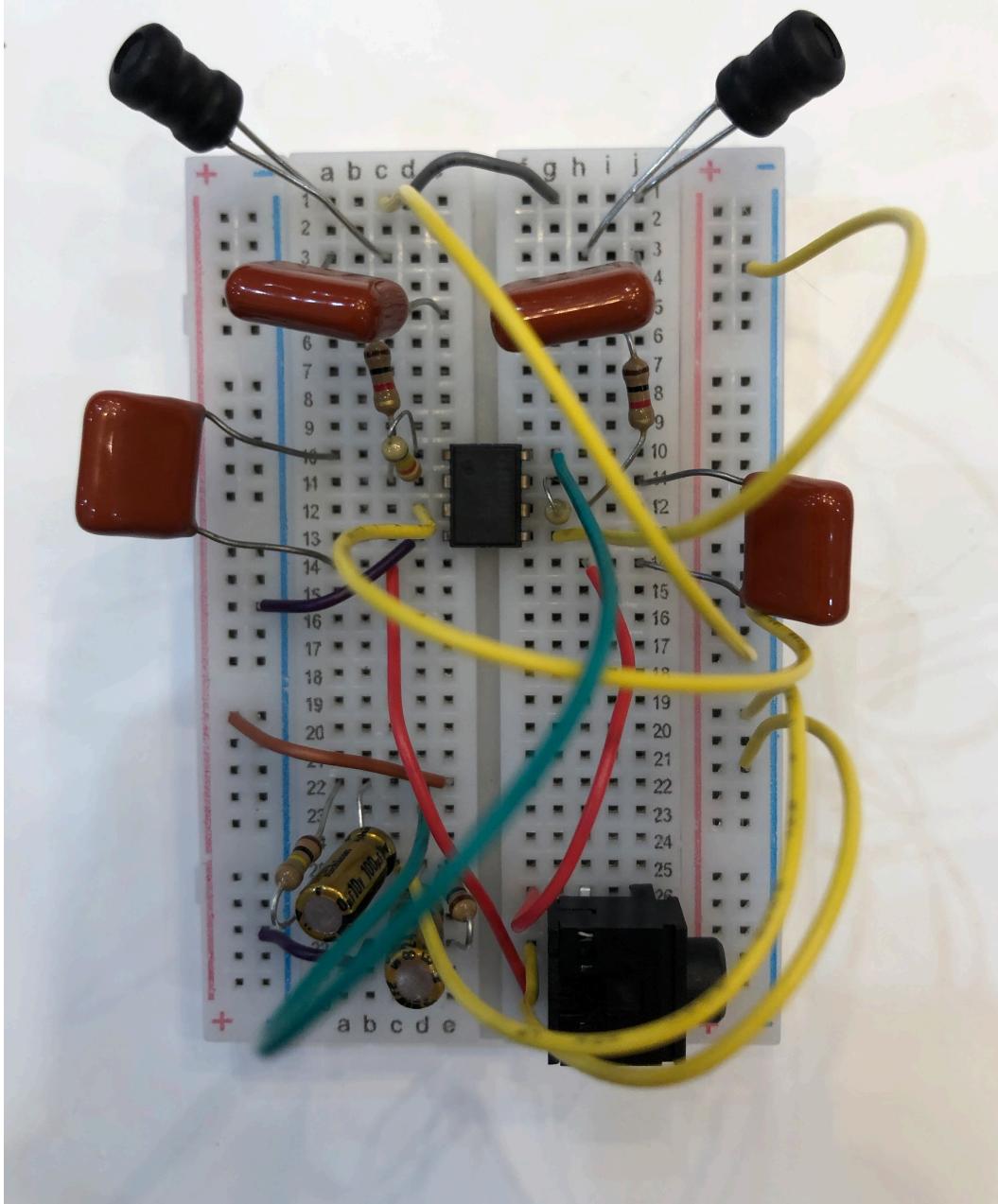
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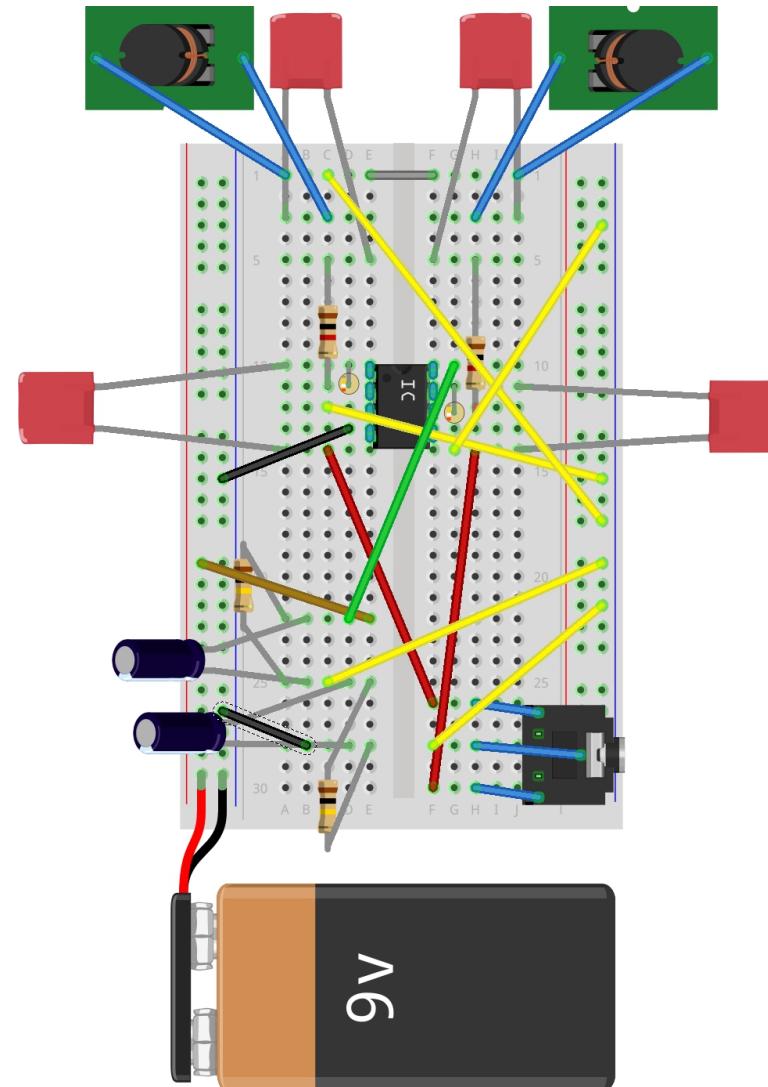
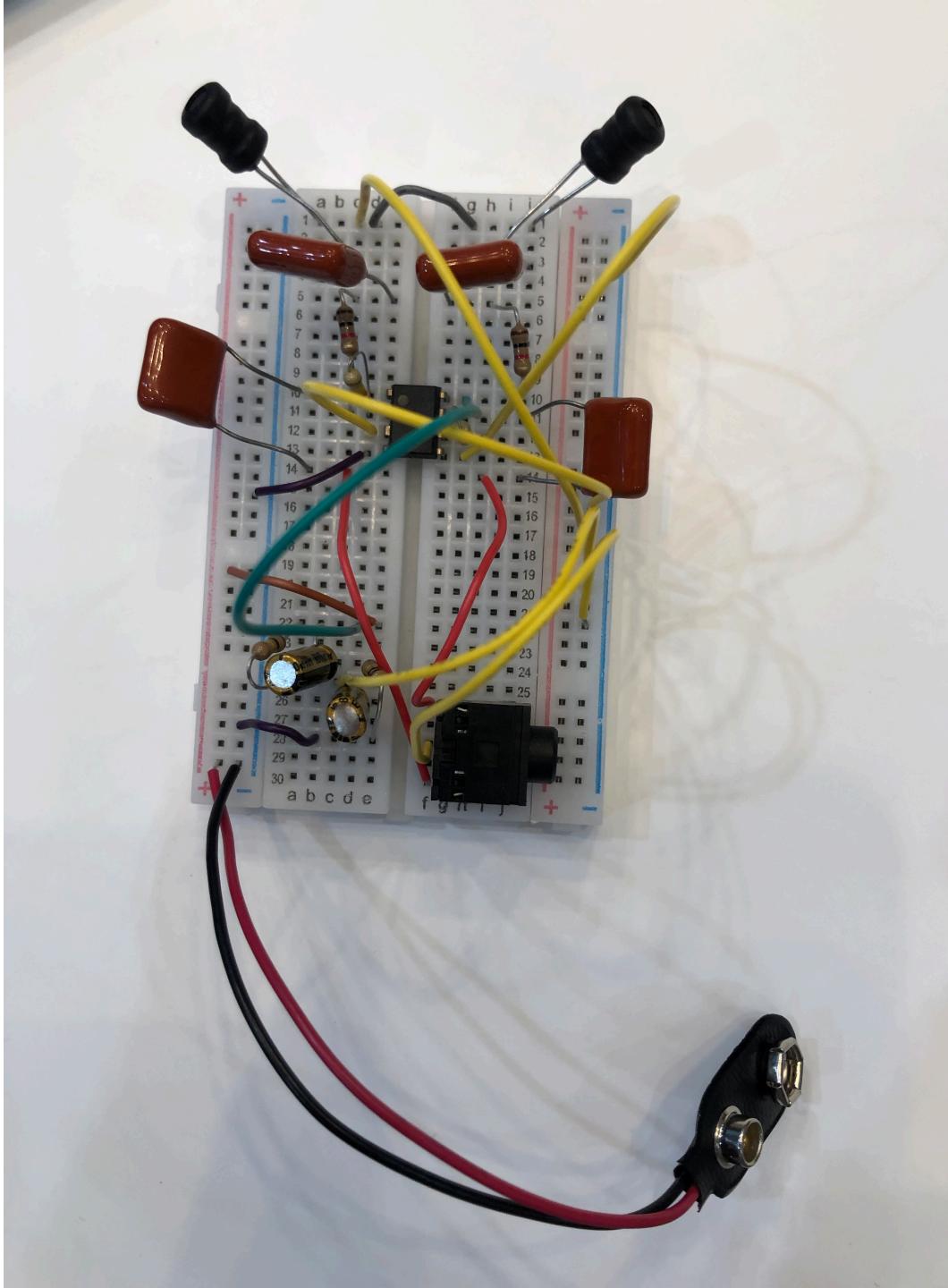
fritzing



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