

LED's

The horrible journey of MG LED's.

- [Introduction](#)
- [The Plan](#)
- [I lied](#)

Introduction

I have a couple kits now that had the ability to take these little LED's module thingies that Bandai made forever ago. Problem with these LED kits is that I am pretty sure they stopped making them (or I just cant get them in Canada).

Regardless, they are way more expensive than they should be here, and I just don't want to pay for that.

Like LOOK AT THIS SHIT



[Click to see full view](#)



Tesyttto 5PCS LED Units for Gundam Models Kits, MG LED Unit Set for Gundam 00 MG GN-X Light Up Certain Gundam Models Hobby Accessories (Green)

Brand: [Tesyttto](#)

4.8 ★★★★★ (20)

-5% \$63⁸⁴

Was: \$67.38

Or **\$11.59**/mo (6 mo). Select from 1 plan

Save up to 4% with business pricing. Sign up for a free Amazon Business account

Get \$65 off your order instantly: Pay \$0.00 \$63.84 if approved for the Amazon.ca Rewards Mastercard. No annual fee. Conditions apply.

About this item

- Modify LED Lights Common for MG GN-X 00Q 00R Gundam Assembled Gundam Model Robot.
- Used it with LR41 battery, and required little bit of tweaking of the leads to stop the led from blinking.
- Made of high-quality plastic, Bright LED lights to light up your Gundam Model.
- Size Approx. 1.9 x 1.4cm/ 0.74 x 0.55inch (Battery include).
- [Package Include]: 5 Pieces LED Unit Set.

➤ [See more product details](#)

 [Report an issue with this product](#)

Anyway, what better than a little wiring project to test my electronic knowledge eh?

The Plan

Originally, I was just going to get some coin batteries, some LED's and try my hand at some BS soldering. Well... Fuck that.

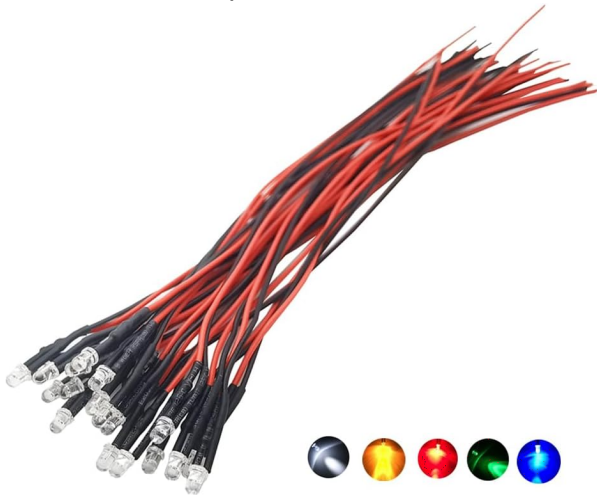
My new idea is way better, and I think could work real nicely if done right.

The idea is simple. I don't want batteries. Honestly the damn LED's to be on all the time, and batteries don't really last.

SO what do I do? Wire them up fam. Sure there is going to be some wires coming from a couple of the models hooked up, but hell it will look dope!

Simplicity until its complicated

5V power supplies are dirt cheap on Amazon, and I bet I can get a nice little inline switch too. The idea is to wire up some these fuckers:



In parallel so the voltage can just be 5V. These little bastards are pre-made LED's with resistors already in them. Fantastic right?

Get something like this:



for the power supply and just cut the end off. Its a 5V DC out, at 2 Amp so a total wattage of 10W. Each LED is around 20mA which is 0.1W each. That means I can have 100 LED's all connected in parallel at the same time. More than enough capacity.

So the only issue I have now is cable management. Its going to be a nightmare to cable manage them all in parallel.

Resources:

- <https://www.digikey.ca/en/resources/conversion-calculators/conversion-calculator-led-series-resistor>
- <https://resistorcolorcodecalc.com/>
- <https://www.circuitbread.com/ee-faq/the-forward-voltages-of-different-leds>
- [https://www.reddit.com/r/led/comments/jn7dh1/3v bulb 3v batteries do i need a resistor /](https://www.reddit.com/r/led/comments/jn7dh1/3v_bulb_3v_batteries_do_i_need_a_resistor/)
- <https://www.circuitlab.com/editor>
- <https://www.ledsupply.com/blog/wiring-leds-correctly-series-parallel-circuits-explained/>

Product Links

- <https://www.amazon.ca/gp/product/B01ERPEMAC>
- <https://www.amazon.ca/gp/product/B0D1C1XF7Z>
- <https://www.amazon.ca/gp/product/B09W96X88K>
- <https://www.amazon.ca/gp/product/B089K9N4YN>
- <https://www.amazon.ca/gp/product/B0CM2Y7V1Z>
- <https://www.amazon.ca/gp/product/B08XXGNJHG>
-

I lied

This didn't end up being the plan at all. Too complicated for my first electrical project and way too expensive.

So I bought some single LED's on amazon (like 10 for \$10) and they came with batteries, a single LED (quite bright too) and some small batteries.

I also bought a pair of calipers too to do some measuring. Some important details I have now discovered:

Max depth of the Gera Doga is 11.5mm. These LED's with their casings are a total of 14.8mm tall. After removing the casing, and just with the top of the LED, and the bottom of the battery pack, it's still 12mm.

So how the hell do I shave off 5mm? I don't.

The goal now is to get little switches. I can put some wires up through the helmet of the model to the back of the neck. Doesn't interfere with movement either other than the tilt of the neck. Not a big problem.

From there, I can attach a wire to a little switch, so then I have external control over the LED. Wire it to the ground of the LED and battery pack and boom. Perfect.

Unfortunately I am going to have to use a bit of hot glue or something similar to keep everything together. However I have some gels coming too.