

Supernova E3 Pro 2 dynamo powered headlight

Replacing my bike's headlight

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Earlier this month my dynamo powered headlight on my commuter bike needed replacing. One of the electrical connectors broke of, likely caused by intense daily use. I searched for the best possible light, one that would be extremely durable and bright. I found the Supernova E3 PRO 2 and decided to install it on my bike.

Supernova E3 PRO 2

The E3 PRO 2 is very much a top model of the Supernova brand, a German company with an extra focus on longevity, performance and environmental impact. They are proud

on their [Deutsche Ingenieurskunst](#). Their quality doesn't come cheap: the Supernova E3 PRO 2 costs as much as some people spend on their entire bike... is it worth it?



Supernova E3 Pro 2

Quality

The light is highly regarded by many different retailers and authorities that have thoroughly tested it. It received numerous awards, including the German "VSF all-ride" seal of quality. The headlight stands out because of the functionality, usability, lifespan and the quality of the material. It won't break down, but the company does offer 5 years of warranty.

Specifications

The E3 PRO 2 is the top model of the dynamo lights produced by Supernova, it has the following specifications:

- **Brightness:** 205lm
- **Input voltage:** 6V AC dynamo
- **Stand light:** 5 minutes
- **Light Type:** Power LED
- **Dimensions LxWxH:** 69 x 40 x 40 MM

- **Material:** 6061 Aluminium
- **Weight:** 110g (without bracket)
- **Colour(s):** Available in 8 different colours

Unboxing

The light comes in a cardboard and metal box, with barely any plastic. It is well packed and the metal box can be re-used to put other (bike)stuff in. Because of it's price, I ordered anti-theft bolts too.



Supernova E3 PRO 2 Box, no plastic - just recyclable cardboard



Supernova E3 Pro: bright, reliable, for years



The light comes in a metal box that you can reuse for something else afterwards. The anti-theft bolts came in a separate bag

Installing the light

You can order different kinds of pre-fitted cable configurations attached to the headlight from Supernova. I ordered one with two simple, long cables. This allowed me to solder

the light onto my bike: eliminating vulnerable micro connectors.



The Supernova E3 PRO comes with cables attached to it

It's a little bit more work, but in the long run this means the light will always have a solid electrical connection. You'll connect the head light to the dynamo *and* to your rear light. This enables the mechanical button to switch to both lights on and off.



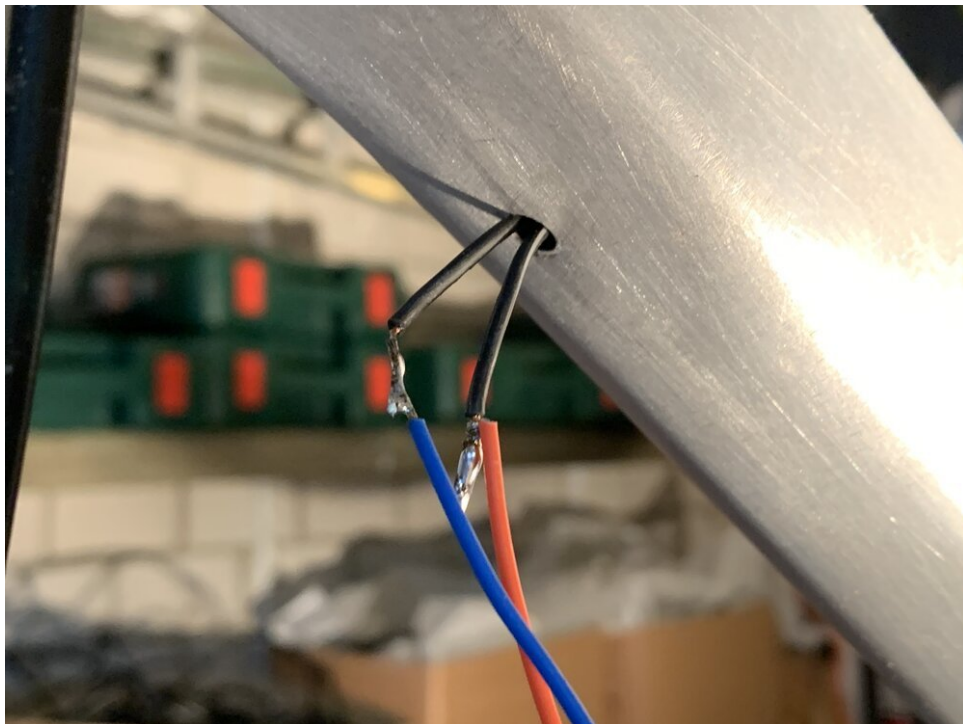
Connector used by my Shimano hub dynamo

The only exception to my direct-soldering approach is the connector located at my Shimano hub dynamo. There will be (unfortunate) situations where I will need to remove my front wheel, like in case of tire punctures. Luckily this connector is sturdy and easy to (re)attach to the light cable.



Soldering the existing cables on my bike required a little creativity using clamps

My bike has internal cables going through the frame. This is great to keep the cable from harms way, but when you need to replace the cable it means fiddling through tiny holes. To minimise the fiddling I decided to solder the new cable on to the old one, using it as 'pulling cable' through the bike frame.



New cable soldered to the old one, allowing it to pull the new one through the bike frame



Voila! Pulling the cable worked like charm

After pulling the old cable out, I undid the soldering and prepared the connection to the rear light. It's a good idea to put shrink wraps on the cable joints where they are exposed to the elements (and dirt). On my bike this joint is located below the bottom bracket.



Connecting the rear light to the head light, protecting the joint with shrink wraps



After heating the shrink wraps, they'll provide a protective layer against the elements

As I don't like any cables exposed (more than necessary), I decided to tie-wrap it closely to the sturdier shifting cable. This way it is better protected against accidentally pulling it out (by another bike, in the city, etc).



Tie wrapping the electric wire to the sturdier shifter cable

Conclusion

The light fits nicely on my bike, it is very sturdy and well built. The brightness is amazing! It is really good when you use this on your daily commute.



Supernova E3 PRO2 fitted to my bike

I'll need more time with the light to judge its proclaimed longevity, but already I have a feeling that it will prove excellent in the long run. As a good light is essential for your personal safety on the bike, I think investing in quality like this Supernova E3 PRO2 makes perfect sense!