Attaching Swappable LED Kit to Psycho Mask

Things you'll need:

- Assembled LED Kit
- CR232 Coin Cell Battery (included with kit)
- Tape, for temporary positioning
- Hot glue, for permanent positioning



Note: actual parts may vary slightly, depending on current availability, but their function, and attachment process is essentially the same, regardless.

This guide covers adding LEDs to a Psycho Mask, and assumes you have purchased one of our LED kits (or done your own similar wiring). If you're interested to know what goes into actual assembly of the kit itself (wiring diagram, and step-by-step how to solder all the connections), let us know; we have an additional guide which covers all that detail. But, it's not at all necessary for installing the preassembled kit.

The guide focuses on the 2-LED model, but the idea is the same for kits which have more LEDs.

In this guide, positive wires are GREEN, and negative wires are White. Yes, we know, those aren't the proper colors to use . . . it's a long story. And really, you don't care anyway because it's already all hooked up, you just have to put the battery in right. ©

We won't go into excruciating detail on all this, because there's not too much to it, but will explain a few things. The picture on the next page really says it all. But if something isn't clear, please contact us.

A Word on the LEDs

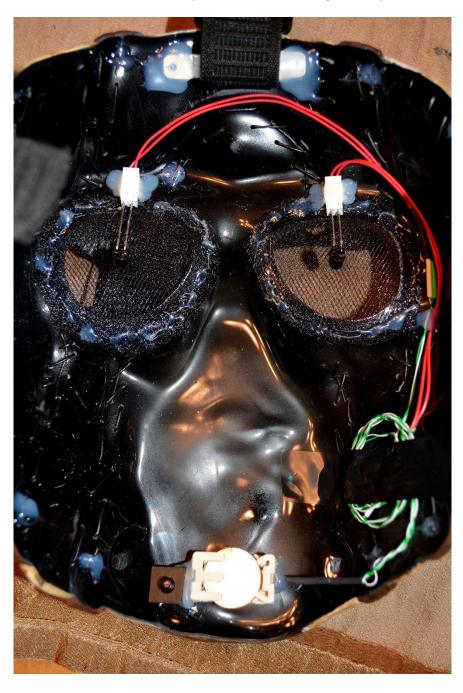
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For most colors, we use Ultra Bright Blue LEDs for the Psycho eyes. The advantage of the Ultra Bright is that they are still really bright, even after diffusing them. These LEDs have been sanded down on the top of the lens, to diffuse the light, and give a better "glow" effect. They have also been painted black

on all sides except the top. This is so that the light does not shine back into your eyes, which is really important for actually being able to see out of the mask, and also just to keep your eyes happy.

The Goal

This is what we want everything to look like when we're done, or somewhere thereabouts. Extra wire is looped and held down with black electrical tape here. You can also glue it in place.



Note: If you plan on covering the eyes, you should do that before attaching the LEDs

The Process

Before you do Anything Else, Insert the Battery into the Holder

The battery goes in Positive (+) side UP; this is the flat side of the battery. (The printing on your battery may differ from this picture, but the idea is still the same)



With the battery in place, make sure the switch and LEDs work properly. We do make sure they all work when we make them, but just in case something happened to them during shipping, better to find out now than after you've glued everything together. If they don't work, PLEASE LET US KNOW.

Getting Ready

While your hot glue gun warms up, set the mask down with the inside facing you, place the entire LED assembly in the mask, and stretch out the parts to familiarize yourself where everything should go, and how it is all going to fit. If it makes things easier, you can temporarily hold things in place with electrical (or other) tape.

The LEDs Need to be Bent at a 90° Angle, Right at the Base of the Lens

This is so that they will point outwards, while the leads and wires extend up. This can be adjusted as necessary, just don't bend them around too much, because they'll eventually break, just like bending a paperclip back and forth over and over, although with LEDs you only get 2 or 3 bends!

Run LED Wires up either side

If the length of wire between the switch and LEDs is a little too long, just put a little loop in it to take up the extra slack. Tack it down in a few places with the hot glue, or electrical tape.

Finally, Attach the LEDs

There is no right or left; either one works fine in either location. The trick here is to get them pointed in the right direction. The 90° bend you made at the beginning is the start here. You also may need to contour the leads coming off it a little bit. This is so that the LED can be glued down right around the eyebrow area, and point forward, but not protrude through the front of the mask.





Installed View

Side View

The LEDs should be attached so that the two square tabs on the holder point inwards, towards your face. The holder should be placed above the eye holes, just barely high enough to be out of view. This way, the LED itself will hang down far enough to be in the center of the eye.

Play around with the placement a little bit, and hold them in place with tape while you try on the mask, and ensure they aren't in the way of your eyes.

Once you're satisfied, glue them in place with hot glue.

Adjusting LEDs

The LED kit is meant to be adjustable. The LEDs can be moved up or down in the holder, for better placement in the eye area. They look best centered, and shouldn't obstruct your view too much, but if you find them to be bothersome, they can easily be moved up, and out of the way of your field of view. One caution, make sure that the two LED leads DO NOT TOUCH. If the two leads touch, this will create a short circuit, and the LED will not light up. You won't ruin anything if they do touch, but nothing will work until they are separated again.



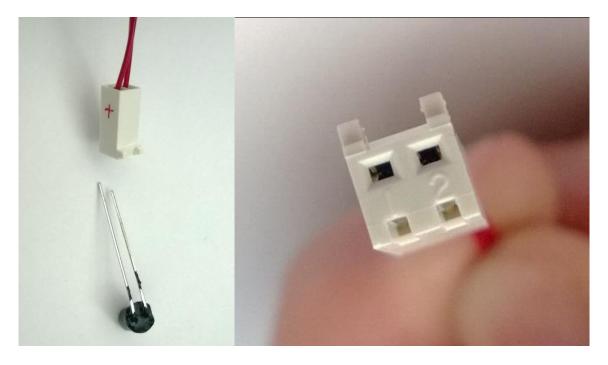
Swapping LEDs

This kit is also designed to also allow for easily changing light colors, or just putting in a new one if something goes wrong. Here's all you need to know:

LEDs have two leads, called Cathode, and Anode.

The Anode is the LONG positive lead, and the Cathode is the short negative lead.

Each holder is marked with a + for the positive side, and that is where the Anode (long lead) must be inserted.



Depending on current supplies, the wires are now different colors: one red, and one black. The Long + lead should match with the Red wire, and the short with the black.

We recommend using our LEDs to ensure compatibility, but you are certainly free to use your own. Just be sure that with the ones you get, two of them can be powered by a single CR232 battery.

Front View, For Reference

