

## The Hacksmith: Real-Life Neuralyzer from Men in Black

BY THE HACKSMITH (</EN/MAKER/PROFILES/495DB67FF1314F61B47DAC263EEA147B>)



The Men in Black movie franchise is known for its awesome aliens and gadgets, so it's no surprise that Hacksmith Industries was tasked with recreating one of these gadgets to celebrate the release of Men in Black: International's release on BlueRay.

Probably the most iconic gadget in the Men in Black movies is the neuralyzer, the little device that makes a super bright flash and erases people's memories. The neuralyzer allows the Men in Black to remain a secret, so the greater population of Earth doesn't fall into panic every time an interstellar existential threat comes to possibly wipe out the planet.

Hacksmith Industries took polls from channel viewers for which MIB gadget to recreate for this video, and the neuralyzer won with an overwhelming majority. This shouldn't have been too much of a surprise: the neuralyzer is so popular that director F. Gary Grey said "There's no Men in Black if there's no neuralyzer."

Men in Black: International features a redesigned neuralyzer. In order to recreate the latest rendition of the Neuralyzer, The Hacksmith team had to make several design choices for both the casing and the circuit to make it flash. See how it was made in the video below! The neuralyzer from this video is actually up for raffle and viewers have a chance to win it!



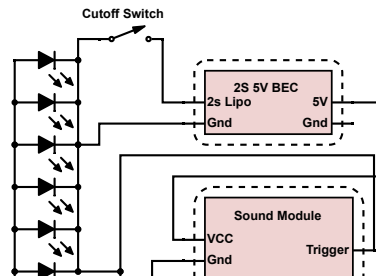
## How Does it Work?

The biggest decision the team had to make in terms of the circuit was whether to go with an old-school design (using capacitors to make a bright flash like a camera) or to use the modern wonders of LED technology. The first two prototypes used capacitors, while the third prototype used a battery to steadily charge a flash module taken from a camera. Ultimately, the [high powered LEDs \(/product-detail/en/cree-inc/MKRAWT-00-0000-0B0HG440H/MKRAWT-00-0000-0B0HG440HCT-ND/4572375\)](/product-detail/en/cree-inc/MKRAWT-00-0000-0B0HG440H/MKRAWT-00-0000-0B0HG440HCT-ND/4572375) won out because the flash they make lasts longer and is easier to capture on camera.

The next system to add was a sound system, so this neuralyzer could make the same sound as the one in the movie. The audio comes from an [Adafruit 2210 Audio FX sound board \(/product-detail/en/adafruit-industries-llc/2210/1528-1209-ND/5353669\)](/product-detail/en/adafruit-industries-llc/2210/1528-1209-ND/5353669) connected to two small speakers. The LEDs and the sound system are powered by 8.4V Lithium Ion batteries. The flash and sound share a trigger so they both power on at the same time.

You can check out the schematic for all of this below!

## Schematic and BOM



## More Hacksmith Creations with Capacitors and LEDs

Even though the team went with an LED-based design instead of one with capacitors, there are still plenty of projects with both on Maker.io. Check them out in the links below!

### Stunning LEDs!

[Pandora's Box \(/en/maker/projects/the-hacksmith-pandoras-box/e33fc7650981488eb7c97177874b4f89\)](/en/maker/projects/the-hacksmith-pandoras-box/e33fc7650981488eb7c97177874b4f89)

[Rainbow Six Blitz Shield \(/en/maker/projects/the-hacksmith-rainbow-six-blitz-shield/fa05a51a48af4b219e765cf696acf378\)](/en/maker/projects/the-hacksmith-rainbow-six-blitz-shield/fa05a51a48af4b219e765cf696acf378)

[Arduino-Controlled LED System for the Batmobile \(/en/maker/projects/arduino-controlled-led-system-for-the-hacksmiths-batmobile/294397223f8f41e0bebd00229d3f05c2\)](/en/maker/projects/arduino-controlled-led-system-for-the-hacksmiths-batmobile/294397223f8f41e0bebd00229d3f05c2)

### Huge Capacitors!

[Making a Charging Circuit for a Railgun \(/en/maker/projects/the-hacksmith-making-a-charging-circuit-for-a-railgun/112713051a234eeabc25df2efd73c97f\)](/en/maker/projects/the-hacksmith-making-a-charging-circuit-for-a-railgun/112713051a234eeabc25df2efd73c97f)

[300V Capacitor Hammer of Thor \(/en/maker/projects/the-hacksmith-300v-capacitor-hammer-of-thor/6736f056fbbe43069f764f8fa9fe7962\)](/en/maker/projects/the-hacksmith-300v-capacitor-hammer-of-thor/6736f056fbbe43069f764f8fa9fe7962)

## Key Parts and Components



[\(/product-detail/en/cree-inc/MKRAWT-00-0000-0B0HG440H/MKRAWT-00-0000-0B0HG440HTR-ND/4501512?WT.mc\\_id=frommaker.io\)](/product-detail/en/cree-inc/MKRAWT-00-0000-0B0HG440H/MKRAWT-00-0000-0B0HG440HTR-ND/4501512?WT.mc_id=frommaker.io)

CREE INC.

[LED XLAMP NEUTRAL WHT 4000K 2SMD \(/product-detail/en/cree-inc/MKRAWT-00-0000-](https://www.digikey.com/en/product-detail/en/cree-inc/MKRAWT-00-0000-0B0HG440H/MKRAWT-00-0000-0B0HG440HTR-ND/4501512?WT.mc_id=frommaker.io)

[0B0HG440H/MKRAWT-00-0000-0B0HG440HTR-ND/4501512?WT.mc\\_id=frommaker.io\).](https://www.digikey.com/en/product-detail/en/cree-inc/MKRAWT-00-0000-0B0HG440H/MKRAWT-00-0000-0B0HG440HTR-ND/4501512?WT.mc_id=frommaker.io)



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[\(/product-detail/en/adafruit-industries-llc/2210/1528-1209-ND/5353669?](https://www.digikey.com/en/product-detail/en/adafruit-industries-llc/2210/1528-1209-ND/5353669?WT.mc_id=frommaker.io)

[WT.mc\\_id=frommaker.io\).](https://www.digikey.com/en/product-detail/en/adafruit-industries-llc/2210/1528-1209-ND/5353669?WT.mc_id=frommaker.io)

ADAFRUIT INDUSTRIES LLC

[FX SOUND BOARD 2X2W WAV/OGG 2MB \(/product-detail/en/adafruit-industries-llc/2210/1528-1209-ND/5353669?WT.mc\\_id=frommaker.io\).](https://www.digikey.com/en/product-detail/en/adafruit-industries-llc/2210/1528-1209-ND/5353669?WT.mc_id=frommaker.io)

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[Add all Digi-Key Parts to Cart \(/classic/ordering/fastadd.aspx?newCart=true&part0=MKRAWT-00-0000-0B0HG440HTR-ND&qty0=1&part1=1528-1209-ND&qty1=1\).](https://www.digikey.com/en/product-detail/en/adafruit-industries-llc/2210/1528-1209-ND/5353669?WT.mc_id=frommaker.io)

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## Project Details

### Tags

[Adafruit \(/en/maker/search-results?t=7f142f895d4447759fe823c26140bbca&y=13825c8674444e22884d8d26197819d1\).](https://www.digikey.com/en/maker/search-results?t=7f142f895d4447759fe823c26140bbca&y=13825c8674444e22884d8d26197819d1)

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[DIY \(/en/maker/search-results?t=d9a7c4d9dccf4c45b15015eecd3ca31&y=13825c8674444e22884d8d26197819d1\).](https://www.digikey.com/en/maker/search-results?t=d9a7c4d9dccf4c45b15015eecd3ca31&y=13825c8674444e22884d8d26197819d1)

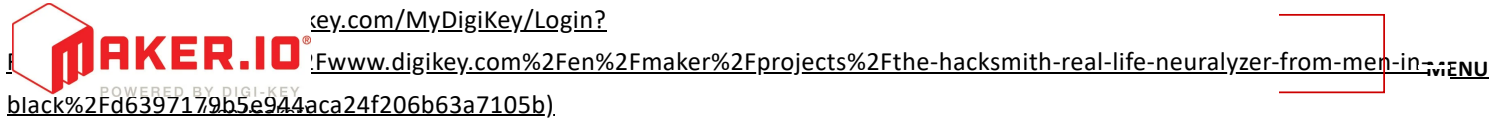
[Fabrication \(/en/maker/search-results?t=26550c84299c48a8a76355b7f28b331d&y=13825c8674444e22884d8d26197819d1\).](https://www.digikey.com/en/maker/search-results?t=26550c84299c48a8a76355b7f28b331d&y=13825c8674444e22884d8d26197819d1)

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[LEDs \(/en/maker/search-results?t=50b78b6cc0bf4e8db7cd0d273734c07c&y=13825c8674444e22884d8d26197819d1\).](https://www.digikey.com/en/maker/search-results?t=50b78b6cc0bf4e8db7cd0d273734c07c&y=13825c8674444e22884d8d26197819d1)

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