

LED DIY Overview

- I. Attaching your LEDs to a heatsink
- II. Wiring Your LEDs and Driver Together
- III. Wiring Your Driver to AC

Attaching Your LEDs to a Heatsink

When attaching LEDs to a heatsink, you must put a thin layer of thermal compound between the LED star and the heatsink. The thermal grease ensures proper thermal conductivity of heat away from the LED. Cool LEDs have a long lifetime and stay bright. A very small dab of grease on the back of each LED is all that is necessary. More is NOT better. Too little will lower thermal conductivity and too much will create a mess. A thin layer works best. All of these guidelines apply to thermal adhesive, but ensure to press down on the LED to spread the adhesive evenly underneath the LED as you will not be using screws to tighten it down. The photo below is about how much you should use.

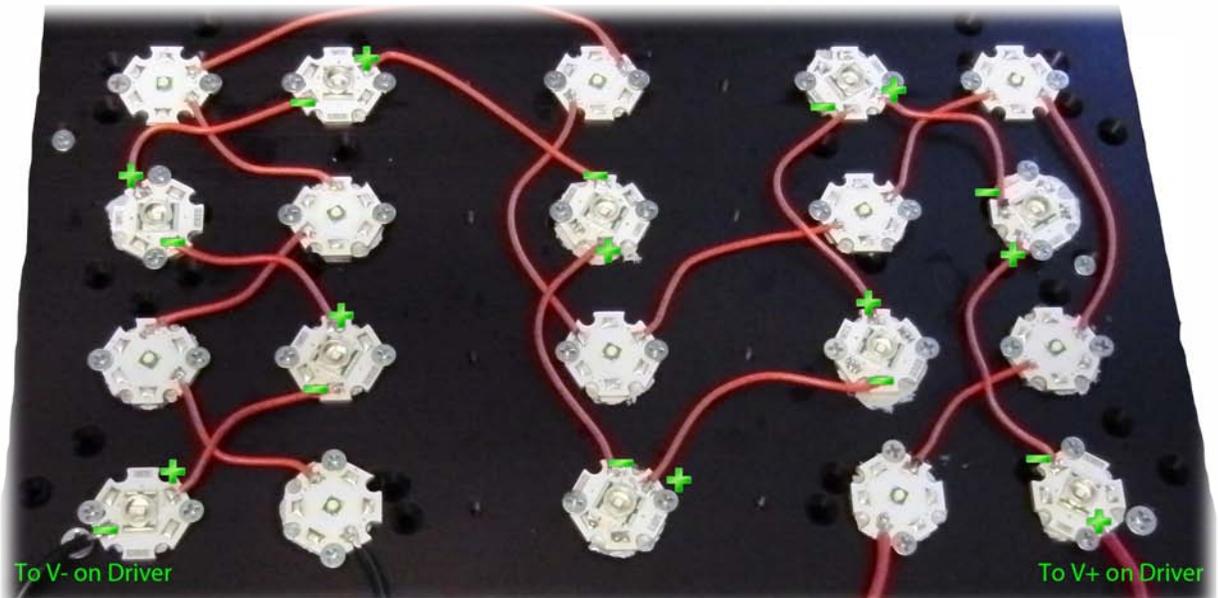


Here's an example of some nicely attached LEDs on one of our Nano Retrofit heatsinks:



Wiring your LEDs and Driver Together

Wiring LEDs is done by strings in series. Each string is a series circuit wired + to – (or – to +, depending on where you start) starting from one LED power wire on the driver, from LED to LED, to the other LED power wire on the driver. Below, there is a string of 10 Royal Blue LEDs wired to one driver, + to – all the way around. Do NOT power the driver until the wiring is complete. You risk burning out your LEDs, a very expensive mistake.



Wiring your driver to AC Power

The AC Line and Neutral, or ACL and ACN wires, which are blue and brown, connect to the power cord included in our kits. Strip the white and black wires of the power cord (green is ground and unused) and attach them to the blue and brown wires on the driver with the included wire nuts. Order is not important because AC current alternates.

NOTE: If your driver has dimming functionality please read our dimmable driver documentation before powering it up or you risk BURNING OUT all of your LEDs.

